2. Global Trends in E-Government

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2.1 Introduction

E-government has become the cornerstone for building effective, accountable, resilient, and inclusive institutions at all levels, as called for in Sustainable Development Goal (SDG) 16, and for strengthening the implementation of Goal 17. This chapter presents a data-driven analysis of key trends in e-government development in 2024 based on the assessment of the E-Government Development Index (EGDI). It also describes and analyses global trends in electronic and mobile services delivery and sheds light on the distribution of online services based on country income levels and on the provision of services in specific sectors that are particularly important for sustainable development. The analysis is further supplemented by the key findings of the Member States Questionnaire (MSQ) and from case studies and best practices provided by States Members of the United Nations.

2.1.1 EGDI methodology: continuous improvement

The EGDI is a composite index of digital government development, calculated as the average of three independent component indices: the Online Services Index (OSI), the Telecommunications Infrastructure Index (TII), and the Human Capital Index (HCI). Each successive edition of the Survey reflects constructive improvements in the EGDI methodology deriving from the lessons learned from previous editions, the input and feedback received from Member States, the recommendations of external evaluations, the outcomes of expert group meetings, and the advancement of the latest technological and policy developments in digital government.

For the 2024 edition of the Survey, the OSI continues to assess government portals based on five subindices: institutional framework, services provision, content provision, technology, and e-participation. The overall OSI value is calculated using the normalized values of these subindices. The TII has been updated by removing the fixed broadband subscriptions subindex and adding "affordability" as a new subindex, complementing the three existing subindices from the previous two Surveys. The HCI has been refined by adding a fifth subindex to include aspects of e-government literacy. This new subindex, developed in-house, benchmarks the ability of all segments of the population, especially vulnerable groups, to fully utilize available e-government services and take advantage of e-participation opportunities. Specifically, the e-government literacy subindex provides insights into government efforts to enhance digital literacy and engagement with online services across diverse domains, measuring the level of e-government literacy within a country by assessing key features on government portals. The updated methodology supports a more nuanced and granular analysis of advancements in e-government development and is further detailed in annex.

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2.2 E-government rankings in 2024

The Survey presents national, regional and global trends in e-government development based on the assessment of the EGDI and its OSI, TII and HCI component indices. Each of these three component indices is a composite measure that can be extracted and analysed independently.

The analysis focuses on correlations between EGDI composite/component values and country income groups, comparisons of advancements in e-services provision, and major trends in electronic and mobile services delivery across various development sectors, including education, employment, environment, health, justice, and social protection. Additionally, it examines the differences among countries in e-government advancement for vulnerable groups, including older people, women, youth, persons with disabilities, and migrants. Where relevant, the Survey highlights similarities and differences between EGDI groups, between the OSI, TII and HCI component groups, and between the EGDI rating classes (quartile subgroups). Additional insights are provided based on comparisons with data from previous editions.

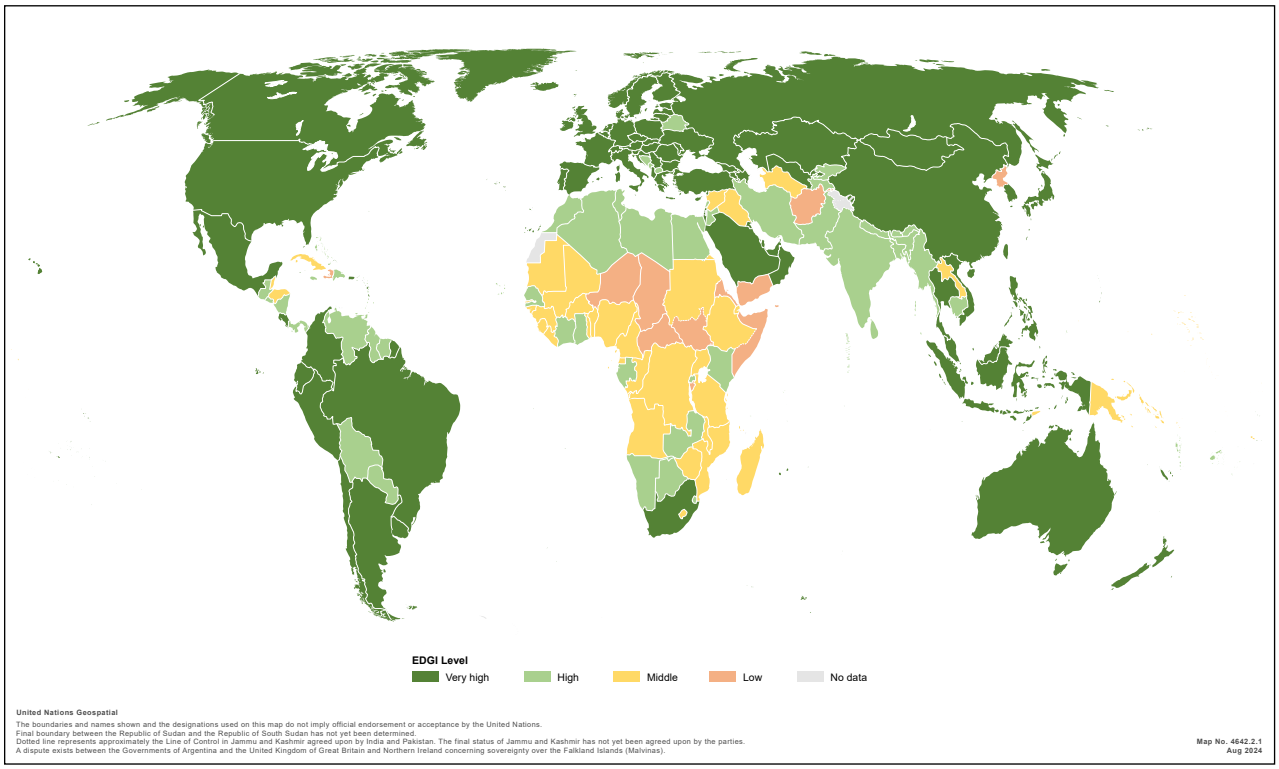
The sections below present the key findings of the 2024 Survey and recent progress made by Member States in e-government development, measured through EGDI values, rankings, and rating classes.

2.3 E-government development at a glance

2.3.1 Overall EGDI results

E-government development has improved at the global level, with the average EGDI value reaching 0.6382 on a scale of 0 to 1, up from 0.6102 in 2022. Figure 2.1 shows the geographical distribution of the four EGDI groups in 2024.

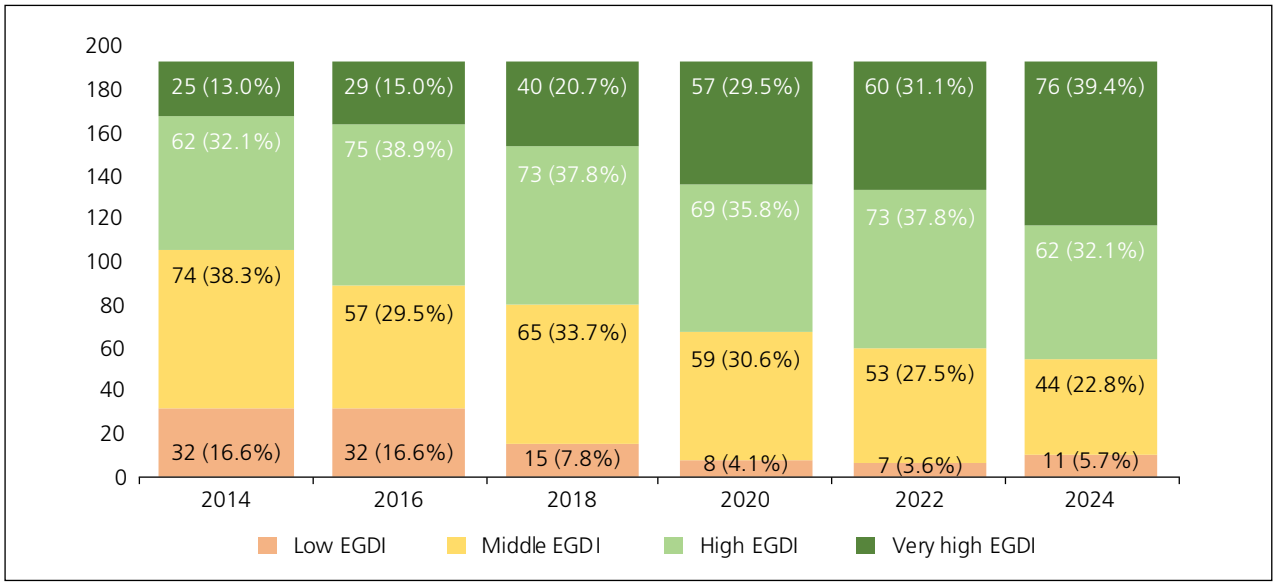
Figure 2.1 Geographical distribution of the four EGDI groups, 2024



Source: 2024 United Nations E-Government Survey.

For the first time, Member States with very high EGDI values (above 0.75) comprise the largest share, accounting for 39 per cent of the total (76 of the 193 countries assessed). This group is followed by countries with high EGDI values (ranging from 0.50 to 0.75), which make up 32 per cent (62 countries). The number of countries with middle EGDI values (ranging from 0.25 to 0.50) has declined from 53 in 2022 to 44 (23 per cent) in 2024. However, the number of countries with low EGDI values has increased from 7 to 11 (6 per cent) since 2022, primarily due to geopolitical conflicts and post-conflict situations that have hindered their digital development. The overall progress achieved is consistent with the positive e-government development trend observed over the past decade, as illustrated in figure 2.2.

Figure 2.2 Number and percentage of countries in each EGDI group, 2014 to 2024

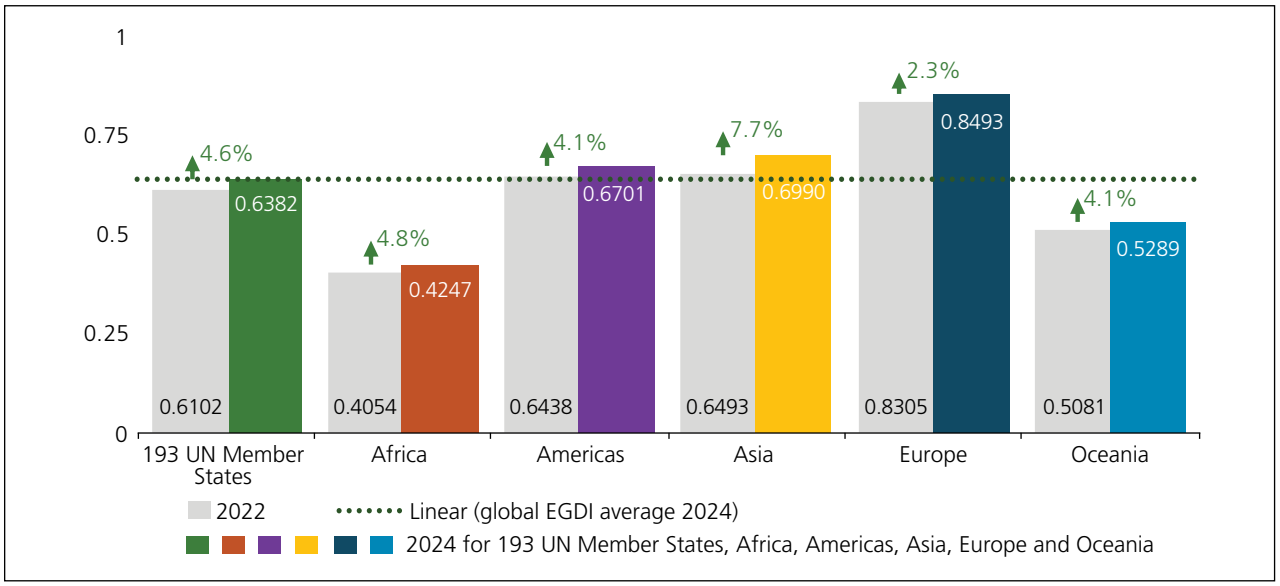


Sources: 2014-2024 United Nations E-Government Surveys.

The number of countries with very high EGDI values has more than tripled over the past ten years, rising from 25 in 2014 to 76 in 2024. The combined number of countries with very high and high EGDI values has increased from 87 in 2014 to 138 in 2024. This underscores the growing importance and priority Governments have placed on digital transformation over the past decade. It highlights the significant strides made in enhancing e-government services and infrastructure, reflecting a global commitment to leveraging technology for improved governance and public services delivery. As a result of these gains, the number of countries with middle and low EGDI values has decreased significantly, falling from 106 in 2014 to 55 in 2024. This shift is broadening the base of nations that are strengthening their digital capabilities, ensuring that more citizens can benefit from the efficiencies and conveniences of digital government services.

Figure 2.3 presents the 2024 global and regional average EGDI values and the percentage increases in these averages since 2022. Europe has the highest average EGDI value (0.8493), followed by Asia (0.6990), the Americas (0.6701), Oceania (0.5289), and Africa (0.4247). Asia has seen the sharpest increase in its average EGDI value (7.7 per cent), followed by Africa, (4.8 per cent), the Americas and Oceania (4.1 per cent), and Europe (2.3 per cent).

Figure 2.3 Global and regional EGDI averages, 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

It is noteworthy that the TII is the highest component index contributing to average EGDI values globally and regionally. This reflects the increased investment in digital infrastructure during the post-COVID-19 pandemic recovery process. Over the past two years, the average TII value has increased by 19.9 per cent globally (see table 2.1). The most significant regional increase is observed in Oceania (29.4 per cent), followed by Africa (27.8 per cent), Asia (25.5 per cent), the Americas (19.6 per cent), and Europe (9.9 per cent). These increases highlight the global emphasis on establishing a strong telecommunications infrastructure as a foundation for digital growth.

Table 2.1 Average global and regional values for the EGDI and its component indices, 2022 and 2024

Average values for:		EGDI		OSI		TII		HCI	
193 UN Member States	**2024**	**0.6382**	**4.59%**	**0.5754**	**3.6%**	**0.6896**	**19.9%**	**0.6494**	**-7.2%**
	2022	**0.6102**		**0.5554**		**0.5751**		**0.7001**	
Africa	2024	0.4247	4.8%	0.3862	5.2%	0.4534	27.8%	0.4346	-12.1%
	2022	0.4054		0.3670		0.3548		0.4945	
Americas	2024	0.6701	4.1%	0.5797	3.8%	0.7345	19.6%	0.6962	-8.3%
	2022	0.6438		0.5585		0.6139		0.7590	
Asia	2024	0.6990	7.7%	0.6401	4.3%	0.7740	25.5%	0.6828	-4.8%
	2022	0.6493		0.6137		0.6166		0.7175	
Europe	2024	0.8493	2.3%	0.7836	1.8%	0.9227	9.9%	0.8418	-4.6%
	2022	0.8305		0.7699		0.8392		0.8825	
Oceania	2024	0.5289	4.1%	0.4378	4.2%	0.4885	29.4%	0.6603	-9.5%
	2022	0.5081		0.4201		0.3775		0.7298	

Sources: 2022 and 2024 United Nations E-Government Surveys.

Global and regional OSI averages have also increased slightly since 2022. The steepest increase has been in Africa (5.2 per cent), followed by Asia (4.3 per cent), Oceania (4.2 per cent), the Americas (3.8 per cent), and Europe (1.8 per cent). This suggests that countries are making steady progress in enhancing their online service offerings, albeit at a different pace. The decrease in HCI values can be attributed to the introduction of the new e-government literacy subindex within the HCI component. The addition has made the HCI data sets from previous years not directly comparable; the lower index values for this component do not indicate a disinvestment in human capital.

These trends indicate that the surge in digitalization following the COVID-19 pandemic is now reflected in improved e-government development globally and in every region, including Africa and Oceania. Despite ongoing development challenges at the regional level and persistent digital divides within and between these regions, significant progress has been made. The unique dynamic prevailing in each region – including factors that promote or hinder digital development – is analysed in some depth in chapter 3 of the present Survey.

2.3.2 Country groupings by EGDI level and movement between the groups

Among the 76 countries in the very high EGDI group, 36 are in Europe, 25 are in Asia, 11 are in the Americas, 2 are in Africa, and 2 are in Oceania (see figure 2.4).

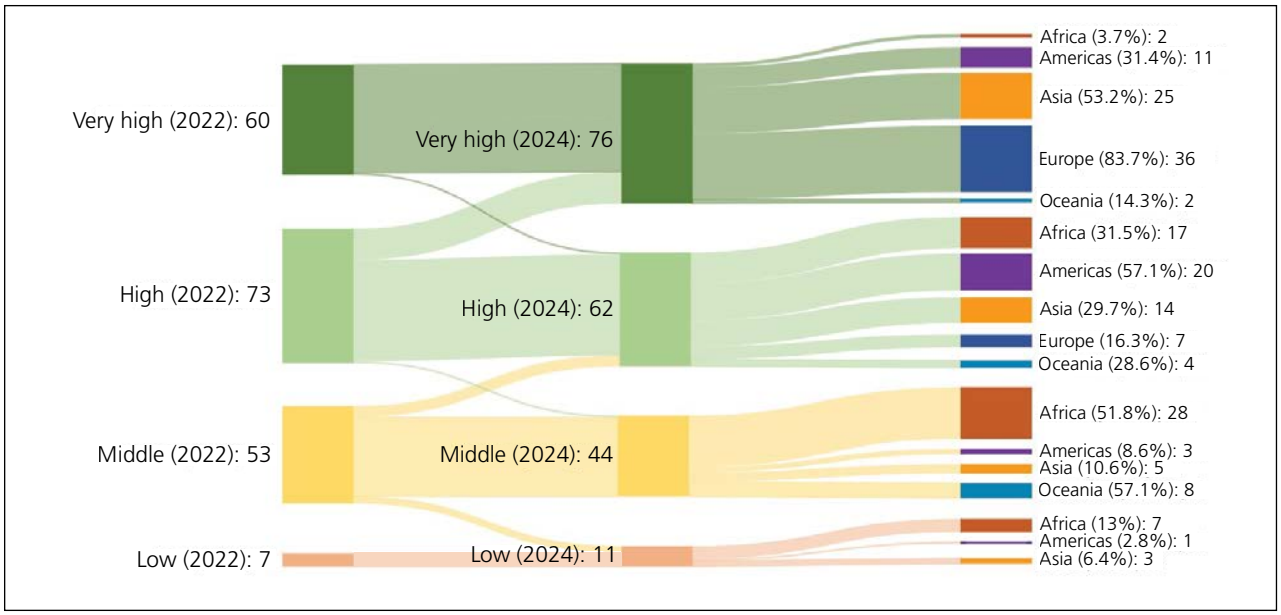
South Africa and Mauritius, with respective EGDI values of 0.8616 and 0.7506, are the first African countries to join the very high EGDI group. Europe continues to lead e-government development, with all countries in the region having very high (84 per cent) or high (16 per cent) EGDI values. While the proportion of countries with high and very high EGDI values in the Americas (88 per cent) remains higher than in Asia (83 per cent), the share of countries with very high EGDI values has been growing faster in Asia (by 21 per cent, compared with an 8 per cent increase in the Americas). Asian countries in the very high EGDI group now account for 53 per cent of the regional total – a proportion exceeded only by Europe.

Among the countries with high EGDI values, 20 are in the Americas, 17 are in Africa, 14 are in Asia, 7 are in Europe, and 4 are in Oceania. The majority of countries with middle EGDI values are in Africa (28), followed by Oceania (8), Asia (5), and the Americas (3). Among the 11 countries with low EGDI values, 7 are in Africa, 3 are in Asia, and 1 is in the Americas.

All of the countries with low EGDI values in 2022 are still in the same group in 2024, and four other countries have moved from the middle to the low EGDI group.

A more detailed analysis of e-government development at the regional level is provided in chapter 3. Section 2.6 of this chapter includes an analysis of countries in special situations.

Figure 2.4 The number of countries in each regional EGDI group and the movement of countries between EGDI groups, 2024

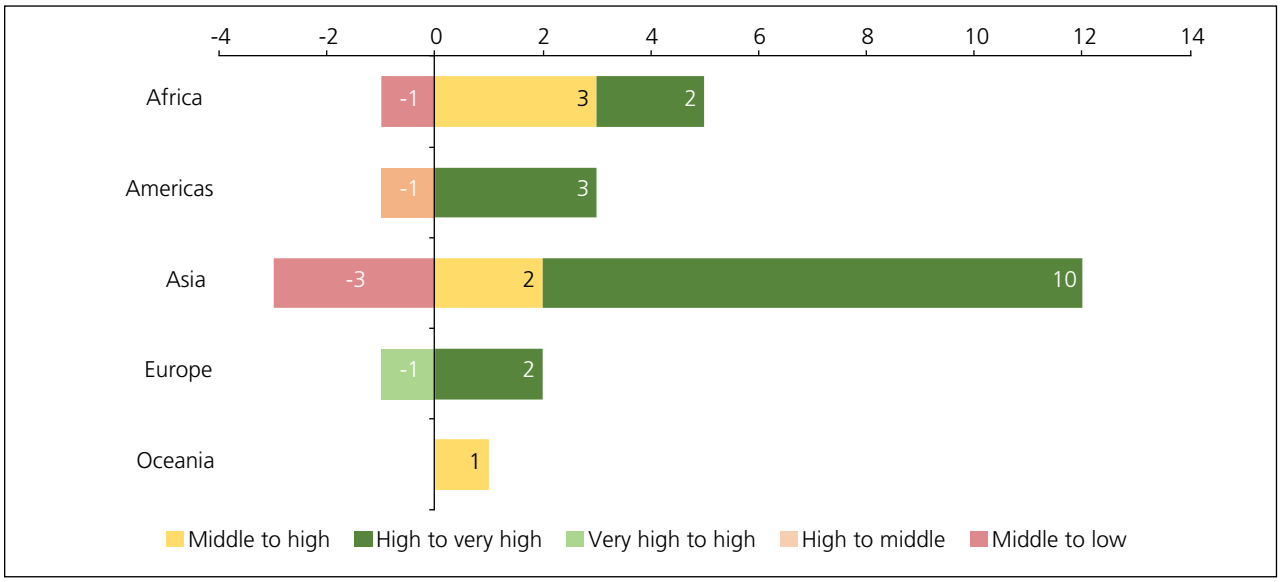


Source: 2024 United Nations E-Government Survey.

Movement between EGDI groups and rating classes

Twenty-three countries have moved to a higher EGDI group. Ten countries in Asia (Armenia, Azerbaijan, Brunei Darussalam, Indonesia, Kuwait, Mongolia, Philippines, Qatar, Uzbekistan, and Viet Nam), three countries in the Americas (Colombia, Ecuador, and Mexico), two countries in Africa (Mauritius and South Africa), and two countries in Europe (Albania and the Republic of Moldova) have moved from the high to the very high EGDI group (see figure 2.5). Three countries in Africa (Eswatini, Libya, and Senegal), two in Asia (Myanmar and Pakistan), and one in Oceania (Vanuatu) have moved from the middle to the high EGDI group.

Figure 2.5 Movement of countries between EGDI groups during the period 2022-2024, by region
(Number of countries)



Source: 2024 United Nations E-Government Survey.

These countries have made significant progress in their digital transformation journeys, focusing on enhancing their telecommunications infrastructure, improving online services, and investing in human capital development. They have implemented various strategies and initiatives to boost their digital capabilities, such as expanding broadband access, developing e-government platforms, and promoting digital literacy among their populations. These efforts have been instrumental in their advancement and upward movement in the EGDI rankings.

Downward movement between EGDI groups is observed for six countries, including Belarus in Europe (from very high to high), Belize in the Americas (from high to middle), Burundi in Africa (from middle to low), and Afghanistan, Democratic People's Republic of Korea, and Yemen in Asia (also from middle to low). These countries have been dealing with significant geopolitical and post-conflict challenges that have hindered their digital development. The inability to fully assess these countries due to data and portal restrictions has further contributed to their downward shifts in EGDI levels and rankings. These factors highlight the complex and multifaceted nature of e-government development, where political stability and access to reliable data and open digital platforms play crucial roles.

More detailed information on these developments and the specific efforts undertaken by countries is available in chapter 3.

2.3.3 Countries leading e-government development

Table 2.2 shows the EGDI composite and component values for the 18 countries leading e-government development globally. All these countries are in the very high (VH) rating class within the very high EGDI group.

Table 2.2 Countries leading e-government development, 2024
(Index values)

Country	Rating class	Region	OSI	HCI	TII	EGDI (2024)	EGDI (2022)
Denmark	VH	Europe	0.9992	0.9584	0.9966	0.9847	0.9717
Estonia	VH	Europe	0.9954	0.9497	0.9731	0.9727	0.9393
Singapore	VH	Asia	0.9831	0.9362	0.9881	0.9691	0.9133
Republic of Korea	VH	Asia	1.0000	0.9120	0.9917	0.9679	0.9529
Iceland	VH	Europe	0.9076	0.9953	0.9983	0.9671	0.9410
Saudi Arabia	VH	Asia	0.9899	0.9067	0.9841	0.9602	0.8539
United Kingdom of Great Britain and Northern Ireland	VH	Europe	0.9535	0.9450	0.9747	0.9577	0.9138
Australia	VH	Oceania	0.9222	1.0000	0.9509	0.9577	0.9405
Finland	VH	Europe	0.9097	0.9836	0.9791	0.9575	0.9533
Netherlands (Kingdom of the)	VH	Europe	0.9212	0.9688	0.9715	0.9538	0.9384
United Arab Emirates	VH	Asia	0.9163	0.9436	1.0000	0.9533	0.9010
Germany	VH	Europe	0.9238	0.9672	0.9236	0.9382	0.8770
Japan	VH	Asia	0.9427	0.9117	0.9509	0.9351	0.9002
Sweden	VH	Europe	0.8836	0.9275	0.9868	0.9326	0.9410
Norway	VH	Europe	0.9117	0.9175	0.9654	0.9315	0.8879
New Zealand	VH	Oceania	0.9453	0.9615	0.8728	0.9265	0.9432
Spain	VH	Europe	0.9054	0.8961	0.9603	0.9206	0.8842
Bahrain	VH	Asia	0.9030	0.8680	0.9877	0.9196	0.7707

Sources: 2022 and 2024 United Nations E-Government Surveys.

The group of countries in the highest (VH) rating class is almost identical to the corresponding group in the previous edition of the Survey, though there has been a net increase of three countries. Included in the VH rating class are 10 countries in Europe, 6 in Asia, and 2 in Oceania. In Europe, three countries (Germany, Norway and Spain) have joined this group, while Malta has moved down to the V3 rating class. In Asia, Bahrain and Saudi Arabia respectively moved from the V1 and V2 rating classes in 2022 to the VH rating class in 2024. In the Americas, the United States of America has moved from the VH to the V3 rating class.

The 18 countries leading digital development are exclusively high-income countries. Denmark has the highest EGDI value globally for the fourth consecutive Survey and is one of ten countries in Europe and one of seven countries in the European Union that are part of the highest (VH) rating class. Spain is the only member of the VH rating class in Southern Europe; Germany and the Kingdom of the Netherlands are in Western Europe, and the other seven countries are in Northern Europe. Europe accounts for 56 per cent of the countries in the VH rating class (Denmark, Estonia, Finland, Germany, Iceland, Kingdom of the Netherlands, Norway, Spain, Sweden, and United Kingdom), and Asia accounts for 33 per cent (Bahrain, Japan, Republic of Korea, Singapore, United Arab Emirates, and Saudi Arabia). For the first time, Singapore is the top EGDI performer in Asia, followed by the Republic of Korea and Saudi Arabia. In Oceania, Australia and New Zealand lead e-government development, consistent with the past four editions of the Survey, and account for 11 per cent of the countries in the VH rating class.

More detailed information on these developments and the specific efforts undertaken by the leading countries is available in chapter 3.

2.4 National income and e-government development

There has always been a positive correlation between EGDI values and country income as measured by per capita gross domestic product (GDP). Higher-income countries tend to have higher EGDI values than do lower-income countries. This suggests that wealthier nations typically have more resources to invest in the necessary infrastructure, technology, and human capital required for advanced e-government services. Having a higher income allows these countries to develop robust telecommunications networks, comprehensive online services, and extensive educational programmes to boost digital literacy – all of which contribute to higher EGDI values.

A detailed analysis of the EGDI and its component indices can be strategic for ascertaining nuanced policy implications. Examining these components individually can allow policymakers to identify specific areas of strength and weakness within their e-government framework. Understanding the interplay between these indices and broader socioeconomic factors enables countries to formulate more effective e-government strategies tailored to their specific needs. It highlights the importance of financial investment but also the need for comprehensive policies that support digital transformation, with clear provisions for inclusive education, innovative governance, and robust infrastructure development.

Figure 2.6 shows the percentage change in EGDI component values between 2022 and 2024 for different national income groups.

Figure 2.6 Percentage change in EGDI component values between 2022 and 2024, by country income group, 2024

Sources: 2022 and 2024 United Nations E-Government Surveys.

TII values have risen for all income groups in 2024, with the greatest increase observed for the lower-middle-income group (33.7 per cent), followed by the upper-middle-income group (24.5 per cent), the high-income group (9.6 per cent), and the low-income group (7.1 per cent). These gains demonstrate a concerted push towards improving the foundational aspects of digital connectivity. The corresponding increases in OSI values are less pronounced, indicating that infrastructure improvements are not yet translating into substantial enhancements in online services provision for many nations.

Countries in the upper-middle-income group have focused on enhancing telecommunications infrastructure, which has positively affected their overall EGDI values; improvements in online services have been more modest, averaging 1.6 per cent for this group.

For the lower-middle-income group, the 8.6 per cent increase in the average OSI value suggests that these countries are prioritizing the allocation of resources towards improving online services provision. Among lower-middle-income countries, eight have very high OSI values: India (0.8184), Jordan (0.7591), Kenya (0.7770), Mongolia (0.8222), Philippines (0.8054), Thailand (0.7611), Ukraine (0.9854), and Uzbekistan (0.7648). Fifteen others (Bangladesh, Benin, Bhutan, Plurinational State of Bolivia, Cabo Verde, Côte d'Ivoire, Egypt, Ghana, Kyrgyzstan, Morocco, Nigeria, Pakistan, Sri Lanka, Tunisia, and Viet Nam) have high OSI values.

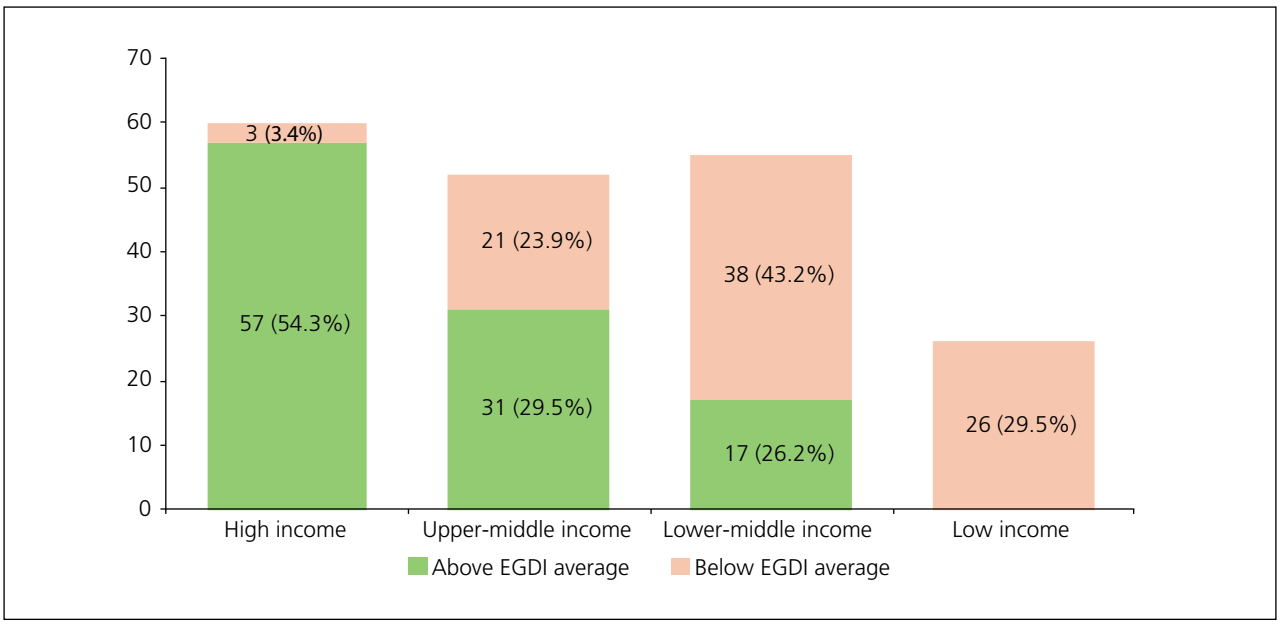
High-income countries have already achieved a relatively high level of services provision, so the increases in their average OSI value (2.0 per cent) and average EGDI value (2.4 per cent) are more modest. While high-income countries continue to invest in and improve their digital services, incremental gains tend to be smaller, as these countries have already reached an advanced stage of development. The 9.6 per cent increase in the average TII value is impressive, however.

A concerning trend is observed in low-income countries, where the average OSI value has declined by 5.6 per cent, and the average EGDI value has declined by 6.7 per cent despite the 7.1 per cent increase in the average TII value. This indicates that while many low-income countries are strengthening their telecommunications infrastructure, a substantial number face significant challenges in developing their e-government services and online presence, which are critical for enhancing public services delivery and citizen engagement; Rwanda, with a very high OSI value of 0.8207, and Uganda, with a high OSI value of 0.6069, are notable exceptions. The downward shift for the group as a whole signifies a deepening digital divide as low-income countries struggle to keep pace with other country income groups in digital development.

For all country income groups, average HCI values have declined. This drop is primarily due to changes in the way the HCI is measured and does not necessarily imply disinvestment in human capital by the Member States. The HCI modifications include the addition of the new subindex to assess e-government literacy and refinements in the weights assigned to the other indicators. The updated HCI reflects a more comprehensive assessment of human capital development.

The digital divide, as measured by the range in EGDI values, remains a critical issue in assessing global e-government development. Using the EGDI world average of 0.6382 as a proxy threshold, significant disparities are evident between countries of different income levels. Digital divides are vividly illustrated in figure 2.7, where countries in each income category are grouped by their EGDI values relative to the global average.

Figure 2.7 Number of countries with EGDI values above and below the global average, by income group, 2024



Source: 2024 United Nations E-Government Survey.

Eighty-four per cent of the 105 Member States that have EGDI values above the global average are countries with a high income (54 per cent) or upper-middle income (30 per cent). This distribution underscores the strong correlation between national income level and the capacity to develop advanced e-government services.

In stark contrast, only 16 per cent of the countries with EGDI values above the world average are in the lower-middle-income group, and none of the low-income countries have reached or exceeded the global average EGDI value. The lower-middle-income countries have seen improvement in their average OSI value but still make up a relatively small share of the countries with EGDI values above the global average. This indicates that while progress has been made in certain areas of digital government, countries on the lower end of the income spectrum continue to struggle with comprehensive e-government development. The improvements in OSI values suggest that there have been targeted efforts to enhance online services; however, these efforts alone are insufficient to overcome the broader infrastructural and human capital deficits that hinder overall e-government progress.

These trends highlight the substantial challenges faced by lower-income countries in bridging the digital divide. A more detailed analysis of the digital divide and its implications for global and regional e-government development is provided in chapter 3. This analysis delves deeper into the specific challenges faced by the countries in different income groups and offers insights into effective strategies for narrowing the digital divide and achieving greater equity and inclusiveness in the provision of digital government services worldwide.

2.5 Online Services Index

OSI values are based on the results of a comprehensive survey covering multiple aspects of the online presence of all 193 Member States. The five OSI subindices include services provision, the institutional framework supporting e-government development, content provision, technological aspects of the portals, and e-participation. The composite OSI value is calculated based on the normalized values for each of these subindices (see the technical appendix for details on the methodology used). The results are tabulated and presented as a set of standardized index values on a scale of 0 to 1, with 1 corresponding to the highest-rated online services provision and 0 to the lowest.

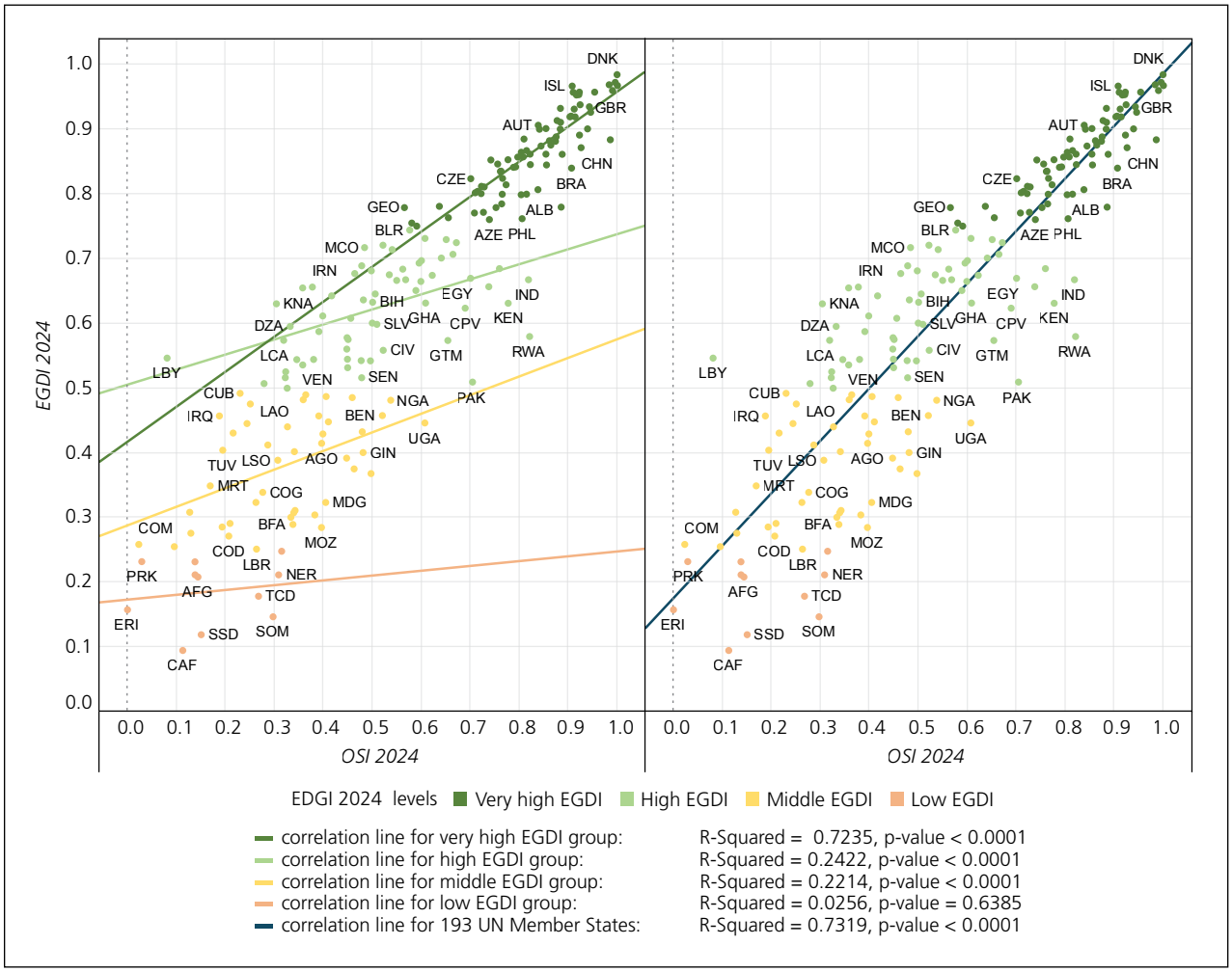
OSI values, like EGDI values, are not intended as absolute measurements; rather, they capture the online performance of countries relative to each other at a particular point in time. Because the OSI is a composite tool, a high value is an indication of current best practices rather than perfection. Similarly, a lower value, or a value that has not changed since the last edition of the Survey, does not mean there has been no progress in e-government development. Survey results relating to the OSI and its five subindices are presented below.

2.5.1 Country groupings by OSI and EGDI levels

Figure 2.8 highlights the positive correlation between progress in online services provision and overall improvement in e-government development (as reflected in OSI and EGDI values).

While a country's online services development is often a solid predictor of overall e-government development, the two are not always aligned, as the TII and HCI components are also factored into the EGDI value. It is important to identify cases in which the OSI level is higher or lower than the overall EGDI level so that targeted policies can be adopted and sufficient resources allocated for the improvement of online services provision.

Figure 2.8 Distribution of EGDI levels relative to OSI levels for United Nations Member States, 2024



Source: 2024 United Nations E-Government Survey

As indicated in table 2.3, OSI and EGDI levels are positively correlated for 123 of the 193 Member States (64 per cent). However, 11 countries have OSI levels that are higher than their EGDI levels, and 59 countries have OSI levels lower than their respective EGDI levels; in the first group, the level of online services provision has already surpassed the level of telecommunications infrastructure and/or human capital development, while in the second group, the higher levels of infrastructure and/or human capital development provide a foundation for accelerating the development of online services provision.

Table 2.3 Convergence and divergence of OSI levels relative to EGDI levels, 2024

Member States		Very high EGDI		High EGDI		Middle EGDI		Low EGDI	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Very high OSI	65	61	94%	4	6.2%	-	-	-	-
High OSI	45	15	33%	27	60%	3	6.7%	-	-
Middle OSI	62	-	-	30	48.4%	28	45.2%	4	6.5%
Low OSI	21	-	-	1	4.8%	13	61.9%	7	33.3%
Total	**193**	**76**		**62**		**44**		**11**	

Source: 2024 United Nations E-Government Survey.

Notes: The cells shaded in blue indicate convergence between OSI and EGDI levels. The cells shaded in green and red represent divergence (green = OSI level > EGDI level; red = OSI level < EGDI level).

From a policymaking perspective, the implications for improving overall e-government development (expressed as an EGDI value) may differ for countries with divergences in OSI, TII or HCI levels, which are highlighted below.

Very high OSI group

Ninety-four per cent of the 65 countries with very high OSI values (ranging from 0.75 to 1.00) also have very high EGDI values. Table 2.4 lists countries with very high OSI levels that have divergent EGDI, TII or HCI values. This snapshot suggests that Ecuador would benefit from further investment in telecommunications infrastructure, whereas India, Jordan, Kenya and Rwanda need to focus on the development of both digital infrastructure and human capital. Peru, the Philippines and Qatar already have very high TII values but would benefit from additional investment in human capital development.

Table 2.4 Countries with very high OSI levels and divergent EDGI, TII or HCI levels, 2024

Countries	EDGI level	OSI level	HCI level	TII level	Region
Ecuador	Very High EGDI	VH-OSI	VH-HCI	H-TII	Americas
India	High EGDI	VH-OSI	H-HCI	H-TII	Asia
Jordan	High EGDI	VH-OSI	H-HCI	H-TII	Asia
Kenya	High EGDI	VH-OSI	H-HCI	H-TII	Africa
Peru	Very High EGDI	VH-OSI	H-HCI	VH-TII	Americas
Philippines	Very High EGDI	VH-OSI	H-HCI	VH-TII	Asia
Qatar	Very High EGDI	VH-OSI	H-HCI	VH-TII	Asia
Rwanda	High EGDI	VH-OSI	H-HCI	M-TII	Africa

Source: 2024 United Nations E-Government Survey.

High OSI group

The high OSI group is relatively diverse in terms of HCI, TII, and overall EGDI values (see table 2.5). National e-government development policies can be tailored to specific needs within this context.

Among the 45 countries with high OSI values (0.50 to 0.75), 27 have high EGDI values as well. However, only seven countries (Bangladesh, the Plurinational State of Bolivia, Cabo Verde, Dominican Republic, Egypt, Ghana, and Jamaica) are also in the high TII and HCI groups.

Belgium, Costa Rica, Czechia, Georgia, Hungary, Liechtenstein, Republic of Moldova, and Slovakia have very high TII and HCI values and are all part of the very high EGDI group. With such a solid foundation in place, these countries can focus on further developing their online services.

Azerbaijan, Brunei Darussalam, Kuwait, Malaysia, Mauritius, Romania, and Viet Nam have very high TII and EGDI values but can accelerate digital development by improving online services delivery and human capital development.

Countries whose strongest component is telecommunications infrastructure (as reflected in their very high TII values) include Bahamas, Belarus, Bhutan, Bosnia and Herzegovina, El Salvador, Fiji, Kyrgyzstan, Maldives, Montenegro, Morocco, North Macedonia, Panama, Paraguay, Sri Lanka, Trinidad and Tobago, and Tunisia. With high values for the other two components and the composite Index, these countries are making solid progress but can improve their overall e-government development (EGDI values) by investing more in strengthening human capital and online services provision.

Table 2.5 Countries with high OSI levels grouped by divergences with EDGI, TII or HCI levels, 2024

Countries	EDGI level	OSI level	HCI level	TII level	Region
Belgium	Very High EGDI	H-OSI	VH-HCI	VH-TII	Europe
Costa Rica	Very High EGDI	H-OSI	VH-HCI	VH-TII	Americas
Czechia	Very High EGDI	H-OSI	VH-HCI	VH-TII	Europe
Georgia	Very High EGDI	H-OSI	VH-HCI	VH-TII	Asia
Hungary	Very High EGDI	H-OSI	VH-HCI	VH-TII	Europe
Liechtenstein	Very High EGDI	H-OSI	VH-HCI	VH-TII	Europe
Republic of Moldova	Very High EGDI	H-OSI	VH-HCI	VH-TII	Europe
Slovakia	Very High EGDI	H-OSI	VH-HCI	VH-TII	Europe
Azerbaijan	Very High EGDI	H-OSI	H-HCI	VH-TII	Asia
Brunei Darussalam	Very High EGDI	H-OSI	H-HCI	VH-TII	Asia
Kuwait	Very High EGDI	H-OSI	H-HCI	VH-TII	Asia
Malaysia	Very High EGDI	H-OSI	H-HCI	VH-TII	Asia
Mauritius	Very High EGDI	H-OSI	H-HCI	VH-TII	Africa
Romania	Very High EGDI	H-OSI	H-HCI	VH-TII	Europe
Viet Nam	Very High EGDI	H-OSI	H-HCI	VH-TII	Asia
Bahamas	High EGDI	H-OSI	H-HCI	VH-TII	Americas
Belarus	High EGDI	H-OSI	H-HCI	VH-TII	Europe
Bhutan	High EGDI	H-OSI	H-HCI	VH-TII	Asia
Bosnia and Herzegovina	High EGDI	H-OSI	H-HCI	VH-TII	Europe
El Salvador	High EGDI	H-OSI	H-HCI	VH-TII	Americas
Fiji	High EGDI	H-OSI	H-HCI	VH-TII	Oceania
Kyrgyzstan	High EGDI	H-OSI	H-HCI	VH-TII	Asia
Maldives	High EGDI	H-OSI	H-HCI	VH-TII	Asia
Montenegro	High EGDI	H-OSI	H-HCI	VH-TII	Europe
Morocco	High EGDI	H-OSI	H-HCI	VH-TII	Africa
North Macedonia	High EGDI	H-OSI	H-HCI	VH-TII	Europe
Panama	High EGDI	H-OSI	H-HCI	VH-TII	Americas
Paraguay	High EGDI	H-OSI	H-HCI	VH-TII	Americas
Sri Lanka	High EGDI	H-OSI	H-HCI	VH-TII	Asia
Trinidad and Tobago	High EGDI	H-OSI	H-HCI	VH-TII	Americas
Tunisia	High EGDI	H-OSI	H-HCI	VH-TII	Africa
Grenada	High EGDI	H-OSI	VH-HCI	H-TII	Americas
Pakistan	High EGDI	H-OSI	M-HCI	M-TII	Asia
Côte d'Ivoire	High EGDI	H-OSI	M-HCI	H-TII	Africa
Guatemala	High EGDI	H-OSI	M-HCI	H-TII	Americas
Benin	Middle EGDI	H-OSI	M-HCI	M-TII	Africa
Nigeria	Middle EGDI	H-OSI	M-HCI	M-TII	Africa
Uganda	Middle EGDI	H-OSI	H-HCI	L-TII	Africa

Source: 2024 United Nations E-Government Survey.

Granada has a very high HCI level and can capitalize on this by investing in infrastructure development and online services provision.

Benin, Nigeria and Pakistan are in the middle TII and HCI groups. Through its significant investment in online services provision, Pakistan has achieved a higher level of overall e-government development than the other two countries. Benin and Nigeria have higher HCI and TII values than does Pakistan and would benefit from increased investment in online services provision.

Guatemala and Côte d'Ivoire have high EGDI values of 0.6583 and 0.5219, respectively, but the TII value is higher in Côte d'Ivoire (0.6693) than in Guatemala (0.5596). While both countries need to invest in strengthening e-government, particularly through human capital development, the stronger telecommunications infrastructure in Côte d'Ivoire will allow more rapid advancement in online services provision.

With an HCI value of 0.5023, an OSI value of 0.6069, and a TII value of 0.2299, Uganda has leveraged its human capital to achieve notable progress in online services delivery despite having an underdeveloped telecommunications infrastructure. Significant investment in building this infrastructure will allow the country to reach a higher level of e-government development.

Middle OSI group

Divergences between OSI and EGDI levels are most pronounced for the group of 62 countries with middle OSI values (0.25 to 0.50). About half of these countries have high EDGI levels, and four have low EGDI levels.

For nine countries in the middle OSI group (Angola, Congo, Ethiopia, Guinea, Lesotho, Sierra Leone, Syrian Arab Republic, Togo, and United Republic of Tanzania), the EGDI, OSI, HCI and TII levels coincide. The variations in TII and HCI levels for the other countries in the group are provided in table 2.6.

Twenty-five countries in the middle OSI group – Algeria, Antigua and Barbuda, Botswana, Cambodia, Eswatini, Gabon, Islamic Republic of Iran, Nepal, Saint Kitts and Nevis, San Marino, Seychelles, Suriname, Dominica, Guyana, Lebanon, Myanmar, Namibia, Nicaragua, Saint Lucia, Saint Vincent and the Grenadines, Tajikistan, Vanuatu, Bolivarian Republic of Venezuela, and Zambia – have high EGDI values, and their telecommunications infrastructure and human capital are sufficiently well developed to support accelerated advancement in e-government if investments are targeted towards improving services delivery.

Barbados and Monaco have very high HCI and TII values but are in the high EGDI group because their online services provision requires further development. Togo and Palau have highly developed human capital but need to improve their telecommunications infrastructure and online services provision.

For 19 other countries (Belize, Turkmenistan, Lao People's Democratic Republic, Marshall Islands, Cameroon, Honduras, Kiribati, Samoa, Timor-Leste, Zimbabwe, Burkina Faso, Mali, Liberia, Madagascar, Malawi, Federated States of Micronesia, Mozambique, Papua New Guinea, and Solomon Islands), EGDI and OSI levels coincide, but OSI, TII and HCI values diverge, indicating that targeted efforts may be needed in one or more of these areas to achieve balanced and comprehensive e-government development.

Table 2.6 Countries with middle OSI levels grouped by divergences with EDGI, TII or HCI levels, 2024

Countries	EDGI level	OSI level	HCI level	TII level	Region
Barbados	High EGDI	M-OSI	VH-HCI	VH-TII	Americas
Monaco	High EGDI	M-OSI	VH-HCI	VH-TII	Europe
Algeria	High EGDI	M-OSI	H-HCI	VH-TII	Africa
Andorra	High EGDI	M-OSI	H-HCI	VH-TII	Europe
Antigua and Barbuda	High EGDI	M-OSI	H-HCI	VH-TII	Americas
Botswana	High EGDI	M-OSI	H-HCI	VH-TII	Africa
Cambodia	High EGDI	M-OSI	H-HCI	VH-TII	Asia
Eswatini	High EGDI	M-OSI	H-HCI	VH-TII	Africa
Gabon	High EGDI	M-OSI	H-HCI	VH-TII	Africa
Iran (Islamic Republic of)	High EGDI	M-OSI	H-HCI	VH-TII	Asia
Nepal	High EGDI	M-OSI	H-HCI	VH-TII	Asia
Saint Kitts and Nevis	High EGDI	M-OSI	H-HCI	VH-TII	Americas
San Marino	High EGDI	M-OSI	H-HCI	VH-TII	Europe
Seychelles	High EGDI	M-OSI	H-HCI	VH-TII	Africa
Suriname	High EGDI	M-OSI	H-HCI	VH-TII	Americas
Dominica	High EGDI	M-OSI	H-HCI	H-TII	Americas
Guyana	High EGDI	M-OSI	H-HCI	H-TII	Americas
Lebanon	High EGDI	M-OSI	H-HCI	H-TII	Asia
Myanmar	High EGDI	M-OSI	H-HCI	H-TII	Asia
Namibia	High EGDI	M-OSI	H-HCI	H-TII	Africa
Nicaragua	High EGDI	M-OSI	H-HCI	H-TII	Americas
Saint Lucia	High EGDI	M-OSI	H-HCI	H-TII	Americas
Saint Vincent and the Grenadines	High EGDI	M-OSI	H-HCI	H-TII	Americas
Tajikistan	High EGDI	M-OSI	H-HCI	H-TII	Asia
Vanuatu	High EGDI	M-OSI	H-HCI	H-TII	Oceania
Venezuela, Bolivarian Republic of	High EGDI	M-OSI	H-HCI	H-TII	Americas
Zambia	High EGDI	M-OSI	H-HCI	H-TII	Africa
Tonga	High EGDI	M-OSI	H-HCI	M-TII	Oceania
Palau	High EGDI	M-OSI	VH-HCI	M-TII	Oceania
Belize	Middle EGDI	M-OSI	H-HCI	H-TII	Americas
Turkmenistan	Middle EGDI	M-OSI	H-HCI	H-TII	Asia
Lao People's Democratic Republic	Middle EGDI	M-OSI	M-HCI	H-TII	Asia
Marshall Islands	Middle EGDI	M-OSI	VH-HCI	M-TII	Oceania
Cameroon	Middle EGDI	M-OSI	H-HCI	M-TII	Africa
Honduras	Middle EGDI	M-OSI	H-HCI	M-TII	Americas
Kiribati	Middle EGDI	M-OSI	H-HCI	M-TII	Oceania
Samoa	Middle EGDI	M-OSI	H-HCI	M-TII	Oceania
Timor-Leste	Middle EGDI	M-OSI	H-HCI	M-TII	Asia
Zimbabwe	Middle EGDI	M-OSI	H-HCI	M-TII	Africa
Burkina Faso	Middle EGDI	M-OSI	L-HCI	M-TII	Africa
Mali	Middle EGDI	M-OSI	L-HCI	M-TII	Africa
Liberia	Middle EGDI	M-OSI	M-HCI	L-TII	Africa
Madagascar	Middle EGDI	M-OSI	M-HCI	L-TII	Africa
Malawi	Middle EGDI	M-OSI	M-HCI	L-TII	Africa
Micronesia (Federated States of)	Middle EGDI	M-OSI	H-HCI	L-TII	Oceania
Mozambique	Middle EGDI	M-OSI	M-HCI	L-TII	Africa
Papua New Guinea	Middle EGDI	M-OSI	M-HCI	L-TII	Oceania
Solomon Islands	Middle EGDI	M-OSI	M-HCI	L-TII	Oceania

Source: 2024 United Nations E-Government Survey.

Low OSI group

Of the 21 countries with low OSI values (0.00 to 0.25), 1 has a high EGDI value and 13 are in the middle EDGI group. These countries (Libya, Cuba, Nauru, Sao Tome and Principe, Tuvalu, Iraq, Mauritania, Comoros, Djibouti, Equatorial Guinea, Gambia, Guinea-Bissau, Sudan, and Democratic Republic of the Congo), along with Yemen, have a moderately developed infrastructure and human capital base that, while limited, can support the expansion of online services delivery and contribute to overall e-government development. For Afghanistan, Democratic People's Republic of Korea, Eritrea, Haiti, Central African Republic, and South Sudan, significant investment is needed in all areas; failing to move forward with e-government and broader digital development will only widen the digital divide as some countries are left behind in a world that is becoming highly digitalized.

Table 2.7 Countries with low OSI levels grouped by divergences with EDGI, TII or HCI levels, 2024

Countries	EDGI level	OSI level	HCI level	TII level	Region
Libya	High EGDI	L-OSI	H-HCI	VH-TII	Africa
Cuba	Middle EGDI	L-OSI	H-HCI	H-TII	Americas
Nauru	Middle EGDI	L-OSI	H-HCI	H-TII	Oceania
Sao Tome and Principe	Middle EGDI	L-OSI	H-HCI	M-TII	Africa
Tuvalu	Middle EGDI	L-OSI	H-HCI	M-TII	Oceania
Iraq	Middle EGDI	L-OSI	M-HCI	H-TII	Asia
Mauritania	Middle EGDI	L-OSI	M-HCI	H-TII	Africa
Comoros	Middle EGDI	L-OSI	M-HCI	M-TII	Africa
Djibouti	Middle EGDI	L-OSI	M-HCI	M-TII	Africa
Equatorial Guinea	Middle EGDI	L-OSI	M-HCI	M-TII	Africa
Gambia	Middle EGDI	L-OSI	M-HCI	M-TII	Africa
Guinea-Bissau	Middle EGDI	L-OSI	M-HCI	M-TII	Africa
Sudan	Middle EGDI	L-OSI	M-HCI	M-TII	Africa
Democratic Republic of the Congo	Middle EGDI	L-OSI	M-HCI	L-TII	Africa
Yemen	Low EGDI	L-OSI	M-HCI	M-TII	Asia
Afghanistan	Low EGDI	L-OSI	M-HCI	L-TII	Asia
Democratic People's Republic of Korea	Low EGDI	L-OSI	M-HCI	L-TII	Asia
Eritrea	Low EGDI	L-OSI	M-HCI	L-TII	Africa
Haiti	Low EGDI	L-OSI	M-HCI	L-TII	Americas
Central African Republic	Low EGDI	L-OSI	L-HCI	L-TII	Africa
South Sudan	Low EGDI	L-OSI	L-HCI	L-TII	Africa

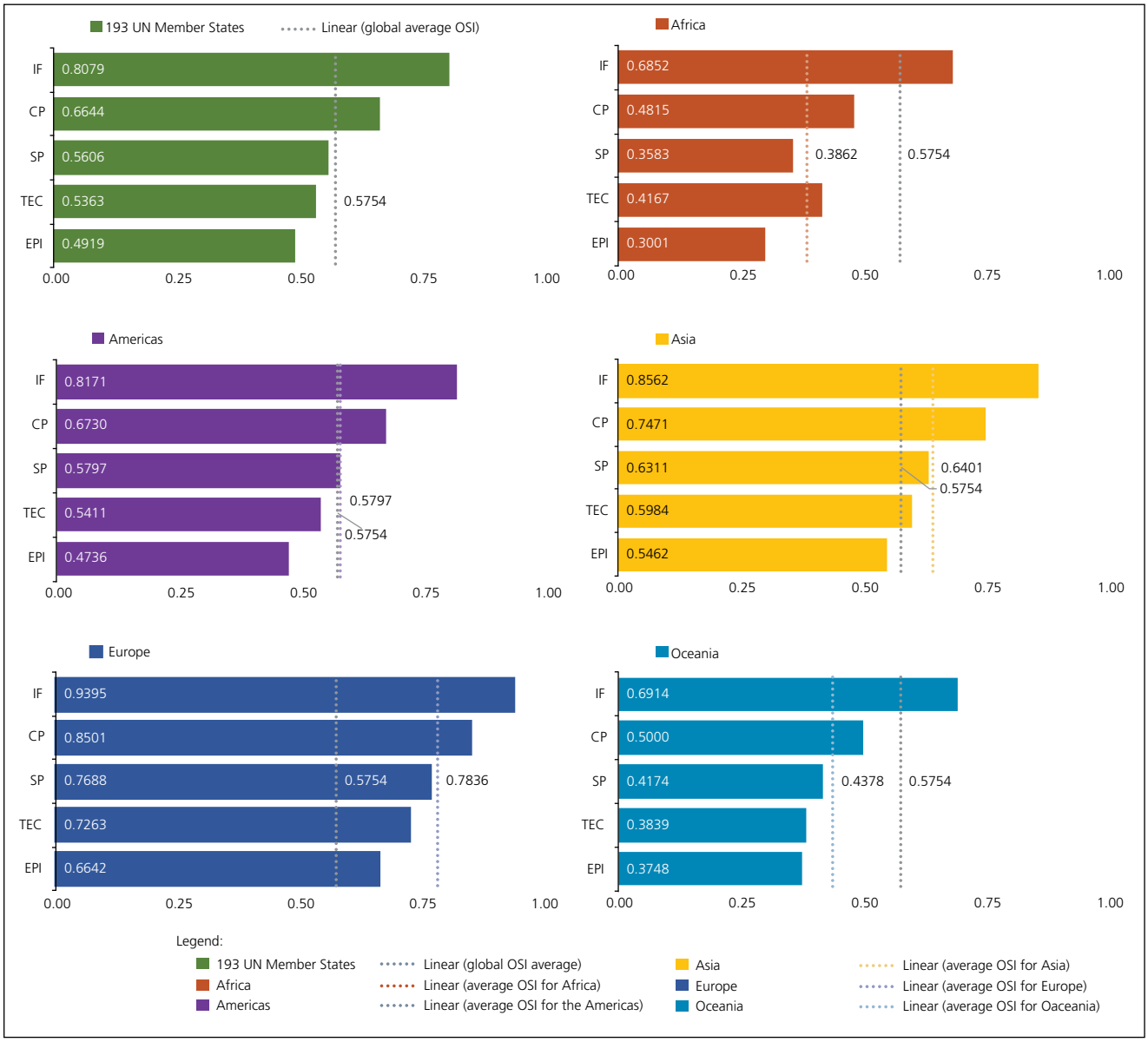
Source: 2024 United Nations E-Government Survey.

2.5.2 OSI subindices

The subsections above have highlighted areas that require further attention if countries wish to strengthen overall e-government development (as reflected in their respective EGDI levels). In cases where improvements in online services provision (OSI values) are necessary, it is important to understand which specific aspects of this component require attention. The main Survey findings for each of the five OSI subindices are presented below.

As shown in figure 2.9, the institutional framework (IF) is better developed than other aspects of online services provision in all regions. Content provision (CP) has the next highest subindex value, followed by services provision (SP), technical characteristics (TEC) and e-participation (EPI). At the regional level, Europe is leading in terms of average OSI and subindex values, followed by Asia, the Americas, Oceania, and Africa – the one exception being that the technical aspects of the OSI are slightly better developed in Africa than in Oceania.

Figure 2.9 Values for OSI subindices (IF, CP, SP, TEC and EPI) at the regional and global levels, 2024

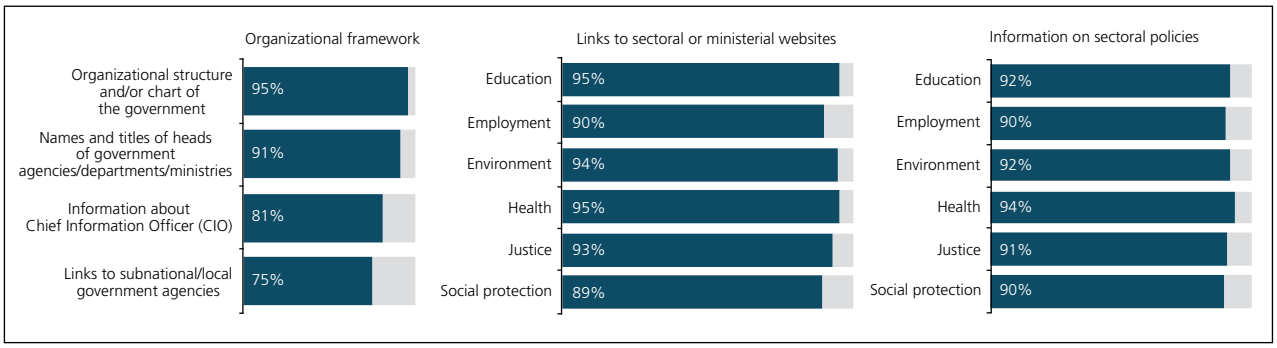


Source: 2024 United Nations E-Government Survey.

2.5.3 OSI institutional framework subindex

The organizational aspects of the institutional framework, which orient users on engaging government agencies through the online platforms, are well developed across the board (see figure 2.10). All Member States except Belize* have fully operational national portals. The vast majority of countries (95 per cent) make the government organizational chart and information on the government structure available on these portals, 91 per cent provide the names and titles of the heads of government agencies, departments and ministries, 81 per cent furnish information on the national chief information officer (CIO) or the equivalent, and 75 per cent share links to subnational or local government agencies. More than 90 per cent of the countries have national portals that provide links to ministerial websites and offer sources of information on sector-specific policies.

Figure 2.10 Percentage of countries addressing various aspects of the institutional framework, 2024

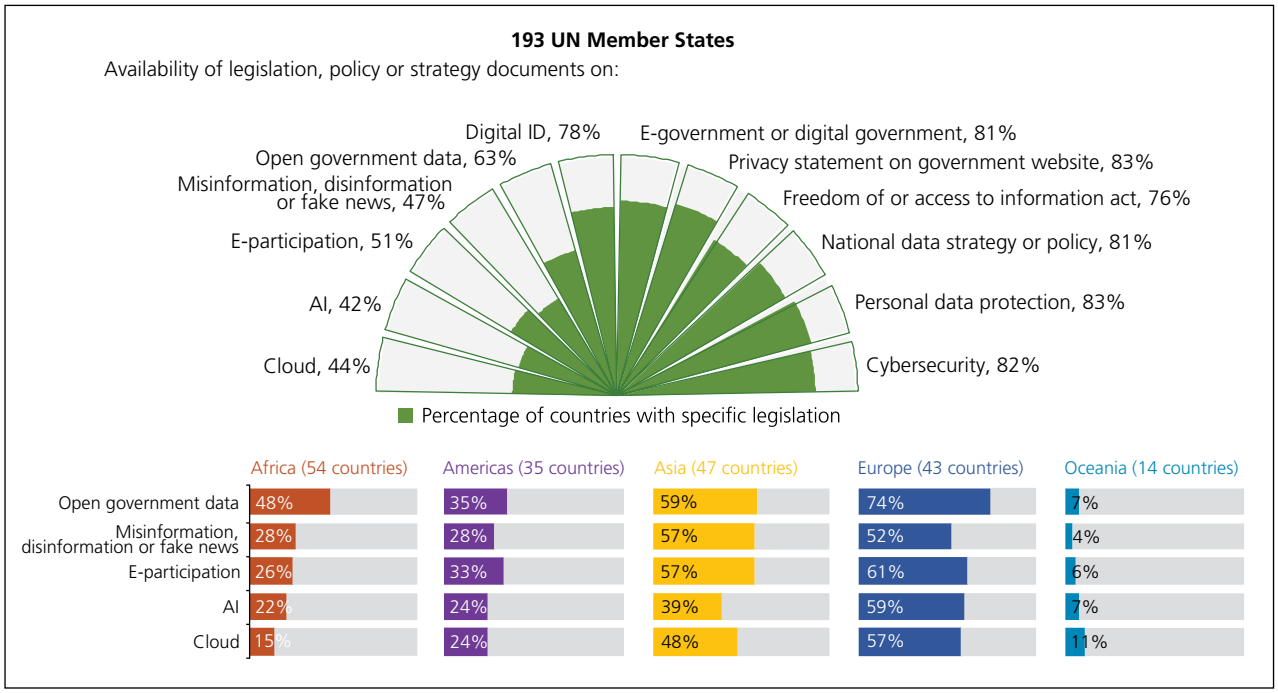


Sources: 2024 United Nations E-Government Survey.

The legislative, policy and strategy aspects of the institutional framework are less consistently developed (see figure 2.11). Between 81 and 83 per cent of countries have national e-government strategies, policies or legislation on cybersecurity, data privacy, and data protection, 78 per cent require citizens to use a digital ID when accessing public services, and 76 per cent offer public access to legislation on the right of citizens to access government information. The shares are lower for legislation or policies on open government data (63 per cent), e-participation (51 per cent), protecting the public against misinformation, disinformation, and/or fake news (47 per cent), and frontier technologies such as cloud computing (44 per cent) and artificial intelligence (42 per cent). Regional disparities are more pronounced for these last five indicators; more than half of the countries in Asia and Europe have already adopted relevant legislation, policies or strategies, the average for the Americas is slightly above 30 per cent and that for Africa slightly below 30 per cent, and in Oceania the compliance rates range from 4 to 11 per cent.

* At the time of the assessment for the Survey, the national portal of Belize was under review and inaccessible. To the extent possible, the assessment was conducted through various ministerial website

Figure 2.11 Percentage of countries with legislative frameworks relevant to e-government development, 2024

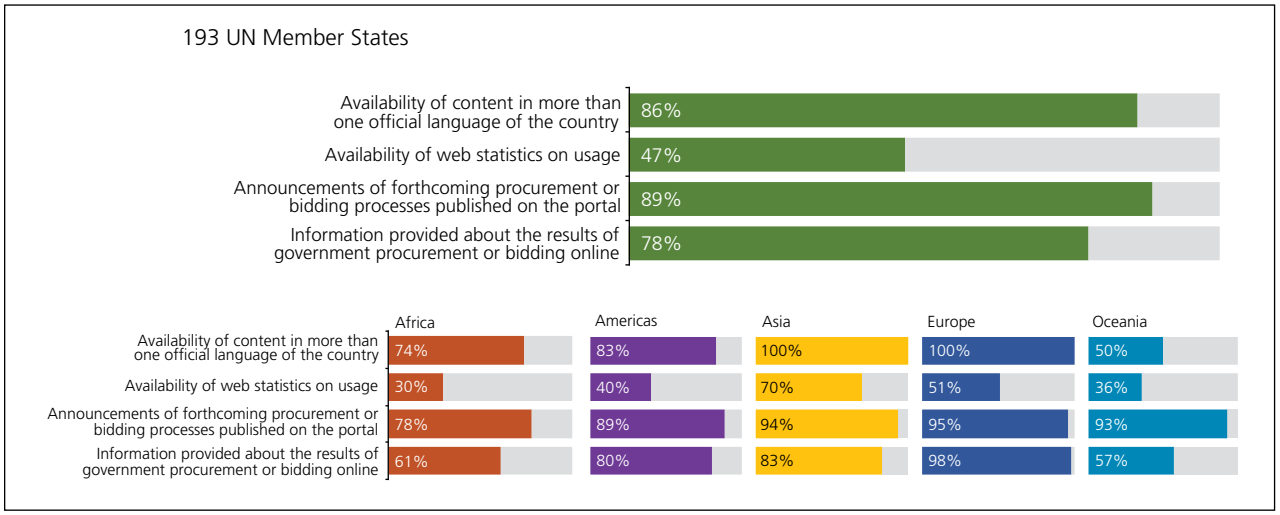


Source: 2024 United Nations E-Government Survey.

2.5.4 OSI content provision subindex

In most countries (86 per cent), the Government provides information and services in multiple languages, which strengthens inclusiveness and facilitates access to information and online services in multilingual societies (see figure 2.12). However, fewer than half (47 per cent) proactively share web statistics on usage such as the number of new visits, total page views, or average time spent on site on their national portals.

Figure 2.12 Content provision on national portals, 2024
(Percentage of countries, by region)



Source: 2024 United Nations E-Government Survey.

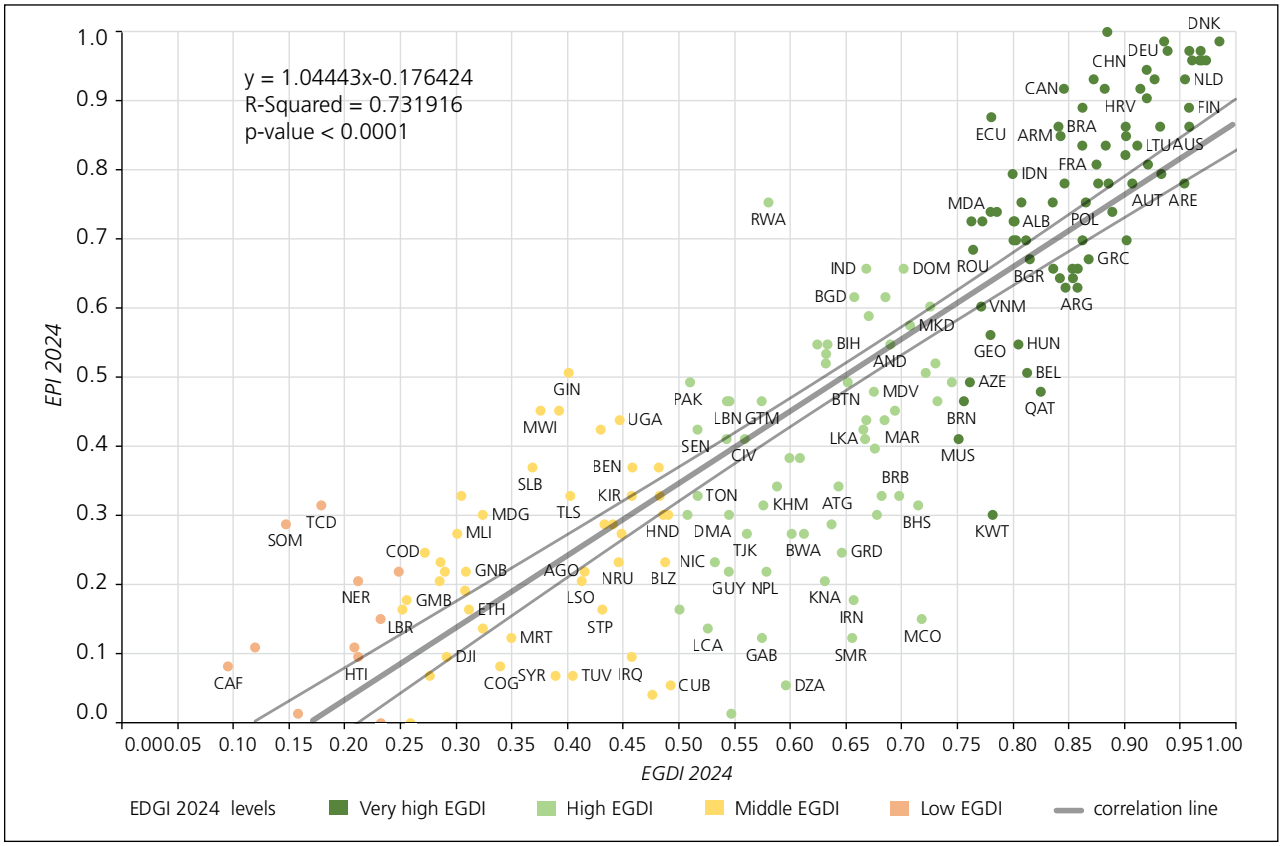
Publishing announcements of forthcoming procurement or bidding processes on national portals is now routine in 89 per cent of the countries surveyed, but fewer countries (78 per cent) share information about the bidding or procurement results online. In Europe, these practices are more consistent and nearly universal, with 95 per cent of the region's countries posting announcements and 98 per cent sharing results; the gap between the two indicators is only 3 per cent in Europe but is about 10 per cent in Asia and the Americas, 17 per cent in Africa, and 36 per cent in Oceania.

2.5.5 OSI e-participation subindex

As an essential part of e-government development, the Survey has regularly assessed the readiness of Governments to "ensure responsive, inclusive, participatory and representative decision-making at all levels", as called for in SDG target 16.7. The e-participation subindex uses a three-point scale that identifies progressive levels of engagement based on government policies, provisions and practices surrounding public participation in governance. The first level is providing information to the population on important aspects of public life, the second is engaging the public in consultations on policy development and/or services delivery at different stages of the process, and the third level is reflecting public input and involving people in decision-making.[1] Government portals and websites are assessed for features such as the integration of participatory budgeting or similar mechanisms; the availability of open government data (OGD) in general and in six key sectors linked closely to SDG implementation (education employment, environment, health, justice, and social protection); evidence that people's voices are heard in discussions and decision-making processes linked to the formulation and adoption of policies on issues relating to vulnerable populations; and evidence of online consultations (via e-forums, e-polls, e-questionnaires, or other e-participation tools) that are designed to facilitate the engagement of people in vulnerable situations.

Countries with higher EGDI values normally have higher EPI values (see figure 2.13). Of the 76 countries with very high EGDI values in 2024, 93 per cent have EPI values that are very high (44 countries) or high (27 countries); only a handful of countries with very high EGDI values – Azerbaijan, Brunei Darussalam, Kuwait, Mauritius and Qatar – have comparatively low EPI values (averaging 0.4302). There are 33 countries with high EGDI values (Antigua and Barbuda, Bahamas, Barbados, Belarus, Bhutan, Plurinational State of Bolivia, Botswana, Cambodia, Côte d'Ivoire, Dominica, El Salvador, Eswatini, Fiji, Guatemala, Jamaica, Kyrgyzstan, Lebanon, Maldives, Morocco, Namibia, Pakistan, Palau, Saint Vincent and the Grenadines, Senegal, Seychelles, Sri Lanka, Suriname, Tajikistan, Tonga, Trinidad and Tobago, Tunisia, Vanuatu, and Zambia) that have an average EPI value of only 0.3852.

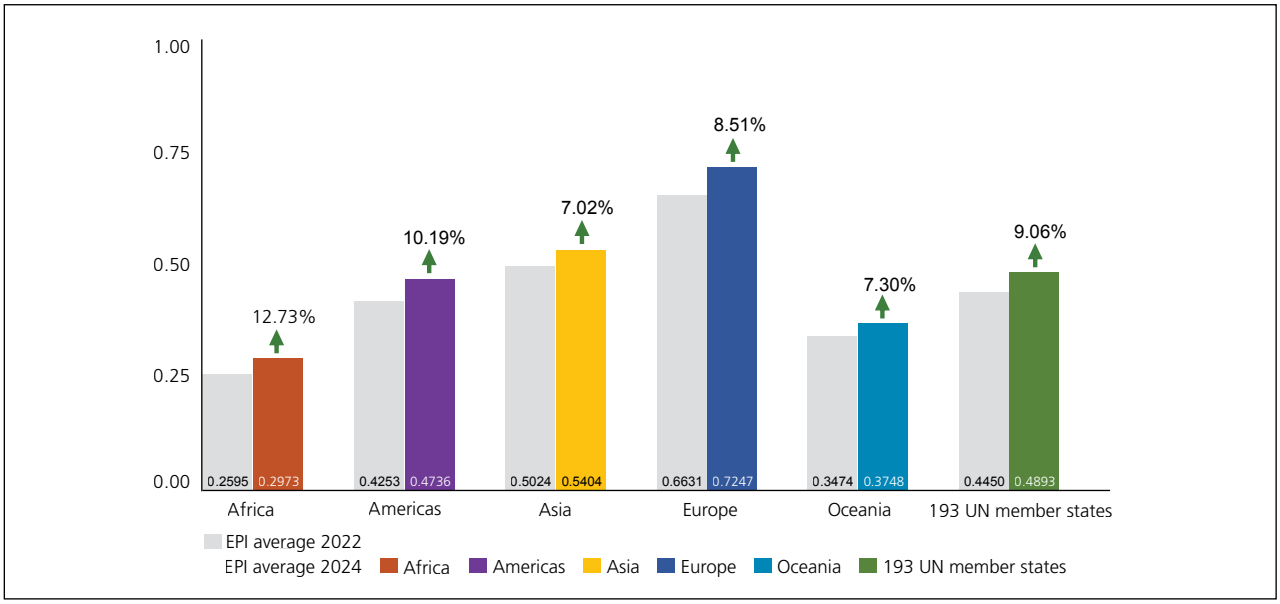
Figure 2.13 Distribution of EGDI levels relative to EPI levels for United Nations Member States, 2024



Source: 2024 United Nations E-Government Survey.

Although e-participation is the least advanced among the five OSI subindices (see figure 2.9), the global average EPI value has increased by 9 per cent, from 0.4450 to 0.4893, since 2022 (see figure 2.14).

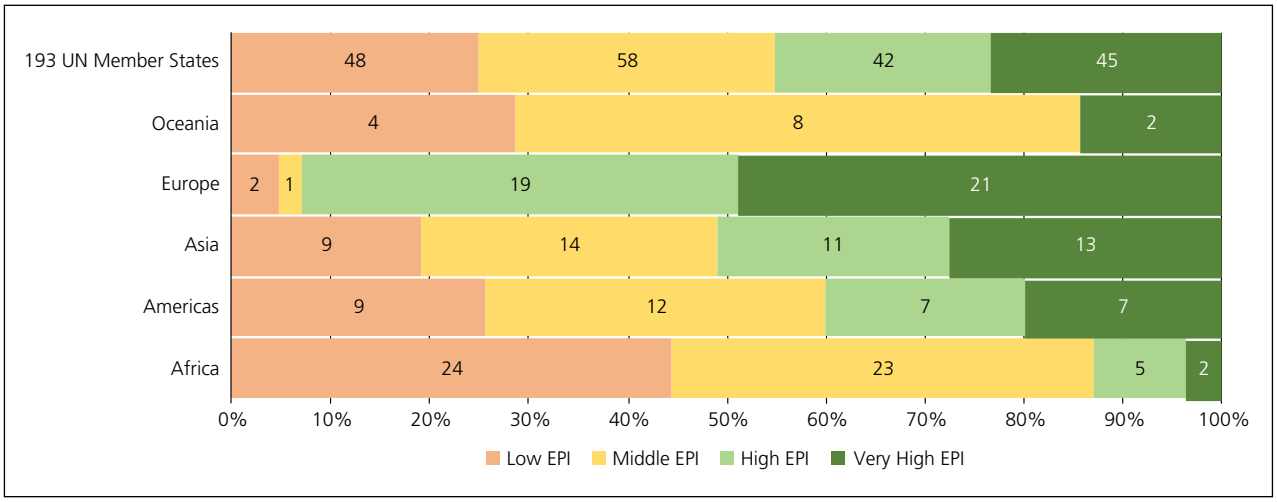
Figure 2.14 Average EPI values by region and percentage change between 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

All regions have improved in terms of proactive engagement with the public through e-participation processes. However, regional disparities remain significant; 93 per cent of countries in Europe have high or very high EPI values (ranging from 0.5 to 1), compared with 49 per cent in Asia, 40 per cent in the Americas, 14 per cent in Oceania, and 13 per cent in Africa (see figure 2.15).[2] Regional variations in the extent to which they address specific aspects of e-participation are reviewed below.

Figure 2.15 Global and regional distribution of countries by EPI level, 2024

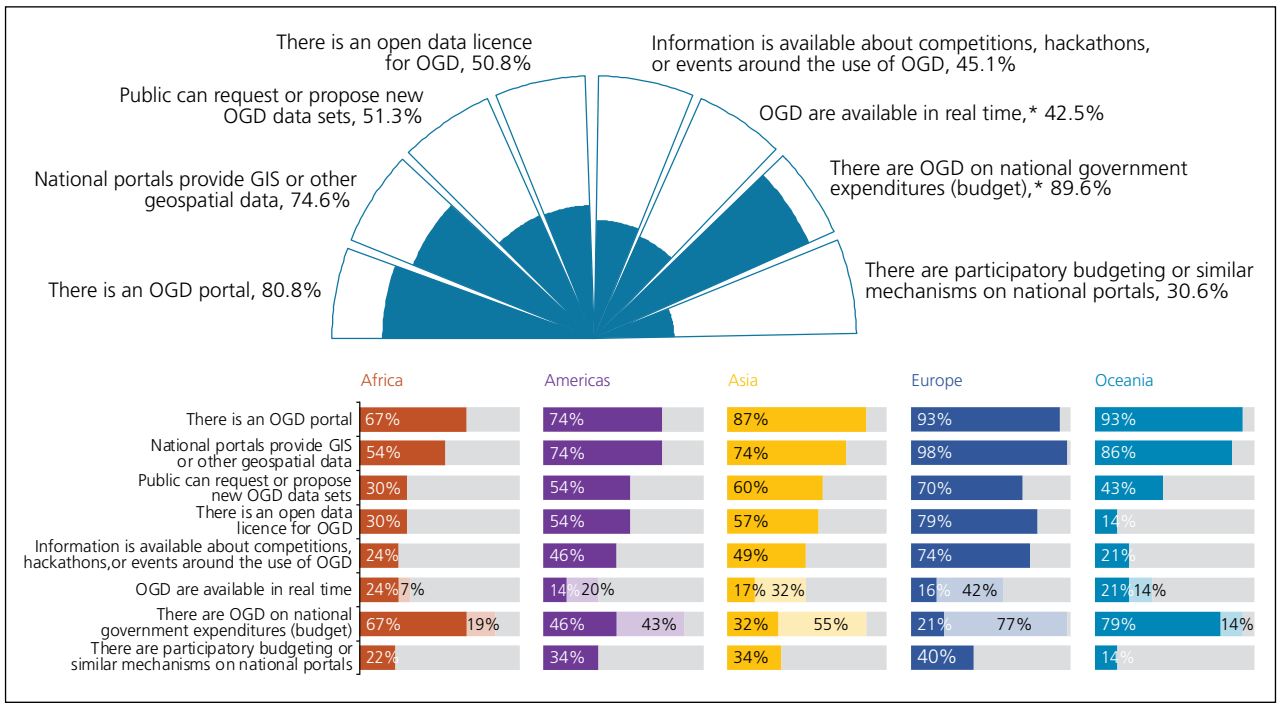


Source: 2024 United Nations E-Government Survey.

E-information

Global trends in sharing government information with the public are improving. As shown in figure 2.16, 81 per cent of countries publish information on dedicated OGD portals, and 75 per cent provide geographic information system (GIS) or other geospatial data on their national portals. These two aspects of data governance are advancing in all regions rather consistently, though at a variable pace; in Europe, for instance, nearly all countries have OGD portals and publish GIS data, whereas in Africa the respective shares are 76 and 54 per cent. In only 51 per cent of countries can people request or propose new open government data sets or freely reuse data owing to the adoption of open data licensing by the Government. Even fewer countries actively promote the use of open data through hackathons and competitions (45 per cent) or make OGD available in real time (43 per cent). Europe is leading in all aspects of open data governance, followed by Asia and the Americas. In Africa and Oceania, the situation varies depending on the aspect of open data governance; for instance, the public can request or propose new data sets in 43 per cent of the countries in Oceania as opposed to 30 per cent of the countries in Africa, whereas more countries have adopted open data licensing in Africa (30 per cent) than in Oceania (14 per cent).

Figure 2.16 Percentages of countries with OGD portals and various aspects of open data governance



Source: 2024 United Nations E-Government Survey.

Note: The availability of OGD in machine-readable formats is indicated in a lighter shade of colour on the regional performance graphs.

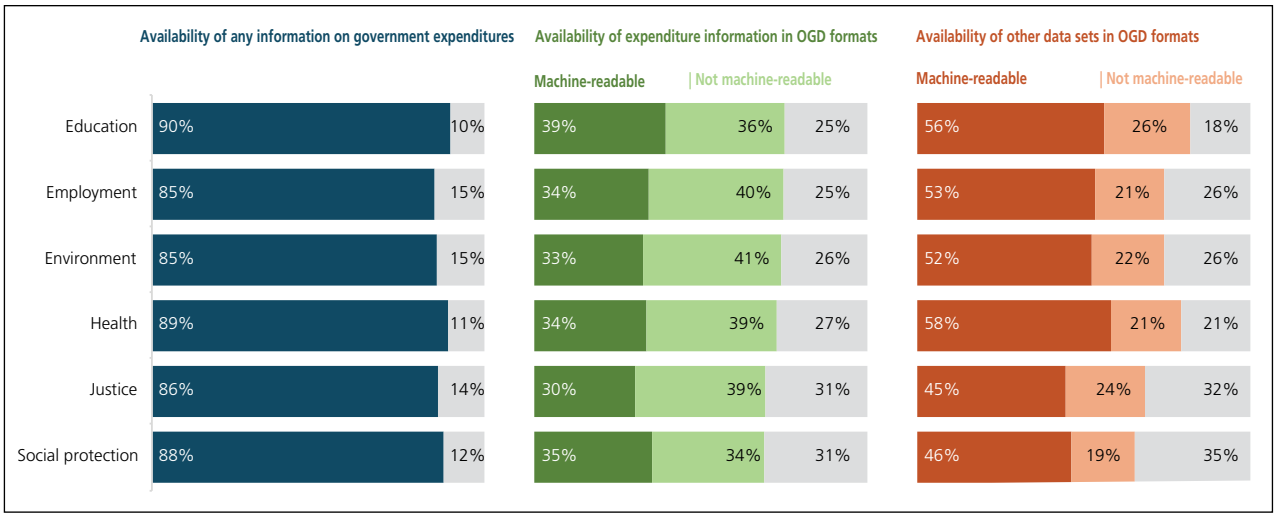
* The availability of OGD in real time for both machine-readable and non-machine-readable data sets.

The availability of useful information on key aspects of public administration, especially in open data formats, allows people to engage in more informed public discourse on policy matters. As a proxy for gauging the accessibility of such information, the Survey has been tracking government practices in sharing information relating to national budgets and expenditures and to six sectors strongly linked to SDG implementation. As shown in figure 2.16, almost 90 per cent of countries publish open data sets on the national budget and government expenditures (45 per cent in machine-readable formats); however, only 31 per cent of countries have a participatory budgeting mechanism in place.

Information on sector-specific government expenditures in mixed formats is available in 9 out of 10 countries (see figure 2.17); however, only about a third of the countries surveyed publish their expenditure-related data sets in machine-readable open formats.

Data sets are available on matters relating to education (82 per cent), health (79 per cent), environment and employment (74 per cent each), justice (68 per cent), and social protection (65 per cent). When such information is available, it is often in machine-readable formats (45-58 per cent of the time).

Figure 2.17 Percentage of countries publishing national budgetary or expenditure information or sectoral data sets, 2024

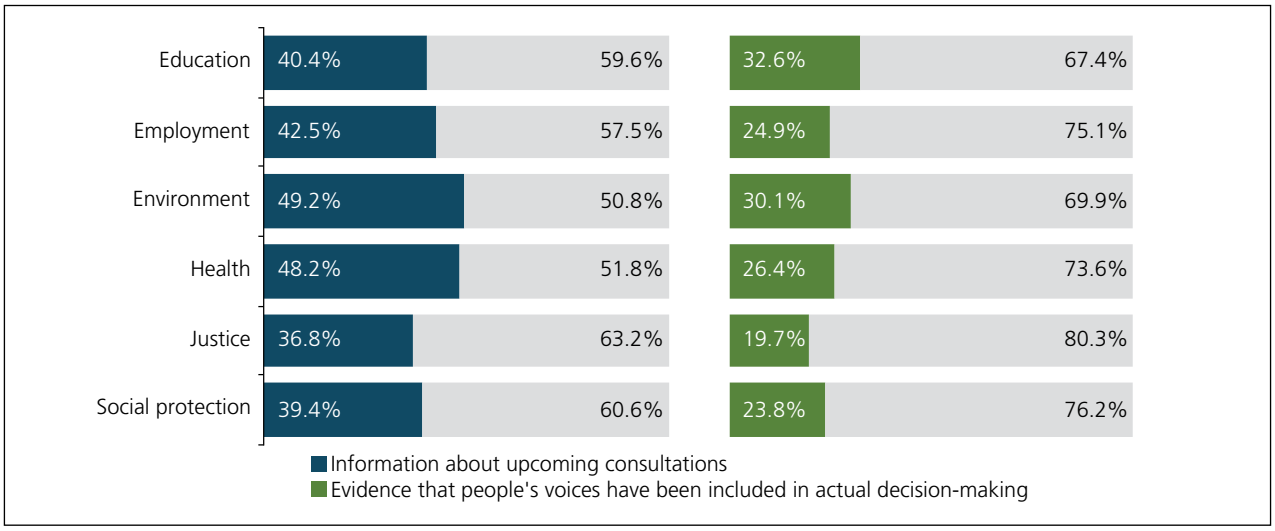


Source: 2024 United Nations E-Government Survey.

E-consultation and e-decision-making

The Survey carefully assesses how proactive Governments are in integrating public input – especially from those living in vulnerable situations – into policymaking in the six sectors most strongly linked to SDG implementation. Figure 2.18 shows that information about upcoming consultations on matters relating to the environment and health sectors can be found on government portals in nearly half of the Member States. Between 37 and 43 per cent of countries inform the public about upcoming consultations on education, employment, social protection, or justice-related issues. Evidence that people's voices have been heard and their feedback incorporated in actual decision-making in these sectors is found in far fewer countries (an average of 17 per cent).

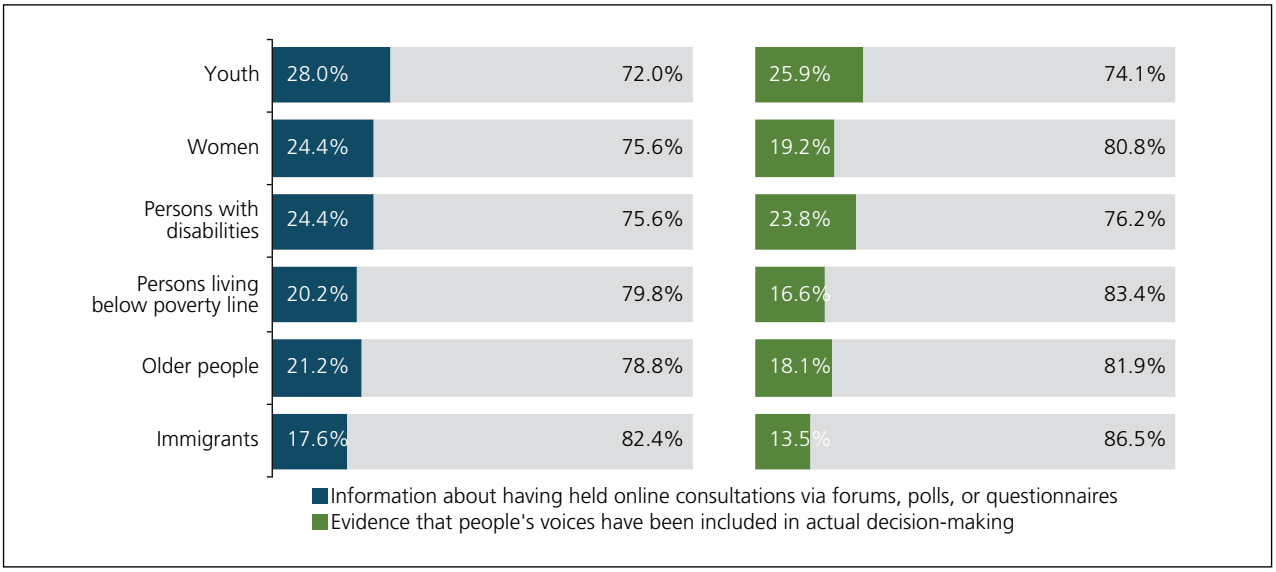
Figure 2.18 Percentage of countries that provide information about upcoming consultations and evidence that people's voices have been included in actual decision-making, by sector, 2024



Source: 2024 United Nations E-Government Survey.

As shown in figure 2.19, between 18 and 28 per cent of countries published information about e-consultations having been held with people in vulnerable situations in the 12 months preceding the administration of the Survey, with the group engaged by the highest number of countries being youth (28 per cent), followed by persons with disabilities and women (24 per cent each), older people (21 per cent), individuals living below the poverty line (20 per cent) and immigrants (18 per cent). Evidence that input from vulnerable groups is included in actual decision-making is available for fewer countries (between 14 and 26 per cent, depending on the group).

Figure 2.19 Engaging the most vulnerable in society: percentage of countries announcing upcoming consultations and providing evidence of people's voices included in actual decision-making, 2024



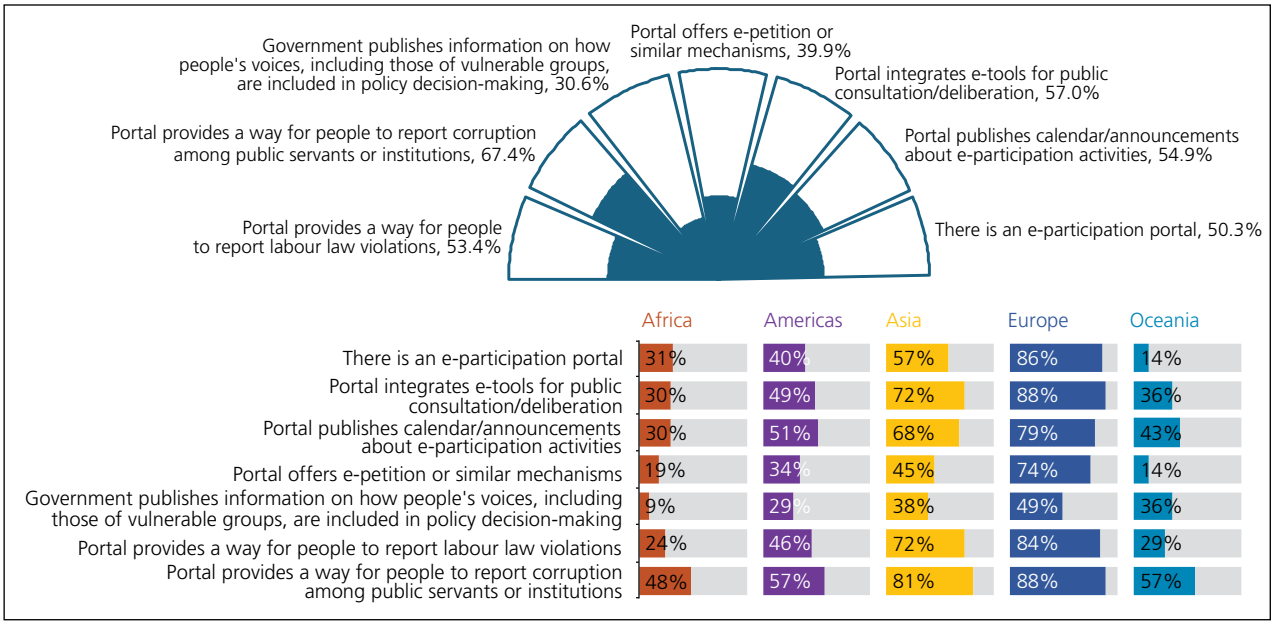
Source: 2024 United Nations E-Government Survey.

Other tools supporting e-participation and government accountability

Making it possible for people to report corruption among public servants or institutions and proactively engaging people in e-participation processes are two ways to improve government accountability and increase public participation.

The 2024 Survey results indicate that the portals of more than two thirds of the Member States provide channels for reporting corruption (see figure 2.20); the highest level of compliance is in Europe (88 per cent), followed by Asia (81 per cent), the Americas and Oceania (57 per cent each), and Africa (48 per cent). More than half of the countries (53 per cent) have also created mechanisms for reporting labour law violations.

Figure 2.20 Percentage of countries offering various e-participation mechanisms and tools, 2024



Source: 2024 United Nations E-Government Survey.

Around 50 per cent of the Member States have a dedicated e-participation portal, 55 per cent publish calendar announcements about upcoming consultations and other participatory activities, and about 40 per cent of use e-petitions or similar mechanisms to engage the population in policy deliberations. The region with the highest proportion of countries providing evidence of having conducted at least one e-consultation in the 12 months preceding the administration of the Survey is Europe (91 per cent), followed by Asia (70 per cent), the Americas (60 per cent), Africa (24 per cent) and Oceania (14 per cent).

Information on the results of such deliberations or on how people's voices are included in policy-related decision-making is published by an average of only 31 per cent of the countries surveyed, though regional disparities are quite pronounced; nearly half of the European countries, slightly over one third of countries in Asia and Oceania, just under a third of countries in the Americas, and only a tenth of the countries in Africa publish the results of public deliberations on their portals.

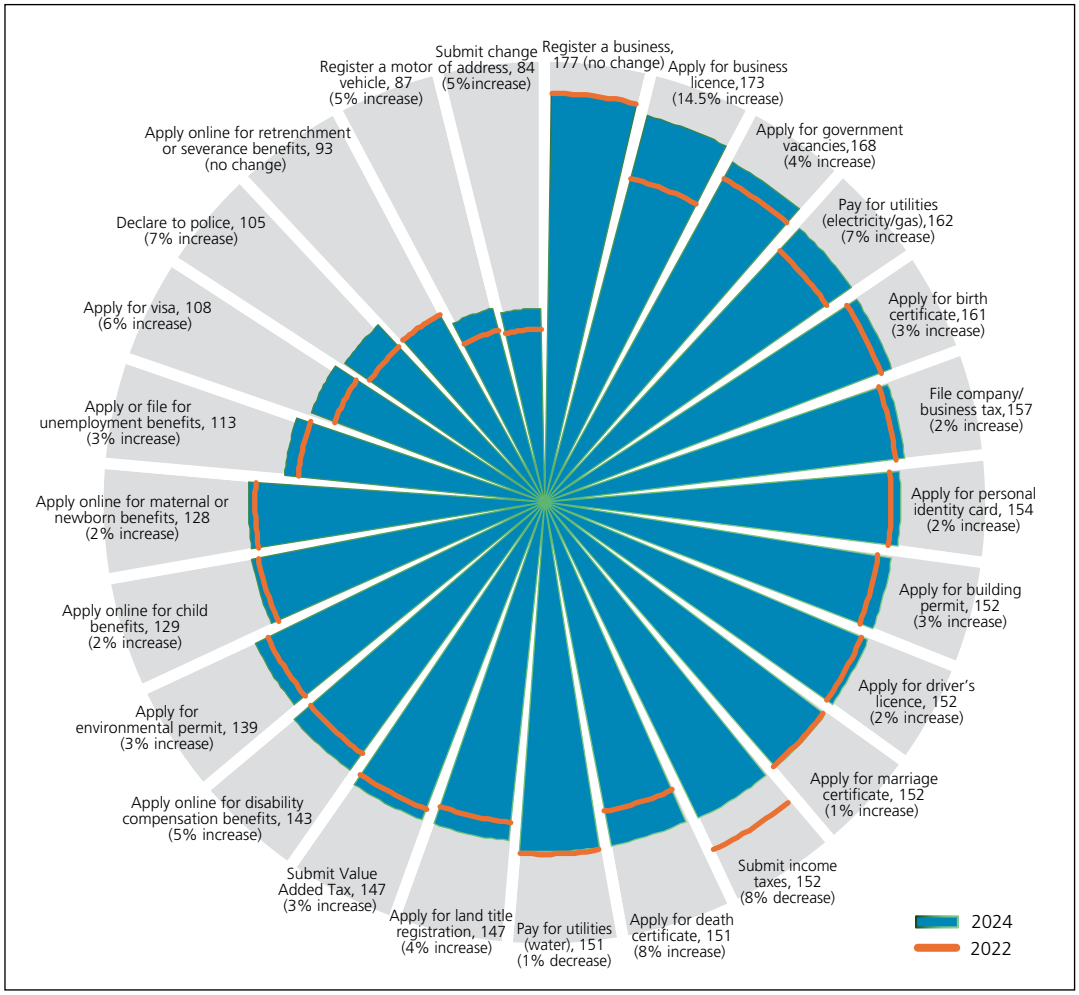
In terms of the proportion of countries in each region proactively offering e-participation channels, tools or mechanisms, Europe is the leader (78 per cent), followed by Asia (62 per cent), the Americas (44 per cent), Oceania (33 per cent), and Africa (27 per cent).

2.5.6 OSI services provision subindex: progress in online services delivery

The services provision subindex of the OSI assesses the availability of various online transactional services, how government services are accessed (through one main portal or multiple channels), the existence and functionality of e-procurement platforms and digital invoicing, the integration of GIS or geospatial data and technologies in online services provision, and the availability of sector-specific services and services for people in vulnerable situations. The data analysis and key findings are presented below.

For the 2024 Survey, 25 online services have been assessed, up from 22 for the last Survey cycle. The number of countries offering at least one of these online services has not changed, remaining at 189 (98 per cent) of the 193 Member States. Figure 2.21 illustrates the overall expansion in the range of services provided, which is reflected in the increased number of countries providing each type of service.

Figure 2.21 Trends in the provision of online transactional services, 2022-2024 (Number of countries and percentage change)



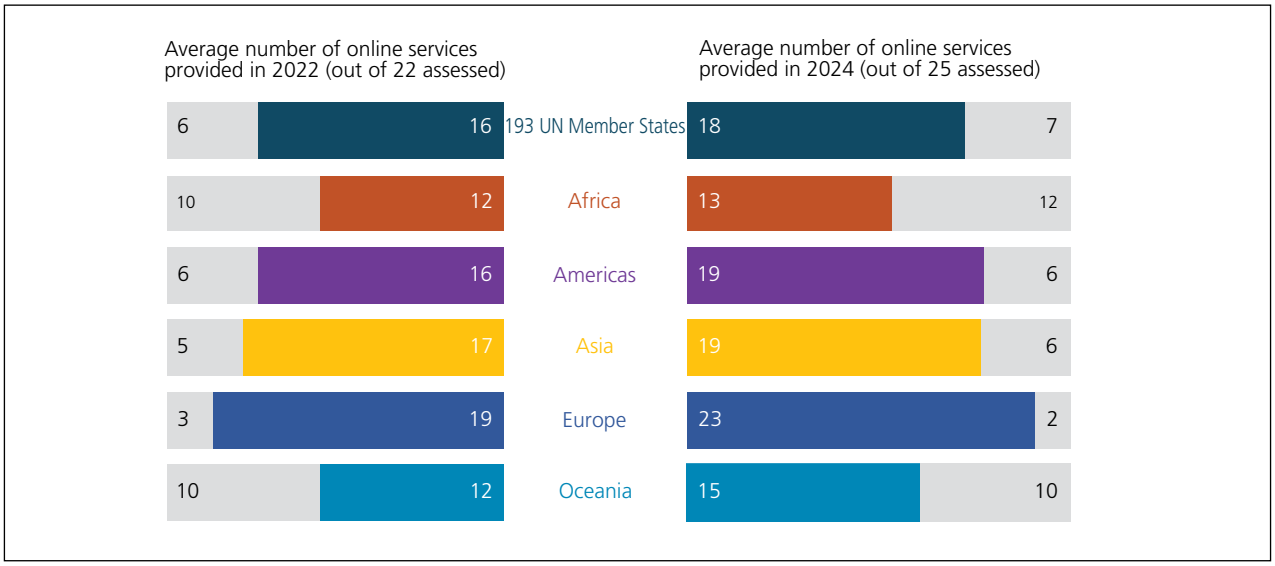
Sources: 2022 and 2024 United Nations E-Government Surveys.

The online provision of all but four types of services has increased by between 1 and 14.5 per cent, translating into an increase of 3 per cent globally. The number of countries that allow companies to register a business (177) and apply for retrenchment or severance benefits online (93) has not changed since 2022. The online services now offered by fewer countries include submitting income taxes and paying water bills (reflected in declines of 8 and 1 per cent, respectively). The decrease is likey due to services being moved to the private sector payment platforms (e.g. for utility payments) or temporary unavailability of government platforms at the time of assessment.

The most prevalent online transactional services remain the registration of a new business (177 countries) and applying for a business licence (173 countries). The next most frequently offered online services include applying for government vacancies, paying utility bills (electricity and gas), applying for a birth certificate, and filing company taxes. The electronic submission of business taxes is offered by more countries than the online submission of income taxes, which is a departure from 2022. Tax-filing services are offered more frequently to businesses (157 countries) than to individuals (152 countries for income tax and 147 countries for Value Added Tax, or VAT). Among the least offered online services are changing an address (84 countries) and registering a motor vehicle (87 countries), though both services are offered by 5 per cent more countries in 2024 than in 2022.

Globally, the average number of online services provided increased from 16 in 2022 to 18 in 2024 (see figure 2.22). It should be noted that while there has been an increase in numerical terms, the online services offered as a percentage of those assessed has remained roughly the same (averaging 72-73 per cent). European countries offer the highest average number of services (23), followed by the Americas and Asia (19 each), Oceania (15), and Africa (13).

Figure 2.22 The average number of online services provided globally and in each region in 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

Extent of digitalization of online services

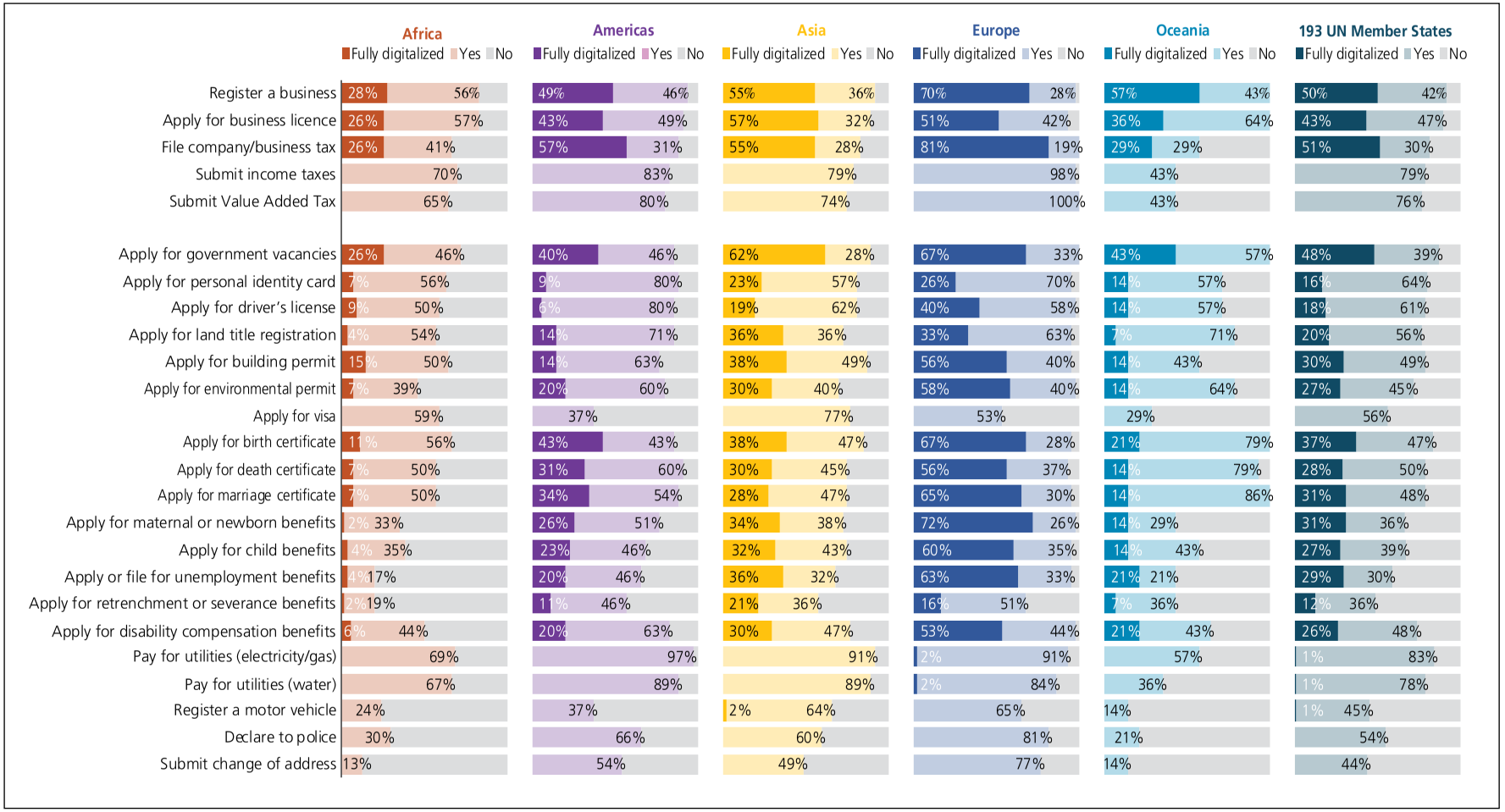
In addition to ascertaining the availability of 25 online services among the Member States, the Survey has assessed the level of digitalization of 19 of these services to determine whether users can conduct transactions fully online.

At the regional level, Europe has the highest degree of full digitalization among the services assessed, followed by Asia, the Americas, Oceania, and Africa. At both the regional and global levels, rates of full digitalization are highest for the types of online services that support business registration, licensing, and paying taxes (around 50 per cent globally) and applying for government vacancies (48 per cent).

In 2022 the Survey began assessing various services related to social protection, including those that allow people to apply online for child benefits, maternal or newborn benefits, unemployment benefits, and retrenchment or severance benefits when losing a job. The number of countries offering these services has increased by an average of 2 per cent in 2024, though regional disparities persist. Rates of full digitalization for these services average around 25 per cent globally.

These findings indicate that the majority of countries use their portals to provide information and forms, but in most cases one still needs to appear in person to complete public service transactions (see figure 2.23).

Figure 2.23 Percentage of countries offering services that can be completed partially or fully online, by region, 2024



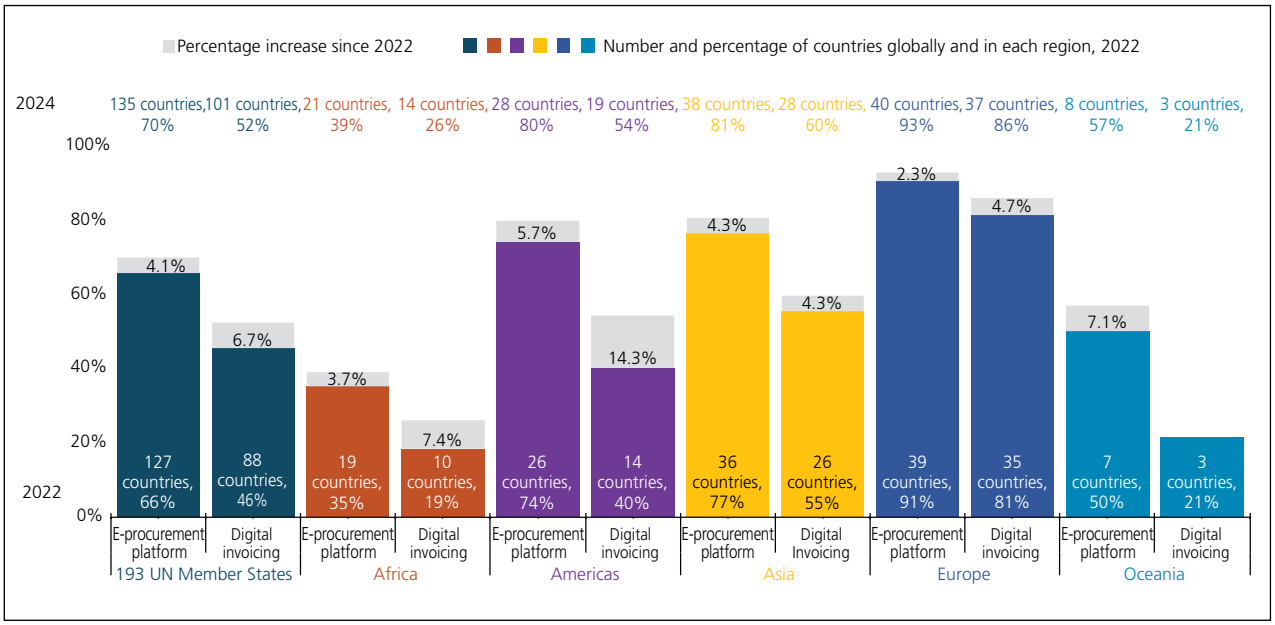
Source: 2024 United Nations E-Government Survey.

Note: The darker shades of colour highlight the proportion of fully digitalized services in each region, and the lighter shades indicate the availability of information, online forms or instructions about the services provided by the Governments.

Public procurement services

A total of 135 countries (70 per cent) have dedicated e-procurement portals, an increase of 4 per cent since 2022. The number of countries that issue digital invoices through their e-procurement portals has increased by almost 7 per cent and now stands at 101 (52 per cent). Nearly all countries in Europe (93 per cent) have e-procurement portals, and most (86 per cent) offer digital invoicing. In Asia and the Americas, about 80 per cent of countries have portals, but fewer (60 and 54 per cent, respectively) issue digital invoices. The gap is wider in Oceania and Africa, where the corresponding proportions are 57 versus 21 per cent and 39 versus 26 per cent, respectively. It is worth mentioning that once e-procurement portals are set up, it may take some time for countries to integrate digital invoicing. In the Americas, for instance, the number of countries with e-procurement portals has risen by 5.7 per cent since 2022, whereas the number of countries offering digital invoicing has increased by 14.3 per cent (see figure 2.24).

Figure 2.24 Number and percentage of countries with e-procurement platforms and digital invoicing capabilities, global and regional data, 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

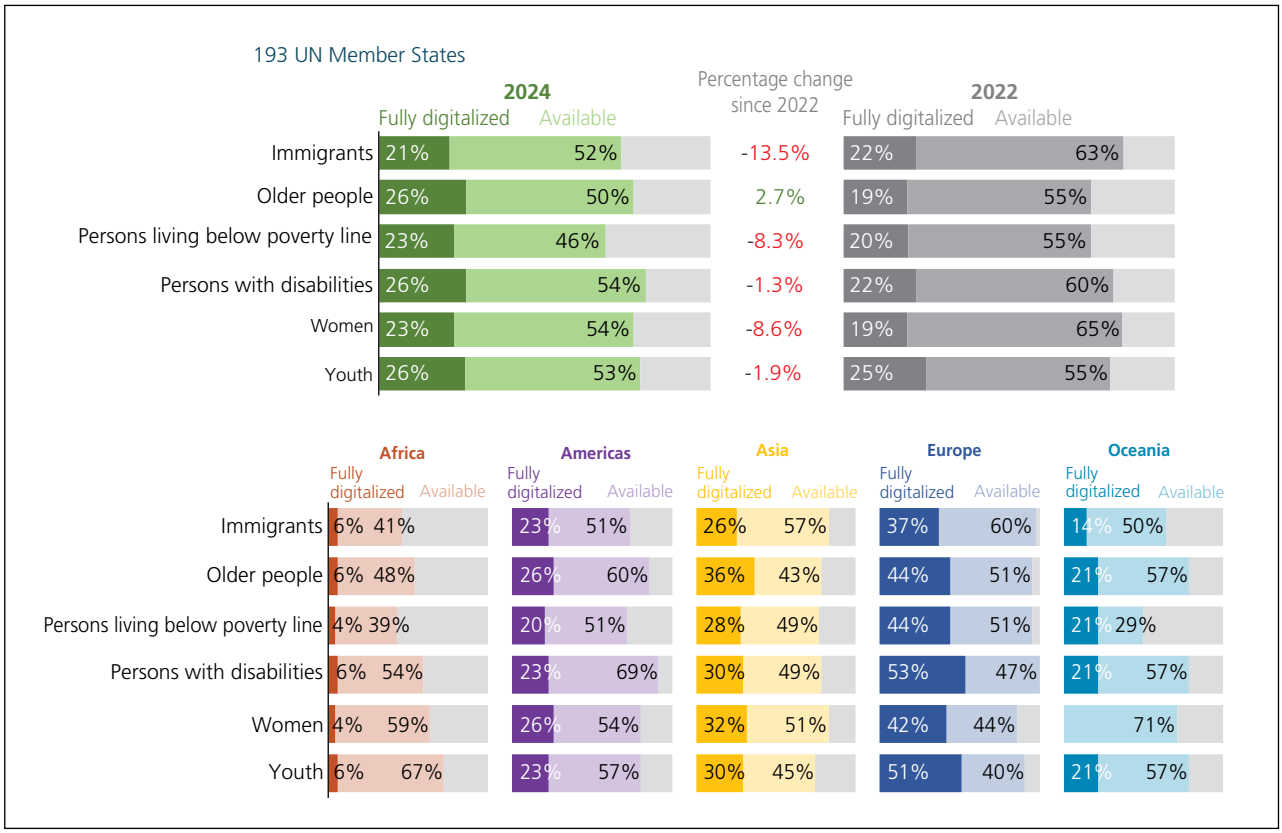
2.5.7 Targeted services for people in vulnerable situations

The number of countries providing information and services that target specific vulnerable populations decreased by an average of 5 per cent between 2022 and 2024. As shown in figure 2.25, the sharpest decline (13.5 per cent) is recorded for immigrants; this is an alarming shift given that in 2022 the services aimed at supporting immigrants were provided by the highest number of countries (163, compared with 141 countries in 2024). The provision of services for women (148 countries) and people living below poverty line (132 countries) has also declined (by 8.6 and 8.3 per cent, respectively). The same is true for youth services (a drop from 155 to 152 countries, representing a 1.9 per cent decline), and for services supporting persons with disabilities (a drop from 157 to 155

countries, representing a 1.3 per cent decline). The only upturn has been a 2.7 per cent increase in the number of countries providing services for older people (148 countries in 2024 versus 144 in 2022). Further studies are required to examine the possible reasons for such deline. On a positive note, the provision of services that can be transacted fully online has increased by an average of 1 to 7 per cent for all groups except immigrants. Countries are moving steadily towards improving the convenience and efficiency of services for users.

Europe remains the most homogeneous region in terms of the provision of online services for people in vulnerable situations (94 per cent of countries), and for 45 per cent of those services (the highest proportion among the regions), transactions can be completed online. While there has been a downturn in the provision of online services to vulnerable populations, the majority of the UN Member States (more than 80 per cent) still offer such services; in regional terms, Europe accounts for the highest proportion, followed the Americas (80 per cent), Asia (79 per cent), Oceania (70 per cent), and Africa (56 per cent). The Americas and Asia have comparable shares of countries offering services to people in vulnerable situations; however, fully digitalized services are offered by more countries in Asia (30 per cent) than in the Americas (23 per cent).

Figure 2.25 Percentage of countries offering services for people in vulnerable situations that can be completed partially or fully online, 2022 and 2024



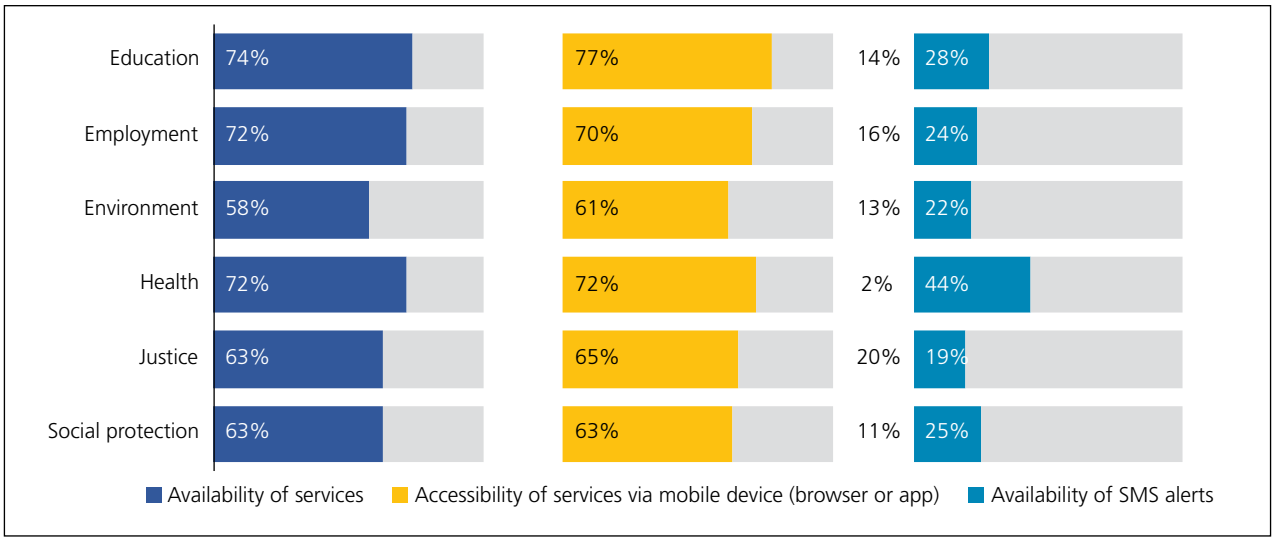
Sources: 2022 and 2024 United Nations E-Government Surveys.

The proportion of countries providing services for people in vulnerable situations has risen from 45 to 70 per cent in Oceania and from 44 to 56 per cent in Africa. However, the share of countries that offer fully digitalized services is only 21 per cent in Oceania and 5 per cent in Africa.

2.5.8 Sector-specific online information and services: sharing via mobile technologies

Online services specifically relating to health, education, employment, environment, justice, and social protection can be found on the portals of 58 to 74 per cent of the countries surveyed (see figure 2.26), and most of these services are easily accessible through mobile technologies and applications (apps). Services relating to education, health, and employment are the most prevalent and are available in almost three quarters of the countries surveyed. Services relating to justice (63 per cent), social protection (63 per cent), and environment (58 per cent) are found on the portals of fewer countries. Although Governments still use SMS alerts to inform people about sector-specific services or important issues, this practice is not very common; 44 per cent of countries still utilize SMS for health sector alerts, but for the other five sectors the corresponding proportions range from 19 to 28 per cent.

Figure 2.26 Percentage of countries providing sector-based information and services online and through mobile channels and SMS alerts, 2024

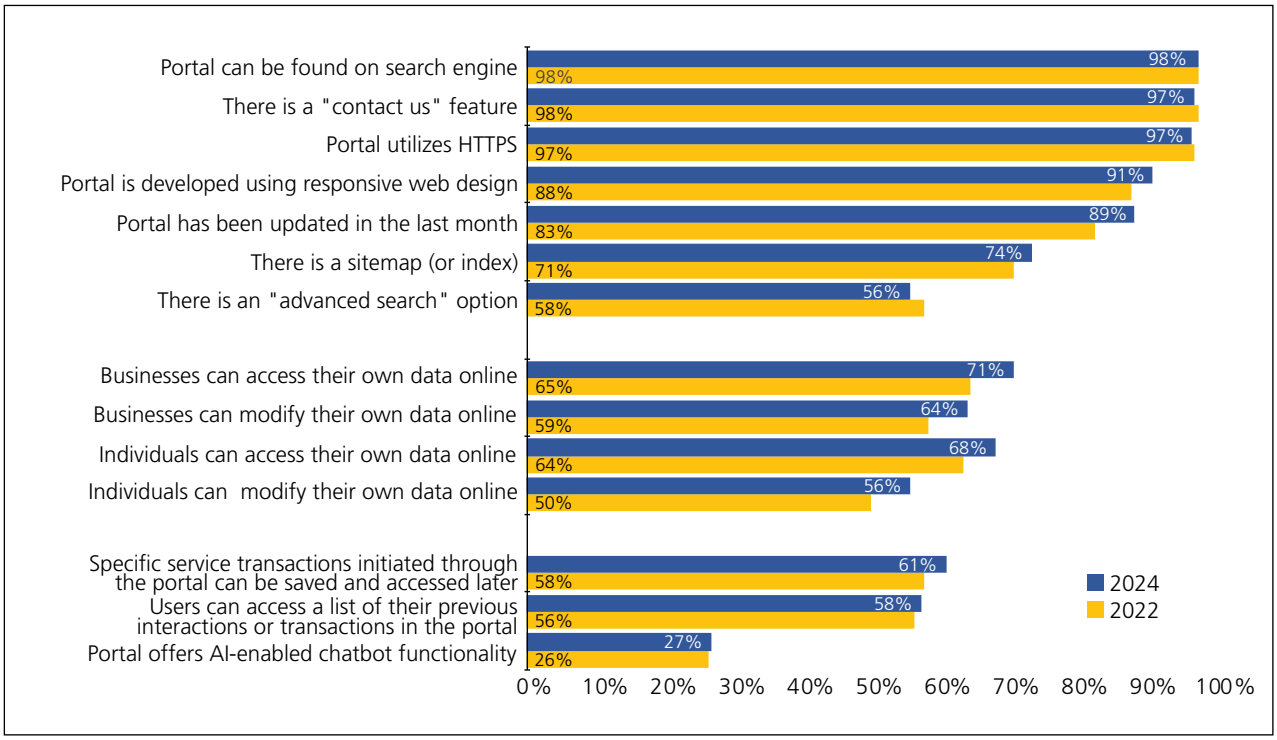


Source: 2024 United Nations E-Government Survey.

2.5.9 Technology subindex

At the time the 2024 Survey assessments were carried out, all countries except Belize had accessible national portals, and 98 per cent of those portals could be found by search engines. Most government portals (97 per cent) have a "contact us" page and utilize Hypertext Transfer Protocol Secure (HTTPS) to provide a safe experience for users (see figure 2.27). In 91 per cent of the countries assessed, the portals have been developed using responsive web design (a 3 per cent increase since 2022), and in 89 per cent the portals are updated at least once a month (a 6 per cent increase). Most portals have a sitemap (74 per cent) and offer "advanced search" options (56 per cent); it should be noted that the proportion of countries offering the latter has declined (from 58 per cent) since 2022.

Figure 2.27 Number of Member States with portals incorporating the assessed technology features, 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

The number of countries that allow individuals and businesses to access or modify their data on government portals has increased by an average of 6 per cent since 2022. Globally, more countries allow users to access their data (71 per cent for businesses and 68 per cent for individuals) than to modify their data (64 per cent for businesses and 56 per cent for individuals).

In 118 countries (a 3 per cent increase from 2022), it is possible for users to save specific service transactions initiated on the portal and access them later. The proportion of countries that allow users to access a list of their previous transactions or rely on AI-enabled chatbot functionality is nearly the same in 2024 as in 2022.

For the 2024 Survey, a new "affordability" indicator was added to the TII and the use of "the fixed (wired) broadband subscriptions" indicator was discontinued (see the technical appendix for details on the methodology used). While the technology subindex of the OSI does not include TII component data, it is important to highlight the changes in TII indicators as part of the evolving landscape of technological advancement. Table 2.8 summarizes the global and regional findings for indicators relating to mobile service pricing, broadband and cellular subscriptions, and Internet use for 2022 and 2024. Figure 2.28 highlights the changes in the latter three indicators between 2022 and 2024.

Internet use and subscriptions for mobile broadband and cellular services are on the rise. The sharpest increases in Internet use have been in Oceania (49 per cent) and Africa (31 per cent). The active mobile broadband subscription rate has increased by 27 per cent in Africa, 10 per cent in Asia and the Americas, and 8 per cent in Europe, but has declined by almost 2 per cent in Oceania (see figure 2.28). Europe remains the leader in active mobile broadband use, with 105 subscriptions per 100 inhabitants, followed by Asia (89) and the Americas (73).

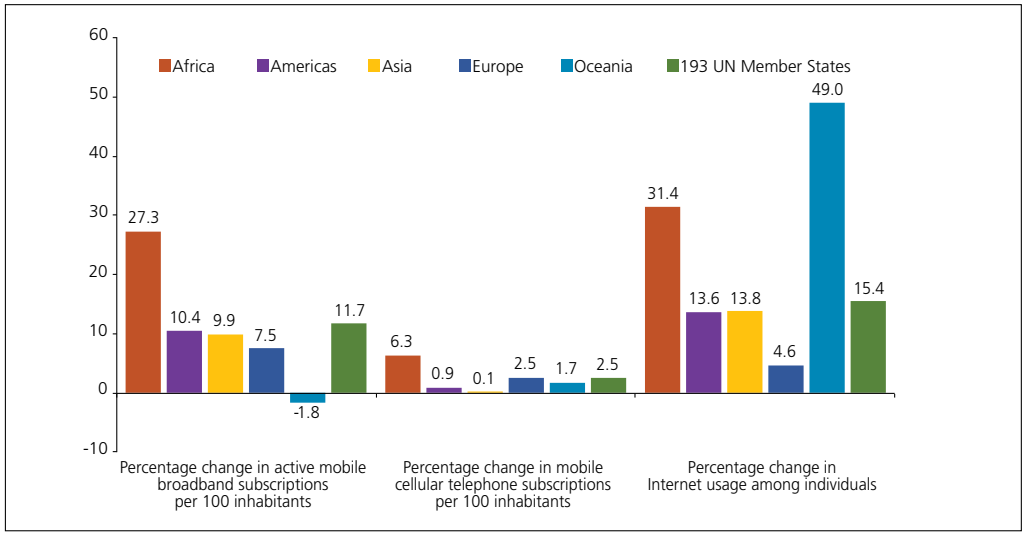
Table 2.8 Affordability of mobile data and voice services, mobile broadband and cellular subscriptions per 100 inhabitants, and percentage of individuals using the Internet, by region, 2022 and 2024

	Affordability		Active mobile broadband subscriptions per 100 inhabitants		Mobile cellular telephone subscriptions per 100 inhabitants		Percentage of individuals using the Internet	
	Mobile data and voice high consumption basket price (as a percentage of GNI per capita)							
	2024	2022	2024	2022	2024	2022	2024	2022
Africa	10.4	-	54.4	42.77	88.95	83.68	43.4	33.01
Americas	3.8	-	72.8	65.96	102.83	101.92	77.1	67.81
Asia	2.8	-	88.5	80.5	106.05	105.93	71.9	63.21
Europe	1.1	-	105.2	97.9	116.75	113.86	89.5	85.52
Oceania	7.6	-	42.4	43.15	73.76	72.53	65.0	43.59
193 UN Member States	**5.2**	**-**	**76.5**	**68.47**	**100.73**	**98.32**	**68.3**	**59.14**

Sources: ITU, Statistics for individuals using the Internet (2022 and 2024), available at https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx; ITU, "Mobile data and voice high-consumption basket", DataHub, available at https://datahub.itu.int/data/?i=34619.

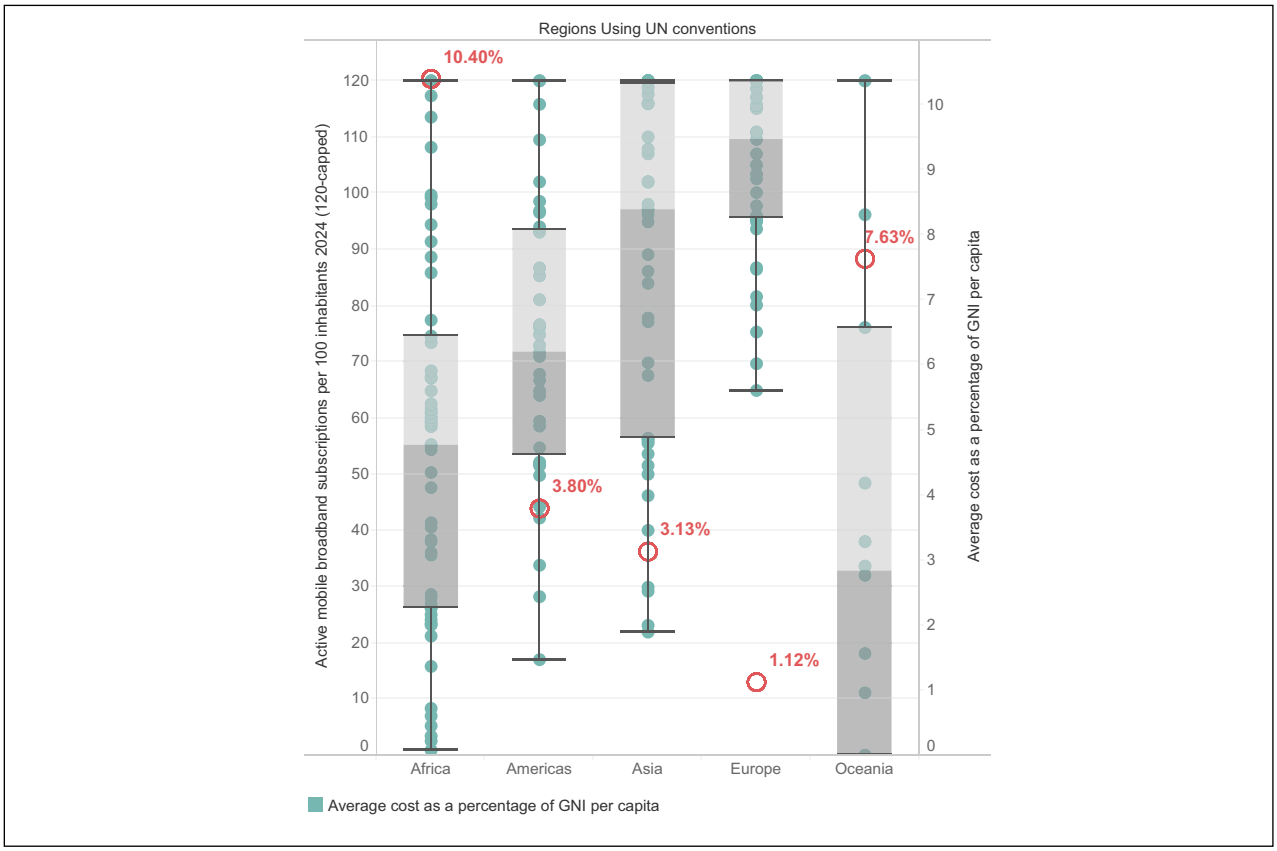
Affordability plays a key role in digital access and engagement. The cost of Internet and active mobile broadband subscriptions as a percentage of gross national income (GNI) per capita remains significantly higher in Africa (10.4 per cent) and Oceania (7.6 per cent) than in other parts of the world, contributing to the digital divide (see figure 2.29).

Figure 2.28 Percentage change at the global and regional levels in Internet usage and in active mobile broadband and mobile cellular subscriptions per 100 inhabitants, 2022-2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

Figure 2.29 The cost of active mobile broadband subscriptions as a percentage of gross national income per capita, by region, 2024



Source: ITU, Statistics on individuals using the Internet (2024), available at https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx.

2.6 Countries in special situations (LDCs, LLDCs and SIDS)

The United Nations has identified three groups of countries in special situations that face specific challenges in their pursuit of sustainable development: least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing States (SIDS).[3] Presently, there are 45 LDCs, 32 LLDCs, and 37 SIDS in the five world regions assessed in the Survey.[4] These group totals may be misleading, as there are actually 90 countries in special situations reviewed for the Survey. However, there are some cases where these designations overlap; 16 countries are LDCs that are also landlocked (LDC/LLDCs), and 8 LDCs are also small island developing States (LDC/SIDS) – and these countries are included in each group, so they are essentially counted twice in the three group totals above.

The LDCs are some of the poorest and most vulnerable countries in the world, comprising around 14 per cent of the global population but accounting for only 1.3 per cent of global gross domestic product (GDP), 1.4 per cent of global foreign direct investment (FDI), and just under 1 per cent of global merchandising exports.[5] Many LDCs face multiple structural challenges and constraints, including narrow production and export bases, stagnant trade and investment flows, diminishing productivity growth, small size, isolation and remoteness from major markets, widespread poverty,

hunger and malnutrition, a lack of access to quality and inclusive education and lifelong learning opportunities, and underdeveloped human capital. Almost half of the LDCs are landlocked or small island countries with a weak land and natural resource base.

According to studies released by the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), LLDCs face significant trade and transport challenges due to their geographical location. These countries must rely on transit through other nations, many of them developing countries themselves, and often have to contend with complex border-crossing procedures and inadequate infrastructure. As a result, LLDCs are subject to substantially higher costs for trade and transport. On average, LLDCs incur more than double the transport costs of transit countries and must also factor in longer transit times, leading to the erosion of any competitive edge they may have. This situation discourages investment, hinders economic growth, and limits sustainable development. LLDC economies are typically dependent on a few commodities and have large informal sectors, high unemployment, low productivity, and relatively weak social capacities, resulting in overall levels of development that are about 20 per cent lower than if they were not landlocked. Their high trade concentration and significantly higher expenditures on transport, insurance and other trade-related expenditures place LLDCs at a distinct economic disadvantage.[6] Among the 32 LLDCs, 16 are also classified as LDCs; this latter group faces more obstacles and may have less success than other LLDCs in mitigating the challenges and consequences deriving from their geographical handicap.

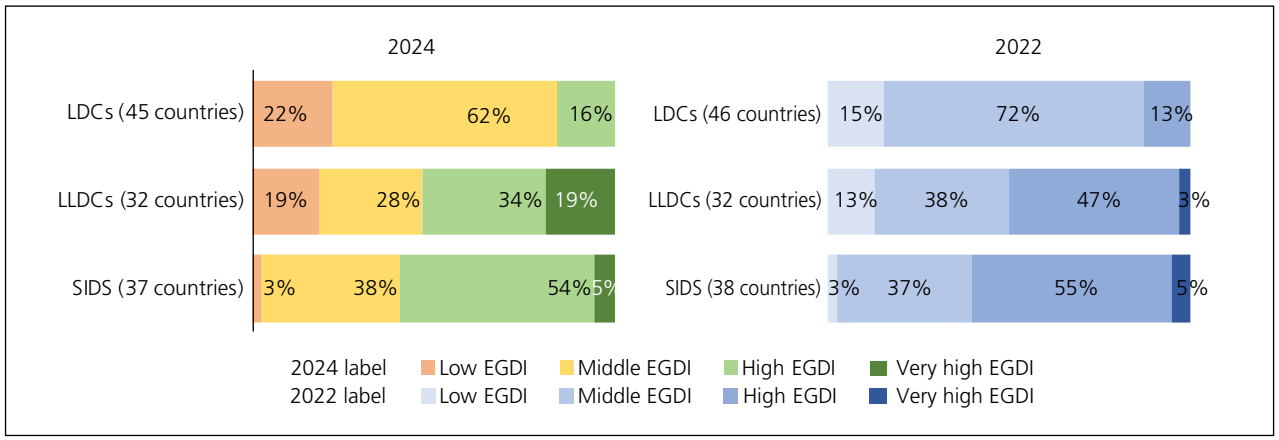
Because SIDS tend to have a narrow resource base and high costs for energy, infrastructure, transportation, communications, and services, they face substantial structural challenges in building the necessary ecosystem, institutions and capacity for promoting and utilizing science, technology, innovation and digitalization to drive economic growth and sustainable development.[7] The fourth International Conference on Small Island Developing States, held in May 2024, adopted the Antigua and Barbuda Agenda for Small Island Developing States: A Renewed Declaration for Resilient Prosperity. This programme of action outlines a set of development priorities and emphasizes the need to address the unique challenges faced by these countries, including climate change, poverty, and digital transformation. The Declaration highlights the need to incorporate and strengthen e-government and digital solutions as a means of addressing issues relating to the vulnerability of SIDS to natural disasters, geographical remoteness and accessibility, high population dispersion, and economic limitations. It calls for efforts to strengthen the capacity of local and national government institutions and the adoption of strategies aimed at bridging the digital divide.[8] Mention is also made of the need to strengthen data collection and analysis capabilities in SIDS to facilitate evidence-based policymaking. Building institutional capacities through technical assistance and training programmes will help SIDS build the strong foundations they need to effectively navigate their unique development challenges.

The subsections below review the unique challenges faced by LDCs, LLDCs and SIDS in digital development and the strategic responses necessary to address those challenges.

2.6.1 E-government development in LDCs, LLDCs and SIDS: trends and insights

E-government development, as measured by the EGDI, varies significantly across LDCs, LLDCs and SIDS, reflecting a complex landscape of progress and setbacks. While some countries are making considerable headway, others are dealing with ongoing challenges that hinder their digital transformation. Addressing these disparities requires a nuanced understanding of the unique situations prevailing in each group, as well as customized strategies that promote inclusive and sustainable digital development.

Figure 2.30 The distribution of countries in special situations among the four EGDI levels, 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

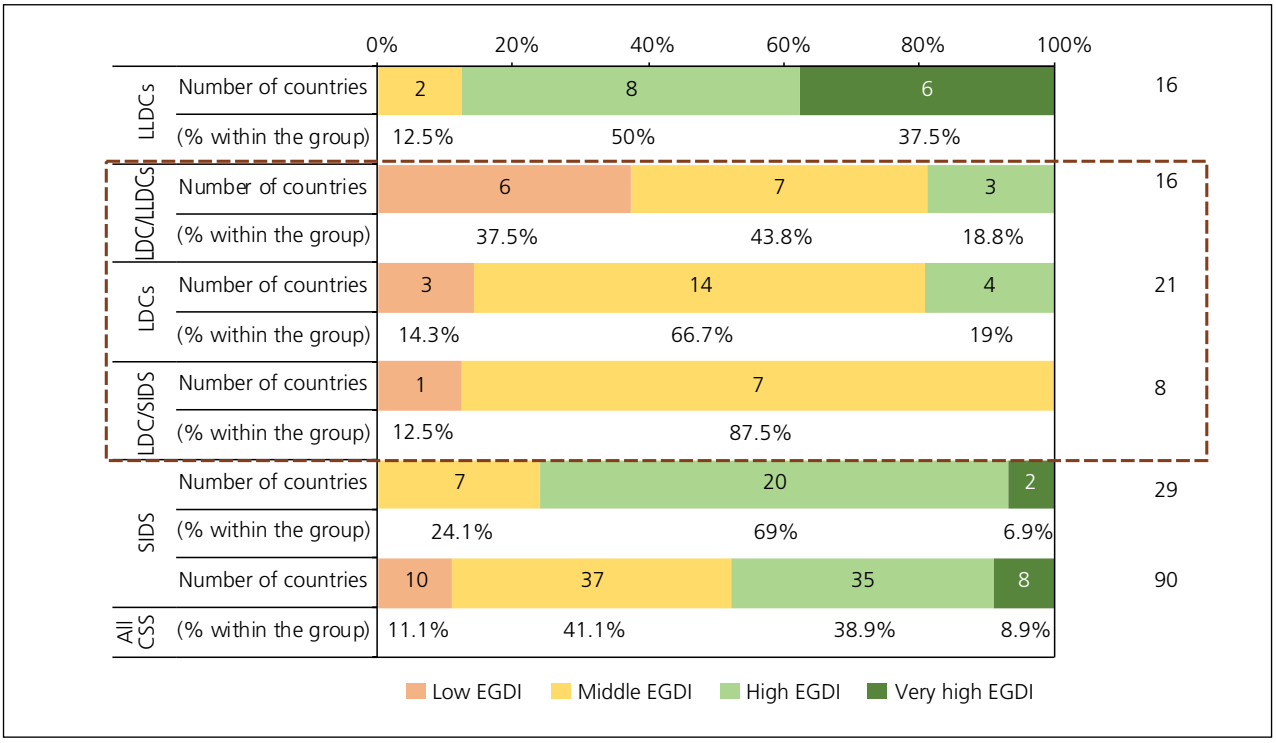
Notes: Countries in special situations include least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing States (SIDS). The list of LDCs and SIDS have changed from 2022 due to Bhutan graduating from the LDC category and Bahrain graduating from the SIDS category. Percentages may not add to 100 due to rounding.

The overall distribution of SIDS across the different EGDI levels has remained relatively stable (see figure 2.30). The majority of SIDS (54 per cent) are in the high EGDI group, followed by 38 per cent in the middle group, 5 per cent in the very high group, and 3 per cent in the low group. Notable changes include Mauritius moving from the high to the very high EGDI group, Vanuatu advancing from the middle to the high EGDI group, and Belize dropping from the high to the middle EGDI level. These shifts illustrate both progress and setbacks, highlighting the diverse digital development trajectories within SIDS. While disparities remain, the general stability in the EGDI distribution suggests a consistent focus on enhancing digital services and public engagement.

The LLDCs have experienced more dynamic changes in e-government development since 2022. Armenia, Azerbaijan, Mongolia, the Republic of Moldova, and Uzbekistan have all moved from the high to the very high EGDI group, increasing the proportion of LLDCs in the latter group from 3 to 19 per cent. Eswatini has also achieved notable progress and has moved from the middle to the high EGDI group. Conversely, Afghanistan and Burundi have moved from the middle to the low EGDI group, raising the proportion of LLDCs in the low EGDI group from 13 to 19 per cent. These shifts indicate both significant progress and ongoing challenges within the LLDCs.

The majority of LDCs (62 per cent) remain in the middle EGDI group. However, there have been notable shifts, with two countries moving up to the high EGDI level and three countries dropping to the low EGDI level; this has increased the proportions of countries in the high and low EGDI groups by 3 and 7 per cent, respectively. These trends highlight widening digital divides within the LDCs, underscoring the need for targeted interventions to support countries lagging in digital development.

Figure 2.31 The number and percentage of countries in special situations in each EGDI group, 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

Notes: Countries in special situations (CSS) include least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing States (SIDS). The list of LDCs and SIDSs have changed since 2022 with the graduation of Bhutan from the LDC category and Bahrain from the SIDS category.

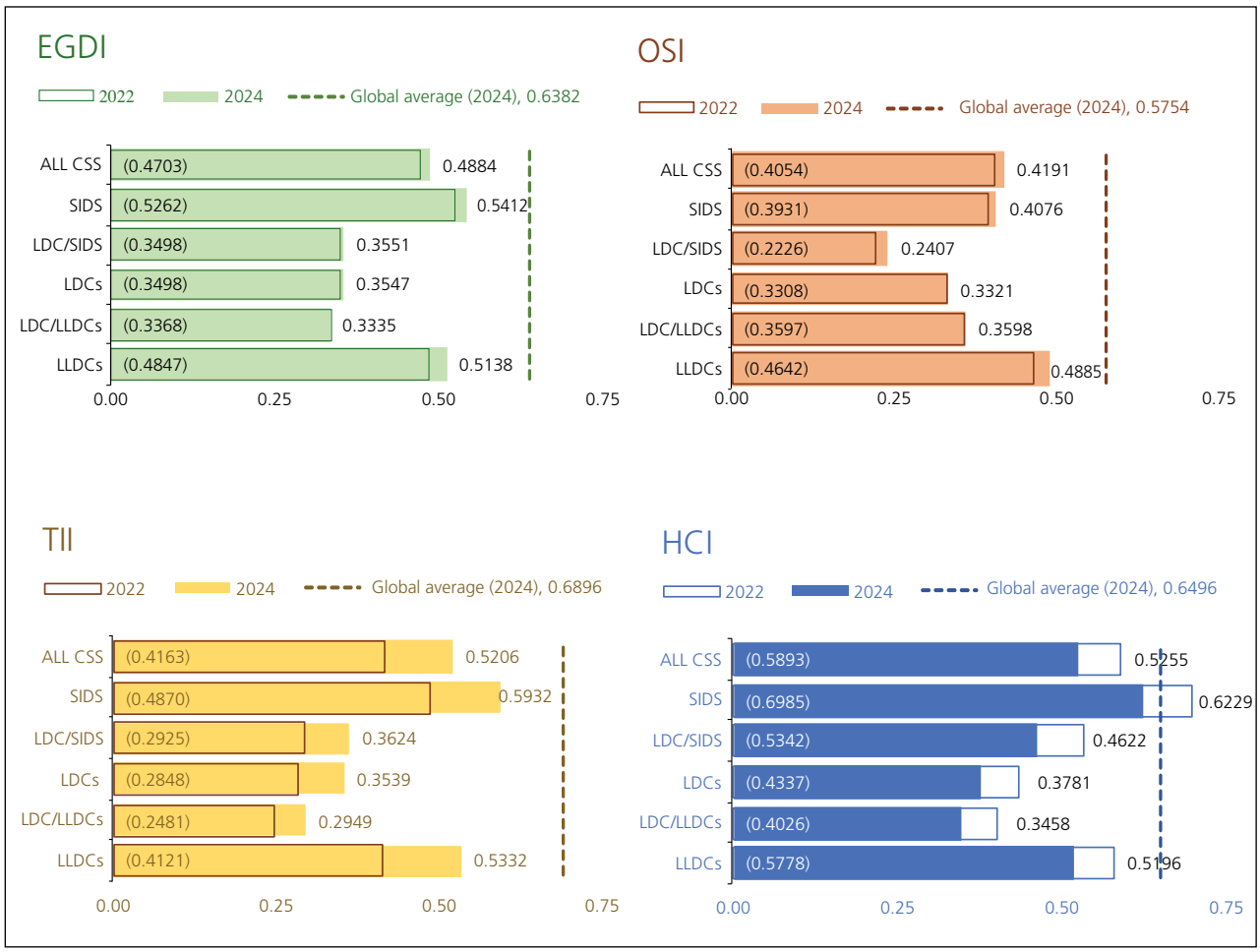
An important observation is that landlocked LDCs generally fare better in e-government development than do LDCs that are SIDS (see figure 2.31). When least developed LLDCs are excluded from the overall group of LLDCs, the remaining landlocked countries make up the highest proportion of countries with high and very high EGDI values (87.5 per cent) among the countries in special situations. This indicates that geographical constraints, while disruptive to development, can be mitigated through effective digital strategies.

EGDI and subindex values among countries in special situations

The combined average EGDI value for LDCs, LLDCs and SIDS rose by 4 per cent between 2022 and 2024, increasing from 0.4703 to 0.4884. While moving steadily in the right direction, the average EGDI value for these groups is still far below the world average of 0.6382 (see figure 2.32). Efforts towards digital transformation are clearly under way in countries in special situations, though significant disparities remain.

The average EGDI value for LDCs has risen slightly (by 1 per cent). LDC/SIDS have seen a 2 per cent increase in their average EGDI value, reflecting better integration of digital services and online platforms. The average EGDI value for LDC/LLDCs (already the lowest among the countries in special situations) fell by 1 per cent, declining from 0.3368 in 2022 to 0.3335 in 2024. This underscores the persistent challenges faced by landlocked LDCs in e-government development.

Figure 2.32 Average EGDI composite and component values for countries in special situations, 2022 and 2024



Sources: 2022 and 2024 United Nations E-Government Surveys.

Notes: Countries in special situations include least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing States (SIDS). The list of LDCs and SIDSs have changed since 2022 with the graduation of Bhutan from the LDC category and the graduation of Bahrain from the SIDS category; the slight changes in the number of countries assessed and the necessary recalculations have resulted in small variations between the numbers reported here and those reported in the previous Survey.

With a 6 per cent increase in their average EGDI value, the LLDCs have achieved the most significant gains among three groups. This notable improvement reflects the success of these countries in overcoming geographical barriers to strengthen e-government. Such progress contrasts with the stagnant or declining trends observed for LDC/LLDCs, highlighting intragroup disparities and the need for targeted interventions.

The average EGDI value for SIDS has increased by 3 per cent, reflecting steady progress in digital government development. The LDC/SIDS have shown significant improvement, particularly in online services provision; their average OSI value rose by 8 per cent – the highest increase for this component among the countries in special situations. The progress made by this group suggests that access to marine transportation routes and other infrastructure-related advantages play a critical role in advancing the development and provision of digital services.

In line with global trends, the average TII values for all groups have increased by between 19 and 29 per cent, though they are still below the global average TII value of 0.6896. These significant increases reflect enhanced investment in telecommunications infrastructure, which is essential for supporting e-government and broader digital development.

Similarly, the average OSI values for the respective groups have improved – albeit at a slower pace than TII values – but still fall significantly short of the global average. The LLDCs and SIDS have seen respective increases of 5 and 4 per cent in their average OSI values. Although the progress made by LDCs in online services provision has been negligible, the LDC/SIDS have increased their average OSI value by 8 per cent. Online services provision for LDC/LLDCs has stalled, indicating the need for focused efforts to accelerate development in this area.

The varying trends in e-government development among LDCs, LLDCs and SIDS reflect both encouraging progress and persistent challenges. While EGDI, TII and OSI values have risen for the groups of countries in special situations, in many cases reflecting substantial improvements, these values remain well below the global averages. Targeted strategies that address the unique needs of each group are essential to bridge the digital divide and promote inclusive digital transformation. The disparities within and between these groups highlight the need for tailored interventions that leverage each group's strengths and address their specific challenges.

2.6.2 The OSI and its subindices: progress among the countries in special situations

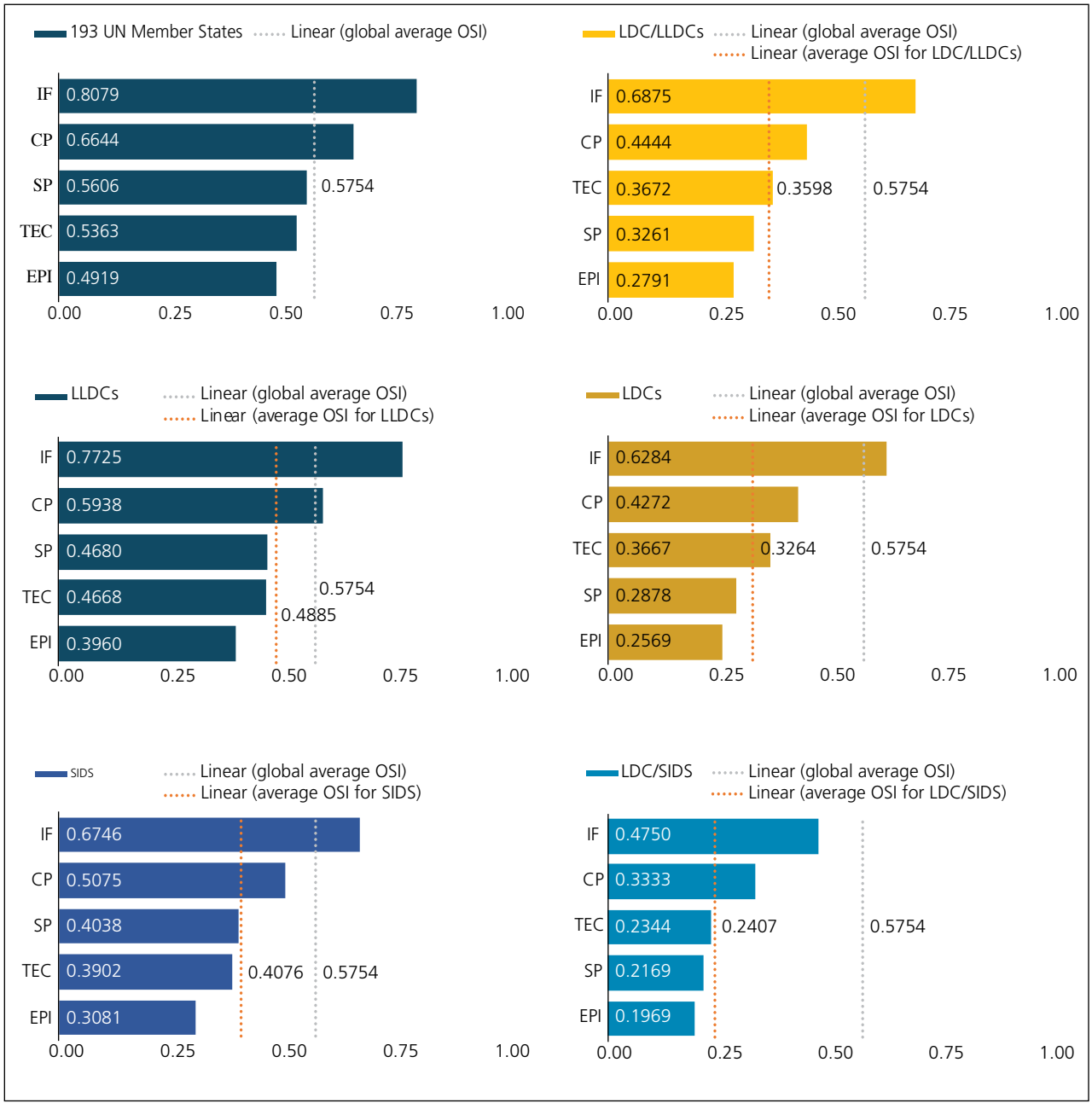
LDCs, LLDCs and SIDS have made progress in online services provision, but there are still significant gaps between their average OSI values and the corresponding global average (see figure 2.33). The smallest gap between the global average OSI value and the average OSI values for specific groups (15 per cent) is observed for LLDCs; the gap widens to 37 per cent for SIDS and 43 per cent for LDCs. Within the LDC group, landlocked LDCs have a sizeable gap of 37 per cent, but LDCs that are also SIDS have the largest gap (58 per cent) relative to the global OSI average.

For all groups, institutional framework and content provision have the highest average values among the five OSI subindices assessed (see figure 2.33). This trend aligns with the global patterns, indicating that these areas are foundational to e-government development and are prioritized even in countries facing significant challenges. Despite this, all OSI subindex values for countries in special situations remain lower than the corresponding global averages, underscoring the need for a sustained focus on these critical areas to bridge the digital divide.

Subindex values for services provision and the technical aspects of national portals vary among the groups. LLDCs and SIDS have comparatively better average values for services provision, while LDCs (especially LDC/SIDS) have a lower average value for online services provision despite being better prepared from a technology standpoint. This discrepancy suggests that even a solid technical infrastructure must be leveraged properly to ensure effective services provision, and that targeted efforts may be needed to strengthen capacities in developing and delivering public services.

Consistent with global trends, nearly all countries in special situations have fully operational national portals, and they provide a government organizational chart and information on the government structure, as well as links to subnational or local government agencies (see figure 2.34). Information about the national CIO or equivalent is available on the national portals of 75 per cent of LLDCs, 68 per cent of SIDS, and 67 per cent of LDCs; only half of the LDC/SIDS provide such information.

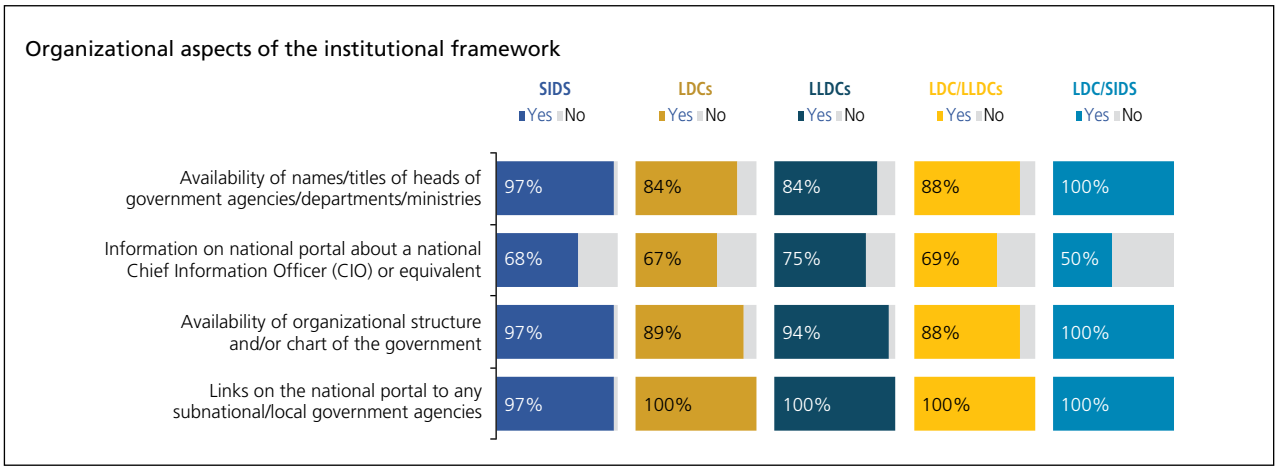
Figure 2.33 Average OSI subindex values for groups of countries in special situations relative to global averages, 2024



Source: 2024 United Nations E-Government Surveys.

Overall, the legislative framework for advancing e-government is better developed in LLDCs, including those that are least developed, than in SIDS or LDCs (see figure 2.35). Most LLDCs have an e-government or digital government strategy (78 per cent), legislation or policy documents on cybersecurity (91 per cent), legal provisions for data protection (88 per cent), legislation governing freedom of information (78 per cent), and digital ID regulations (72 per cent). Fewer SIDS and LDCs (51 to 65 per cent) have these types of legislation in place, and the proportions are even lower for LDC/SIDS (between 13 and 65 per cent, depending on the type of legislation).

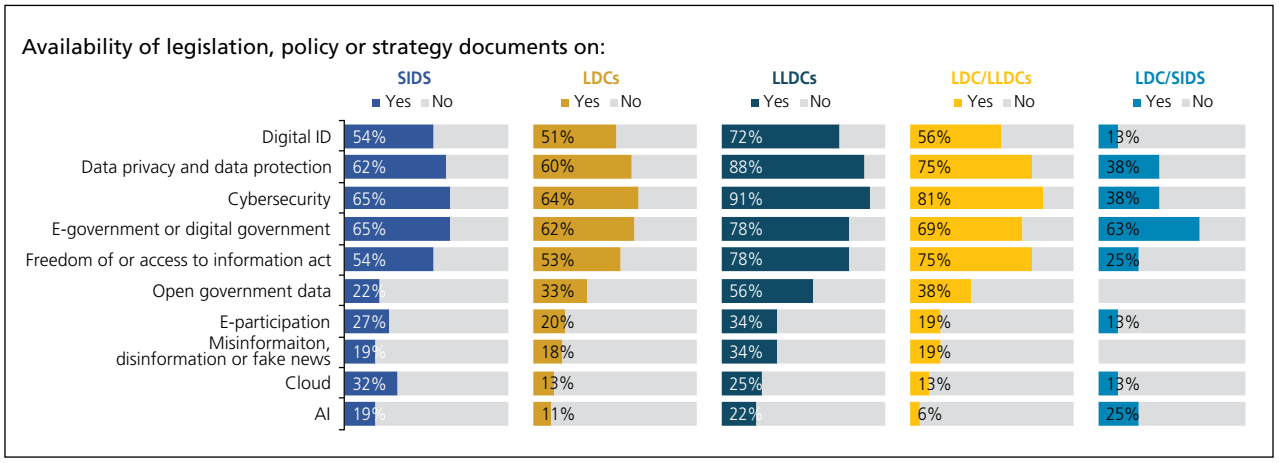
Figure 2.34 Percentage of countries in special situations that have implemented organizational features of the OSI institutional framework subindex, 2024



Source: 2024 United Nations E-Government Surveys.

Policies on open government data, e-participation, artificial intelligence, cloud computing, and protecting the public against misinformation, disinformation and/or fake news are found in about 3 out of 10 LLDCs, 2 out of 10 SIDS, and 1 out 10 LDCs.

Figure 2.35 Percentage of countries in special situations with legislative frameworks relevant to e-government development, 2024



Source: 2024 United Nations E-Government Surveys.

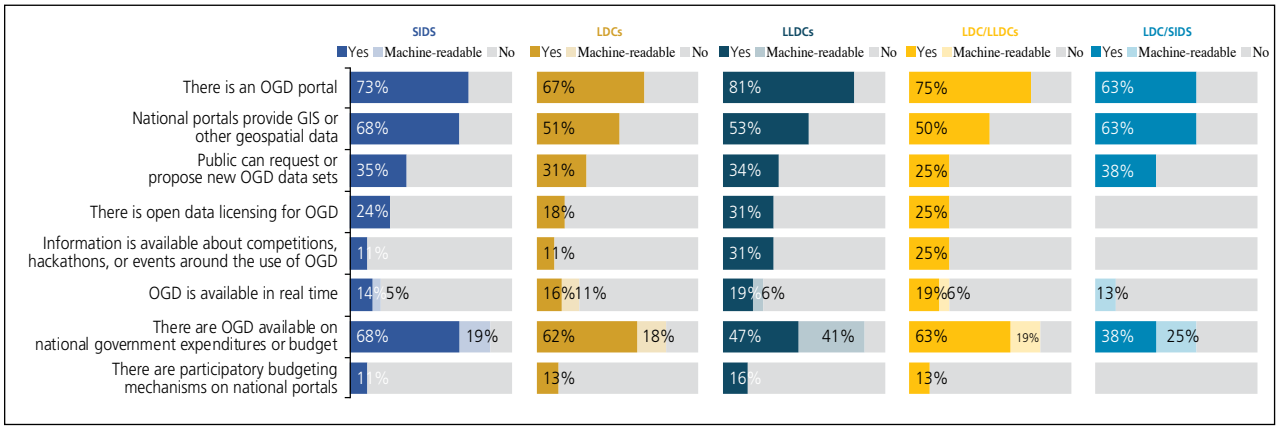
E-participation in countries in special situations

Consistent with global trends, e-participation values remain the lowest among the five OSI subindices for countries in special situations. This is a clear indication that these countries are facing broad challenges in engaging citizens through digital platforms, which is crucial for inclusive and participatory governance. Enhancing e-participation in these regions will require not only investments in technology but also significant cultural and policy shifts to encourage and facilitate citizen engagement. Over the years UN DESA implemented and continues to support countries with various capacity building initiatives in the areas of digital government, participation and accountability, innovation and delivery of public services that contribute to the achievement of sustainable development goal 16[9].

Open government data (OGD)

Group averages indicating the proportion of countries in special situations that share information through dedicated OGD portals are comparable to the corresponding global average; between 63 and 81 per cent of the countries in the respective groups maintain OGD portals, and 50 to 68 per cent provide geospatial data. Most countries in these groups also share information about government expenditures, often in open formats. However, only 3 out of 10 countries in special situations allow members of the public to request or propose new open data sets, compared to about 5 in 10 countries at the global level. More than 70 per cent of LDCs, LLDCs and SIDS have not yet adopted open data licensing, and events such as hackathons around open data use are rare. Most OGD are not available in real time, and fewer than 2 in 10 countries have participatory budgeting mechanisms (see figure 2.36).

Figure 2.36 Percentage of countries in special situations with OGD portals and various aspects of open data governance



Source: 2024 United Nations E-Government Survey.

Note: The availability of OGD in machine-readable formats is indicated by the lighter shades of the same colours in the regional performance graphs.

* The availability of OGD in real time for both machine-readable and non-machine-readable data sets.

Public consultation and reporting corruption

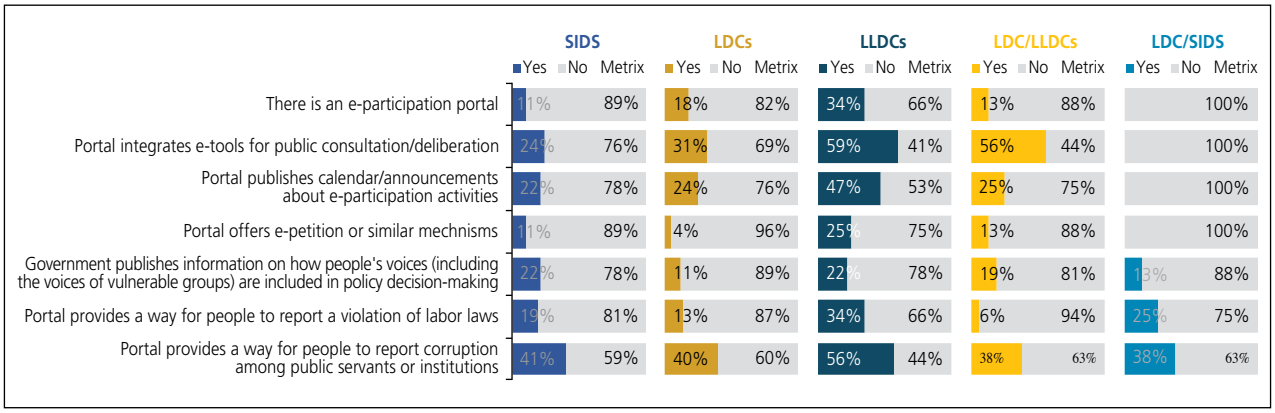
Within the LDC, LLDC and SIDS groups and related subgroups, between 40 and 56 per cent of countries offer online channels for reporting corruption, and 24 to 59 per cent integrate e-tools for public consultation or deliberation (see figure 2.37). However, dedicated e-participation portals, published calendar announcements about upcoming consultations, and information about the results of such deliberations are less common in these countries than in other Member States. Among the three main groups, LLDCs provide a comparatively better environment for e-participation than do SIDS and LDCs.

Degree of digitalization of online services among countries in special situations

The proportion of countries with fully digitalized online services is larger for the LLDC group than for the other groups of countries in special situations, though the averages for each of the services assessed for all these groups are much lower than the comparable global averages. For instance, registering a business online is fully digitalized in half of the Member States, 41 per cent of LLDCs, 38 per cent of SIDS, and 20 per cent of LDCs (see figure 2.38). In the small island and landlocked LDCs, the proportions are even lower (25 and 19 per cent, respectively).

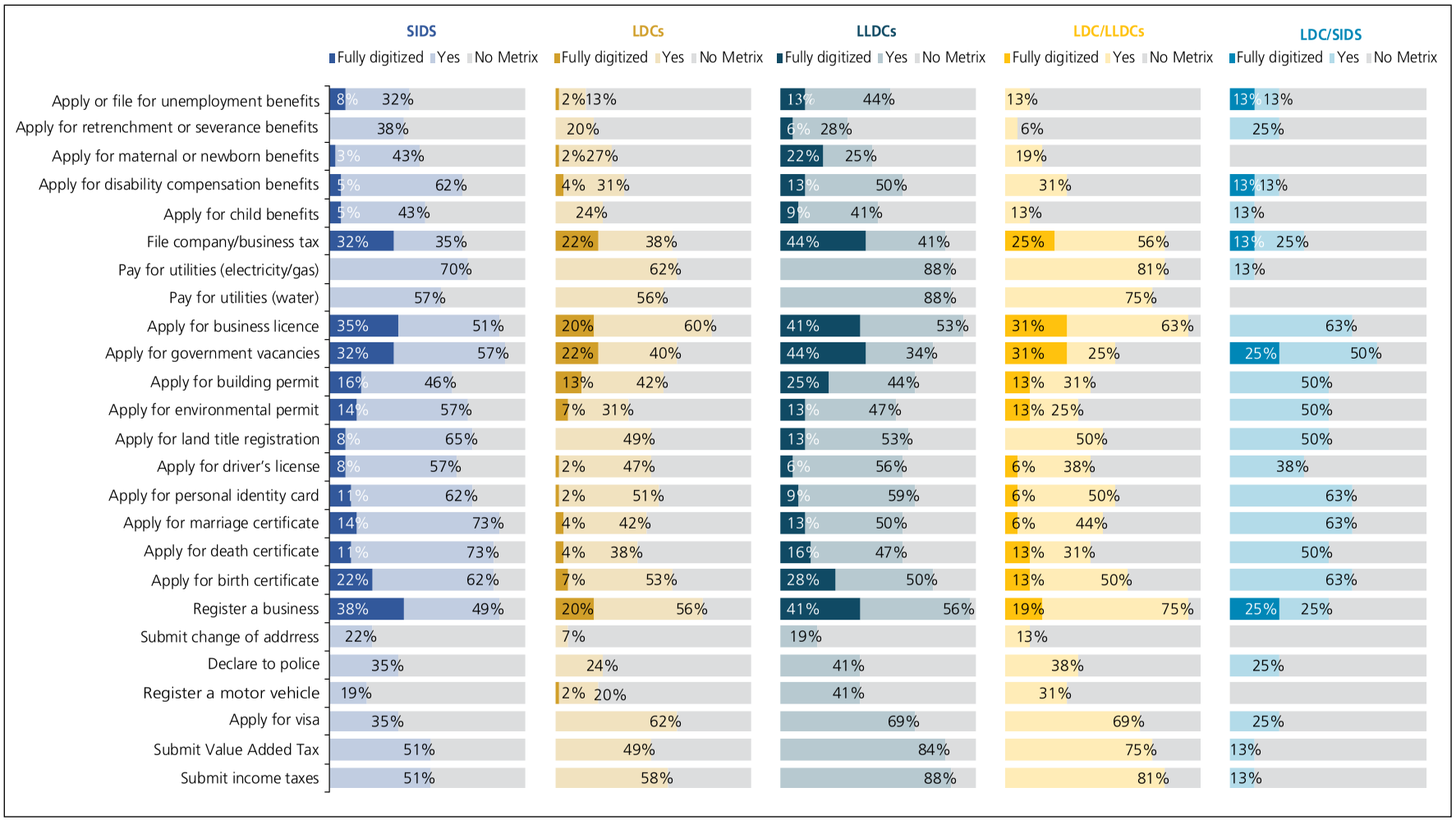
Consistent with global trends, the Governments of countries in special situations prioritize the full digitalization of services that support businesses (registration, licensing, and paying taxes), as well as those that allow people to apply online for government vacancies. For many other types of services, government portals provide information and may even supply forms to fill out, but one still needs to appear in person to complete transactions. More LLDCs and SIDS (including those that are also least developed) provide information about online services than do LDCs.

Figure 2.37 Percentage of countries in special situations offering e-participation tools, 2024



Source: 2024 United Nations E-Government Survey.

Figure 2.38 Percentage of countries in special situations offering services that can be completed partially or fully online, by group, 2024



Source: 2024 United Nations E-Government Survey.

Note: The darker shades of the respective colours highlight the proportion of fully digitalized services in each group, and the lighter shades indicate the availability of information, instructions, or online forms linked to the services provided by Governments.

2.6.3 Leaders in digitalization among the countries in special situations

Chapter 3 of the Survey reviews the major trends in regional e-government development, with the assessment of countries in special situations integrated into the broader regional analyses. The subsections below focus specifically on LDCs, LLDCs and SIDS, highlighting the leaders in digital development among these groups.

Least developed countries

Among the LDCs, Bangladesh, Bhutan, Rwanda, Nepal, Cambodia, and Zambia have been leading digital development since 2022, and Senegal and Myanmar have joined these high performers in 2024. Their EGDI values place all eight countries in the H1, H2 or H3 rating class of the high EGDI group. All except Rwanda are lower-middle-income countries. Rwanda, the only low-income country in this group, raised its OSI value from 0.7935 in 2022 to 0.8207 in 2024, surpassing Bangladesh (0.7374) to take the lead in online services provision among the LDCs. All of the LDCs in the high EGDI group, with the exception of Rwanda, Bhutan and Bangladesh, have OSI values in the middle range (0.3259 to 0.4958); however, their TII values have risen significantly, unlocking the potential for more rapid advancement in digitalization (and higher EGDI values) in the future. Nepal, Rwanda, and Zambia are also landlocked and therefore face additional challenges. Table 2.9 summarizes the performance of the highest-ranked LDCs.

Table 2.9 Least developed countries with the highest EGDI values

Country	Rating class	EGDI Rank	Sub-Region	OSI value	HCI value	TII value	EGDI (2024)	EGDI (2022)
Bangladesh	H3	100	Southern Asia	0.7374	0.5834	0.6501	0.6570	0.5630
Bhutan	H3	103	Southern Asia	0.5886	0.5478	0.8169	0.6511	0.5521
Rwanda	H2	118	Eastern Africa	0.8207	0.5467	0.3724	0.5799	0.5489
Nepal	H2	119	Southern Asia	0.4481	0.5210	0.7653	0.5781	0.5117
Cambodia	H2	120	South-Eastern Asia	0.4503	0.5149	0.7609	0.5754	0.5056
Zambia	H1	130	Eastern Africa	0.4958	0.6225	0.5088	0.5424	0.5022
Senegal*	H1	135	Western Africa	0.4779	0.3380	0.7328	0.5162	0.4479
Myanmar*	H1	138	South-Eastern Asia	0.3259	0.5081	0.6662	0.5001	0.4994

Sources: 2022 and 2024 United Nations E-Government Surveys.

Note: Italicized countries are LLDCs in addition to being LDCs.

* Countries that have moved from the middle to the high EGDI group.

Landlocked developing countries

Among the LLDCs, Kazakhstan has the highest EGDI value (0.9009) and is in the V3 rating class of the very high EGDI group. Mongolia, Armenia, Uzbekistan, the Republic of Moldova and Azerbaijan have joined the very high EGDI group for the first time in 2024 and are part of the V2 or V1 rating class. Among landlocked countries with very high EGDI values, Mongolia has experienced the most significant improvement in EGDI ranking, moving up 28 positions, followed by Armenia, with a 16-position upward shift. Eleven other countries listed in table 2.10 (Kyrgyzstan, Paraguay, North Macedonia, Plurinational State of Bolivia, Bhutan, Botswana, Eswatini, Rwanda, Nepal, Tajikistan, and Zambia) have high EGDI values ranging from 0.5424 to 0.7316. Among these 11 countries, Eswatini moved up 29 positions in the rankings and transitioned from the middle to the high EGDI group, and Paraguay and Bhutan improved their rankings by 14 and 12 positions, respectively. The five leading landlocked countries with very high OSI values include Kazakhstan, Mongolia, Rwanda, Armenia and Uzbekistan.

Table 2.10 Landlocked developing countries with the highest EGDI values

Country	Rating class	EGDI Rank	Sub-Region	OSI value	HCI value	TII value	EGDI (2024)	EGDI (2022)
Kazakhstan	V3	24	Central Asia	0.9390	0.8403	0.9235	0.9009	0.8628
Mongolia**	V2	46	Eastern Asia	0.8222	0.7775	0.9374	0.8457	0.7209
Armenia**	V2	48	Western Asia	0.7922	0.8561	0.8782	0.8422	0.7364
Uzbekistan**	V1	63	Central Asia	0.7648	0.7580	0.8769	0.7999	0.7265
Republic of Moldova**	V1	70	Eastern Europe	0.7264	0.7776	0.8118	0.7719	0.7251
Azerbaijan**	V1	74	Western Asia	0.7386	0.7233	0.8203	0.7607	0.6937
Kyrgyzstan	HV	78	Central Asia	0.6072	0.7061	0.8815	0.7316	0.6977
Paraguay	HV	80	South America	0.6712	0.7093	0.7947	0.7251	0.6332
North Macedonia	HV	84	Southern Europe	0.6642	0.7023	0.7546	0.7070	0.7000
Bolivia	H3	99	South America	0.5987	0.6876	0.7089	0.6651	0.6165
Bhutan	H3	103	Southern Asia	0.5886	0.5478	0.8169	0.6511	0.5521
Botswana	H2	112	Southern Africa	0.3985	0.5719	0.8649	0.6118	0.5495
Eswatini*	H2	113	Southern Africa	0.4557	0.5836	0.7851	0.6081	0.4498
Rwanda	H2	118	Eastern Africa	0.8207	0.5467	0.3724	0.5799	0.5489
Nepal	H2	119	Southern Asia	0.4481	0.5210	0.7653	0.5781	0.5117
Tajikistan	H1	123	Central Asia	0.4476	0.6531	0.5810	0.5606	0.5039
Zambia	H1	130	Eastern Africa	0.4958	0.6225	0.5088	0.5424	0.5022

Sources: 2022 and 2024 United Nations E-Government Surveys.

Note: Italicized countries are LDCs in addition to being LLDCs.

* Countries that have moved from the middle to the high EGDI group.

** Countries that have moved from high to the very high EGDI group.

Small island developing States

Table 2.11 lists all SIDS with high and very high EGDI values for 2024. Singapore and Mauritius are the only SIDS with very high EGDI values (0.9691 and 0.7588, respectively) and are the leaders in digital development within this group. The other 20 countries featured in the table are in the high EGDI group and have an average EGDI value of 0.6219 – an improvement over the corresponding figure for 2022 (0.6115). While these countries have EGDI values ranging from 0.50 to 0.75, all 20 have relatively low OSI values (averaging 0.4690).

Among the countries in special situations, the SIDS group has the highest variance in EGDI values, ranging from 0.2116 for Haiti to 0.9133 for Singapore. Only 12 of the 37 SIDS (Antigua and Barbuda, Bahamas, Barbados, Dominican Republic, Fiji, Grenada, Jamaica, Maldives, Mauritius, Seychelles, Singapore, and Trinidad and Tobago) have EGDI values above the global average of 0.6382.

Table 2.11 Small island developing States with the highest EGDI values

Country	Rating class	EGDI Rank	Sub-Region	OSI value	HCI value	TII value	EGDI (2024)	EGDI (2022)
Singapore	VH	3	South-Eastern Asia	0.9831	0.9362	0.9881	0.9691	0.9133
Mauritius**	V1	76	Eastern Africa	0.5903	0.7456	0.9159	0.7506	0.7201
Bahamas	HV	83	Caribbean	0.5402	0.7376	0.8652	0.7143	0.7277
Dominican Republic	HV	85	Caribbean	0.6405	0.7189	0.7444	0.7013	0.6429
Trinidad and Tobago	HV	86	Caribbean	0.5999	0.7174	0.7745	0.6973	0.6339
Barbados	H3	91	Caribbean	0.4976	0.7845	0.7624	0.6815	0.7117
Seychelles	H3	92	Eastern Africa	0.4638	0.6769	0.8913	0.6773	0.6793
Fiji	H3	93	Melanesia	0.5343	0.7413	0.7507	0.6754	0.6235
Maldives	H3	94	Southern Asia	0.6220	0.6130	0.7886	0.6745	0.5885
Jamaica	H3	96	Caribbean	0.5677	0.7060	0.7296	0.6678	0.5906
Grenada	H3	104	Caribbean	0.5056	0.7550	0.6767	0.6458	0.7277
Antigua and Barbuda	H3	105	Caribbean	0.4166	0.7176	0.7943	0.6428	0.6113
Suriname	H3	106	South America	0.4814	0.5568	0.8714	0.6365	0.5809
Saint Kitts and Nevis	H2	110	Caribbean	0.3039	0.7202	0.8675	0.6305	0.6775
Cabo Verde	H2	111	Western Africa	0.6892	0.5694	0.6128	0.6238	0.5660
Saint Vincent and the Grenadines	H2	117	Caribbean	0.3906	0.6956	0.6767	0.5876	0.5811
Dominica	H1	127	Caribbean	0.3798	0.5781	0.6757	0.5445	0.5789
Guyana	H1	128	South America	0.3455	0.5933	0.6942	0.5443	0.5233
Vanuatu*	H1	129	Melanesia	0.4769	0.5347	0.6165	0.5427	0.4988
Saint Lucia	H1	133	Caribbean	0.3229	0.6037	0.6498	0.5255	0.5580
Tonga	H1	134	Polynesia	0.3220	0.7488	0.4784	0.5164	0.5155
Palau	H1	137	Micronesia	0.2787	0.7520	0.4910	0.5072	0.5018

Sources: 2022 and 2024 United Nations E-Government Surveys.

* Countries that have moved from the middle to the high EGDI group.

** Countries that have moved from high to the very high EGDI group.

2.7 Summary of key findings and policy recommendations

The number of countries with advanced digital capabilities is growing.

Significant progress has been made in e-government development, reflected in the increase from 0.6102 to 0.6382 in the global average EGDI value between 2022 and 2024.

Over the past two years, 23 countries have moved to a higher EGDI level. For the first time, Member States with very high EGDI values (above 0.75) comprise the largest share, accounting for 39 per cent of the total number of countries assessed. The countries with high EGDI values (0.50 to 0.75) make up 32 per cent of the total. The proportion of countries with middle EGDI values (0.25 to 0.50) is now 23 per cent, reflecting a decline from 2022, but the share of countries with low EGDI values has increased to 6 per cent, largely owing to geopolitical conflicts and post-conflict situations that have hindered digital development.

The general upward trend demonstrates the growing importance and priority Governments have given to digital transformation over the past decade, especially after the COVID-19 pandemic, resulting in more people benefiting from the efficiencies and conveniences of digital government services.

In e-government development, Europe is leading, but Asia is advancing more rapidly than other regions.

At the regional level, Europe continues to lead e-government development, once again achieving the highest average EGDI value (0.8493), followed by Asia (0.6990), the Americas (0.6701), Oceania (0.5289), and Africa (0.4247). Asia has seen the steepest increase in its average EGDI value (7.7 per cent).

All European countries have very high (84 per cent) or high (16 per cent) EGDI values. The proportion of countries with high and very high EGDI values remains higher in the Americas (88 per cent) than in Asia (83 per cent); however, the share of countries with very high EGDI values has grown faster in Asia (by 21 per cent, compared with 8 per cent in the Americas). Asian countries in the very high EGDI group now account for 53 per cent of the regional total – a proportion exceeded only by Europe.

South Africa and Mauritius, with respective EGDI values of 0.8616 and 0.7506, are the first countries in Africa to join the very high EGDI group, and Australia and New Zealand remain leaders in e-government development both in Oceania and globally. At the regional level, however, both Africa and Oceania continue to face serious development challenges, and digital divides persist. Africa and Oceania are the only two regions with average EGDI values below the global average of 0.6382.

Global and regional OSI averages have risen slightly in 2024. The highest increase has occurred in Africa (5.2 per cent), followed by Asia (4.3 per cent), Oceania (4.2 per cent), the Americas (3.8 per cent), and Europe (1.8 per cent).

Improved telecommunications infrastructure is accelerating overall e-government development.

In 2024, the TII became the EGDI component contributing most to the increases in average EGDI values at the regional and global levels. This reflects an overall trend towards increased investment in infrastructure as a foundation for digital growth. Strengthening digital capacity has been prioritized as part of the COVID-19 pandemic recovery process.

The global average TII value has increased by 19.9 per cent since 2022. At the regional level, Oceania has seen the most significant increase (29.4 per cent), followed by Africa (27.8 per cent), Asia (25.5 per cent), the Americas (19.6 per cent), and Europe (9.9 per cent).

Governments are providing better access to public information and refining content to promote inclusiveness.

Most countries are steadily improving their online platforms. The organizational aspects of the institutional framework, which orient users on engaging government agencies online, are well developed across the board. In 9 out of 10 countries, the national portals provide users with access to a government organizational chart and information on the government structure, the names and titles of the heads of government departments and agencies, information on the CIO, and links to ministerial websites and sources of information on sector-specific policies. In 3 out of 4 countries, the national portals incorporate links to subnational or local government agencies.

In the vast majority of countries (86 per cent), the Government provides information and services in multiple languages, which promotes inclusiveness and facilitates access to information and online services in multilingual societies.

Legislative frameworks supporting e-government are not equally developed.

The legislative framework supporting e-government is not consistently developed and varies significantly across regions. Between 76 and 83 per cent of countries have national e-government strategies, policies or legislation relating to cybersecurity, data privacy, data protection, digital identity, and the right of citizens to access government information.

Fewer countries have legislation or policies on open government data (63 per cent), e-participation (51 per cent), protecting the public against misinformation, disinformation and/or fake news (47 per cent), and frontier technologies such as cloud computing (44 per cent) and artificial intelligence (42 per cent). Interregional disparities are pronounced in these areas; more than half of the countries in Asia and Europe already have relevant legislation, policies or strategies, the average for the Americas is slightly above 30 per cent and that for Africa slightly below 30 per cent, and in Oceania the compliance rates range from 4 to 11 per cent.

The digitalization of public procurement has improved, though somewhat unevenly.

Countries are steadily moving towards digitalizing public procurement; however, there are significant disparities in the scope and comprehensiveness of e-procurement processes among regions.

Publishing announcements of forthcoming procurement or bidding processes on national portals has become routine in 89 per cent of the countries surveyed. However, fewer countries (78 per cent) share information about the bidding or procurement results online.

A total of 135 countries (70 per cent) have dedicated e-procurement portals, an increase of 4 per cent since 2022. The number of countries issuing digital invoices through these portals has increased by around 7 per cent and now stands at 101 (52 per cent).

Nearly all countries in Europe (93 per cent) have e-procurement portals, and most (86 per cent) offer digital invoicing. In Asia and the Americas, about 80 per cent of countries have portals, but fewer (60 and 54 per cent, respectively) issue digital invoices. The gap is wider in Oceania and Africa, where the comparable proportions are 57 versus 21 per cent and 39 versus 26 per cent, respectively.

E-participation has improved, but regional disparities are significant.

The global average E-Participation Index value has increased by 9 per cent (from 0.4450 to 0.4893) since 2022. All regions have improved in terms of proactive engagement with the public through e-participation processes. However, there are still broad regional disparities in specific aspects of e-participation, including providing information to the public, engaging in e-consultations, and including people's voices in decision-making.

More countries are providing information to the public, often in open, machine-readable formats.

There has been an increase in the availability of useful information on key aspects of public administration, especially in open data formats. Roughly nine out of ten countries publish open data sets for national and sector-specific budgets and expenditures. More countries use open, machine-readable formats for expenditure-related data sets for national budgets (45 per cent) than for sector-specific budgets (about 30 per cent). Only 31 per cent of the countries surveyed have participatory budgeting mechanisms in place.

Along with budgetary information, most countries provide data sets on education (82 per cent), health (79 per cent), environment and employment (74 per cent each), justice (68 per cent), and social protection (65 per cent). When such information is available, it is often in machine-readable formats (45-58 per cent of the time).

Eighty-one per cent of the countries surveyed publish information on dedicated OGD portals, and 75 per cent provide GIS or other geospatial data on their national portals. However, in only 51 per cent of countries can people request or propose new open government data sets or freely reuse data owing to the adoption of open data licensing by the Government. Even fewer countries actively promote the use of open data through hackathons and competitions (45 per cent) or make OGD available in real time (43 per cent).

The use of tools, mechanisms and dedicated portals for e-participation is expanding, though electronic evidence of people's voices being included in decision-making varies widely among regions.

In terms of the proportion of countries in each region proactively offering e-participation tools, channels or mechanisms, Europe is the regional leader (78 per cent), followed by Asia (62 per cent), the Americas (44 per cent), Oceania (33 per cent), and Africa (27 per cent).

Around 50 per cent of the countries assessed for the Survey have a dedicated e-participation portal, 55 per cent publish calendar announcements about upcoming consultations on various sector-specific issues, and 40 per cent use e-petitions or similar mechanisms to engage the public in policy deliberations.

Europe has the highest proportion of countries providing evidence of having conducted at least one e-consultation in the 12 months preceding the administration of the Survey (91 per cent), followed by Asia (70 per cent), the Americas (60 per cent), Africa (24 per cent), and Oceania (14 per cent). Evidence that people's voices have been included in actual decision-making is found in just under 31 per cent of countries, with regional averages ranging from 9 to 49 per cent.

Consultations with people in vulnerable situations are relatively uncommon. Between 18 and 28 per cent of countries published information about e-consultations having been held with people in vulnerable situations in the 12 months preceding the administration of the Survey, with the group engaged by the highest number of countries being youth (28 per cent), followed by persons with disabilities and women (24 per cent each), older people (21 per cent), individuals living below the poverty line (20 per cent), and immigrants (18 per cent). Evidence that input from vulnerable groups is included in actual decision-making is available for fewer countries (between 14 and 26 per cent, depending on the group).

The online reporting of corruption is prioritized as a mechanism for engaging with the wider population.

More than two thirds of the Member States provide channels for reporting corruption online. Europe has the highest proportion of countries incorporating this feature on their portals (88 per cent), followed by Asia (81 per cent), the Americas and Oceania (57 per cent each), and Africa (48 per cent). More than half of the countries (53 per cent) have also created mechanisms for reporting violations of labour law.

Countries are expanding the range of services they provide online.

The number of Member States offering at least one of the online services assessed for the 2024 Survey remains at 189 (98 per cent). The global average number of online services offered relative to the number of services assessed has risen from 16 out of 22 in 2022 to 18 out of 25 in 2024. The online provision of all but four types of services has increased by between 1 and 14.5 per cent, translating to an overall increase of 3 per cent globally.

The most prevalent online transactional services remain the registration of a new business (177 countries) and applying for a business licence (173 countries). The next most frequently offered

online services include applying for government vacancies, paying utility bills (electricity and gas), applying for a birth certificate, and filing business taxes. The electronic submission of company taxes is offered by more countries than the online submission of income taxes, which is a departure from 2022. Tax-filing services are offered more frequently to businesses (157 countries) than to individuals (152 countries for income taxes and 147 countries for VAT).

For the 2024 Survey, countries were asked about the level of digitalization of 19 of the 25 online services assessed. At the regional level, Europe has the highest degree of full digitalization among these services, followed by Asia, the Americas, Oceania, and Africa. At both the regional and global levels, rates of full digitalization are highest for the types of online services that support business registration, licensing, and paying taxes (around 50 per cent globally) and applying for government vacancies (48 per cent). Services related to social protection – those that allow people to apply online for child benefits, maternal or newborn benefits, unemployment benefits, and retrenchment or severance benefits when losing a job – can be completed fully online in about 25 per cent of the Member States (a 2 per cent increase from 2022). Essentially, most countries use their portals to provide information and forms, but in most cases one still needs to appear in person to complete public service transactions.

The provision of online services to the most vulnerable populations is on the decline.

The number of countries providing information and services that target specific vulnerable populations has decreased by an average of 5 per cent since 2022. The sharpest decline (13.5 per cent) is recorded for immigrants, which is concerning given that in 2022 the services aimed at supporting immigrants were provided by the highest number of countries (163, compared to 141 countries in 2024). The provision of services for women (148 countries) and people living below the poverty line (132 countries) has also declined (by 9 and 8.3 per cent, respectively).

Europe remains the most homogeneous region in terms of the provision of online services for people in vulnerable situations (94 per cent of countries), and 45 per cent of those services (the highest proportion among the regions) can be completed online.

Over the past two years, the proportion of countries providing services for people in vulnerable situations has risen from 45 to 70 per cent in Oceania and from 44 to 56 per cent in Africa. However, the share of countries that offer fully digitalized services is only 21 per cent in Oceania and 5 per cent in Africa.

Countries in special situations are making some progress but require ongoing support.

EGDI values are improving for countries in special situations but remain lower than the global average, and there are significant disparities within and between the groups assessed.

The combined average EGDI value for LDCs, LLDCs and SIDS rose by 4 per cent between 2022 and 2024, increasing from 0.4703 to 0.4884 – an indication of progress but still well below the global average EGDI value of 0.6382.

In line with global trends, the average TII values for all groups of countries in special situations have increased by an average of 19 to 29 per cent, though they remain below the global average TII value of 0.6896. These increases reflect enhanced investment in telecommunications infrastructure, which is essential for supporting e-government and broader digital development. Similarly, the average OSI values for the respective groups have improved (at a slower pace than TII values), but still fall significantly short of the global average.

The overall distribution of SIDS across the different EGDI levels has remained relatively stable. The majority of SIDS (54 per cent) are in the high EGDI group, 38 per cent are in the middle group, 5 per

cent are in the very high group, and 3 per cent are in the low group. The average EGDI value for SIDS has increased by 3 per cent, reflecting steady progress in digital government development. The LDC/SIDS have shown significant improvement, particularly in online services provision; their average OSI value rose by 8 per cent – the highest increase for this component among the countries in special situations. The progress made by this group suggests that access to marine transportation routes and other infrastructure-related advantages play a critical role in advancing the development and provision of digital services.

The LLDCs have experienced more dynamic changes in e-government development since 2022. They have achieved the most significant gains among three groups, as reflected in the 6 per cent increase in their average EGDI value. With the movement of five countries from the high to the very high EGDI group, the proportion of LLDCs in the latter group has surged from 3 to 19 per cent. When LDCs and SIDs are excluded from the overall group of LLDCs, the remaining landlocked countries make up the highest proportion of countries with high and very high EGDI values (87.5 per cent) among the countries in special situations. The advances made by the countries in this group indicate that geographical constraints, while disruptive to development, can be mitigated through effective digital strategies.

The majority of LDCs (62 per cent) remain at the middle EGDI level. However, the digital divide has widened within this group, with two countries moving up to the high EGDI level and three countries dropping to the low EGDI; this has increased the proportions of countries in the high and low EGDI groups by 3 and 7 per cent, respectively. These trends underscore the need for targeted interventions to support countries lagging in digital development.

The average EGDI value for LDCs has risen slightly (by 1 per cent). The overall gains for the group as a whole are negligible; however, LDC/SIDS have increased their average OSI value by 8 per cent and their average EGDI value by 2 per cent since 2022. Online services provision for LDC/LLDCs has stalled, indicating the need for focused efforts to accelerate digital development and strengthen the delivery of public services in least developed landlocked countries.

Average OSI values vary widely for groups of countries in special situations – and all are well below the global average OSI value.

LDCs, LLDCs and SIDS have made progress in online services provision, but there are still significant gaps between their average OSI values and the corresponding global average. The smallest gap between the global average OSI value and the average OSI values for specific groups (15 per cent) is observed for LLDCs; the gap widens to 37 per cent for SIDS and 43 per cent for LDCs. Within the LDC group, landlocked LDCs have a sizeable gap of 37 per cent, but LDCs that are also small island States have the largest gap (58 per cent) relative to the global OSI average.

Overall, the legislative framework for advancing e-government is better developed in LLDCs, including those that are least developed, than in SIDS or LDCs. Most LLDCs have an e-government or digital government strategy (78 per cent), legislation or policy documents on cybersecurity (91 per cent), legal provisions for data protection (88 per cent), legislation governing freedom of information (78 per cent), and digital ID regulations (72 per cent). Fewer SIDS and LDCs (51 to 65 per cent) have these types of legislation in place, and the proportions are even lower for LDC/SIDS (between 13 and 65 per cent, depending on the type of legislation).

Policies on open government data, e-participation, artificial intelligence, cloud computing, and protecting the public against misinformation, disinformation and/or fake news are found in about 3 out of 10 LLDCs, 2 out of 10 SIDS, and 1 out 10 LDCs.

E-participation opportunities tend to be limited in countries in special situations.

Within the LDC, LLDC and SIDS groups and related subgroups, between 40 and 56 per cent of countries offer online channels for reporting corruption, and 24 to 59 per cent integrate e-tools for public consultation or deliberation. However, dedicated e-participation portals, published calendar announcements about upcoming consultations, and information about the results of such deliberations are less common in these countries than in other Member States. Among the three main groups, LLDCs provide a comparatively better environment for e-participation than do SIDS and LDCs.

There is more online information about services than actual, fully digitalized services in countries in special situations.

Consistent with global trends, the Governments of countries in special situations prioritize the full digitalization of services that support businesses (registration, licensing, and paying taxes), as well as those that allow people to apply online for government vacancies. For many other types of services, government portals provide information and often even supply forms to fill out, but one still needs to appear in person to complete transactions. More LLDCs and SIDS (including those that are also least developed) provide information about online services than do LDCs.

The proportion of countries with fully digitalized online services is larger for the LLDC group than for the other groups of countries in special situations, though the averages for each of the services assessed for all these groups are much lower than the comparable global average. For instance, registering a business online is fully digitalized in half of the Member States, 41 per cent of LLDCs, 38 per cent of SIDS, and 20 per cent of LDCs. In the small island and landlocked LDCs, the proportions are even lower (25 and 19 per cent, respectively).

The wide disparities in EGDI composite and component values among the countries in special situations reveal a complex landscape of progress and setbacks. The EGDI, TII and OSI values for the three groups and associated subgroups have improved in many cases but are still well below the corresponding global averages. Addressing these disparities requires a nuanced understanding of the unique situations prevailing in each group, as well as customized strategies that promote inclusive and sustainable digital development.

Policy recommendations

- Fully digitalize online services and improve telecommunications infrastructure

  As more countries progress to higher levels of e-government development, it is important to continue to strengthen telecommunications infrastructure and online services provision. Priority should be given to fully digitalizing (rather than merely providing information on) public services, as this will streamline administrative procedures for all users but will be particularly beneficial for the most vulnerable population groups.

- Improve legislative environment for digital development, especially on frontier technologies

  Adopting strong, forward-looking policies, strategies and legislative frameworks – especially for frontier technologies such as AI, cloud, open data licensing, and digital identity – will allow countries to create an enabling environment for digital development and ultimately improve the provision of online services. Countries in Africa and Oceania will particularly benefit from establishing firm foundations through such action, as this will contribute to narrowing digital divides.

- Promote and facilitate public participation in policy and decision making

  Improving e-participation policies and practices is essential for advancing e-government development globally. A growing number of countries are sharing information and data with the public, but more needs to be done to proactively engage citizens in public consultations and integrate their input in decision-making. Promoting and facilitating increased public engagement support the principles of good governance, transparency and accountability and will lead to improvements in overall e-government development (as reflected in the EGDI).

Endnotes

1 The three-point scale distinguishing different levels of public participation was first used in 2020 (see United Nations, *E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development*, pp. 117-118).

2 A list of all Member States and their respective EPI values is provided in annex, table 2.

3 See United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), "What we do", available at https://www.un.org/ohrlls/content/what-we-do.

4 There are officially 39 small island developing States, but two have not been assessed for the Survey. The Cook Islands and Niue are SIDS that participate in activities supported by United Nations specialized agencies; however, they are not States Members of the United Nations, nor do they have non-Member State observer status with the United Nations General Assembly.

5 See UN-OHRLLS, Doha Programme of Action for the Least Developed Countries 2022-2031, adopted on 17 March 2022 at the Fifth United Nations Conference on the Least Developed Countries and adopted by the United Nations General Assembly on 1 April 2022, available at https://www.un.org/ldc5/sites/www.un.org.ldc5/files/doha_booklet-web.pdf.

6 See UN-OHRLLS, "About landlocked developing countries", available at https://www.un.org/ohrlls/content/about-landlocked-developing-countries.

7 See United Nations, General Assembly, "Draft outcome document of the fourth International Conference on Small Island Developing States", 12 April 2024 (A/CONF.223/2024/4), available at https://sdgs.un.org/sites/default/files/2024-05/n2409990.pdf.

8 Ibid., para 25, point (vii).

9 For resources on capacity building work on digital government, public participation and more, please refer to UN DESA/ DPIDG website at: https://publicadministration.desa.un.org/capacity-development/about.