# **EL SALVADOR**

#### Recent trends

El Salvador continues to progress in enhancing digital access and use for all, but a digital gap remains. Despite improvements, active mobile broadband subscriptions in 2018 were below Latin American and Caribbean (LAC) and Organisation for Economic Co-operation and Development (OECD) averages, while Internet users represented 33.8% of the population, compared with 62.9% in LAC and 83.4% in the OECD in 2017. More progress is needed in enhancing trust in the digital ecosystem. In particular, trust in online privacy and the Global Cybersecutiry Index are below LAC and OECD averages.

El Salvador's performance in enabling digital innovation remains subdued. Despite increased research and development expenditures between 2007 and 2016, information and communications technology (ICT) patent applications filed under the Patent Gooperation Treaty (PCT) remain low.

## National strategies and international co-operation for digital transformation

The Digital Agenda 2020-2030 is the main reference document for the development and digital transformation of El Salvador. The digital agenda (DA) details a set of actions that seek to integrate all actors that participate in the development of the country through innovation and the application of ICT. It lays out a ten-year plan for the digital transformation. Its four main streams of work are: digital identity; digital governance; state modernisation; and innovation, education and competitiveness. The DA is aligned with the United Nations (UN) Sustainable Development Goals and eight national strategic projects.

The Secretary for Innovation of the Presidency of the Republic manages, supervises and evaluates progress towards the implementation of the DA. Among other responsibilities, this recently created secretary is responsible for developing and implementing digital identity and electronic signature services based on the Unique Identity Number. For this purpose, information registration systems are being standardised through adoption of a single informatics system in the Register of Vital and Family Records.

Other planned projects include: achieving interoperable systems to facilitate exchange of digital information within public administration; integrating digital technologies into education curricula at all levels; and creating a regulatory framework for Fintech. The National Policy on Open Data, introduced in 2018, and the open data portal Datos.gob.sv are part of a government initiative to promote transparency and fight corruption. To mitigate the economic impact of the coronavirus (Covid-19), the government approved measures to suspend payment of telecommunications services for three months. El Salvador also increased the use of telemedicine, enabling patients to consult their doctors from home (CAF, 2020).

In terms of international co-operation, El Salvador receives expert technical assistance on digital themes from the Uruguayan Agency of Electronic Government and Information Society. Projects aim to train public servants, promoting the digital transformation of government institutions. The country also participates in *Proyecto Mesoamérica* (Mesoamerica project), which seeks to promote the development of ICT infrastructure and public policies for the integration of ICT services.

El Salvador held the seventh Senior Officials Meeting on Science and Technology of the European Union (EU)-Community of Latin American and Caribbean States (CELAC) Joint Initiative on Research and Innovation in October 2017. Countries highlighted the strategic relevance of research and innovation for implementing the UN 2030 Agenda for Sustainable Development and acknowledged the strategic policy inputs of bi-regional projects and programmes.

	Digital indicators - El Salvador¹						
Enhancing access	El Sal			\C²		CD <sup>3</sup>	
	2008	2018	2008	2018	2008	2018	
Fixed broadband subscriptions (per 100 inhabitants) <sup>4</sup>	2.0	7.7	4.1	13.9	22.7	32.9	
Active mobile-broadband subscriptions (per 100 inhabitants) <sup>4</sup>	2009 1.8	<b>2018</b> 54.5	2009 1.8	<b>2018</b> 73.5	<b>2009</b> 29.8	<b>2018</b> 103.6	
notive mount of each and each private (per 100 minustratio)	2015	2018	2015	2018	2015	2018	
Proportion of population covered by at least 3G network⁵	61.3 <b>2008</b>	86.0 <b>2017</b>	86.1 <b>2008</b>	94.6 <b>2017</b>	98.2 <b>2008</b>	98.8 <b>2007</b>	
Fixed broadband speed (in Mbit/s) <sup>4</sup>	0.26	3.0	0.58	5.1	2.2	27.7	
Strengthening their effective use	El Sal	El Salvador		LAC		OECD	
	2008	2018	2008	2018	2008	2018	
E-Government Development Index (EGDI) <sup>6</sup>	0.50 <b>2008</b>	0.55 <b>2017</b>	0.52 <b>2008</b>	0.65 <b>2017</b>	0.72 <b>2008</b>	0.82 <b>2017</b>	
Share of Internet users (% of population) <sup>4</sup>	10.1	33.8	25.3	62.9	65.0	83.4	
UNCTAD B2C E-Commerce Index <sup>7</sup>	<b>2015</b> 31.7	<b>2019</b> 37.2	<b>2015</b> 46.4	<b>2019</b> 51.5	<b>2015</b> 73.9	<b>2019</b> 85.0	
Share of individuals engaging in online shopping <sup>8</sup>	<b>2017</b> 9.0		<b>2017</b> 14.8		<b>2017</b> N/A		
Enabling digital innovation	El Salvador		LAC		OECD		
	2008	2018	2008	2018	2008	2018	
High-technology exports (% of manufactured exports) <sup>9</sup> Share of ICT service imports, as % of total trade in services <sup>7</sup>	5.9	6.1	9.3	8.6	15.6	15.1	
	2.92	2.53	3.1	3.9	4.6	6.7	
IOT activities filed and other Detail Occupation Toute (experilling acceleting	2012	2016	2012	2016	2012	2016	
ICT patent applications filed under the Patent Cooperation Treaty (per million people) <sup>10</sup>	0.00 <b>2007</b>	0.01 <b>2016</b>	0.14 <b>2007</b>	0.34 <b>2016</b>	30.9 <b>2007</b>	38.2 <b>2016</b>	
R&D expenditures, as % of GDP <sup>11</sup>	0.11	0.15	0.34	0.42	1.7	1.9	
OECD OURdata Index <sup>12</sup>	<b>2019</b> 0.28		<b>2019</b> 0.43		<b>2019</b> 0.61		
Ensuring quality jobs for all	El Sal	vador	L	AC	0E	CD	
	200	6-15	200	6-15	200	6-15	
Contributions to changes in total employment, by digital intensity of sectors, 2006-16 <sup>13</sup>	N/A <b>2017</b> 70.2		6.9 <b>2018</b> 54.9		4.8 <b>2018</b> N/A		
Share of informal employment to total employment <sup>14</sup>							
Share of informal employment to total employment."	2007	2017	2007	2017	2007	2017	
Tertiary gross enrolment rate (%) <sup>9</sup>	24.3	28.6	37.5	60.5	66.6	74.3	
Tartiany graduatas by field (9/) Education(1	2016		<b>2016</b> 16.0		<b>2016</b> 9.8		
Tertiary graduates by field (%) - Education <sup>11</sup> Tertiary graduates by field (%) - Health <sup>11</sup>	12.2 17.8		13.8		14.5		
Tertiary graduates by field (%) - Engineering <sup>11</sup>		10.5		12.5		14.6	
Promoting on including digital againty	ELCAL	vador	1.	AC	ΛE	CD	
Promoting an inclusive digital society	2015	vador 2016	2015	2016	2015	2016	
E-waste generated, kilograms per inhabitant <sup>15</sup>	5.6	5.8	6.9	7.2	17.7	17.7	
Number of the death are consistent in	2015	2018	2015	2018	2015	2018	
Number of students per computer <sup>16</sup>	N/A <b>20</b>	N/A 1 <b>18</b>	2.4 <b>20</b>	1.6 1 <b>18</b>	1.8 <b>20</b>	1.1 18	
Percentage of women scoring at Level 2 or 3 in problem solving in technology-rich environments <sup>17</sup>	N/A		7.7		27.7		
Strengthening trust	El Salvador		LAC		0ECD 2020		
CAF GovTech Index <sup>18</sup>	2020 N/A		<b>2020</b> 4.42		N/A		
Global Cybersecurity Index (ITU) <sup>19</sup>	<b>2016</b> 0.21	<b>2018</b> 0.12	<b>2016</b> 0.36	<b>2018</b> 0.43	2016 0.56	<b>2018</b> 0.79	
diobal Cybersecurity illuex (110).	2018	2019	2018	2019	2018	2019	
E-commerce safety (%) <sup>20</sup>	66.7	61.5	72.0	63.1	61.7	58.3	
Trust in online privacy (%) <sup>20</sup>	44.0	39.2	52.8	54.9	41.7	45.6	
Fostering market openness	EI Sal	vador	L	AC	0E	CD	
OECD Digital Services Trade Restrictiveness Index <sup>13</sup>	2015	2019	2015	2019	2015	2019	
	N/A	N/A	0.24	0.24	0.13	0.15	
DECD EDI DDII3	2018		2018		2018		
DECD FDI RRI <sup>13</sup>	N/A		0.07		0.06		

Sources, footnotes and technical details can be found at the end of the country notes.

#### Technical notes

- 1. The table as best as possible follows the seven key areas identified in the OECD Going Digital project:
  1) enhancing access to digital technologies; 2) strengthening their effective use; 3) enabling digital innovation; 4) ensuring quality jobs for all; 5) promoting an inclusive digital society; 6) strengthening trust; and 7) fostering market openness (OECD, 2019a). Indicators are chosen depending on data availability for LAC countries. Potential bias exists from the way components have been aggregated on index indicators.
- 2. LAC average is a simple average. Composition of countries depends on availability of country data. Each average includes as many LAC countries as possible.
- 3. OECD average is a simple average that includes all OECD member countries as of May 2020.
- 4. Data from ITU (2020), World Telecommunication/ICT Indicators Database 2020 (database). Fixed broadband speed in Mbit/s refers to the advertised maximum theoretical download speed guaranteed to users associated with a fixed broadband Internet monthly subscription.
- 5. Data from UN Statistics Division, UN Global SDG Database (database). Data for 2015 and 2018 or latest available year.
- 6. Data from UN E-government Knowledgebase (2019), Data Center (database). The E-Government Development Index is a composite indicator that consists of three indexes (Online Service Index, Telecommunication Infrastructure Index and Human Capital Index), which are equally weighted. It ranges from 0 to 1, with 1 being the most developed.
- 7. Data from UNCTAD (2020), UNCTADSTAT (database). The UNCTAD B2C E-commerce Index measures an economy's preparedness to support online shopping. It ranges from 0 to 100, with 100 being the highest support.
- 8. Own calculations based on data from Latinobarómetro (2019), Libros de Códigos por País/Año (database). Data for 2017. Data from public opinion surveys using randomly selected, nationally representative samples.
- 9. Data from World Bank (2020a), World Bank DataBank (database).
- 10. Data from World Bank (2020b), TCdata360. Data for 2012 and 2016 or latest available year.
- 11. Data from UNESCO (2019), UNESCO Institute for Statistics (database). R&D Expenditures, as % of GDP data from 2006 and 2016 or latest available year.
- 12. Data from OECD (2020a), OECD.Stat (database); and OECD (2020b). The OECD OURdata Index assesses governments' efforts to implement open data in three critical areas: openness, usefulness and re-usability of government data. It ranges from 0 to 1, with 1 being the highest score.
- 13. Data from OECD (2020a), OECD.Stat (database). The OECD Digital Services Trade Restrictiveness Index identifies, catalogues and quantifies barriers that affect trade in digitally enabled services across 46 countries. It ranges from 0 to 1, with 1 being the most restrictive. The Foreign Direct Investment Regulatory Restrictiveness Index (FDI RRI) measures four types of statutory restrictions on foreign direct investment: 1) foreign equity restrictions; 2) screening and prior approval requirements; 3) rules for key personnel; and 4) other restrictions on the operation of foreign enterprises. The FDI RRI is a composite index, which ranges from 0 to 1, with 1 being the most restrictive.
- 14. Data from ILOSTAT, data from 2018 or latest available year.
- 15. Data from the Global E-waste Statistics Partnership.
- 16. OECD calculations based on OECD (2020c), Programme for International Student Assessment (database). Data for 2015 and 2018.
- 17. Data from the OECD (2019d), Survey of Adult Skills (2018). Percentages for problem solving in technology-rich environments are computed so that the sum of percentages for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, at Level 1, at Level 2 and at Level 3.
- 18. Data from CAF (2020), The GovTech Index 2020: Unlocking the Potential of GovTech Ecosystems in Latin America, Spain and Portugal. The GovTech Index 2020 measures the maturity of the GovTech ecosystem. It is based on 28 indicators across 7 dimensions, which on aggregate form 3 equally weighted pillars: start-up industry, government policies and procurement systems.
- 19. The Global Cybersecurity Index measures countries' commitment to cybersecurity at a global level. It has five pillars: 1) legal measures; 2) technical measures; 3) organisational measures; 4) capacity building; and 5) co-operation. It ranges from 0 to 1, with 1 being the highest level of cybersecurity.
- 20. Data from The Economist Intelligence Unit (2019), EIU Inclusive Internet Index (database). Indicators present perceived e-commerce safety and trust in online privacy among randomly sampled individuals in selected countries. It ranges from 0% to 100%, with 100% indicating absolute confidence in e-commerce safety and trust in online privacy.

## References

- CAF (2020), The GovTech Index 2020: Unlocking the Potential of GovTech Ecosystems in Latin America, Spain and Portugal, Development Bank of Latin America, Caracas.
- ECLAC (2018), Observatorio Regional de Planificación para el Desarrollo de América Latina y el Caribe (Regional Observatory of Planning for Development of Latin America and the Caribbean), Economic Commission for Latin America and the Caribbean, Santiago, <a href="https://observatorioplanificacion.cepal.org/es">https://observatorioplanificacion.cepal.org/es</a>.
- The Economist Intelligence Unit (2019), EIU Inclusive Internet Index 2019 (database), the Economist Group, London, <a href="https://theinclusiveinternet.eiu.com/explore/countries/performance">https://theinclusiveinternet.eiu.com/explore/countries/performance</a> (accessed 11 December 2019).
- Global E-waste Statistic Partnership, website, Global E-waste Statistic Partnership, Bonn, <a href="https://globalewaste.org/">https://globalewaste.org/</a> (accessed 11 December 2019).
- ILO (2019), ILO Statistics (database), International Labour Organization, Geneva, <a href="www.ilo.org/global/statistics-and-databases/lang--en/index.htm">www.ilo.org/global/statistics-and-databases/lang--en/index.htm</a> (accessed 11 December 2019).
- ITU (2020), World Telecommunication/ICT Indicators Database 2020 (database), International Telecommunication Union, Geneva, <a href="https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> (accessed 21 August 2020).
- Latinobarómetro (2019), Libros de Códigos por País/Año (database), Latinobarómetro, Providencia, <u>www.</u> <u>latinobarometro.org/latCodebooks.jsp</u> (accessed 11 December 2019).
- OECD (2020a), OECD.Stat (database), OECD Publishing, Paris, https://stats.oecd.org/ (accessed 11 December 2019).
- OECD (2020b), Government at a Glance: Latin America and the Caribbean 2020, OECD Publishing, Paris, <a href="https://doi.org/10.1787/13130fbb-en">https://doi.org/10.1787/13130fbb-en</a>.
- OECD (2020c), Programme for International Student Assessment (database), OECD Publishing, Paris, <a href="https://www.oecd.org/pisa/data/2018database/">www.oecd.org/pisa/data/2018database/</a> (accessed 14 February 2020).
- OECD (2019a), Measuring the Digital Transformation: A Roadmap for the Future, OECD Publishing, Paris, <a href="https://doi.org/10.1787/9789264311992-en">https://doi.org/10.1787/9789264311992-en</a>.
- OECD (2019b), OECD Reviews of Digital Transformation: Going Digital in Colombia, OECD Publishing, Paris, <a href="https://doi.org/10.1787/781185b1-en">https://doi.org/10.1787/781185b1-en</a>.
- OECD (2019c), Digital Government Review of Panama: Enhancing the Digital Transformation of the Public Sector, OECD Digital Government Studies, OECD Publishing, Paris, <a href="https://doi.org/10.1787/615a4180-en">https://doi.org/10.1787/615a4180-en</a>.
- OECD (2019d), Survey of Adult Skills, OECD Publishing, Paris, https://www.oecd.org/skills/piaac/data/.
- Open Knowledge Foundation (2019), Global Open Data Index (database), Open Knowledge Foundation, Cambridge, United Kingdom, <a href="https://index.okfn.org/dataset/">https://index.okfn.org/dataset/</a> (accessed 19 April 2020).
- PIAAC Expert Group in Problem Solving in Technology-Rich Environments (2009), "PIAAC Problem Solving in Technology-Rich Environments: A Conceptual Framework", OECD Education Working Papers, No. 36, OECD Publishing, Paris, <a href="https://doi.org/10.1787/220262483674">https://doi.org/10.1787/220262483674</a>.
- UN E-government Knowledgebase (2019), *Data Center* (database), United Nations Department of Economic and Social Affairs Public Institutions, New York, <a href="https://publicadministration.un.org/egovkb/en-us/Data-Center">https://publicadministration.un.org/egovkb/en-us/Data-Center</a> (accessed 11 December 2019).
- UN Statistics Division (2018, 2015), UN Global SDG (database), United Nations Department of Economic and Social Affairs, New York, <a href="https://unstats.un.org/sdgs/indicators/database/">https://unstats.un.org/sdgs/indicators/database/</a> (accessed 20 May 2020).
- UNCTAD (2020), UNCTADSTAT (database), United Nations Conference on Trade and Development, Geneva, <a href="https://unctadstat.unctad.org/EN/">https://unctadstat.unctad.org/EN/</a> (accessed 11 December 2019).
- UNESCO (2019), UNESCO Institute for Statistics (database), UNESCO, Paris, <a href="http://data.uis.unesco.org/Index.aspx">http://data.uis.unesco.org/Index.aspx</a> (accessed 20 May 2020).
- World Bank (2020a), DataBank (database), World Bank Group, Washington, DC, <a href="https://databank.worldbank.org/home.aspx">https://databank.worldbank.org/home.aspx</a> (accessed 11 December 2019).
- World Bank (2020b), TCdata360 (database), World Bank Group, Washington, DC, <a href="https://tcdata360.worldbank.org/">https://tcdata360.worldbank.org/</a> (accessed 4 August 2020).
- World Economic Forum (2016), "The Global Information Technology Report 2016", World Economic Forum, Geneva, <a href="https://www.weforum.org/reports/the-global-information-technology-report-2016">https://www.weforum.org/reports/the-global-information-technology-report-2016</a>.
- World Wide Web Foundation (2017), OpenData Barometer (database), World Wide Web Foundation, Geneva, <a href="https://opendatabarometer.org/">https://opendatabarometer.org/</a> (accessed 19 April 2020).



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