



United Nations

Department of
Economic and
Social Affairs

4th Digital Transformation in Government Conference

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United Nations E-Government Survey Overview

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Division for Public Institutions and Digital Government

United Nations Department of Economic and Social Affairs

**Organized by
ISACA Ottawa Valley and AEA Ottawa-Gatineau**

THE FUTURE OF DIGITAL GOVERNMENT

12TH

Edition of the UN E-Government Survey

The Survey includes digital government ranking of the **193 UN Member States**.

The 2022 Survey also marks the first study to incorporate an assessment of e-government in the **most populous city** in each of UN Member State.



More than 20 years of data – and a vision of the future

The Survey looks at how digital government can facilitate integrated policies and services across 193 UN Member States. It supports countries' efforts to provide effective, accountable and inclusive digital services to all, bridge the digital divide and leave no one behind.



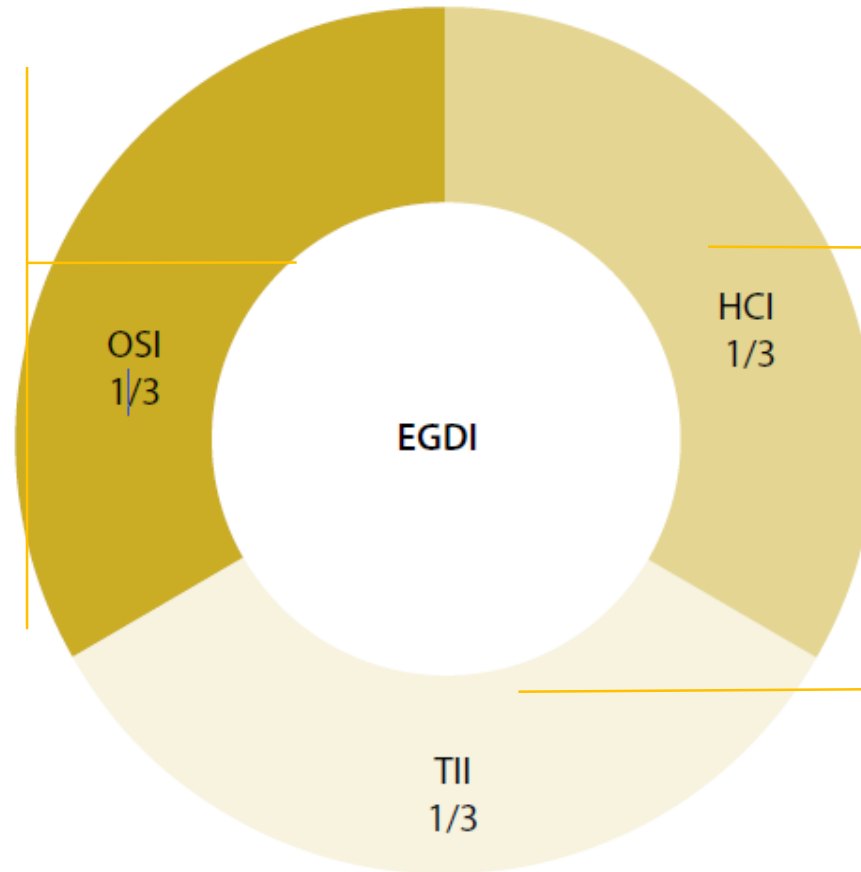
E-Government Development Index (EGDI)

OSI - Online Service Index

Based on web features under five categories:

- ✓ Institutional framework
- ✓ Content provision
- ✓ Service provision
- ✓ Participation
- ✓ Technology

(UN DESA)



HCI - Human Capital Index

- ✓ Adult literacy
- ✓ Gross enrollment ratio
- ✓ Expected years of schooling
- ✓ Mean years of schooling

(UNESCO, UNDP)

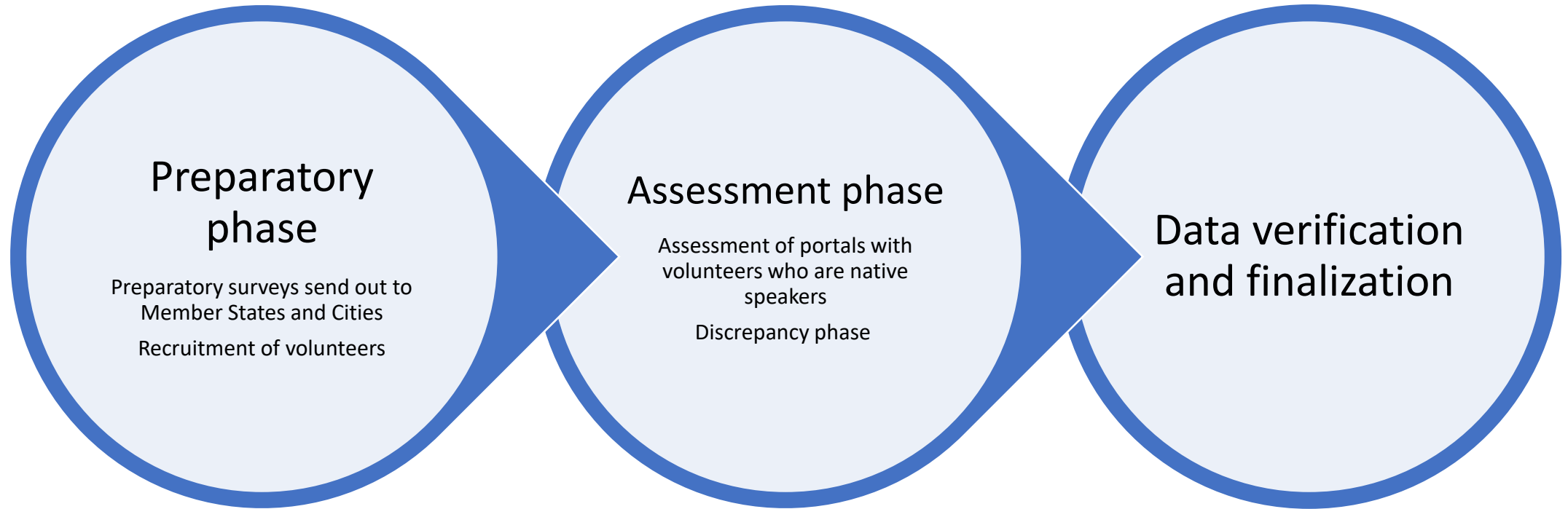
TII - Telecommunication Infrastructure Index

- ✓ Mobile subscribers per 100 inhabitant
- ✓ Fixed broadband subscriptions per 100 inhabitants
- ✓ Internet users per 100 inhabitants
- ✓ Active mobile-broadband subscriptions

(ITU)

$$EGDI = \frac{1}{3} OSI + \frac{1}{3} TII + \frac{1}{3} HCI$$

UN E-Government Survey Process



United Nations E-Government Survey 2022



E-Government Survey 2022

The Future of Digital Government



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#EGovernmentSurvey



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Regional Data

Visible by Administrators only.

Year: 2022 Data: E-Government Development Index Regions: 5 selected

Country Groups: Choose Country Groups Update Clear

2022 E-Government Development Index

World Average

Region	E-Government Development Index (2022)
Europe	0.8305
Asia	0.6493
Americas	0.6438
Oceania	0.5081
Africa	0.4054

Browse country data »

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<https://publicadministration.un.org/egovkb/>



Global and Regional Trends



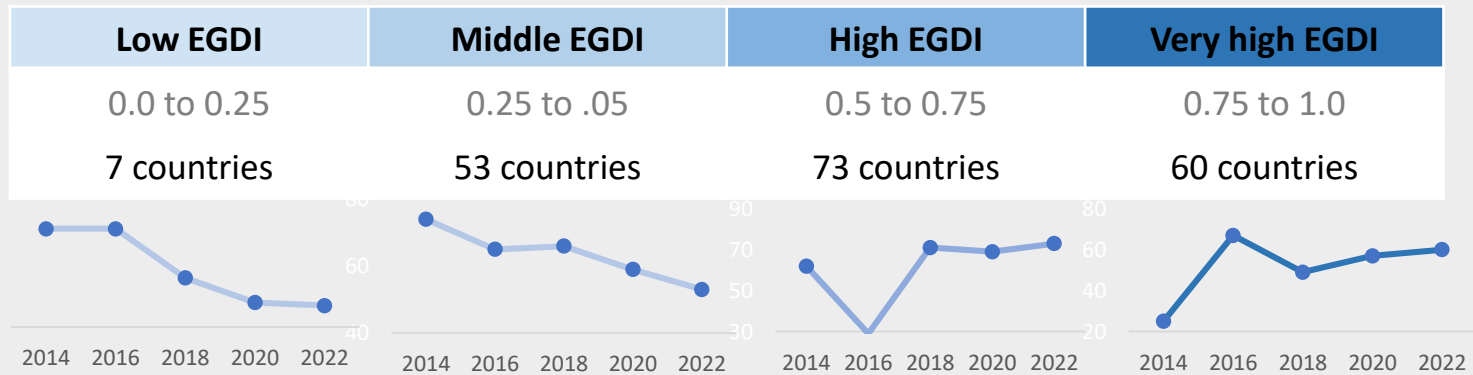
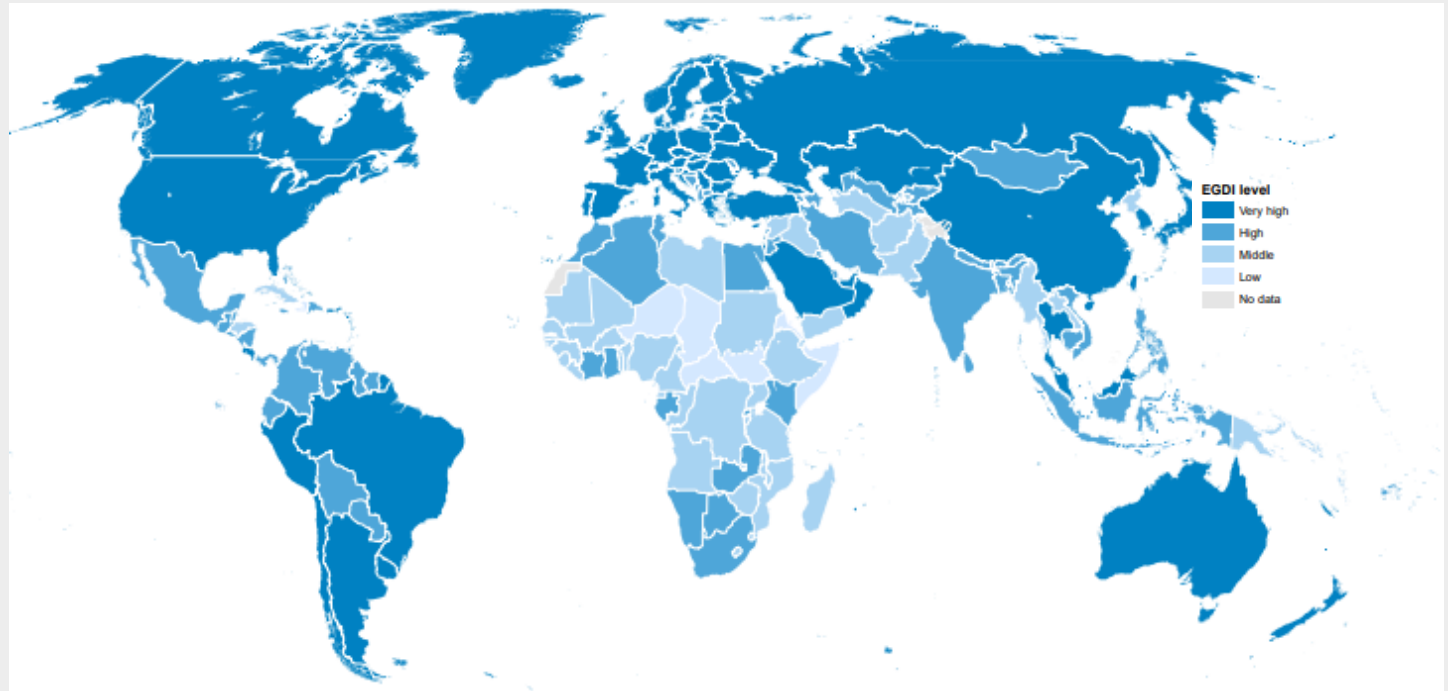
EGDI level

- Very high
- High
- Middle
- Low
- No data

UNITED NATIONS Geospatial
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the Parties.
Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.
A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

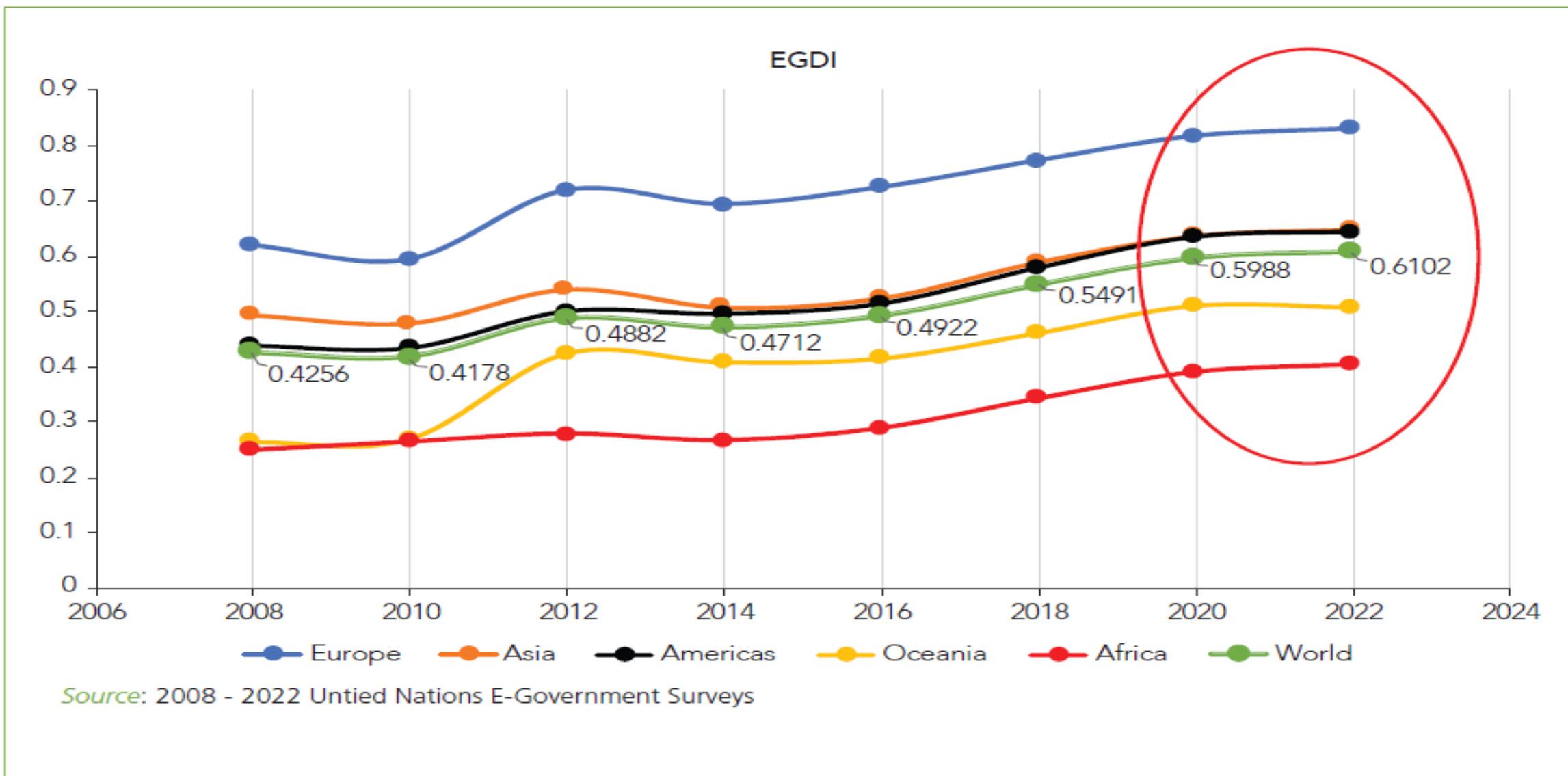
Key Findings

- ✓ E-government development has improved between 2020 and 2022: Global average EGDI value rose from 0.5988 to 0.6102
- ✓ 133 UN Member States (70%) have Very high (60) and High (73) EGDI values : A 5% increase since 2020
- ✓ Only 7 countries have Low-EGDI level: all 7 are LDC/LLDC/SIDSs; 6 in Africa, 1 in the Americas
- ✓ The trend for the last 8 years suggests increasing number of countries improving e-government development





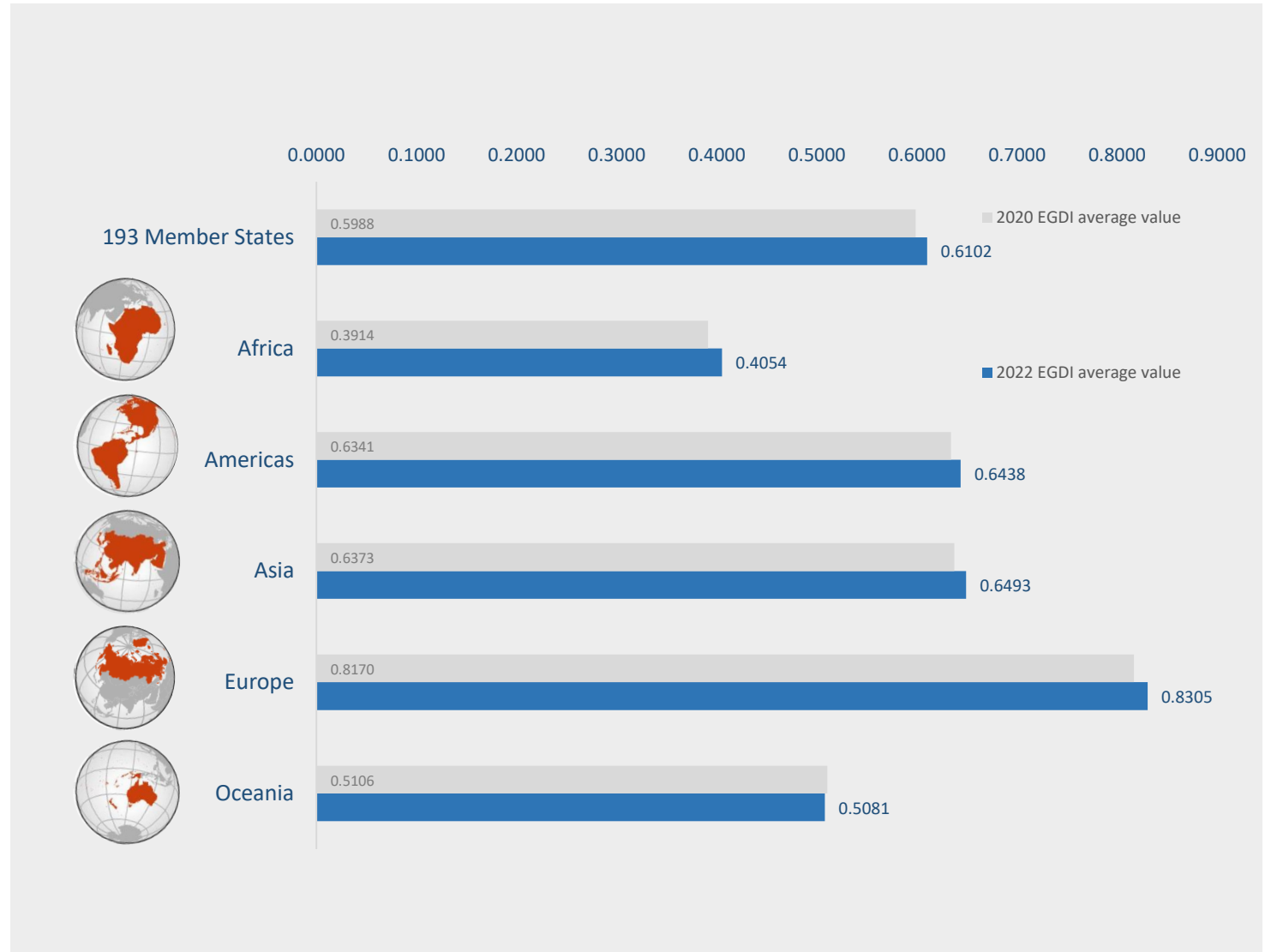
EGDI Series (2008-2022)



Regional Trends at a Glance

Key Findings:

- ✓ **Europe** has the **highest level** of e-government development
 - avg. EGD I for Europe is 0.8305
- ✓ **Asia** and the **Americas** have comparable e-government development:
 - avg. EGD I for Asia is 0.6493
 - avg. EGD I for Americas is 0.6438
- ✓ **Oceania** and **Africa** regions follow, having average EGD I values below the global EGD I average of 0.6102
 - avg. EGD I for Oceania is 0.5081
 - avg. EGD I for Africa is 0.4054





Global and Regional Rankings

- EGDI level**
- Very high
 - High
 - Middle
 - Low
 - No data

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bit.ly/EGovernmentSurvey | [#EGovernmentSurvey](https://twitter.com/EGovernmentSurvey)





Global Leading Countries

Low-EGDI				Middle-EGDI				High-EGDI				Very High-EGDI			
L1	L2	L3	LM	M1	M2	M3	MH	H1	H1	H3	HV	V1	V2	V3	VH

- 15 Countries have the highest Rating Class VH
 - 8 MS from Europe
 - 4 MS from Asia
 - 2 MS from Oceania
 - 1 MS from Americas
- Denmark** is leading the global EGD Ranking for the third time
- Estonia** is leading in online service provision
- UAE and Malta** new entry in the group of leading countries

Country name	Rating class	Region	OSI	HCI	TII	EGDI (2022)
Denmark	VH	Europe	0.9797	0.9559	0.9795	0.9717
Finland	VH	Europe	0.9833	0.9640	0.9127	0.9533
Republic of Korea	VH	Asia	0.9826	0.9087	0.9674	0.9529
New Zealand	VH	Oceania	0.9579	0.9823	0.8896	0.9432
Sweden	VH	Europe	0.9002	0.9649	0.9580	0.9410
Iceland	VH	Europe	0.8867	0.9657	0.9705	0.9410
Australia	VH	Oceania	0.9380	1.0000	0.8836	0.9405
Estonia	VH	Europe	1.0000	0.9231	0.8949	0.9393
Netherlands	VH	Europe	0.9026	0.9506	0.9620	0.9384
United States of America	VH	Americas	0.9304	0.9276	0.8874	0.9151
United Kingdom of Great Britain and Northern Ireland	VH	Europe	0.8859	0.9369	0.9186	0.9138
Singapore	VH	Asia	0.9620	0.9021	0.8758	0.9133
United Arab Emirates	VH	Asia	0.9014	0.8711	0.9306	0.9010
Japan	VH	Asia	0.9094	0.8765	0.9147	0.9002
Malta	VH	Europe	0.8849	0.8734	0.9245	0.8943



Regional Snapshot: Africa

Low-EGDI				Middle-EGDI				High-EGDI				Very High-EGDI			
L1	L2	L3	LM	M1	M2	M3	MH	H1	H1	H3	HV	V1	V2	V3	VH

- ✓ Regional EGD I average is the lowest and below the global average (*)
- ✓ Largest share of positive changes (15 countries)
- ✓ Majority (7 of the 8) of countries in Low-EGDI group are from Africa
 - ❑ South Africa, Mauritius and Seychelles are the top regional leaders
 - ❑ 3 MS moved from Middle to High-EGDI group (Rwanda, Côte d'Ivoire, Zambia)
 - ❑ 1 country moved from Low to Middle-EGDI group (Guinea-Bissau)
 - ❑ 1 MS moved down from High to Middle-EGDI group (Zimbabwe)
 - ❑ 6 MS are in Low EGD I Group (Niger, Chad, Eritrea, Central African Republic, Somalia, South Sudan)

Country	Rating class	EGDI rank	Subregion	OSI value	HCI value	TII value	EGDI (2022)	EGDI (2020)
South Africa	HV	65	Southern Africa	0.7487	0.7733	0.6850	0.7357	0.6891
Mauritius	HV	75	Eastern Africa	0.6282	0.7733	0.7588	0.7201	0.7196
Seychelles	H3	85	Eastern Africa	0.4424	0.7758	0.8198	0.6793	0.6920
Tunisia	H3	88	Northern Africa	0.6031	0.6911	0.6646	0.6530	0.6526
Morocco	H2	101	Northern Africa	0.4721	0.6350	0.6676	0.5915	0.5729
Egypt	H2	103	Northern Africa	0.5730	0.6375	0.5579	0.5895	0.5527
Ghana	H2	106	Western Africa	0.5361	0.6176	0.5934	0.5824	0.5960
Cabo Verde	H2	110	Western Africa	0.4965	0.6507	0.5507	0.5660	0.5604
Algeria	H2	112	Northern Africa	0.3743	0.6956	0.6133	0.5611	0.5173
Kenya	H2	113	Eastern Africa	0.6821	0.5641	0.4305	0.5589	0.5326
Gabon	H2	116	Middle Africa	0.3578	0.6706	0.6279	0.5521	0.5401
Botswana	H1	118	Southern Africa	0.2740	0.6932	0.6814	0.5495	0.5383
Rwanda*	H1	119	Eastern Africa	0.7935	0.5322	0.3209	0.5489	0.4789
Côte d'Ivoire*	H1	120	Western Africa	0.5467	0.5748	0.5186	0.5467	0.4457
Namibia	H1	121	Southern Africa	0.4316	0.6516	0.5133	0.5322	0.5747
Zambia*	H1	131	Eastern Africa	0.4414	0.6744	0.3909	0.5022	0.4242

Regional Snapshot: Americas

Low-EGDI				Middle-EGDI				High-EGDI				Very High-EGDI			
L1	L2	L3	LM	M1	M2	M3	MH	H1	H1	H3	HV	V1	V2	V3	VH

- The vast majority of MS have remained in the same EGD I groups since 2020
- The average EGD I value has increased from 0.63 to 0.64.
- 32 out of 35 MS are in the High or Very high EGD I**
- United States (VH)** leads the Americas followed by Canada.
- Uruguay, Chile and Argentina lead LAC with the same rating class V2
- Peru, Guyana and Belize** moved from the middle to the high EGD I group in 2022;
- Haiti** is the only country that moved down to the low EGD I group.

Country	Rating class	EGDI rank	Subregion	OSI value	HCI value	TII value	EGDI (2022)	EGDI (2020)
United States of America	VH	10	Northern America	0.9304	0.9276	0.8874	0.9151	0.9297
Canada	V2	32	Northern America	0.8504	0.9260	0.7770	0.8511	0.8420
Uruguay	V2	35	South America	0.7641	0.8980	0.8543	0.8388	0.8500
Chile	V2	36	South America	0.8280	0.8853	0.7999	0.8377	0.8259
Argentina	V2	41	South America	0.8089	0.9173	0.7332	0.8198	0.8279
Brazil	V1	49	South America	0.8964	0.7953	0.6814	0.7910	0.7677
Costa Rica	V1	56	Central America	0.6812	0.8593	0.7572	0.7659	0.7576
Peru*	V1	59	South America	0.8099	0.8207	0.6267	0.7524	0.7083
Mexico	HV	62	Central America	0.8245	0.7874	0.6300	0.7473	0.7291
Grenada	HV	66	Caribbean	0.5507	0.8977	0.7348	0.7277	0.5812
Bahamas	HV	66	Caribbean	0.6214	0.7641	0.7976	0.7277	0.7017
Colombia	HV	70	South America	0.7418	0.7867	0.6498	0.7261	0.7164

Sources: 2020 and 2022 United Nations E-Government Surveys.

* Countries that moved from the high to the very high EGD I group in 2022.



Regional Snapshot: Asia

Low-EGDI				Middle-EGDI				High-EGDI				Very High-EGDI			
L1	L2	L3	LM	M1	M2	M3	MH	H1	H1	H3	HV	V1	V2	V3	VH

Asia increased its average EGD I value from 0.57 in 2018 to 0.64 in 2020, or by 10 per cent becoming the second most advanced region in e-government development.

- ROK , Singapore , UAE and Japan lead in the region (Highest Rating class VH)
- 15 MS are in the Very-High EGD I
- 1 MS (Georgia) moved from High to Very-High EGD I
- 1 MS moved down from Very High to High EGD I (Kuwait)
- 22 MS are in the High EGD I
- 3 MS moved from Middle to High (Lebanon, Nepal, Tajikistan)
- 10 MS are in the Middle EGD I
- No MS in low EGD I

(**) See E-Government Survey 2020 Annex

Country	Rating class	EGDI rank	Subregion	OSI value	HCI value	TII value	EGDI (2022)	EGDI (2020)
Republic of Korea	VH	3	Eastern Asia	0.9826	0.9087	0.9674	0.9529	0.9560
Singapore	VH	12	South-Eastern Asia	0.9620	0.9021	0.8758	0.9133	0.915
United Arab Emirates	VH	13	Western Asia	0.9014	0.8711	0.9306	0.9010	0.8555
Japan	VH	14	Eastern Asia	0.9094	0.8765	0.9147	0.9002	0.8989
Israel	V3	16	Western Asia	0.8745	0.8994	0.8915	0.8885	0.8361
Cyprus	V3	27	Western Asia	0.7792	0.8934	0.9253	0.8660	0.8731
Kazakhstan	V3	28	Central Asia	0.9344	0.9021	0.7520	0.8628	0.8375
Saudi Arabia	V2	31	Western Asia	0.8220	0.8662	0.8735	0.8539	0.7991
China	V2	43	Eastern Asia	0.8876	0.7429	0.8050	0.8119	0.7948
Turkey	V1	48	Western Asia	0.8600	0.8722	0.6626	0.7983	0.7718
Oman	V1	50	Western Asia	0.7423	0.8067	0.8012	0.7834	0.7749
Malaysia	V1	53	South-Eastern Asia	0.7630	0.7645	0.7945	0.7740	0.7892
Bahrain	V1	54	Western Asia	0.7523	0.8154	0.7444	0.7707	0.8213
Thailand	V1	55	South-Eastern Asia	0.7763	0.7879	0.7338	0.7660	0.7565
Georgia*	V1	60	Western Asia	0.6111	0.8984	0.7409	0.7501	0.7174





Regional Snapshot: Europe

Low-EGDI				Middle-EGDI				High-EGDI				Very High-EGDI			
L1	L2	L3	LM	M1	M2	M3	MH	H1	H1	H3	HV	V1	V2	V3	VH

- ❑ The Most homogeneous e-government development with the highest average EGDI and the highest number of MS (35 up to 43) in the Very-high EGDI.
- ❑ Denmark, Finland, Sweden, Iceland, Estonia, Netherlands, UK, and Malta, are leading the region (VH)
- ❑ 2 MS moved from High to Very-High EGDI (Serbia and Ukraine)
- ❑ The lowest variance in EGDI scores among countries
- ❑ 8 MS are in the high EGDI group and have an average EGDI value of 0.7.
- ❑ 2 LLDCs have relatively less developed infrastructure (Republic of Moldova and North Macedonia.)
- ❑ All MS except Ukraine are in the high-income or upper-middle-income group.

Country	Rating class	EGDI rank	Subregion	EU	OSI value	HCI value	TII value	EGDI (2022)	EGDI (2020)
Denmark	VH	1	Northern Europe	Yes	0.9797	0.9559	0.9795	0.9717	0.9758
Finland	VH	2	Northern Europe	Yes	0.9833	0.9640	0.9127	0.9533	0.9452
Sweden	VH	5	Northern Europe	Yes	0.9002	0.9649	0.9580	0.9410	0.9365
Iceland	VH	5	Northern Europe	No	0.8867	0.9657	0.9705	0.9410	0.9101
Estonia	VH	8	Northern Europe	Yes	1.0000	0.9231	0.8949	0.9393	0.9473
Netherlands	VH	9	Western Europe	Yes	0.9026	0.9506	0.9620	0.9384	0.9228
United Kingdom of Great Britain and Northern Ireland	VH	11	Northern Europe	No	0.8859	0.9369	0.9186	0.9138	0.9358
Malta	VH	15	Southern Europe	Yes	0.8849	0.8734	0.9245	0.8943	0.8547
Norway	V3	17	Northern Europe	No	0.8007	0.9528	0.9102	0.8879	0.9064
Spain	V3	18	Southern Europe	Yes	0.8559	0.9072	0.8895	0.8842	0.8801
France	V3	19	Western Europe	Yes	0.8768	0.8784	0.8944	0.8832	0.8718
Austria	V3	20	Western Europe	Yes	0.8827	0.9070	0.8505	0.8801	0.8914
Slovenia	V3	21	Southern Europe	Yes	0.8666	0.9439	0.8239	0.8781	0.8546
Germany	V3	22	Western Europe	Yes	0.7905	0.9446	0.8957	0.8770	0.8524
Switzerland	V3	23	Western Europe	No	0.7677	0.9128	0.9450	0.8752	0.8907
Lithuania	V3	24	Northern Europe	Yes	0.8347	0.9251	0.8636	0.8745	0.8665
Liechtenstein	V3	25	Western Europe	No	0.7329	0.8726	1.0000	0.8685	0.8359
Luxembourg	V3	26	Western Europe	Yes	0.8319	0.8245	0.9462	0.8675	0.8272
Latvia	V3	29	Northern Europe	Yes	0.8135	0.9284	0.8378	0.8599	0.7798
Ireland	V3	30	Northern Europe	Yes	0.7796	0.9618	0.8287	0.8567	0.8433
Greece	V2	33	Southern Europe	Yes	0.7753	0.9405	0.8206	0.8455	0.8021
Poland	V2	34	Eastern Europe	Yes	0.7929	0.9033	0.8348	0.8437	0.8531
Italy	V2	37	Southern Europe	Yes	0.8659	0.8606	0.7860	0.8375	0.8231
Portugal	V2	38	Southern Europe	Yes	0.7954	0.8665	0.8201	0.8273	0.8255
Belgium	V2	39	Western Europe	Yes	0.6899	0.9614	0.8294	0.8269	0.8047
Serbia*	V2	40	Southern Europe	No	0.8514	0.8332	0.7865	0.8237	0.7474
Russian Federation	V2	42	Eastern Europe	No	0.7368	0.9065	0.8053	0.8162	0.8244
Croatia	V2	44	Southern Europe	Yes	0.8108	0.8500	0.7711	0.8106	0.7745
Czech Republic	V2	45	Eastern Europe	Yes	0.6693	0.9114	0.8456	0.8088	0.8135
Ukraine*	V1	46	Eastern Europe	No	0.8148	0.8669	0.7270	0.8029	0.7119
Slovakia	V1	47	Eastern Europe	Yes	0.7260	0.8436	0.8328	0.8008	0.7817
Hungary	V1	51	Eastern Europe	Yes	0.7465	0.8345	0.7671	0.7827	0.7745
Bulgaria	V1	52	Eastern Europe	Yes	0.7092	0.8221	0.7984	0.7766	0.7980
Romania	V1	57	Eastern Europe	Yes	0.6814	0.8090	0.7954	0.7619	0.7605
Belarus	V1	58	Eastern Europe	No	0.5302	0.9011	0.8426	0.7580	0.8084





Regional Snapshot: Oceania

Low-EGDI				Middle-EGDI				High-EGDI				Very High-EGDI			
L1	L2	L3	LM	M1	M2	M3	MH	H1	H1	H3	HV	V1	V2	V3	VH

- ❑ The only regional average EDGI value that slightly declined over the past two years.
- ❑ New Zealand and Australia are the leading countries in the region and in the World (rating class VH). The remaining MS have an average EDGI value that is below the global average.
- ❑ 5 MS are in the Very-High or High EDGI groups
- ❑ 12 MS are SIDS, 3 of them (Kiribati, Solomon Islands and Tuvalu) are also LDCs.
- ❑ Vanuatu graduated from LDC status in 2020.

Country	Rating class	EGDI rank	Subregion	OSI value	HCI value	TII value	EGDI (2022)	EGDI (2020)
New Zealand	VH	4	Australia and New Zealand	0.9579	0.9823	0.8896	0.9432	0.9339
Australia	VH	7	Australia and New Zealand	0.9380	1.0000	0.8836	0.9405	0.9432
Fiji	H3	97	Melanesia	0.4813	0.7957	0.5935	0.6235	0.6585
Tonga	H1	124	Polynesia	0.3296	0.8675	0.3496	0.5155	0.5616
Palau	H1	132	Micronesia	0.2373	0.8946	0.3735	0.5018	0.5109
Vanuatu	MH	135	Melanesia	0.4228	0.6009	0.4727	0.4988	0.4403
Nauru	MH	139	Micronesia	0.2952	0.5925	0.4768	0.4548	0.4150
Kiribati	M3	148	Micronesia	0.3686	0.6785	0.2530	0.4334	0.432
Samoa	M3	152	Polynesia	0.3592	0.7470	0.1558	0.4207	0.4219
Tuvalu	M3	158	Polynesia	0.2265	0.6492	0.2607	0.3788	0.4209
Marshall Islands	M3	160	Micronesia	0.3004	0.6903	0.1236	0.3714	0.4055
Micronesia (Federated States of)	M2	164	Micronesia	0.2703	0.6845	0.1102	0.3550	0.3779
Solomon Islands	M2	164	Melanesia	0.3676	0.4925	0.1988	0.3530	0.3442
Papua New Guinea	M2	170	Melanesia	0.3263	0.4996	0.1430	0.3230	0.2827





Digital Government is Hybrid

The New Face of Inequality is Digital



- ❑ **The future of digital government is not digital but hybrid.** The primary objective is not digital development but rather recognizing human agency and supporting human development through digitalization.
- ❑ **Digital divides are not static;** vulnerability is a dynamic and shifting state, and a list of risk factors is not always sufficient to identify those who need different ways to access and utilize services.
- ❑ There is **diversity and intersectionality for different vulnerable groups** (women and girls, older people, persons with disabilities, youth, migrants, refugees, minorities, and other marginalized groups).
- ❑ **An inclusive, integrated digital/analogue ecosystem is needed** to facilitate and sustain inclusive e-government development so that everyone benefits, and no one is left behind.
- ❑ **Inclusive design has not received sufficient attention.** The most notable progress in e-government has benefitted those groups that are easiest to reach, with many of the poorest and most vulnerable being left behind.



E-Government as an Equalizer for Inclusion

LNOB as an Operational Principle



- ❑ **LNOB** should guide policy development and implementation in e-government and the public sector.
- ❑ Governments should adopt “inclusion by design”, “inclusion by default” or “inclusion first” strategies,
- ❑ Targeted, localized and contextual approaches are key, as not all excluded groups are confronted with the same barriers.
- ❑ A whole-of-government approach that integrates multilevel, multisectoral and multidisciplinary strategies and partnerships is needed for the implementation of inclusive digital government.
- ❑ Top-down and bottom-up approaches should be combined to better understand and address the e-government needs of the most vulnerable.
- ❑ The global community can play a part in “leaving no country behind in digital government”, through knowledge exchange, capacity building and partnerships.

The Future of Digital Government

Innovation Should Focus on Human Development



- Innovations and the broader digital transformation must aim to be truly inclusive.
- More MS are deploying cutting-edge technologies such as cloud computing, artificial intelligence and blockchain.
- Some have developed new methods for exploiting data-driven policy modelling tools and have created pilot initiatives and sandboxes to design, validate and scale up innovative solutions.
- New approaches are strengthening MS analytical and anticipatory capabilities and are shaping future development scenarios.
- MS are moving towards seamless, invisible government in which fully automated services are made accessible to anyone anytime from anywhere.
- Cognitive government, agile and adaptive government, and the development of predictive capabilities, can better anticipate and respond to the needs of all members of society

Local Online Service Index (LOSI)?



Municipalities are closer to people



credits: <https://encc.eu/resources/database/10-people-centred-smart-city-initiatives>

A growing number of people are living in cities

- Today, 56% of the world's population – 4.4 billion inhabitants – live in cities.
- The total number of people living in cities is expected to grow from approximately 4.4 billion today to 6.7 billion in 2050. (UNDESA)
- The rate of urbanization is expected to be higher in Africa and Asia
- Urban residents are twice as likely as those living in rural areas to use the Internet
- In Africa, the gap is even greater; half of the region's urban dwellers are online, compared with just 15 per cent of the rural population
- In the least developed countries (LDCs), urban residents are almost four times as likely as rural residents to use the Internet (47 versus 13 per cent).

The LOSI Methodology

LOSI 2022 comprises **86 indicators** relating to **five criteria**

Institutional framework (8)

Focuses on **municipal e-government strategy, organizational structure, legislation governing access to information and privacy, and open data policy.**

Content provision (25)

Aims to identify **the extent** to which **essential public information and resources** are available online.

Services provision (18)

Focuses on the **availability and delivery of targeted government services.**

Technology (18)

Focuses on **technical features of the portals** to specify how the site and content are made available for users.

Participation and engagement (17)

Assesses the **availability of mechanisms and initiatives for interaction** and opportunities for **public participation** in local governance structures.

LOSI Results

193 cities



146 cities assessed

- Most populous city in a country
- *Source of population:* UN Demographic Yearbook and The World's Cities Data Booklet

Current Status of Local E-government

Cities in the **VERY HIGH LOSI** group

City	Country	LOSI score	City	Country	LOSI score
Berlin ☆	Germany	0.9767	Reykjavik	Iceland	0.8372
Madrid ☆	Spain	0.9767	Helsinki	Finland	0.8256
Tallinn ☆	Estonia	0.9535	Kiev	Ukraine	0.8256
Copenhagen	Denmark	0.9419	Riga	Latvia	0.8256
Dubai	United Arab Emirates	0.9186	Stockholm	Sweden	0.8256
Moscow ☆	Russian Federation	0.9186	Manama	Bahrain	0.8140
New York ☆	United States of America	0.9186	Almaty	Kazakhstan	0.8023
Paris ☆	France	0.9186	Luxembourg City	Luxembourg	0.8023
Singapore	Singapore	0.9070	Vilnius	Lithuania	0.8023
Shanghai	China	0.8837	Montevideo	Uruguay	0.7907
Bogota	Colombia	0.8721	Seoul	Republic of Korea	0.7674
Buenos Aires	Argentina	0.8721	Tel Aviv	Israel	0.7674
Istanbul	Turkiye	0.8721	Toronto	Canada	0.7674
Tokyo	Japan	0.8605	Warsaw	Poland	0.7674
Zurich	Switzerland	0.8605	Brussels	Belgium	0.7558
Rome	Italy	0.8488	Oslo	Norway	0.7558
Sao Paulo	Brazil	0.8488	Riyadh	Saudi Arabia	0.7558
Vienna	Austria	0.8488	Sydney	Australia	0.7558
Auckland	New Zealand	0.8372	Zagreb	Croatia	0.7558

- **38 cities (26%)** VH LOSI group
- **Madrid and Berlin #1**
- Cities marked with ☆ have ranked in the **top 10 in the 2018, 2020 and 2022 editions**
- **Copenhagen and Singapore** assessed for the first time in 2022 edition
- **Region distribution**
 - 20 in **Europe**
 - 10 in **Asia**
 - 6 in the **Americas**
 - 2 in **Oceania**

Current Status of Local E-government

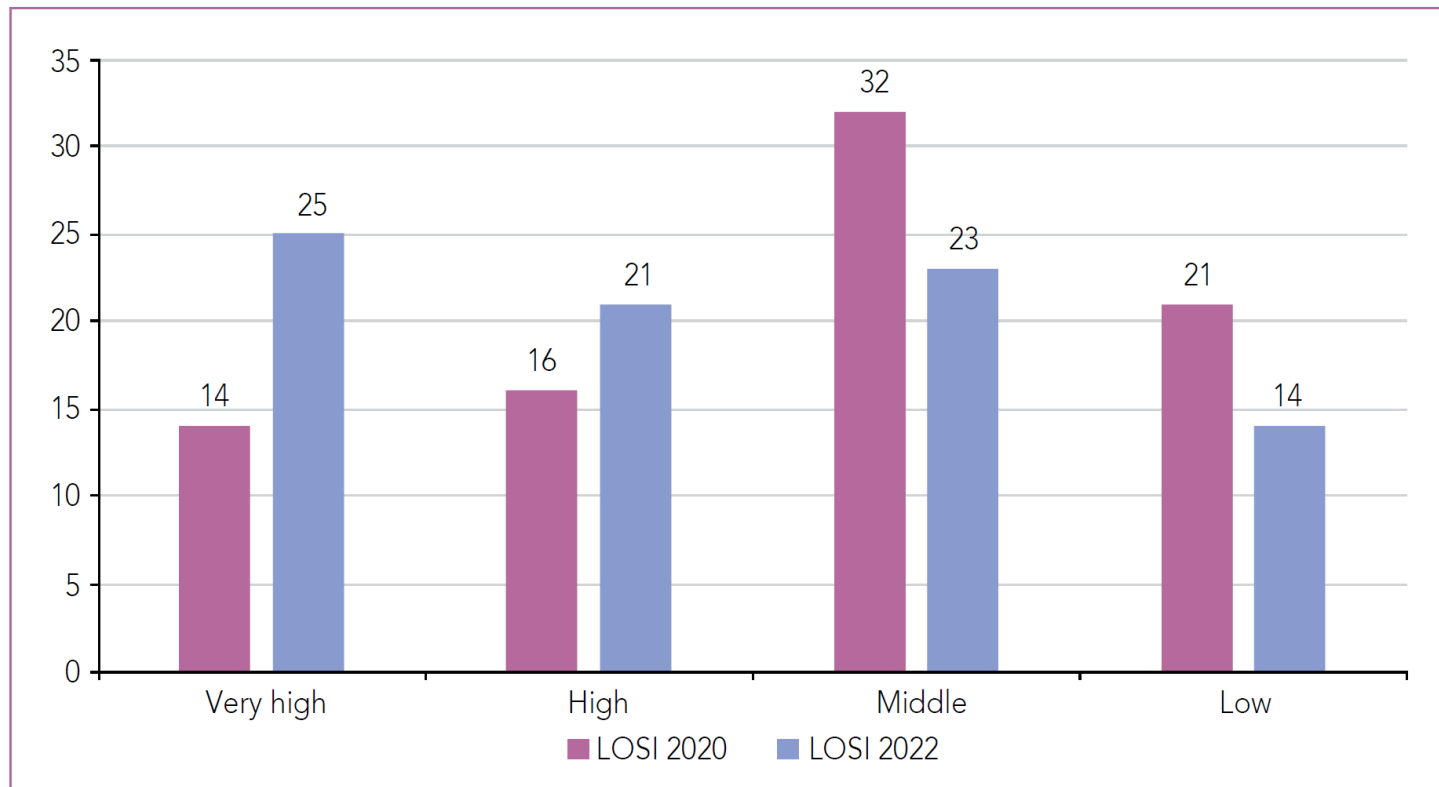
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Sao Paulo	Brazil	0.8488	Riyadh	Saudi Arabia	0.7558
Vienna	Austria	0.8488	Sydney	Australia	0.7558
Auckland	New Zealand	0.8372	Zagreb	Croatia	0.7558

- Kiev and Riyadh moved from **the MIDDLE** to the **VERY HIGH LOSI** group
- Minsk moved from **the LOW** to **the HIGH LOSI** group

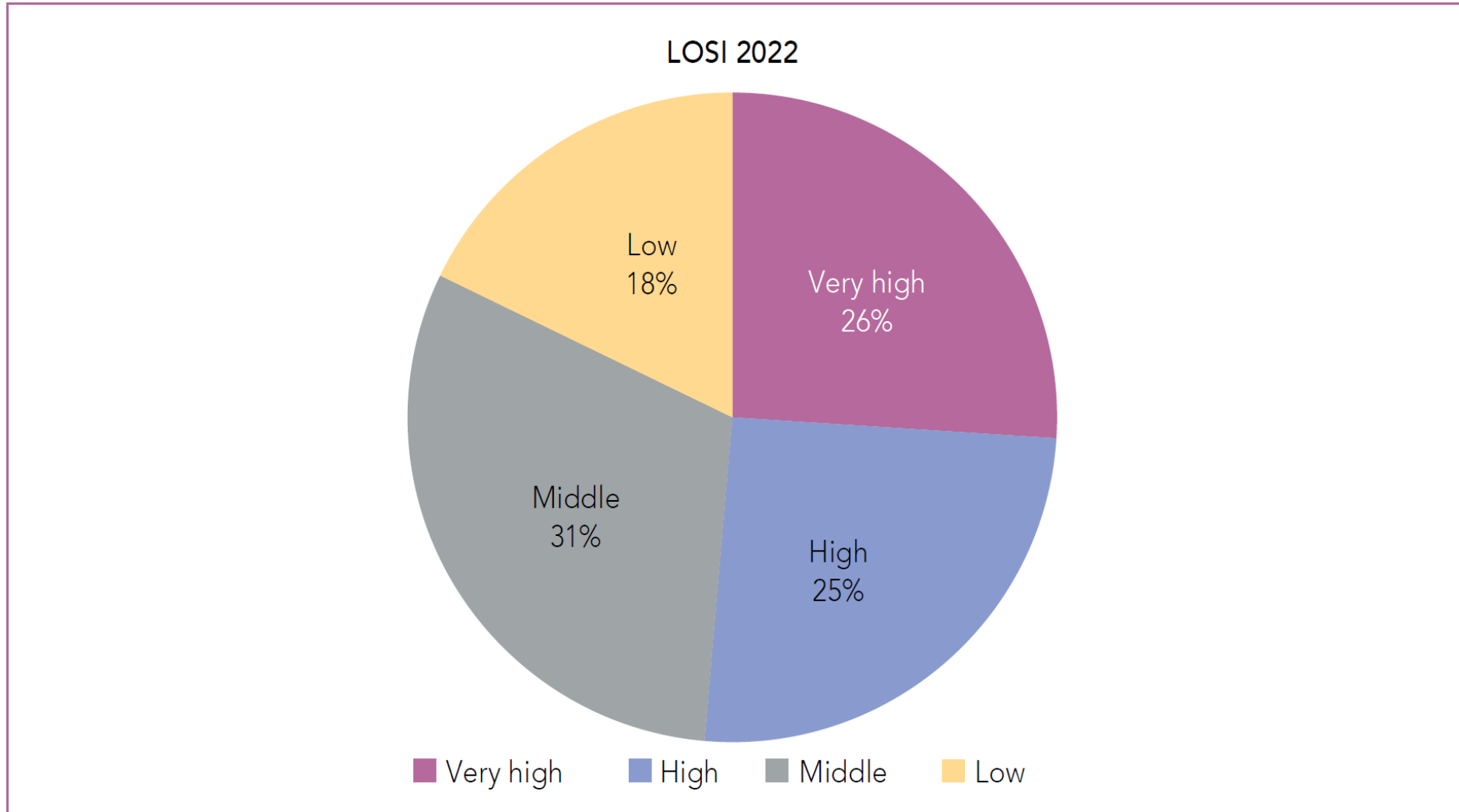
Current Status of Local E-government

Comparison of LOSI levels for **83 cities assessed in 2020 and 2022** (Number of cities per category)



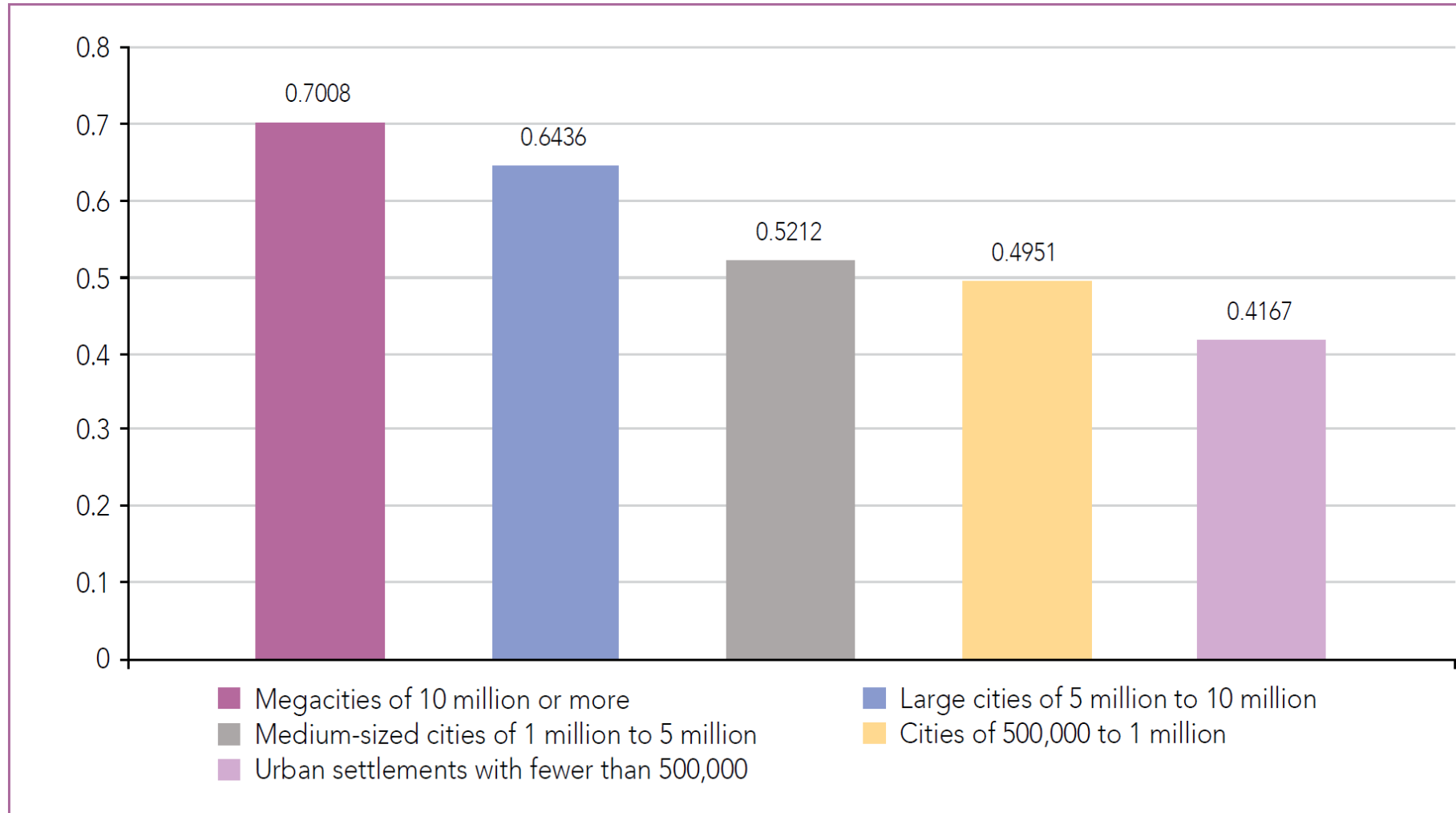
- **Interesting** progress achieved!
- Cities in the **Very High and High** groups **increased** from **30** in **2020** to **46** in **2022**
- Cities in the **Middle and Low** groups **decreased** from **53** to **37**, or by nearly **20%**, during this period.

LOSI 2022 levels for the 146 cities assessed



Average LOSI:
0.51 in 2022
0.43 in 2020

Average LOSI 2022 values by population size



assessed:

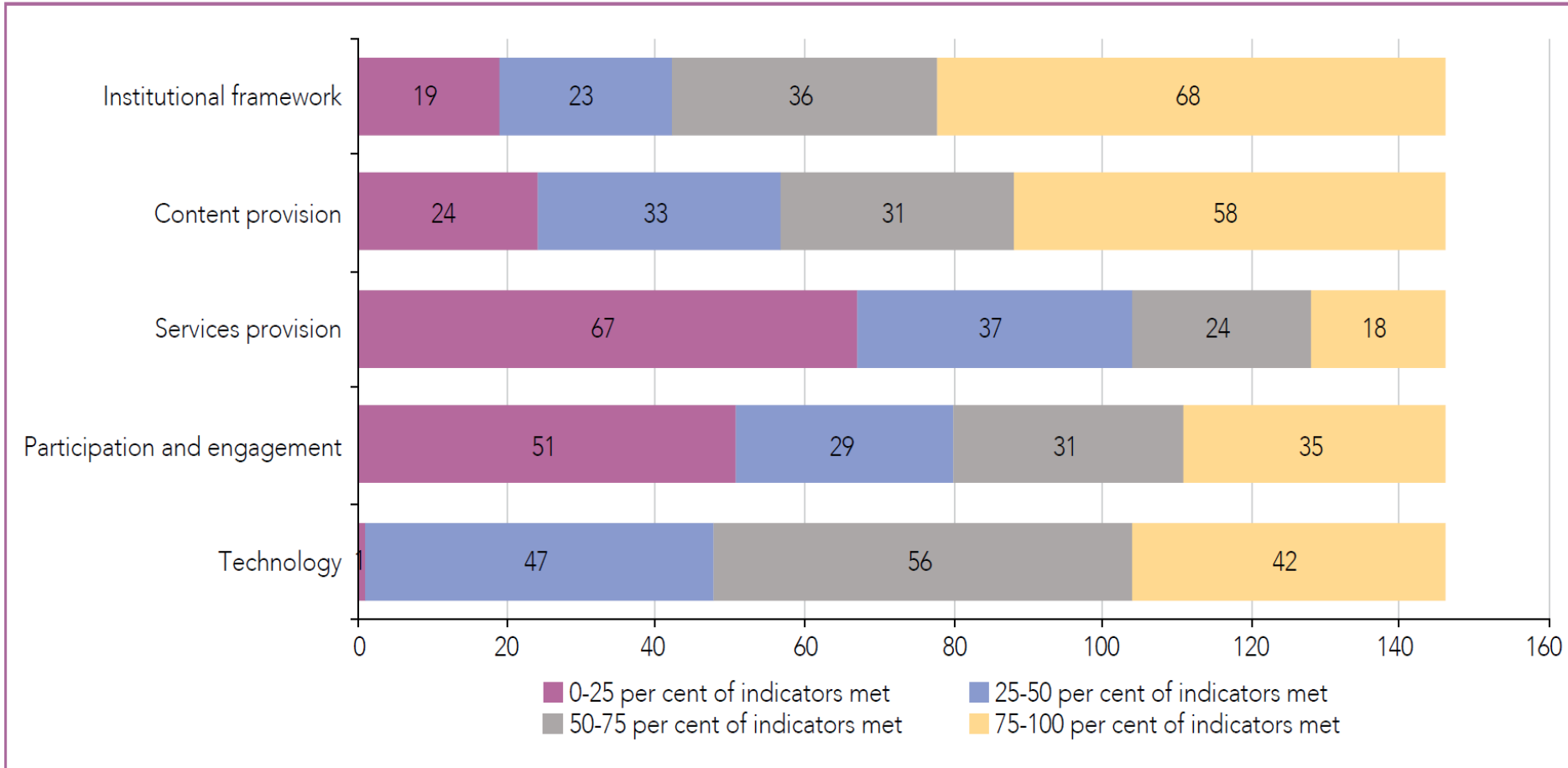
- 11 megacities
- 17 large cities
- 56 medium-sized cities
- 31 cities 500,000-1M
- 31 urban settlements < 500,000

LOSI versus OSI 2022 values for the 146 cities assessed

	Very high OSI 2022	High OSI 2022	Middle OSI 2022	Low OSI 2022
Very high LOSI 2022	35 (24.0%)	3 (2.1%)	None	None
High LOSI 2022	16 (11.0%)	20 (13.7%)	1 (0.7%)	None
Middle LOSI 2022	2 (1.4%)	19 (13.0%)	23 (15.8%)	1 (0.7%)
Low LOSI 2022	None	3 (2.1%)	20 (13.7%)	3 (2.1%)

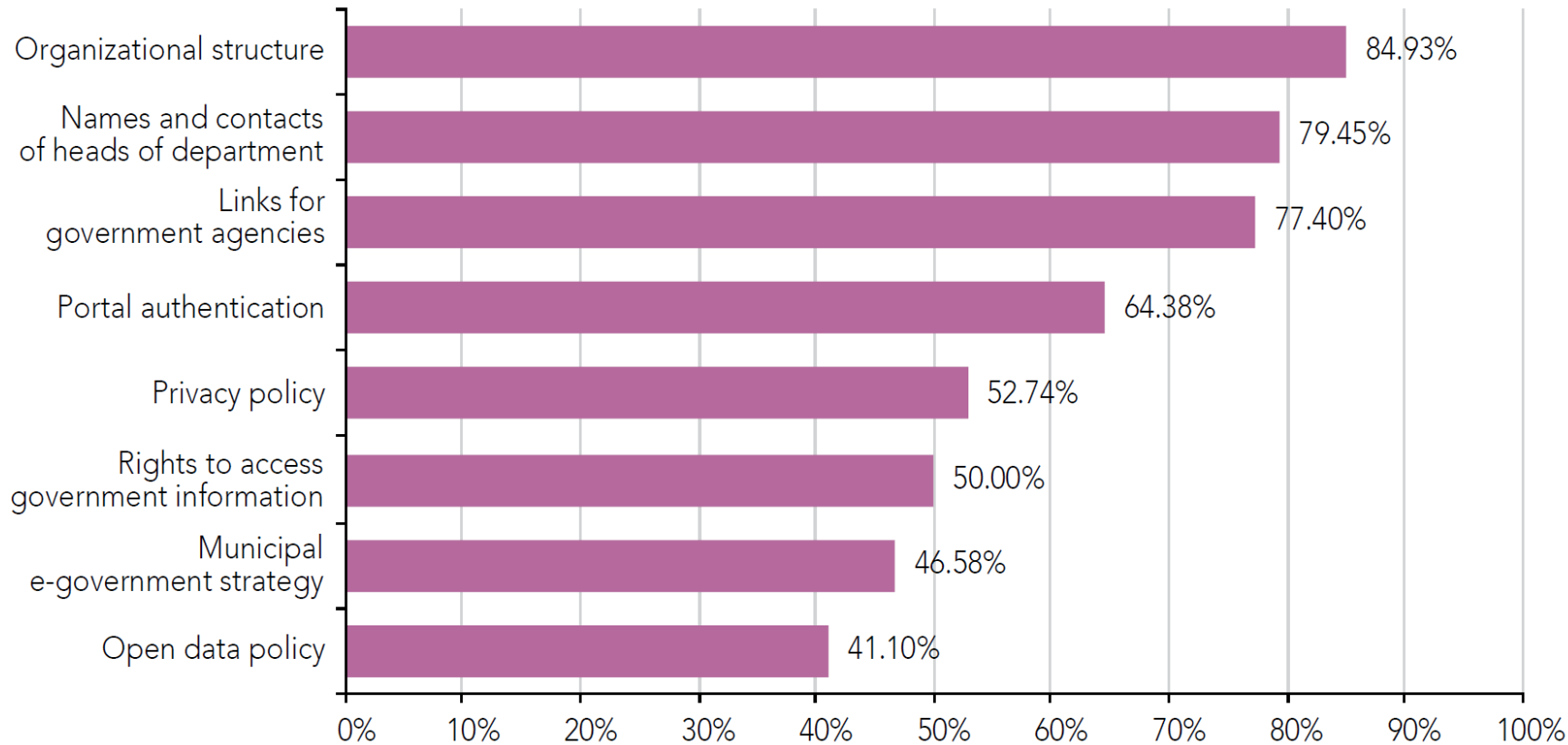
- **81 cities same LOSI and OSI groups**
- **60 (41%) cities lower LOSI group**
- **5 cities higher LOSI group**
 - Moscow; Bogota; Brussels
 - Monaco
 - Brazaville

Implementation of LOSI indicators in city portals



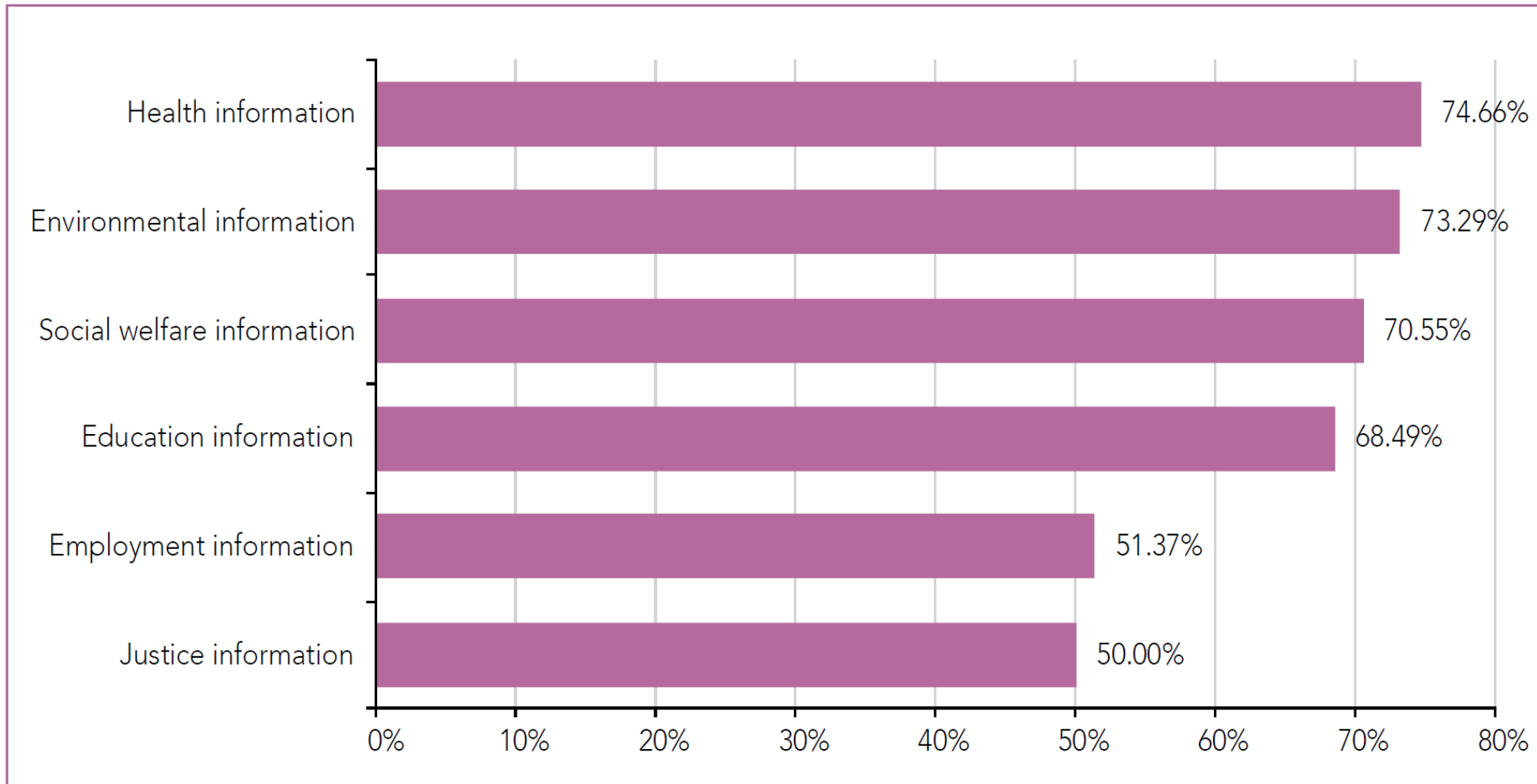
- **Highest** compliance for **Institutional Framework**
- Compliance for **Content Provision** and **Technology** relatively high
- **Lowest** compliance for **Service Provision**

Implementation of Institutional Framework indicators



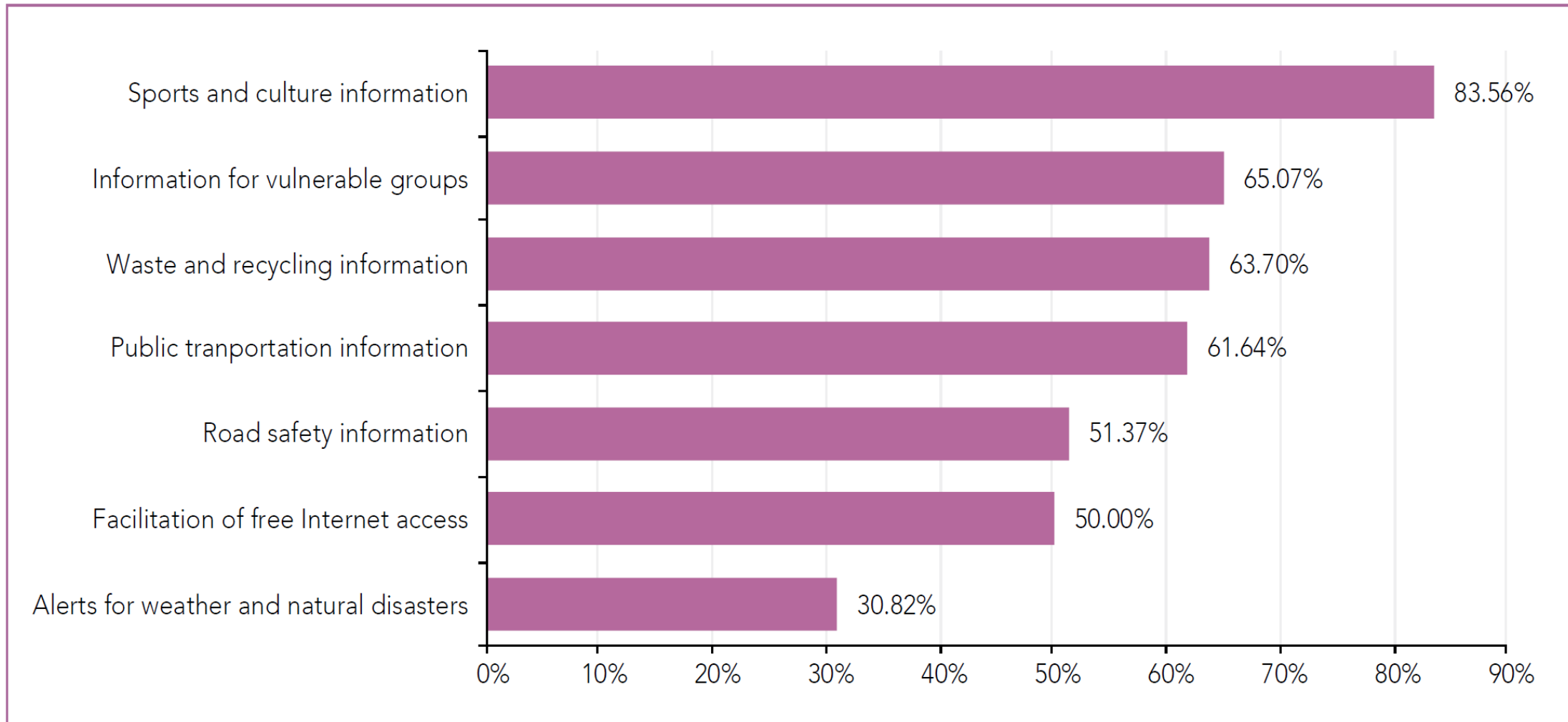
- **Most frequently satisfied** IF indicators are the relatively **straightforward and easy to implement**
- **Less frequently satisfied** IF indicators are related to legal framework issues
- **Portal authentication: 64%!**

Implementation of Content Provision indicators: *sectoral information*

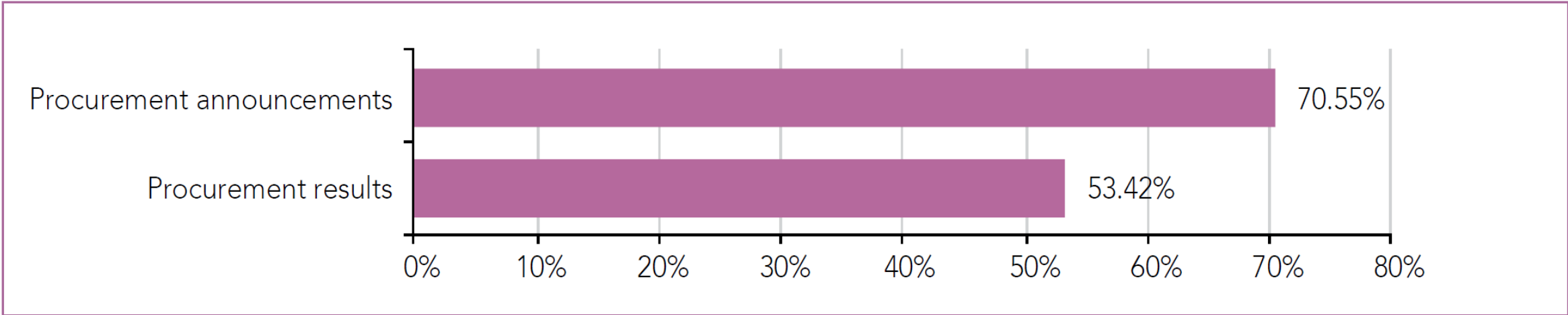


- Covid-19 influence?
- Almost $\frac{3}{4}$ providing environmental information!
- Content provision focused on **genuine needs of citizens!**

Implementation of Content Provision indicators: *addressing everyday needs*

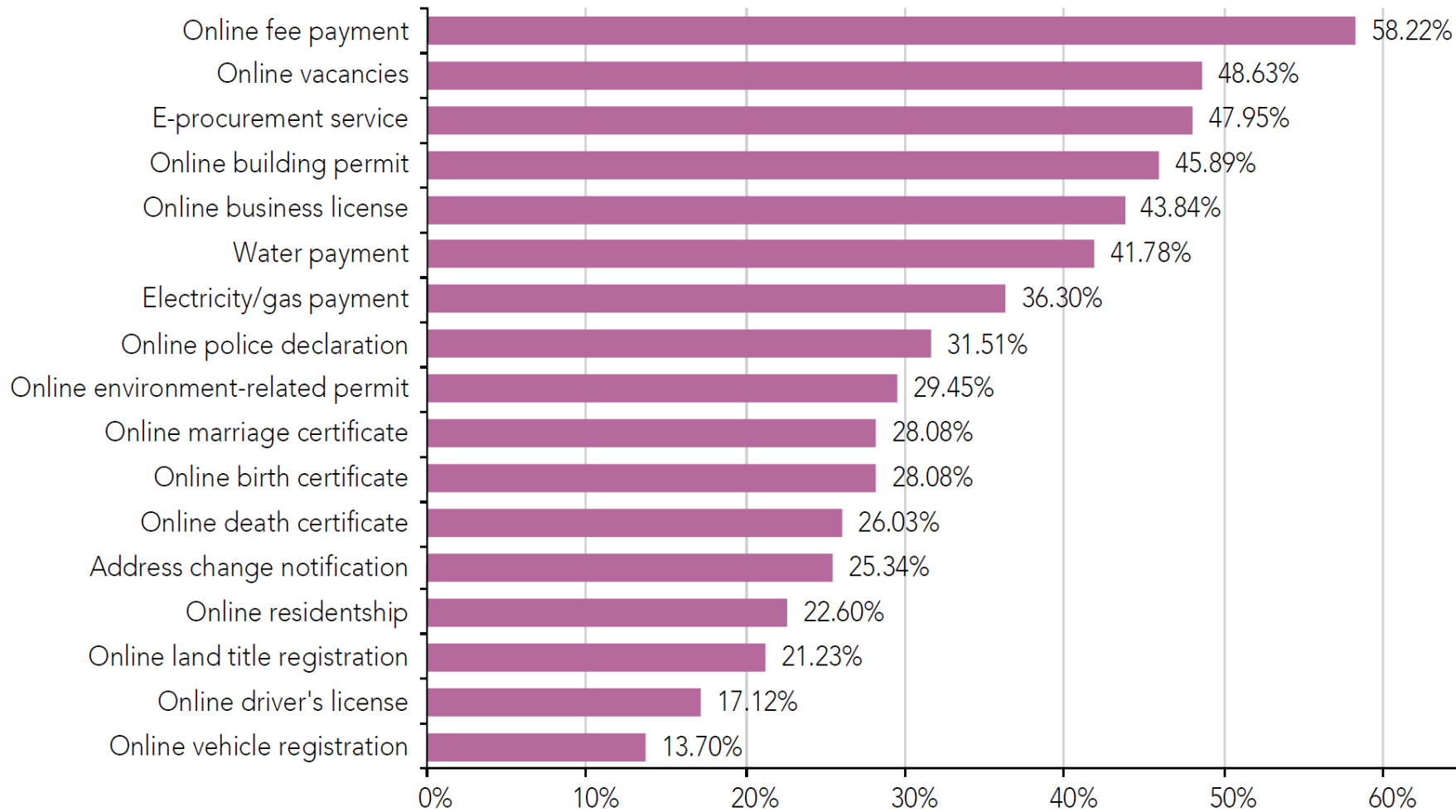


Procurement Information on city portals



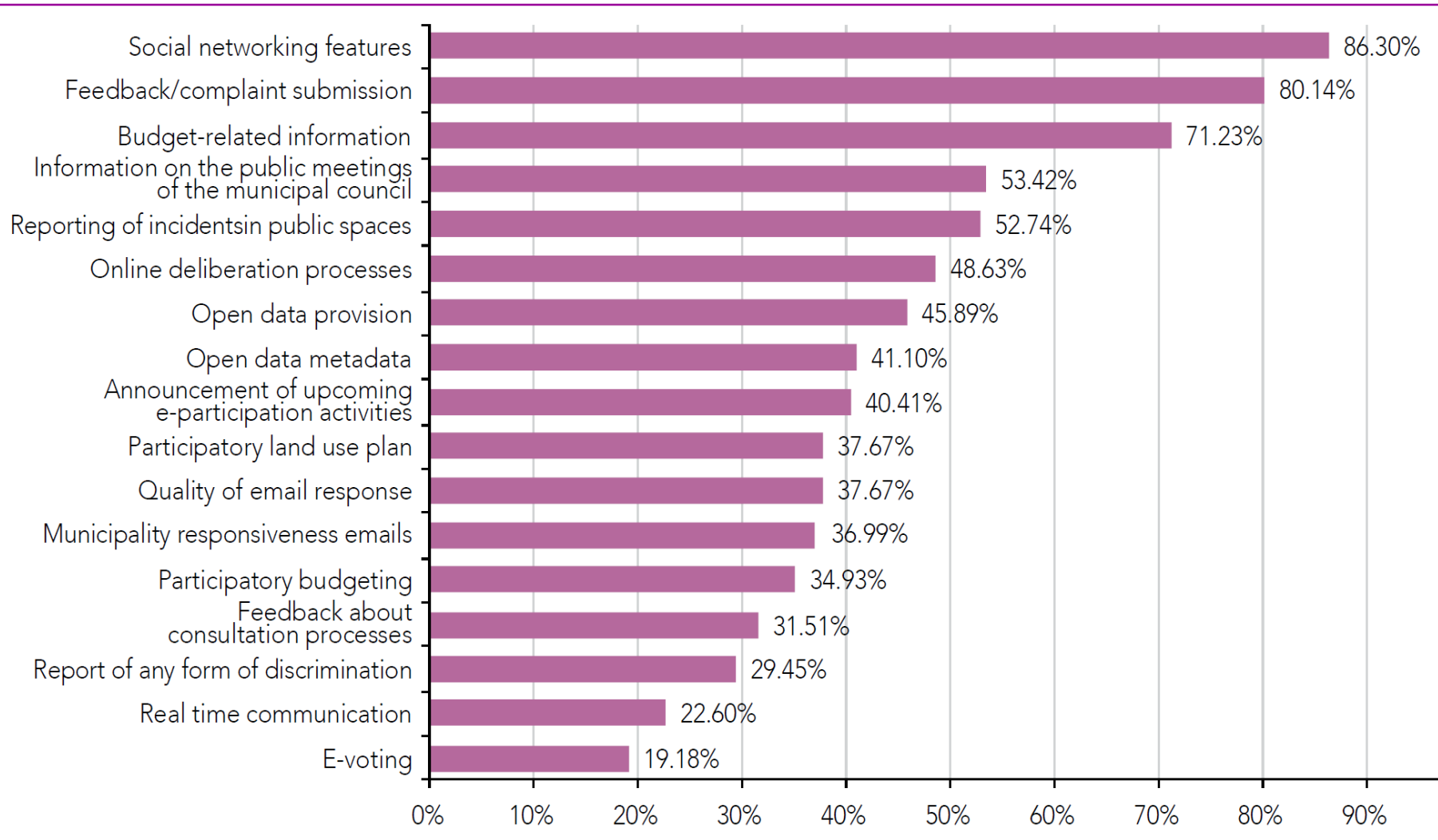
Almost **71%** of the city portals **share upcoming procurement or bidding processes**
BUT only **53%** share the results of the procurement processes !!!

Implementation of Services Provision indicators on city portals



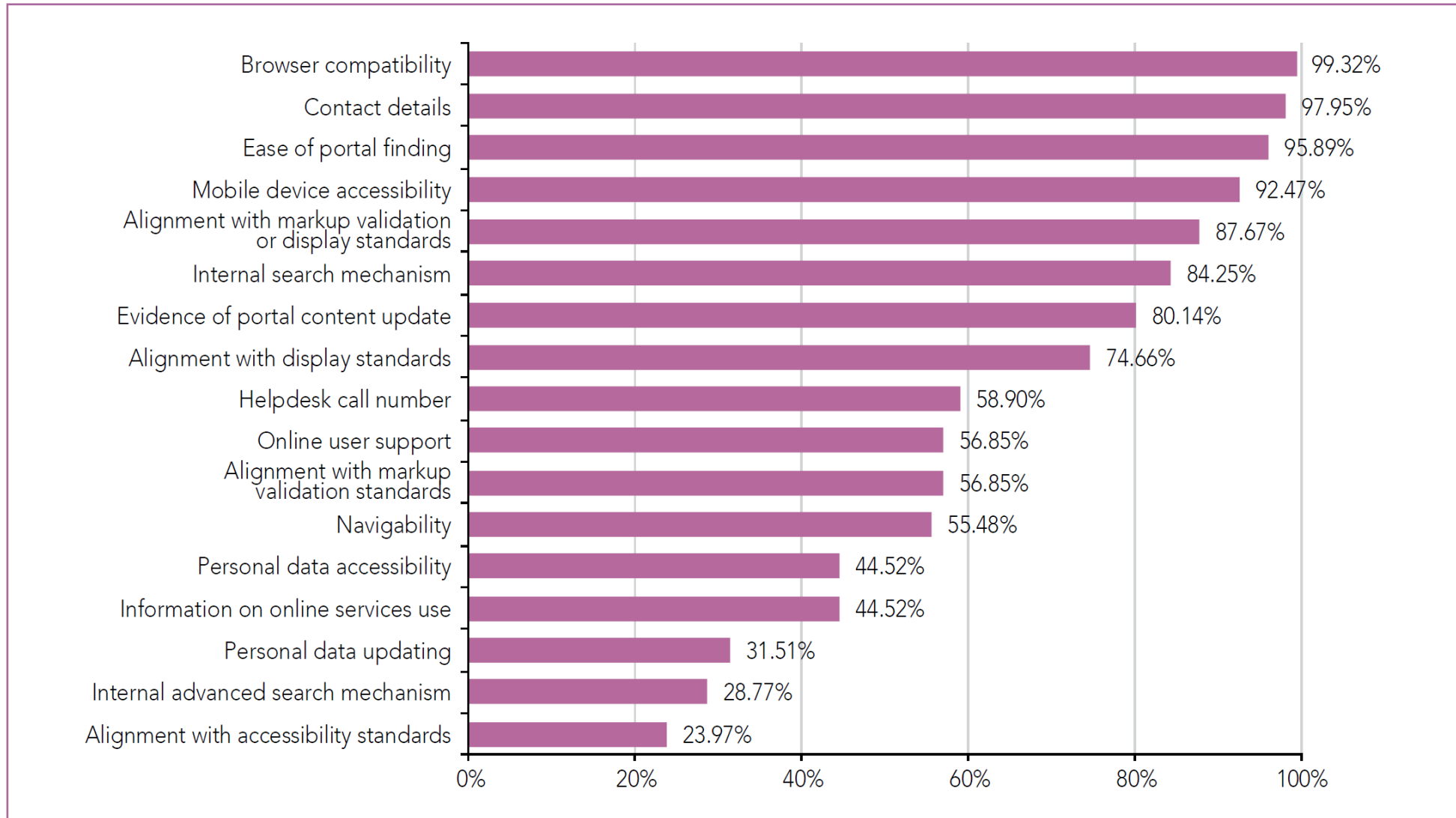
- **Service Provision has the lowest level of compliance among the five criteria!!!!**
echoing 2020 results!!!
- **Online fee payments most provided!!!!**

Implementation of Participation and Engagement Indicators in City Portals



- **Most met indicators relate to social networking!!!**
- **Only 46% of the cities provide open data (and only 41% provide metadata for the data sets)**
- **Only 38% of the cities responded to email in a timely manner**
- **Only 23% offer live chat support functionality**


Implementation of Technology indicators in city portals



Local Government Questionnaire (LGQ)

- Questionnaire administered to **support the LOSI process**
- LGQ made **available online** and **also sent to municipalities**
- LGQ had **eight sections**
 1. Institutional framework
 2. Legal framework
 3. Strategy and implementation
 4. Usage of online services
 5. User satisfaction
 6. Social media
 7. COVID-19 measures
 8. Smart city and new technologies
- **42 cities replied (29% !!!)** → 3 replied in 2020!!!

United Nations E-Government Survey – Local Government Questionnaire (LGQ)



Local Government Questionnaire (LGQ) for the
United Nations E-Government Survey

The objective of this questionnaire is to gather information from local governments/municipalities in preparation for the upcoming United Nations E-Government Survey. For the first time in 2018, the United Nations E-Government Survey assessed 40 pilot cities. The 2020 Survey featured 100 cities/local government websites assessment and the upcoming survey of 2022 has increased to 193 cities. The responses will be shared online in the [UN E-Government Survey Knowledgebase](#), unless otherwise requested. For any question about this questionnaire, please contact lpdq@un.org

City name

Country name

I. Institutional Framework

1. What is the official **e-Government¹** portal of the city/municipality? If more than one exists, please list all.
2. Please provide **URLs** for **portals** providing specific services/features
 - a. E-services²:
 - b. E-participation³:
 - c. Open government data⁴:
 - d. Public procurement:
 - e. Other major portals at the city/municipality level:
3. Does your city/municipality have a **Chief Information Officer (CIO)⁵** to manage its e-Government programs/strategies?

Name: _____

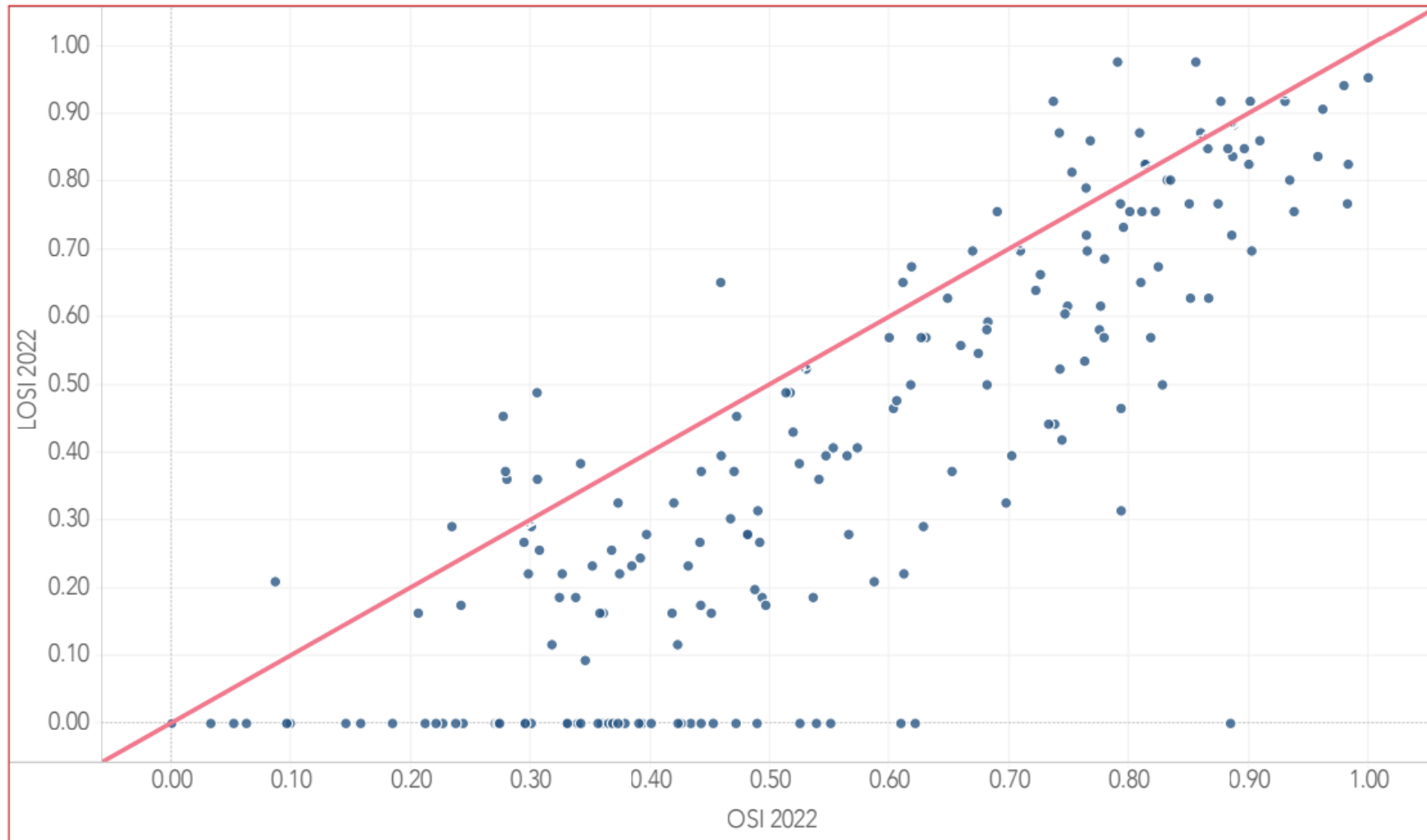
Title: _____

Insights



- **Inequalities** between **local and national portals performances**
- The **average LOSI** value increased from **0.43** to **0.51** between 2020 and 2022
- **More populous cities** tend to have **higher LOSI value**
- **Service provision** criterion has the **lowest rate of compliance**
- Most city portals have a dedicated **COVID-19 page** or section serving as a **hub for pandemic related information**, contributing to **recovery efforts**
- Local governments should **consider the opinions of the residents** both **for service provision** and **in decision-making processes**.
- **Broadening the LOSI coverage** would allow to **identify needs** and **develop targeted solutions** in line with local priorities and budgets
- **Collaboration** between **cities of similar size** and **with similar needs**

Figure ES.2 Comparison of city portals and nations portals' performance



LOSI application in countries

- A **strong interest** from UN DESA and UNU-EGOV to **apply LOSI to more cities in single country**
- Received **Expressions of Interest** from researchers to apply LOSI to cities in their countries!!



UN DESA finalized a **Memorandum of Understanding (MOU)** legal document and **partnered with some institutions** to run some **LOSI pilots** within countries

Brazil + Jordan + Palestine

- **Independent studies** were also undertaken in **China** and **Ecuador** using the LOSI methodology !!!!!

LOSI Network

Structure

- Network of **entities that support LOSI application** to cities at the national level
- An entity (e.g. research institution, university) **becomes the national representative** in applying LOSI in the national context
- **Under the supervision and guidance of UNDESA and UNU-EGOV**
- **Current LOSI Network:** Brazil, Jordan, Palestine

Objectives

- **Instrument improvement**
- Enhance the **local e-Government assessment research**
- **Support government officials and researchers** in conducting e-Government assessment at the local level
- Collect and make available a significant amount of **open local e-Government assessment data**

Visibility

- Results will be published in **national reports**
- Establish and expand the **e-Government assessment network**



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United Nations

Department of Economic and Social Affairs



UNITED NATIONS UNIVERSITY

UNU-EGOV

Operating Unit on Policy-Driven Electronic Governance



شكرا

谢谢

Thank You

Merci

Спасибо

Gracias