

State of the Internet and Digital Rights in Armenia (2019-2025)

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1. General Information

1.1. Geographical Location

Armenia is a landlocked country located in Transcaucasia (also known as the South Caucasus) on the northeastern part of the Armenian Highlands, geographically part of Western Asia.¹ The country is situated between the Black and Caspian Seas and borders Georgia to the north, Azerbaijan to the east, Iran and the Nakhchivan Autonomous Republic (an exclave of Azerbaijan) to the south, and Turkey to the west.¹ Armenia's terrain is predominantly mountainous; more than 90% of its territory is located at an elevation above 1000 meters above sea level, which creates natural barriers for transportation, especially between the northern and southern regions.¹

Such geographical isolation, exacerbated by complex political relations with two of its four neighbors (Turkey and Azerbaijan³), forms structural challenges for economic development and the deployment of telecommunications infrastructure. In particular, this leads to the country's dependence on a limited number of international internet channels, mainly passing through Georgia and Iran.⁴ This dependence increases the vulnerability of the national internet infrastructure to possible failures, cable damages⁵ or potential external influences, which directly affects the stability and quality of internet access and, consequently, the realization of citizens' digital rights.

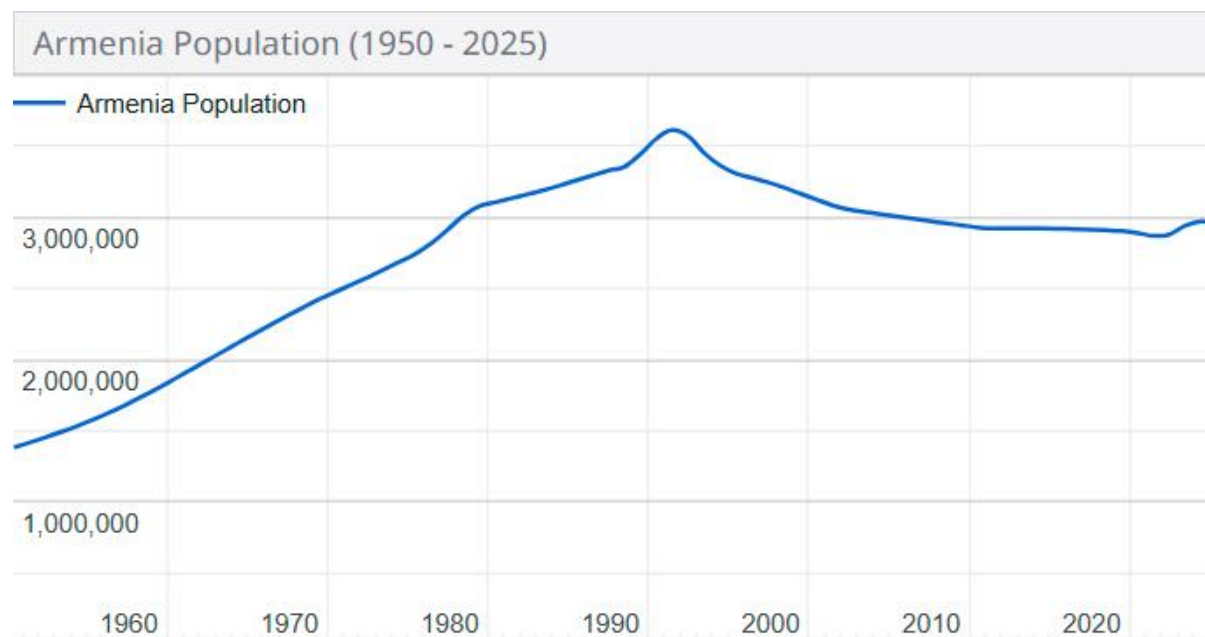
1.2. Population

Armenia's population is characterized by a high proportion of urban population (about 64% at the beginning of 2024⁷) and a relatively high average age (37.4 years at the beginning of 2024⁷). The demographic situation is complicated by the trend toward population aging and historically high levels of emigration.⁸ However, in the period from 2022 to 2024, there was a noticeable increase in population size, which is largely related to the influx of migrants, including from

Russia after February 2022, and a large number of ethnic Armenians displaced from Nagorno-Karabakh in September 2023.⁸

The population dynamics for the period under review are presented in Graph 1.

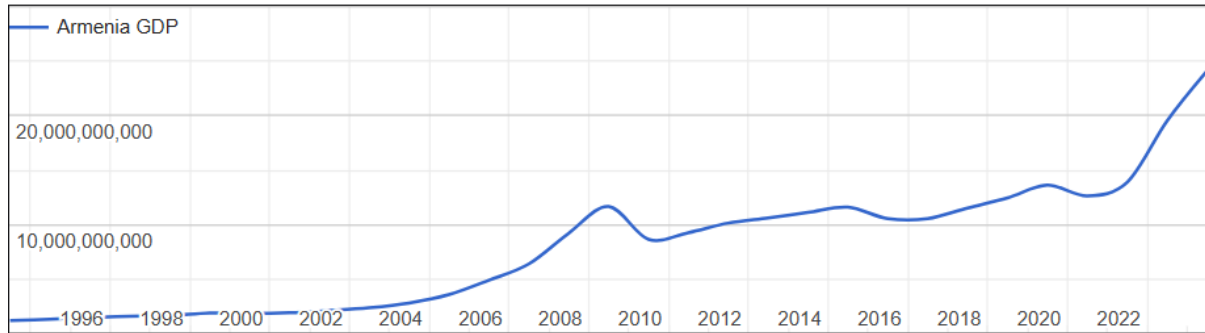
Graph 1: Population Dynamics of Armenia (1950–2025)



Source: *worldometers.info*

1.3. Gross Domestic Product (GDP)

Armenia's economy in the period from 2019 to 2024 demonstrated resilience and significant growth rates, interrupted only by a decline in 2020 caused by the COVID-19 pandemic and the Second Karabakh War.³ Particularly high real GDP growth rates were recorded in 2022 (+12.6%)³ and 2023 (+8.7%).¹⁴ In 2024, growth slowed to 5.9%.¹⁶ According to forecasts from international financial organizations, a further slowdown in growth rates to 4.0–4.5% is expected in 2025 as the effect from capital inflows is exhausted and external demand slows.¹⁶

Graph 2: Nominal GDP Dynamics of Armenia (1993–2023)**Armenia GDP (Nominal, \$USD) 1993-2023**

Source: *worldometers.info*

1.4. Main Economic Characteristics

The period 2019–2024 was characterized by significant economic growth, interrupted only by the recession of 2020 caused by the COVID-19 pandemic and the war in Nagorno-Karabakh.³ The drivers of growth were significant capital inflows, increased exports, as well as active development of the construction, hospitality, and information and communication technologies (ICT) sectors.¹⁹ In 2024, GDP growth was driven by an increase in private consumption and investments, and on the supply side – growth in the sectors of trade, real estate, financial services, and construction.¹⁶ For 2025, a slowdown in growth rates is forecasted.¹⁶

The key sectors of Armenia's economy are the services sector (including ICT, trade, financial services), industry (especially mining, metallurgy, production of food products and beverages), construction, and agriculture.³ The ICT sector demonstrates particularly dynamic growth and is becoming increasingly important for the country's economy, contributing to innovation and the creation of highly qualified jobs.³

Despite the positive growth dynamics, Armenia's economy faces a number of serious structural problems. These include: high dependence on imports of energy resources, in particular Russian natural gas¹⁹; limited access to financing for small and medium-sized businesses, exacerbated by competition from a significant informal sector of the economy⁸; shortage of qualified personnel, restraining productivity growth¹⁹; gender inequality in the labor market and regional disparities⁸; predominance in the export structure of goods with low added value, such as metals and mineral raw materials¹⁹; insufficient diversification of exports

both in terms of product nomenclature and geography¹⁶; underdeveloped transportation infrastructure and logistical difficulties due to geographical isolation (lack of access to the sea) and unresolved regional conflicts³; as well as vulnerability to climate change, especially in the sectors of water resources and agriculture.³⁴

Thus, although high GDP growth rates and the development of the ICT sector create favorable conditions for digital transformation, the structural vulnerabilities of the economy pose risks to the sustainability of this process. Geopolitical dependence, infrastructure limitations, and regional conflicts can negatively affect digital connectivity, cybersecurity, and the overall stability of the digital environment in Armenia.³

1.5. General Political Situation

According to the Constitution with amendments of 2015, Armenia is a parliamentary republic.³⁵ Executive power is headed by the Prime Minister, who determines the main directions of government policy.³⁶ The President performs the functions of the head of state with predominantly representative powers.³⁶ Legislative power belongs to the unicameral National Assembly.³⁵

According to the results of the snap parliamentary elections in 2021, the majority in the National Assembly was won by the "Civil Contract" party led by Nikol Pashinyan, who again took the post of Prime Minister.³⁵ The main opposition forces represented in parliament are the "Armenia" block (led by the second president Robert Kocharyan) and the "I Have Honor" block (associated with the third president Serzh Sargsyan and the Republican Party of Armenia).³⁵ The President of the Republic of Armenia since March 2022 is Vahagn Khachaturyan.³⁵ A large number of political parties are registered in Armenia, but most of them do not show significant activity.³⁷

The political situation in Armenia in the period 2019–2024 remained tense and was characterized by the consequences of the "Velvet Revolution" in 2018, the heavy defeat in the Second Karabakh War in 2020, ongoing border incidents and conflicts with Azerbaijan, as well as the humanitarian crisis caused by the exodus of Armenian population from Nagorno-Karabakh in September 2023.⁸ These events contributed to the preservation of a high degree of political polarization in society.⁵ The government declares commitment to democratic reforms, fighting corruption, and strengthening the rule of law¹⁰, but is criticized by the opposition and part of civil society for alleged pressure on opponents, media, and the judiciary.⁵ In foreign policy, steps are observed to diversify partners and deepen relations with the European Union and the USA¹⁰, with simultaneous cooling of relations with the traditional ally – Russia.¹⁰

The administrative-territorial division of Armenia includes 10 regions (marzes) and the city of Yerevan, which has the status of a region.³⁵ The regions are: Aragatsotn, Ararat, Armavir, Gegharkunik, Kotayk, Lori, Shirak, Syunik, Tavush, and Vayots Dzor.³⁵

The established political instability and external threats create a context in which authorities may resort to restricting digital rights and freedoms, motivating this by national security considerations. Examples can serve as documented cases of blocking online platforms during conflicts⁵ or legislative initiatives expanding the powers of authorities to control the internet in conditions of emergency or martial law.⁵ This creates a potential contradiction between the declared course on democratization and the actual practice in the digital sphere.

2. Internet

2.1. National Domain

The national domain of the upper level (ccTLD) for Armenia is .am.⁵⁷ Parallely, there exists and is used a domain in Armenian – .հայ.⁵⁷ Management of both domains is carried out by the public organization "Internet Society" (ISOC Armenia) through its subdivision – the Armenian Network Information Center (AMNIC).⁵⁷

The .am domain was delegated to Armenia on August 26, 1994.⁵⁷ The first registration of a domain name in this zone (yerphi.am for the Yerevan Physics Institute) took place in December of the same year.⁶¹ The AMNIC center was founded in 1996, initially under the management of ARMINCO company, and then transferred to ISOC Armenia.⁵⁹ The organization "Internet Society" itself was registered in 1995, although its founding meeting took place back in August 1994.⁵⁹

Registration of domain names in the .am zone, as well as in subdomains .com.am, .net.am, .org.am and others⁵⁷, is available both to residents and non-residents of Armenia.⁵⁸ Registration is carried out by accredited registrars on a paid basis.⁵⁷ The length of the domain name should be from 1 to 63 characters; Latin letters, digits, and hyphens are allowed (but not at the beginning or end of the name).⁵⁷ Each registration application undergoes a check, usually taking 2–3 working days.⁵⁸

The registration rules prohibit the use of .am domain names for distributing spam, pornography, materials promoting violence, terrorism, inciting discrimination on various grounds, as well as for any other activity contrary to the legislation of Armenia, principles of morality or public interests.⁵⁷ The .am domain has gained certain popularity outside Armenia

due to the possibility of creating English words ending in "am" (for example, the Instagram service used the Instagr.am domain), as well as among AM radio stations.⁵⁸

Management of the national domain by a non-governmental organization (ISOC Armenia)⁵⁷ corresponds to the multistakeholder approach, officially supported in Armenia.⁶⁴ Nevertheless, the presence in the registration rules of vague formulations prohibiting the use of the domain for purposes "contrary to principles of morality or incompatible with public interests"⁵⁷, creates a theoretical possibility for their broad interpretation and potential use for refusing registration or canceling domains with critical or opposition content, although specific examples of such abuses are not recorded in the provided materials.

2.2. Number of Users

The assessment of the number of internet users in Armenia and the level of internet penetration gives somewhat differing results depending on the source and counting methodology.

According to data from the International Telecommunication Union (ITU), the level of internet penetration among Armenia's population showed steady growth: 76.5% in 2020⁴¹, 78.6% in 2021⁴¹ and 77% in 2022.⁶⁵ World Bank data indicate a penetration level of 80% in 2023.¹⁴ A similar indicator (80.0%) as of the beginning of 2025 is provided by the research portal DataReportal, estimating the total number of users at 2.37 million people.⁶⁶

A year earlier, as of the beginning of 2024, DataReportal estimated the number of users at 2.14 million, and penetration at 77.0%.⁶⁷

At the same time, data from the Public Services Regulatory Commission (PSRC) of Armenia indicated that the number of internet users exceeded 3 million back in 2019.⁶⁸

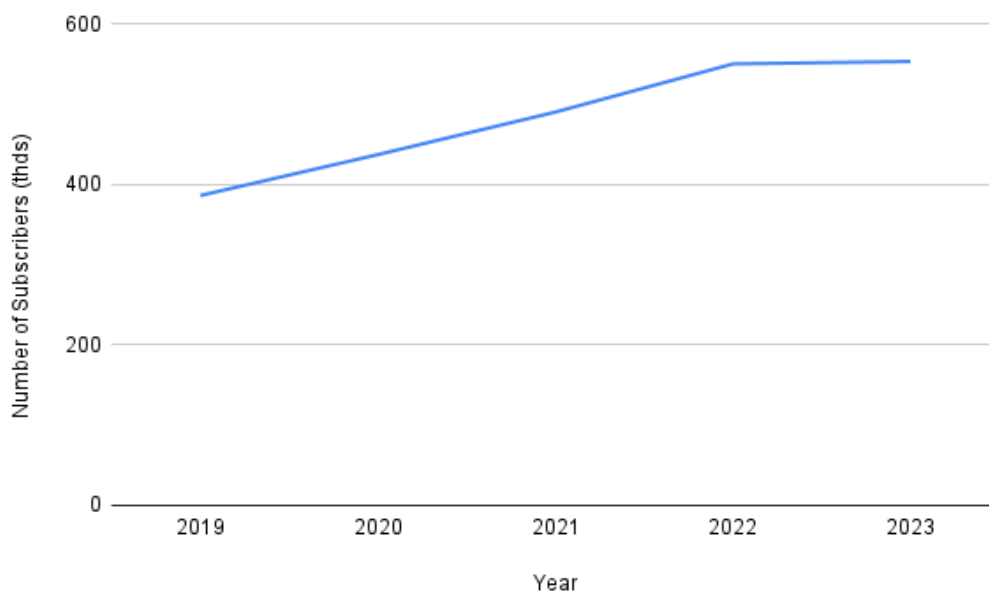
Such discrepancies may be related to differences in methodology (for example, accounting only for "active" users, different definitions of "user", use of different population databases) or revisions of estimates after the 2022 population census. Nevertheless, all sources agree that the level of internet penetration in Armenia is high for the region. It is important to note that, according to DataReportal estimates, about 20% of the population (approximately 593 thousand people) did not use the internet as of the beginning of 2025⁶⁶, which indicates the persistence of a certain digital divide despite the high overall penetration level.

Data sources: DataReportal⁶⁶, International Telecommunication Union (ITU)⁵, World Bank (World Bank)⁵, Public Services Regulatory Commission of Armenia (PSRC/PSRC).⁶⁸

2.2.1 Fixed Internet

The fixed broadband access (BB) market in Armenia shows growth, although its penetration remains significantly lower than that of mobile internet. According to ITU data, the fixed BB penetration level was 14.5% in 2020⁴⁰, 18.4% in 2022⁴¹ and 18.5% in 2023.⁵ The main access technology is becoming fiber optics (FTTH/FTTB), whose share in the retail market exceeded 59% back in 2019⁶⁸, gradually displacing ADSL and cable technologies.⁷⁰ The development of fiber optic networks contributes to increasing the speed and reliability of connection for end users.

Graph 3: Dynamics of Fixed BB Subscribers in Armenia (2019–2023)



Note: Data on the total number of subscribers for 2019 provided by PSRC.⁶⁸ ITU/World Bank data for 2020–2023⁵ show penetration per 100 people; absolute figures are estimates. The growth in fixed BB penetration is important for ensuring stable and high-speed access needed for education, remote work, and receiving digital government services, however, the persistent relatively low penetration level indicates a digital divide, especially between urban and rural areas.⁵

The fixed BB market in Armenia is characterized by a high degree of concentration. Historically, the main players were Ucom, Armentel (later renamed Beeline, then sold and became Team Telecom Armenia) and Rostelecom (GNC-Alfa, later Ovio).⁷⁰ According to 2016 data, these three companies together with VivaCell-MTS and Interactive TV controlled about 95% of the market.⁷⁰ More recent data confirm the dominance of Ucom, Team Telecom Armenia, and Ovio.

Table 1: Largest Fixed BB Providers in Armenia (estimate)

Provider	Website	Market Share / Number of Subscribers (approximately)	Source(s)
Ucom	https://ucom.am/	~39% (2016); 110.7 thousand (Q1 2024); Leader in FTTH (2015); 75 thousand residential subscribers (2021?)	⁵
Team Telecom Armenia (formerly Beeline)	https://www.telecomarmenia.am/	~37% (2016); 95.7 thousand (Q1 2024); 94.8 thousand (Q4 2023); 32.1% subscriber share (2023)	⁵
Ovio (formerly Rostelecom/GNC-AI fa)	https://ovio.am/	~7% (2016); 66.5 thousand (Q1 2024)	⁵
Viva-MTS (Fedilco Group)	https://www.mts.am/	~13% (2016, incl. mob.); Entry into B2B market in 2017, purchase of ADC; Data on fixed subscribers not found	⁷⁰

Note: Data on market shares mainly refer to 2016.⁷⁰ Team Telecom Armenia's market share by number of subscribers in 2023 was 32.1%.⁷¹ Current data on number of subscribers for 2023–2024 available for Ucom, Team, and Ovio. High market concentration can affect the level of competition, prices, and quality of services, requiring attention from antitrust authorities.

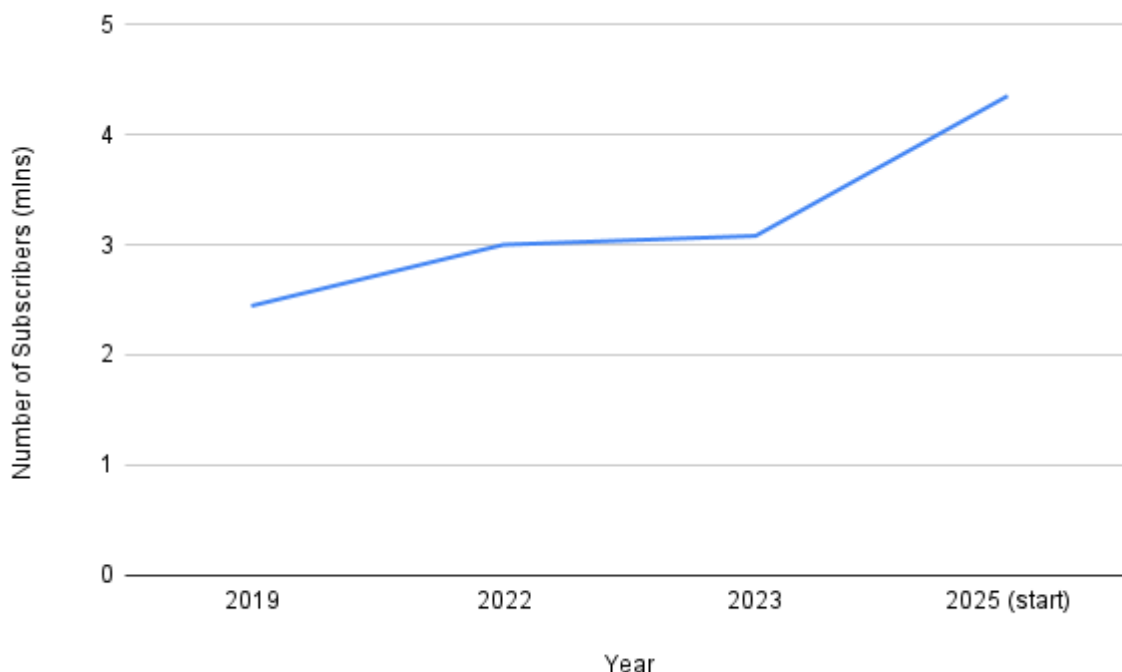
2.2.2. Mobile Internet

Mobile internet is the dominant way of accessing the network for the majority of Armenia's population. The level of penetration of active mobile BB subscriptions exceeded 100% by 2022–2023, according to ITU data.⁵ DataReportal estimates the total number of active mobile connections (including those that may not have internet access) at 4.35 million as of early 2025, which is 147% of the total population.⁶⁶ This indicates widespread use of mobile devices and frequent use of multiple SIM cards by one person.

Coverage with 4G/4G+ networks reached 100% of populated areas by 2021⁵, ensuring basic BB availability throughout the country. In 2023, the regulator issued permissions for using

frequencies for deploying 5G networks to Telecom Armenia and MTS Armenia companies⁵, and the operators began implementing this technology.⁸²

Graph 4: Dynamics of Mobile BB Subscribers in Armenia (2019–2025)



2.3. Internet Access Speed and Quality of Services Provided

Internet access speed in Armenia shows positive dynamics in both mobile and fixed segments. According to Ookla Speedtest Global Index:

- **March 2025:** Median mobile internet speed was 58.18 Mbps (84th place in the world), fixed – 103.41 Mbps (94th place).⁹²
- **August 2024:** Median mobile internet speed – 31.16 Mbps (81st place).⁹³
- **May 2024:** Median mobile internet speed – 27.6 Mbps, fixed – 56.8 Mbps.⁵
- **January 2025 (growth over the year):** Mobile internet speed grew by 32.9%, fixed by 18.9%.⁶⁶
- **June 2022:** Median mobile internet speed – 21.46 Mbps (84th place).⁹⁴

Despite the growth in speeds, Armenia lags behind some neighboring countries in mobile internet indicators, such as Azerbaijan, Georgia, and Turkey.⁹³

The quality of internet services is generally improving, confirmed by almost full coverage of populated areas with 4G+ networks.⁵ The Digital Quality of Life Index for 2022 placed Armenia

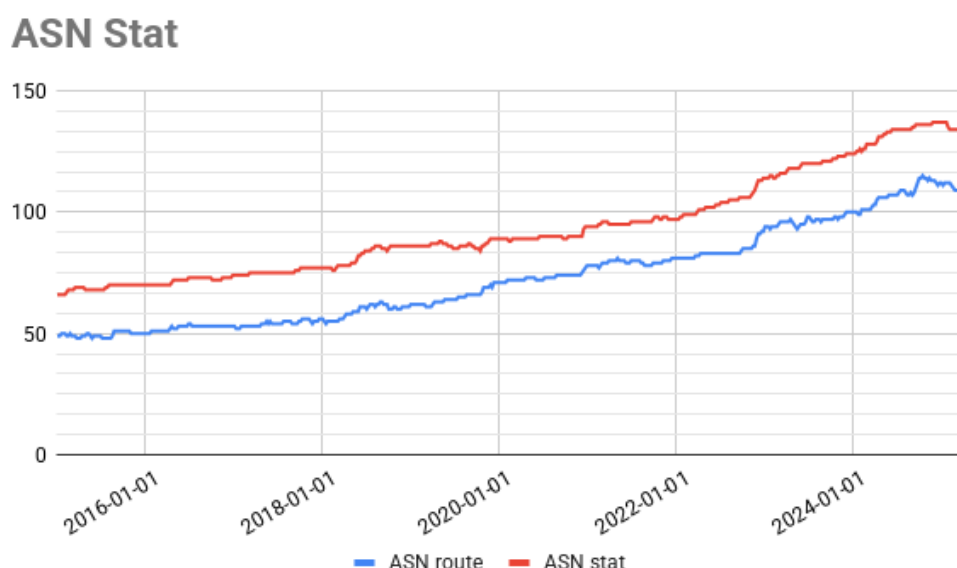
2nd in the world for internet affordability.⁹⁵ However, more recent data for this index (2023, 2024) were not found in the provided materials.⁹⁸ The Network Readiness Index for 2023 and 2024 shows Armenia's strengths in access to technologies but notes weaknesses in inclusivity and trust.¹⁰⁰

Nevertheless, problems with connection quality, especially mobile, persist in remote and mountainous areas of the country.⁴ This is related both to the complexity of laying fiber optic cables in mountainous terrain and limited competition among providers outside large cities.⁴ The launch of the global satellite system Starlink in Armenia in 2025⁴ is seen as a potential solution for ensuring stable access in hard-to-reach regions, as well as an important backup communication channel, considering the country's vulnerability due to the limited number of cross-border cable connections.⁴ At the same time, dependence on external cable routes through Georgia and Iran⁴ remains a risk factor, confirmed by temporary internet connection disruptions, for example, in January 2024⁵ and earlier due to cable damages.⁵

2.4. Development of Providers and Autonomous Systems

An autonomous system (AS) represents a collection of IP networks and routers managed by one or more operators with a single routing policy with the Internet. The dynamics of the number of registered and actively routed AS in the country reflect the growth and diversification of internet infrastructure, as well as the level of competition at the infrastructure level.

Data on the number of AS in Armenia for the period 2019–2025 are provided by the regional internet registrar RIPE NCC through the RIPEstat service. Unfortunately, the analyzed materials do not have specific time series for the number of registered and routed AS for Armenia.¹⁰³

Graph 5: Dynamics of Autonomous Systems in Armenia (2015–2025)

The graph demonstrates explosive growth and strengthening of Armenia's digital independence in recent years. The increase in the number of autonomous systems more than doubled in 8 years — this is a sign of a healthy and rapidly developing internet ecosystem. The country is becoming an increasingly important node in the regional internet infrastructure, stimulated by both organic growth and external factors, such as the influx of technological business.

Throughout the period from 2016 to mid-2024, Armenia has seen consistent growth in the number of both registered autonomous systems (red line, "ASN stat") and actually routed in the internet (blue line, "ASN route"). This indicates systematic development of internet infrastructure in the country.

Acceleration of growth from late 2021 - early 2022: Both lines show noticeable acceleration of growth, starting from late 2021. This indicates a significant increase in the number of new internet players (providers, large companies, hosters), connecting to the global network. A likely cause of such a jump is the relocation of a large number of technological companies and IT specialists to Armenia.

The growth in the number of autonomous systems is a direct indicator of diversification and increasing competition in the telecommunications services market. A larger number of independent networks usually leads to improved service quality and reduced prices for end consumers.

The blue line ("ASN route") shows the number of systems that are not just registered but actively announcing their networks in the global internet. The fact that it grows almost parallel to the red line indicates that new ASN are not just registered "for reserve" but are actively introduced into operation.

Small correction in 2024: In the last part of the graph (2024) a small decline in both curves is visible after reaching peak values. This may be a temporary fluctuation, the result of some players leaving the market, or a statistical correction, but it interrupts the multi-year trend of continuous growth.

Table 2: Top 10 Largest Autonomous Systems in Armenia

#	Number of AS	Name	Web Site	Foreign neighbour count	Local neighbour count	Total neighbour count	Foreign neighbours share
1	8932	UCOMINT	http://www.ucom.am	1249	29	1278	98%
2	49800	GNC-Alfa CJSC	http://www.ovio.am	65	54	119	55%
3	12297	TELECOM-ARMENIA Telecom Armenia AS	https://telecomarmenia.am	81	33	114	71%
4	43733	Viva-Armenia	https://www.viva.am	18	11	29	62%
5	201986	Arpinet	http://www.arpinet.am	2	14	16	13%
6	33852	Vivacell. Viva Armenia	https://www.viva.am/	1	13	14	7%
7	208339	UTC-LLC	http://www.utc.am	0	8	8	0%
8	201589	EdgeAm LLC	https://edgeam.am/	7	0	7	100%
9	202269	BitCommand	https://bitcommand.com/	5	2	7	71%
10	212552	BitCommand	https://bitcommand.com/	4	2	6	67%

The internet market in Armenia has a clearly expressed hierarchical structure. There is one dominant international gateway (Ucom), two other large universal operators (GNC-Alfa/Ovio and Telecom Armenia), as well as a number of smaller players with different specializations — from providers oriented to the domestic market to international content networks.

Analysis of Armenia's networks shows:

1. Clear dominance of Ucom as the main international gateway The most obvious conclusion is the colossal lead of Ucom (AS8932) from all other players. With 1249 connections to foreign networks (neighbors) and only 29 to local, Ucom is the main window of Armenia to the global internet. 98% of its connections are international. This is a typical profile for a Tier-2 operator, which specializes in selling transit (access to the world internet) to other, smaller operators in the country.
2. "Big Three" forms the core of the market Companies occupying places 1 to 3 — Ucom, GNC-Alfa (Ovio/Rostelecom) and Telecom Armenia (Team Telecom) — constitute the core of the country's internet backbone. While Ucom focuses on international transit, GNC-Alfa (AS49800) and Telecom Armenia (AS12297) have a more balanced profile. GNC-Alfa has the largest number of local connections (54), which speaks to its deep integration into the internal internet exchange.
3. Diversity of network strategies The table shows that the "top-10" is not just ten identical internet providers, but companies with different business models:
 - International transit: Ucom (AS8932).
 - Balanced operators (retail + transit): GNC-Alfa and Telecom Armenia.
 - Focus on local market: Arpinet (AS201986) and especially UTC-LLC (AS208339), which has 0% foreign connections. They actively exchange traffic within Armenia, and buy access to the world from larger players.
 - Specialized services: EdgeAm LLC (AS201589) with 100% foreign neighbors and zero local. This is typical for content delivery networks (CDN) or cloud providers that place their equipment in the country for fast content delivery but do not participate in local traffic exchange.
4. Use of multiple ASN by one company Viva-Armenia (Viva-MTS) and BitComm appear in the list with two different autonomous systems. This may indicate:
 - Network separation: For example, one ASN for mobile internet, another for corporate clients or hosting.
 - Legacy networks: One of the networks could remain after merger or reorganization.
 - Increased fault tolerance.

2.5. IPv6 Penetration

The transition to Internet Protocol version 6 (IPv6) is a global necessity for ensuring further internet growth, development of the Internet of Things (IoT), and overcoming the shortage of IPv4 addresses. The government of Armenia has included support for promoting the dissemination of IPv6 in the principles of internet management in the country.⁶⁴

However, based on available data, the actual implementation of IPv6 in Armenia significantly lags behind many other countries and regions. Statistics from APNIC Labs show that the Western Asia region, to which Armenia belongs, has one of the lowest IPv6 penetration levels (about 19.3% at the time of data analysis).¹¹¹ Data on individual major Armenian autonomous systems, such as AS215416 (MAGNET) and AS42688 (ARCA), also indicate extremely low or zero level of IPv6 implementation as of 2024–2025.¹¹² The AMNIC registry also noted the need to address issues related to IPv6 before implementing Unicode-compatible domain names.⁵⁸

Graph 6: Dynamics of IPv6 Penetration in Armenia (2015–2025)

Use of IPv6 for Armenia (AM)



Source: stats.labs.apnic.net

Despite political support⁶⁴, the low rates of IPv6 adoption can become a long-term obstacle to Armenia's digital development. Lagging behind global trends¹¹⁴ may lead to technical difficulties in the future, limit opportunities for introducing new technologies (e.g., IoT), and potentially create compatibility problems with resources available only via IPv6. This indicates a possible gap between strategic goals and their technical implementation in the field of internet infrastructure development.

2.6. Connectivity Index

For assessing the level of integration of the internet segment, two key indicators are used, based on the analysis of pairwise connections (peerings) between Autonomous Systems (ASN).

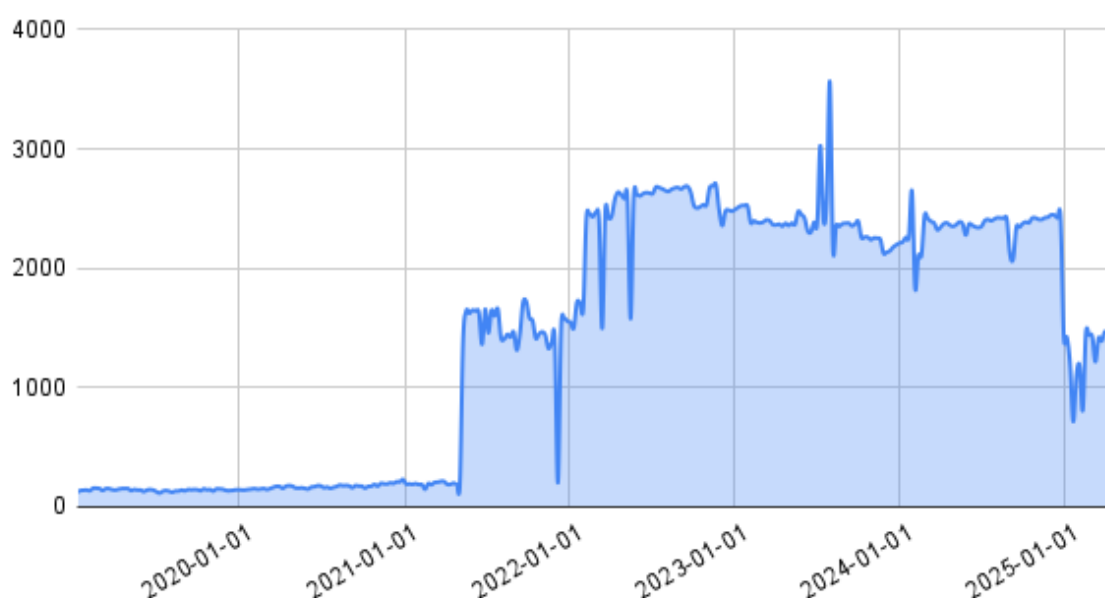
Global Connectivity Index: This index represents the total number of unique connections between each Armenian ASN and each external (foreign) ASN. Essentially, it measures how widely and diversely the Armenian internet segment is connected to the rest of the world. The higher this indicator, the more "windows" the country has to the global network.

Local Connectivity Index: This index is calculated as the total number of unique connections between different Armenian ASN. It reflects the intensity and complexity of the internal internet market, in particular, the activity at traffic exchange points (IXP). A high indicator speaks to a developed internal ecosystem, allowing efficient traffic exchange within the country, minimizing delays and dependence on external channels for local data.

The analysis of the ratio of these two indices allows understanding the strategic orientation of the national network: whether it is predominantly self-sufficient or deeply integrated into the global infrastructure.

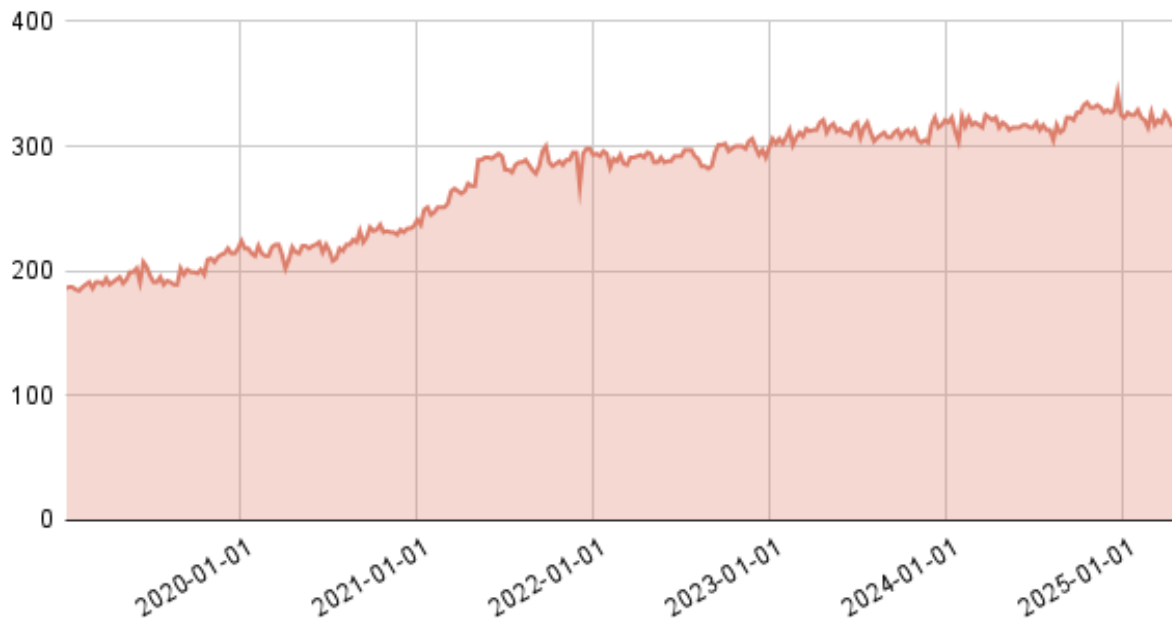
Graph 7: Dynamics of Global Connectivity of Armenia's Autonomous Systems (2019–2025)

Global connectivity statistics



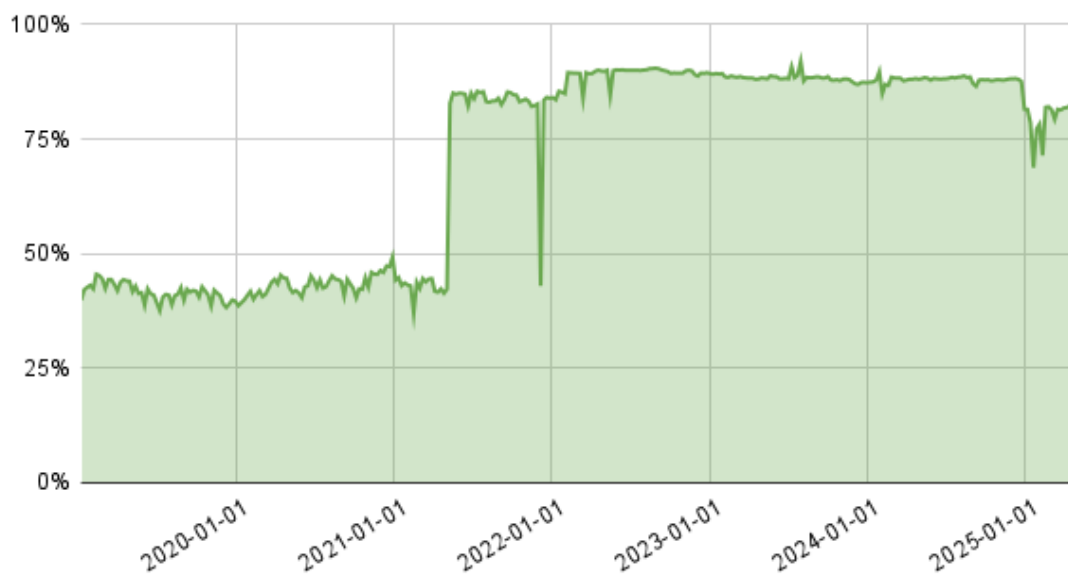
Graph 8: Dynamics of Local Connectivity of Autonomous Systems in Armenia (2019–2025)

Local connectivity statistics



Graph 9: Dynamics of the Ratio of Global and Local Connectivity of Autonomous Systems in Armenia (2019–2025)

Total connectivity share



3. Internet Legislation

3.1. Principles of Internet Governance

Internet governance in Armenia is based on principles approved by the government in 2014, which declare a multistakeholder approach and are aimed at promoting internet development, ensuring its accessibility, protecting human rights, and supporting innovations.⁶⁴ This approach assumes cooperation between government, private sector, civil society, academic, and technical communities.⁶⁴ To coordinate this interaction, the Internet Governance Council (IGC) was created.⁶⁴

3.1.1. Regulation

The main legislative act regulating the sector is the Law "On Electronic Communications".¹²¹ It defines the rights and obligations of users, operators, and providers, as well as the powers of regulatory bodies. The law is aimed at supporting sector development, ensuring fair and effective competition, accessibility of services, and protecting user interests.¹²¹ An important element of regulation is the cancellation of mandatory licensing for internet providers (ISP) since 2013; instead, only notification of the regulator about the start of activity is required.⁵ The country also supports the principle of net neutrality, although it is not explicitly enshrined in law, but reflected in the government resolution of 2014 and the regulator's decision of 2008.⁵

3.1.2. Regulatory Bodies and Responsible Persons

Two state bodies play a key role in regulating the internet and the electronic communications sector:

1. **Public Services Regulatory Commission (PSRC):** This is an independent collegial body responsible for regulating natural monopolies and competitive markets in energy, water supply, and electronic communications.⁷⁷ In the internet and communications sphere, PSRC is responsible for:

- Issuing permissions for using limited resources (radio frequencies, numbering).¹²³
- Establishing rules for network interconnection and interaction.¹²³
- Regulating tariffs and activities of operators occupying a dominant position.⁷⁹
- Ensuring and monitoring competition.¹²³
- Protecting consumer rights for communication services.¹²³
- Quality control of services.¹²³
- Applying sanctions for violations of legislation and license/permission conditions.¹²³

- **Leadership (as of latest data):** Chairman – Garegin Baghramyan. Commission members: Sergey Aghinyan, Seda Shaginyan, Kamo Sargsyan, Ara Nranian.¹²⁷ Official website: <https://psrc.am/>

2. **Ministry of High-Tech Industry (MHTI):** Created in 2019 by reorganizing the Ministry of Transport, Communications, and Information Technologies.¹²⁸ MHTI is responsible for forming and implementing state policy in a wide range of areas, including:

- High technologies and IT sector.¹²⁸
- Digitization of government services and economy.¹²⁸
- Development of communications and postal infrastructure.¹²⁸
- Cybersecurity.¹¹⁹
- Cosmic activity.¹²⁸
- Military-industrial complex.¹²⁸
- Development of digital transformation strategies.¹¹⁹
- **Leadership (as of latest data):** Minister – Mkhitar Hayrapetyan. First Deputy Minister – Gevorg Mantashyan. Deputies: Ruben Simonyan, Gevorg Meliksetyan. General Secretary – David Gasparyan. Head of Communications and Postal Department – Gevorg Sargsyan.¹³² Official website: <https://hightech.gov.am/>.¹³³ Leadership profiles: <https://hightech.gov.am/en/ministry/structure/>.¹³²

The presence of two key ministries with partially overlapping spheres of responsibility (PSRC focuses on economic market regulation, MHTI on strategic development and policy) can create potential difficulties in coordinating actions, especially in such dynamically developing areas as cybersecurity, data management, and online content regulation. Effective interaction between these bodies is an important factor for consistent and balanced development of the digital environment in Armenia.

3.2. Market Monopolization

Armenia's legislation contains norms aimed at protecting and encouraging competition in the electronic communications sector. The Law "On Protection of Economic Competition" prohibits anti-competitive agreements (cartels) and abuse of dominant position on the market.¹³⁴ The Law "On Electronic Communications" directly obliges the regulator (PSRC) to ensure conditions for fair and effective competition, prevent its distortion, and apply special regulatory measures to operators recognized as dominant.¹²¹ These measures may include price control, obligations to provide access to network infrastructure (interconnect), requirements for separate accounting to prevent cross-subsidization.⁷⁹ The regulator uses the concept of significant market power (Significant Market Power – SMP) for determining dominant players.⁷⁹

Despite the presence of antitrust legislation, the actual structure of the telecommunications market in Armenia is characterized by high degree of concentration and can be described as

an oligopoly. On the fixed BB market, three main providers dominate: Ucom, Team Telecom Armenia (former Beeline) and Ovio (former Rostelecom).⁵ According to estimates of 2016, five largest operators controlled about 95% of this market.⁷⁰ On the mobile communications market, three nationwide operators also operate: Viva-MTS (owned by Fedilco Group Limited⁸⁴, previously part of the Russian MTS group⁷⁰), Team Telecom Armenia (owned by CJSC "Team"⁸⁷, founded by former Ucom executives Hayk and Alexander Yesayan⁸⁷), and Ucom.⁸⁴ Historically, Viva-MTS held leading positions by number of subscribers.⁷⁴

Such an oligopolistic market structure, where a small number of companies controls the overwhelming share of services in both fixed and mobile segments, can limit real choice for consumers, potentially affect price levels and quality of services provided, as well as slow down the pace of innovation due to weakened competitive pressure. Recent changes in the ownership structure of large operators (sale of Beeline and creation of Team Telecom, sale of Viva-MTS) may lead to changes in market dynamics and competitive strategy, requiring further monitoring from the regulator.

3.3. Internet Shutdowns by Order of Authorities

Armenia's legislation provides state bodies with powers to restrict or completely shut down access to the internet and communication services in certain extraordinary circumstances. Article 10 of the Law "On Electronic Communications" allows the government to take over "responsibility for the operation and management of any or all networks or electronic communication services" during a state of emergency.⁴¹

More specific and potentially broader powers are contained in the draft amendments to the Law "On the Legal Regime of Martial Law", presented by the Ministry of Justice in December 2022.⁵ This bill, which, as of May 2024, has not yet been adopted⁵, provides for the possibility for authorities during martial law:

- Restrict the right to freedom of expression and information by temporary blocking of websites and social media platforms.⁵
- Introduce special rules for using communication devices.⁵⁶
- Temporarily confiscate or seize media equipment (printing devices, radio transmitting and sound amplification equipment).⁵⁵

The Law "On the Legal Regime of Emergency Situation" also mentions the possibility of restricting the use of electronic communications means¹³⁶, but does not detail the procedures. In the existing and proposed regulatory acts, there are no clear procedures for initiating and implementing shutdowns, criteria for necessity and proportionality of such measures, as well as mechanisms for oversight and appeal. It is unclear which specific body or official is

authorized to make the final decision on shutdown and based on what exact threats (besides general reference to the emergency or martial law regime).

The presence of such broad and insufficiently clearly defined powers in the executive branch creates significant risks for freedom of information, freedom of expression, and other human rights, especially during periods of political tension or conflicts. The lack of legislative guarantees against arbitrary application of internet shutdowns causes concern for human rights organizations⁵⁵, especially in light of documented cases of actual restrictions on access to online platforms in the past (see section 4.1).

3.4. Legislation on "Words on the Internet"

Regulation of statements in online space in Armenia is carried out through norms of civil and, in certain periods, criminal legislation, as well as through strategic documents on combating disinformation.

Defamation and insult: The main tool for protecting honor, dignity, and business reputation is the Civil Code (article 1087.1).¹³⁷ In October 2021, amendments were adopted that significantly increased the maximum amounts of compensation for insult (up to 3 million drams, ~\$6,300 USD) and defamation (up to 6 million drams, ~\$12,600 USD).⁴⁴ These changes caused concerns among media organizations about possible financial pressure on the press and increased self-censorship.⁴⁴

In July 2021, criminal liability for "grave insult" was introduced (article 137.1 of the Criminal Code), aimed primarily at public figures, public activists, and journalists.⁴⁴ This article provided for punishment up to 3 months of imprisonment and caused sharp criticism both within the country and from international organizations.⁴⁴ During its validity, more than 800 criminal cases were initiated.⁴⁵ However, under pressure from the public and human rights activists, this article was decriminalized with the adoption of the new Criminal Code, which entered into force on July 1, 2022.⁵ Despite the decriminalization of "grave insult", there remains the possibility of prosecution for insulting statements online under other articles of the Criminal Code, for example, under the article "Hooliganism".¹¹

"Fakes" and disinformation: In Armenia, there is no special law criminalizing the spread of "fake news" or disinformation in general.¹³⁸ However, during the state of emergency introduced in connection with the COVID-19 pandemic (March–April 2020), a temporary ban on publishing information about the virus differing from official was in effect.¹³⁹ In December 2023, the government of Armenia approved the "Concept for Combating Disinformation for 2024–2026".⁵ This document, developed with the participation of civil society, recognizes the threat of disinformation to public trust and national security and proposes a complex of measures,

including strengthening the capacity of state bodies, increasing media literacy of the population, and developing fact-checking mechanisms.³⁹ At the same time, experts express concerns about the necessity of a clear definition of "disinformation" to avoid its use for suppressing criticism and restricting freedom of speech in the implementation of the concept.⁵ The problem of disinformation is also acute in the context of the Armenian-Azerbaijani conflict, where the sides regularly accuse each other of spreading false information.¹⁴⁰

Thus, Armenia's legislative field regarding online statements is dynamic. Although the most controversial norm on criminal liability for "grave insult" was abolished, high civil penalties for defamation and insult, as well as the possibility of applying other articles of the Criminal Code, maintain potential risks for freedom of expression in the internet. The fight against disinformation is designated as a priority but requires a balanced approach to protect both information security and freedom of speech.

3.5. Legislation on Internet Blocks

In Armenia, there is no single law comprehensively regulating the procedure for blocking internet resources. The existing legal norms touching on this issue are fragmented and relate to specific situations. As mentioned (section 3.3), the Law "On Electronic Communications"⁴¹ and the discussed bill on the legal regime of martial law⁵ contain provisions allowing authorities to restrict access to networks and sites during periods of emergency or martial law.

3.5.1. Legislation

The legislation provides for blocking in the following cases:

- Law "On Protection of Personal Data": Provides the data subject with the right to demand blocking of processing their data under certain circumstances (for example, when disputing their accuracy), but this does not concern blocking websites as such.¹⁴¹
- At the end of 2023 – beginning of 2024, amendments were adopted to the laws "On Gambling..." and "On Lotteries", which introduced a mechanism for blocking access to websites of foreign organizers of gambling games and lotteries not having a license in Armenia.⁵ To implement this measure, the creation of a special interdepartmental commission is provided.¹⁴³
- In other cases, content blocking is possible, as a rule, only based on a court decision, for example, when distributing materials containing child pornography, or when violating intellectual property rights.⁵

3.5.2. Blocking Procedures

The legislatively established blocking procedure is clearly prescribed only for the case of unlicensed gambling sites: the blocking decision is made by an interdepartmental commission created by the prime minister.¹⁴³

In other situations, the legal mechanism for blocking is unclear. Cases of blocking access to the TikTok platform and Azerbaijani/Turkish sites during the 2020 and 2022 conflicts occurred without official statements from authorities or providers about legal grounds.⁵ In the case of blocking the Przdnt.am site in December 2022, it was initiated by a letter from the National Security Service (NSS) to the hosting provider with a demand to block the domain name.⁵ This indicates the possibility of extrajudicial blocks at the request of security agencies, whose legal basis is questionable.

The absence of clear, transparent, and legislatively fixed blocking procedures, except for specific cases (gambling, court decision on certain types of content), creates a risk of arbitrary and disproportionate restrictions on access to information.

3.5.3. Registries of Blocked Internet Resources

In Armenia, there is no official, publicly available registry of blocked resources. International sanction lists, such as the OFAC list of the USA¹⁴⁴, may influence the accessibility of resources associated with sanctioned persons or organizations, but this is not a result of the national blocking system. Similarly, lists of goods prohibited for export¹⁴⁵ have no direct relation to blocking websites.

The absence of an official registry of blocked resources hinders public control and monitoring of blocking practices, as well as the possibility of challenging wrongful restrictions on access. Users and resource owners often learn about the block post factum, without understanding its reasons and legal grounds.

Due to the absence of an official registry, information about blocks in Armenia can be obtained mainly from reports of international and local human rights and monitoring organizations, as well as from media messages and users. Specialized unofficial public registries or tools systematically tracking blocks specifically in Armenia were not identified in the analyzed materials.

Projects like OONI (Open Observatory of Network Interference) collect data on censorship using the OONI Probe software. OONI Explorer allows analyzing these data and identifying anomalies indicating possible DNS, TCP/IP, or HTTP blocks. However, at the time of the last

access to OONI Explorer data for Armenia, the volume of collected measurements was insufficient to form a complete picture of blocks.

3.5.4. Development of Blocks

As noted above, until recently, internet resource blocks in Armenia were a rare phenomenon. However, the situation changed during periods of internal political tension and military conflicts.

- **March 2008:** After presidential elections and subsequent protests, opposition news sites and blogs were blocked.¹⁴⁹
- **July 2016:** During the capture of the PPS regiment by police in Yerevan, a short-term Facebook block was observed in some areas of the capital.¹⁴⁹
- **Autumn 2020 (Second Karabakh War):** Users reported problems with access to TikTok. Also, numerous Azerbaijani and Turkish news and government resources with .az and .tr domains were unavailable. The blocks continued for several weeks or even months after the ceasefire.
- **February 2021 (Political crisis):** On the background of the prime minister's statements about an attempted military coup, NetBlocks organization recorded a short-term drop in internet connectivity level to 82% of normal.
- **September 2022 (Border clashes):** TikTok blocks were recorded again, lasting about a week.
- **December 2022:** Block of the Przdnt.am site at the request of NSS.

OONI reports for Armenia, available on their platform, could provide more detailed technical information about the methods and scales of these blocks, however, as indicated in, the volume of data on Armenia is insufficient for a comprehensive analysis.

Conclusion: The practice of blocks in Armenia demonstrates a troubling trend towards using restrictions on access to information during political crises and conflicts, often without clear legal grounds. This contradicts the declared principles of open internet and poses a threat to freedom of speech and access to information. Although in the last reporting period Freedom House (June 2023 – May 2024) no new cases of site or social network blocks were recorded, legislative initiatives and previous precedents indicate the persistence of risks.

4. Human Rights Violations in the Internet

In Armenia, despite overall progress in developing internet infrastructure and high level of internet penetration, during the period from 2019 to 2024, cases of digital human rights violations were recorded. These violations include both technical restrictions on access to

information (shutdowns and blocks) and persecution of citizens and organizations for their online activity. International organizations such as Freedom House and Amnesty International note both positive shifts and persisting problems in this area.

Particular concern is caused by incidents occurring against the background of political tension and military conflicts, when restrictions on digital freedoms are often justified by national security considerations, but may serve as a tool for control over information and suppression of criticism.

4.1. Internet Shutdown by Authorities' Order

The practice of complete internet shutdowns (shutdowns) on a nationwide scale in Armenia is not recorded. However, there were cases of targeted blocking or restriction of access to individual online platforms and resources, especially during periods of conflict escalation with Azerbaijan and internal political tension.

- **October 2020 (Second Karabakh War):** Users in Armenia faced problems with access to the social network TikTok. The state agency "Armenpress" reported disruptions in the application's operation, and some users could not upload or view videos.⁴⁰ Problems with access persisted for several weeks.⁴⁵ Simultaneously, numerous Azerbaijani and Turkish news and government resources with .az and .tr domains were blocked.⁵ Authorities or internet providers did not officially confirm or comment on these blocks.⁴⁰
- **February 2021 (Political crisis):** Against the background of the prime minister's statements about an attempted military coup, the NetBlocks organization recorded a short-term drop in internet connectivity level to 82% of normal.⁶ Although there is no direct indication of intentional shutdown, the incident coincided with a period of acute political instability.
- **September 2022 (Border clashes):** TikTok blocks were recorded again, lasting about a week. The block affected users of different providers.⁵
- **December 2022:** Block of the Przdnt.am site at the request of the NSS.

These cases, although not full shutdowns, demonstrate the readiness of authorities or unidentified actors to interfere in the internet's operation and limit access to information and communication platforms during crisis situations. The lack of transparency and clear legal grounds for such actions causes serious concern from the point of view of compliance with digital rights.⁵⁵

4.2. Criminalization of Statements in the Internet

In Armenia, there were cases of criminal and administrative prosecution of citizens for statements made in the internet, including posts in social networks.

- **Criminal prosecution for "grave insult" (2021–2022):** After introducing article 137.1 of the Criminal Code ("Grave Insult") in July 2021, at least 802 criminal cases were initiated, many of which concerned criticism of Prime Minister Nikol Pashinyan and other officials.⁴⁵ This article provided for punishment up to 3 months of imprisonment.⁴⁴ Although the article was decriminalized in July 2022⁵, the fact of its application caused wide criticism as a tool for suppressing dissent.
- **Prosecution under the article "Hooliganism":** In March 2024, the hosts of the "Imnemnimi" podcast Naarek Samsonyan and Vazgen Saghatelian were detained and arrested for two months.¹¹ They were charged with hooliganism (article 297 of the Criminal Code) for using profane language in addressing the prime minister and other representatives of authority in the broadcast of their program, broadcast online.¹¹ This case demonstrates the possibility of using other articles of the Criminal Code for prosecution for insulting statements in the internet even after decriminalization of the special article.
- **Prosecution for "calls to violence":** In November 2023, activist Samvel Vardanyan was charged with public calls to violence (article 330 of the Criminal Code) due to a post in Facebook, which authorities considered a call to violent actions against police employees during protests.⁵

These cases show that, despite a certain liberalization of legislation (decriminalization of "grave insult"), citizens in Armenia can still face criminal or administrative prosecution for their statements in the internet, especially if they contain sharp criticism of authorities or are perceived as insulting or calling for illegal actions. The vagueness of formulations in some articles of the Criminal Code and the possibility of their broad interpretation create risks for freedom of speech in online space.

4.3. Persecution of Media and NGOs

Mass media and non-governmental organizations (NGOs) in Armenia also faced pressure and persecution in connection with their activity and publications in the internet.

- **Pressure and attacks on journalists:** During periods of political tension, especially during protests in spring 2024, reports were noted of increased pressure and persecutions in relation to journalists covering events.¹¹ The Committee to Protect Freedom of Expression (CPFE) recorded cases of physical violence and other forms of pressure on journalists.⁴² The Union of Journalists of Armenia repeatedly made statements condemning violence and

obstruction of journalists' activities.⁴⁶ Cases were noted of discriminatory treatment of journalists by both representatives of authorities and opposition, depending on the presumed political orientation of the media.¹⁵⁰

- **Strategic lawsuits against public participation (SLAPP):** There is an increase in the number of lawsuits filed against journalists, media, and activists by large companies, state bodies, and politicians on charges of defamation or insult.¹⁵¹ Often such lawsuits have signs of SLAPP – strategic lawsuits aimed not so much at protecting reputation as at intimidation, depletion of resources of defendants, and suppression of criticism.¹⁵¹ For example, in 2024, 70% of lawsuits against media and journalists were filed by subjects with large political or economic resources, including the dominant mining company.¹⁵¹ In 2023, the court froze the assets of journalist David Sargsyan and the publication 168.am in the framework of a civil defamation lawsuit.⁴⁷ The Hetq.am site also faced lawsuits from state structures.¹⁵³
- **Pressure on NGOs:** Although direct examples of NGO persecution specifically for online content are few in the snippets, the overall atmosphere of pressure on civil society is present. Reports were made of an increase in cases of abuses by law enforcement agencies in relation to detainees, including activists.¹⁵⁴ Environmental activists opposing controversial projects (e.g., Amulsar mine) faced lawsuits and media campaigns to discredit them, accusing them of threatening national security.¹¹
- **Use of spyware:** In reports from Citizen Lab and Freedom House, cases were mentioned of targeting journalists, activists, and NGO representatives in Armenia using spyware such as Pegasus and Predator.⁵ This represents a serious threat to the confidentiality of communications and the safety of human rights defenders and journalists.

These facts indicate the presence of challenges for media freedom and NGO activity in Armenia's digital space. The use of SLAPP lawsuits, physical pressure on journalists, and application of spyware create an unfavorable environment for critical journalism and public activity online.

5. Civil Society in the Field of Internet Governance

Civil society in Armenia plays a noticeable role in issues related to internet governance and protection of digital rights. There are a number of organizations actively working in this sphere, promoting principles of open internet, freedom of information, and protection of user rights. The multistakeholder approach to internet governance, officially adopted in the country⁶⁴, assumes the participation of civil society representatives in policy development through such platforms as the Internet Governance Council (IGC)⁶⁴ and the Armenian Internet Governance Forum (ArmlGF).¹⁵⁵

Despite the presence of active organizations and formal mechanisms for participation, civil society faces challenges, including pressure on activists and journalists (see section 4.3), lack of resources, and the need to increase digital literacy of the population for broader public participation in digital policy issues.¹³¹ Cooperation between government and civil society, as in the case of developing the Concept for Combating Disinformation³⁹, shows potential for joint problem-solving, but the effectiveness of such interaction depends on the real readiness of authorities to consider the opinions and recommendations of NGOs.

5.1. Organizations

In Armenia, several key civil society organizations operate, dealing with internet and digital rights issues:

- **"Internet Society" (ISOC Armenia):** Non-governmental organization of internet users, founded in 1994–1995.⁵⁹ Plays a central role in managing national domains .am and .fwj through its AMNIC center.⁵⁷ Is the organizer of the Armenian Internet Governance Forum (ArmlGF) and the School on Internet Governance (ArmSIG).¹⁵⁵ Actively participates in international structures (CENTR, RIPE NCC, ICANN At-Large, APRALO, GFCE).¹⁵⁸ The ISOC Armenia structure also includes CERT.AM, responsible for the security of the Armenian segment of the internet.¹⁵⁷
 - Website: <https://www.isoc.am/>¹⁵⁸
- **Freedom of Information Center of Armenia (FOICA):** Founded by journalists and lawyers in 2001.¹⁵⁹ Mission – promotion of the right to access information and transparency of governance.¹⁵⁹ Works on applying legislation on freedom of information, conducts trainings, monitorings, provides legal assistance, leads strategic court cases.¹⁶⁰ Actively engages in issues of combating disinformation, transparency of beneficial owners, protection of personal data.¹⁵⁹ Participates in the "Open Government Partnership" initiative.¹⁵⁹
 - Website: <https://foi.am/en/>¹⁵⁹
- **Committee to Protect Freedom of Expression (CPFE / Khosq.am):** Journalistic NGO, registered in 2003.¹⁶² Main activity – monitoring the situation with freedom of speech in Armenia, identifying and responding to violations of rights of journalists and media, publishing periodic reports.¹⁶² Provides practical assistance in protecting media rights, including in courts.¹⁶² Actively comments on legislative initiatives and cases of pressure on journalists.⁴⁶
 - Website: <https://khosq.am/en/>¹⁶²
- **Media Diversity Institute - Armenia:** Branch of the international organization MDI.¹⁵⁰ Works on promoting media literacy, combating disinformation, and responsible coverage of diversity issues in media.¹⁶³ Conducts trainings for journalists and activists, works with educational institutions.¹⁶³ Makes statements on freedom of media issues jointly with other organizations.¹⁵⁰
 - Website: <https://mdi.am/en/> (Note: the site was unavailable during check¹⁶⁴)

- **Helsinki Citizens' Assembly – Vanadzor Office (HCAV):** Human rights organization working on a wide range of human rights, including freedom of speech and access to information.¹⁶⁵ Conducts monitoring of human rights violations, provides legal assistance, engages in strategic litigation, including in the ECtHR on cases related to freedom of expression (e.g., Oganeczova v. Armenia case, concerning online statements of LGBT activists¹⁶⁷).¹⁶⁵
 - Website: <https://hcav.am/en/>¹⁶⁶
- **Helsinki Committee of Armenia:** Human rights organization also dealing with issues of freedom of assemblies and expression. Won a case against Armenia in the ECtHR (Helsinki Committee of Armenia v. Armenia) regarding the ban on holding a peaceful march, which is indirectly related to the right to disseminate information.¹⁶⁸
 - Website: <https://www.armhels.org/en/> (Note: the site was unavailable during check¹⁷⁰)

These and other organizations form the ecosystem of civil society that monitors compliance with digital rights, responds to violations, participates in the development of legislation, and contributes to raising public awareness on these issues.

5.2. VPN and Block Bypass Tools

Using VPN (Virtual Private Network) and other tools for anonymization and bypassing blocks in Armenia is not mass and permanent, but interest in them grows during periods of internal political tension or external conflicts, when authorities resort to restricting access to the internet.¹⁴⁹ In general, Armenian legislation does not prohibit or regulate the use of VPN services.¹⁴⁹

The main motivation for using VPN in Armenia is apparently related not so much to bypassing systematic censorship (which, as a rule, is absent⁵), as to overcoming temporary blocks of specific platforms (e.g., TikTok⁴⁰) or with the desire to increase the level of online security and privacy.¹⁷⁴

5.2.1. Status of VPN Services

At the current moment, using VPN in Armenia is legal.¹⁷¹ In Armenia's legislation, there are no special norms that would prohibit or limit the use, advertising, or sale of VPN services.¹⁴⁹ Users can freely download and use VPN applications.¹⁷²

However, the legality of using VPN does not exempt users from responsibility for committing unlawful actions in the internet using these tools (e.g., violation of copyright, access to prohibited content, fraud, etc.).¹⁷⁴ In addition, as mentioned earlier (section 3.3), the bill on the legal regime of martial law provided for the possibility of introducing restrictions on the use of

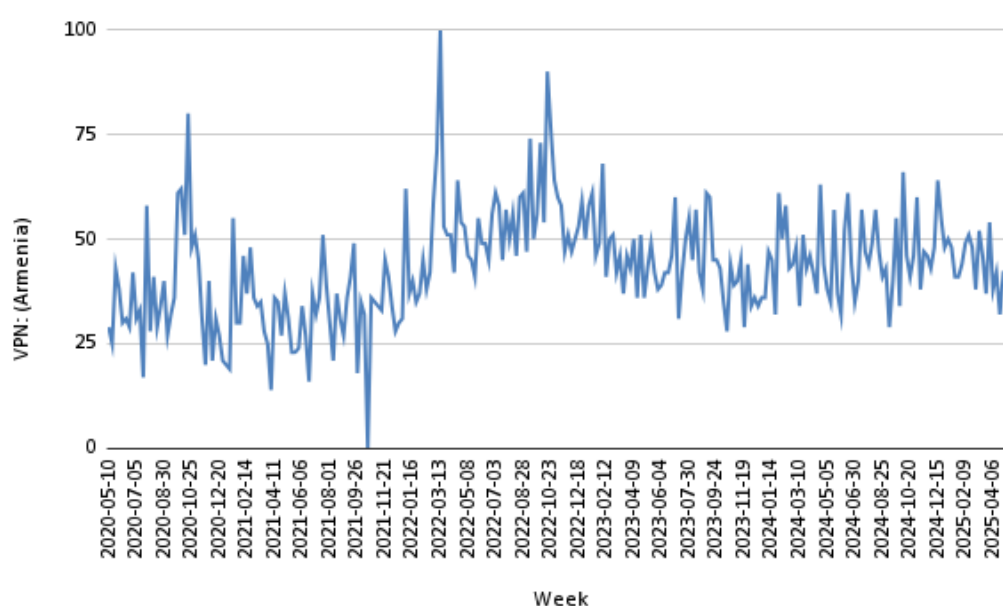
communication means⁵⁶, which theoretically could affect VPN in case of its adoption and introduction of martial law.

5.2.2. Number of VPN Users

Exact statistical data on the number of VPN users in Armenia and the dynamics of their number for 2019–2024 in the analyzed materials were not found.¹⁷⁶ Global studies of the VPN market, such as Global VPN Adoption Index, often do not include Armenia in their samples.¹⁴⁹

Indirect data indicate surges in interest in VPN during periods of blocks. For example, during the block of TikTok and other resources in autumn 2020 and in September 2022, a sharp increase in VPN application downloads was observed.¹⁴⁹ However, the overall level of VPN use in Armenia likely remains relatively low compared to countries with strict internet censorship.¹⁴⁹

Graph 10: Dynamics of Search Queries about VPN in Armenia (2020–2025)



Source: trends.google.com

The graph illustrates the dynamics of interest in VPN services in Armenia from 2020 to 2025. The analysis shows a direct and strong correlation between surges in search queries and periods of military-political tension. The most expressed peaks of interest clearly coincide with the escalation of the conflict in Nagorno-Karabakh: in October 2020, as well as in March and October 2022. This indicates that in moments of situation aggravation, citizens actively seek tools for ensuring the security of their communications, accessing potentially blocked information resources, and preserving digital anonymity.

In addition to peaks related to specific events, the graph traces an important structural change that occurred at the beginning of 2022. From this moment, the base level of interest in VPN significantly increases and stabilizes at a higher mark than in previous years. This shift is likely due not only to regional tension but also to the mass influx to Armenia of relocants from Russia and other countries, for whom using VPN is a habitual practice for access to blocked services in their homeland. Thus, VPN from a tool used predominantly in crisis moments has turned into a more mass and constantly demanded product for a significant part of internet users in Armenia.

Information about targeted blocking of VPN services themselves or protocols in Armenia is absent.⁴⁵

5.2.3. Cases of Persecution for Using VPN

In the available materials, no confirmed cases of direct persecution of citizens or organizations in Armenia exclusively for the fact of using VPN services were found.¹⁷⁴ As noted, the use of VPN itself is legal.¹⁷¹

However, in the report of the Media Diversity Institute¹⁴⁹ it is mentioned that "there have been cases when citizens have been prosecuted for using VPN" ("there have been cases when citizens have been prosecuted for using VPNs"). Unfortunately, the report does not provide specific details of these cases, circumstances, or legal grounds for prosecution. Possibly, it refers to situations where VPN was used for committing other offenses, or to an incorrect interpretation of authorities' actions. Without additional data, it is difficult to assess the credibility and context of these statements.

5.2.4. Block Monitoring

Systematic monitoring of internet blocks in Armenia is carried out within global projects, as well as by local civil society organizations.

- **OONI (Open Observatory of Network Interference):** Global initiative collecting data on censorship using OONI Probe software. The OONI Explorer platform allows analyzing these data by countries, including Armenia.¹⁴⁷ However, as noted, the volume of data on Armenia may be insufficient for a full picture.¹⁴⁷

- Website: <https://ooni.org/>, <https://explorer.ooni.org/country/AM>¹⁴⁷

- **Freedom House (Freedom on the Net):** Annual report analyzing the state of internet freedom in different countries, including Armenia. Reports contain information on cases of blocks, legislative changes, and violations of user rights.⁵

- Website: <https://freedomhouse.org/report/freedom-net>

- **NetBlocks:** Organization tracking failures and shutdowns in the internet worldwide in real time. Published reports on failures and restrictions in Armenia.⁶
 - Website: <https://netblocks.org/>
- **Access Now (#KeepItOn):** Global campaign against internet shutdowns. Collects data and publishes reports on shutdown cases worldwide.⁵⁶
 - Website: <https://www.accessnow.org/keepiton/>¹⁸⁶
- **Local organizations:** Committee to Protect Freedom of Expression (CPFE)¹⁶², Freedom of Information Center (FOICA)¹⁵⁹, Media Diversity Institute - Armenia¹⁵⁰, HCA-Vanadzor¹⁶⁵ and other local NGOs also monitor the situation with freedom of speech and internet, publishing reports and statements on violations.

Digest of messages about blocks (2019–2024):

- **2019:** No messages about significant blocks found.
- **2020:** Block of TikTok and sites .az/.tr during the Second Karabakh War (autumn).⁵ Temporary restrictions on publishing unofficial information about COVID-19 (March–April).¹³⁹
- **2021:** Short-term internet connectivity failure on the background of political crisis (February), cause unclear.⁶
- **2022:** TikTok block during border clashes (September).⁵ Block of Przdnt.am site at the request of NSS (December).⁵
- **2023:** No new cases of site or social network blocks recorded in the Freedom House report.⁴¹ Beginning of discussion of legislation on blocking gambling sites.⁵
- **2024:** No new cases of site or social network blocks recorded in the Freedom House report.⁵ Temporary failures in internet operation due to problems with external channels (January).⁵

Monitoring shows that blocks in Armenia have rather a situational character, tied to periods of conflicts or political instability, and are not a constant practice of censorship. However, the fact of their application without clear legal grounds causes concern.

6. Conclusion

The analysis of the state of the internet and digital rights in Armenia for the period from 2019 to 2025 reveals a complex and contradictory picture. On the one hand, the country demonstrates significant progress in developing digital infrastructure: high level of mobile internet penetration⁵, almost full coverage with 4G+ networks⁵, growth in access speeds⁶⁶, and internationally recognized affordability of internet by price.⁹⁵ The ICT sector is developing dynamically and becoming an important part of the economy.¹⁹ Principles of internet governance have been adopted in the country, corresponding to international standards and

promoting a multistakeholder approach⁶⁴, and market regulation in general contributes to competition, although the actual market structure remains oligopolistic.⁵ Civil society actively operates, dealing with digital rights and freedom of information issues.¹⁵⁰

On the other hand, there are serious challenges and risks for compliance with human rights in the digital environment. The geographical and geopolitical vulnerability of the country creates risks for the stability of internet infrastructure.⁴ Legislation provides authorities with broad and insufficiently clearly defined powers to restrict access to the internet and content in conditions of emergency or martial law.⁴¹ There were cases of actual blocks of online platforms during conflicts, carried out without transparent procedures and legal grounds.⁵ Legislation on responsibility for online statements, despite decriminalization of "grave insult", maintains risks for freedom of speech due to high civil fines and the possibility of applying other articles of the Criminal Code.⁵ Cases were recorded of persecution of journalists and activists for their online activity, including the use of SLAPP lawsuits and spyware.¹¹ Implementation of modern technologies, such as IPv6, is lagging.¹¹¹

Forecast of events development:

- **Neutral scenario:** Preservation of current trends. Slow improvement of infrastructure and access speeds. The level of internet penetration will remain high, but the digital divide between the capital and regions will shrink slowly. Legislation will develop fragmentarily, preserving both liberal norms and provisions allowing restrictions on rights in certain situations. The practice of blocks and persecutions for online statements will remain situational, depending on political conjuncture and level of tension in the region. Civil society will continue its work, but its influence on decision-making will be limited.
- **Positive scenario (liberalization):** Accelerated development of digital infrastructure, including widespread implementation of 5G and IPv6, possibly with the support of international partners and investments. Strengthening legislative guarantees of digital rights, bringing norms on emergency/martial law in line with international standards (principle of necessity and proportionality), refusal of extrajudicial blocks. Reduction of pressure on media and activists, effective investigation of cases of attacks and use of spyware. Strengthening the role of multistakeholder platforms in internet governance. Increasing digital literacy and reducing the digital divide. This scenario is possible under conditions of political stability, successful continuation of democratic reforms, and deepening cooperation with the EU and other democratic partners.¹⁰
- **Negative scenario (strengthening of censorship and control):** Strengthening state control over the internet under the pretext of fighting disinformation, protecting national security, or in connection with escalation of regional conflicts. Adoption of restrictive laws (e.g., on martial law in its original edition⁵⁵), expanding the powers of authorities for content blocking and surveillance. Increased cases of internet resource and social network blocks.

Strengthening persecution for critical statements in the internet, including using legislation on defamation/insult or other articles of the Criminal Code. Further pressure on independent media and NGOs working in the digital sphere. Restriction on the use of VPN and anonymization tools. This scenario may be realized in case of growth in political instability, escalation of conflict with Azerbaijan, or strengthening of authoritarian tendencies in internal politics.

In general, the future of digital rights in Armenia will depend on the ability of authorities and society to find a balance between the necessity of ensuring security and development, on the one hand, and protecting fundamental rights and freedoms in online space, on the other.

Sources

1. Geography of Armenia - Wikipedia, accessed: May 8, 2025, https://en.wikipedia.org/wiki/Geography_of_Armenia
2. Geography of Armenia — Wikipedia, accessed: May 8, 2025, https://ru.wikipedia.org/wiki/%D0%93%D0%B5%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D0%B8%D1%8F_%D0%90%D1%80%D0%BC%D0%B5%D0%BD%D0%B8%D0%B8
3. Economy of Armenia — Wikipedia, accessed: May 8, 2025, https://ru.wikipedia.org/wiki/%D0%AD%D0%BA%D0%BE%D0%BD%D0%BE%D0%BC%D0%B8%D0%BA%D0%B0_%D0%90%D1%80%D0%BC%D0%B5%D0%BD%D0%B8%D0%B8
4. Starlink arrives in Armenia: backup internet for mountainous regions and military, accessed: May 8, 2025, <https://jam-news.net/starlink-arrives-in-armenia-backup-internet-for-mountainous-regions-and-military/>
5. Armenia: Freedom on the Net 2024 Country Report, accessed: May 8, 2025, <https://freedomhouse.org/country/armenia/freedom-net/2024>
6. Internet disrupted in Armenia amid political turmoil and alleged coup attempt - NetBlocks, accessed: May 8, 2025, <https://netblocks.org/reports/internet-disrupted-in-armenia-amid-political-turmoil-and-alleged-coup-attempt-18lpVL8a>
7. ARMENIA – POVERTY SNAPSHOT OVER 2020–2023, accessed: May 8, 2025, https://ophi.org.uk/sites/default/files/2025-03/Armenia_Poverty_Snapshot_over_2020–2023.pdf

8. Key policy developments in education, training and employment – Armenia 2023 - ETF (europa.eu), accessed: May 8, 2025, https://www.etf.europa.eu/sites/default/files/2024-01/Country%20Fiche_Armenia_2023_EN_web.pdf
9. Population of Armenia — Wikipedia, accessed: May 8, 2025, https://ru.wikipedia.org/wiki/Население_Армении
10. Armenia: Freedom in the World 2025 Country Report, accessed: May 8, 2025, <https://freedomhouse.org/country/armenia/freedom-world/2025>
11. Human Rights in Armenia - Amnesty International, accessed: May 8, 2025, <https://www.amnesty.org/en/location/europe-and-central-asia/eastern-europe-and-central-asia/armenia/report-armenia/>
12. Armenia Population (2025) - Worldometer, accessed: May 8, 2025, <https://www.worldometers.info/world-population/armenia-population/>
13. Armenia Population, 1989 – 2025 | CEIC Data, accessed: May 8, 2025, <https://www.ceicdata.com/en/indicator/armenia/population>
14. Armenia - World Bank Open Data, accessed: May 8, 2025, <https://data.worldbank.org/country/armenia>
15. Հայաստանի մշտական բնակչության ..., accessed: May 8, 2025, <https://factor.am/865196.html>
16. Armenia Overview: Development news, research, data | World Bank, accessed: May 8, 2025, <https://www.worldbank.org/en/country/armenia/overview>
17. Number of internet users in Armenia increased by 6.7% in 2019, exceeding 3 million. - Finport.am, accessed: May 8, 2025, https://finport.am/full_news.php?id=53059&lang=2
18. Economy of Armenia - Wikipedia, accessed: May 8, 2025, https://en.wikipedia.org/wiki/Economy_of_Armenia
19. Armenia Country Strategy - 2025-2030 - EBRD, accessed: May 8, 2025, <https://www.ebrd.com/armenia-country-strategy-20252030.pdf>
20. Armenia Real GDP 2024 Estimate and 2025 Projection - World Economics, accessed: May 8, 2025, <https://www.worldeconomics.com/GrossDomesticProduct/Real-GDP/Armenia.aspx>
21. Country Profile - amaWebClient - UN Statistics Division, accessed: May 8, 2025, <https://unstats.un.org/unsd/snaama/CountryProfile?ccode=51>
22. 2024 Investment Climate Statements: Armenia, accessed: May 8, 2025, <https://www.state.gov/reports/2024-investment-climate-statements/armenia/>
23. IMF Staff Reaches Staff Level Agreement with Armenia on the Fifth Review of the Stand-By Arrangement - International Monetary Fund (IMF), accessed: May 8, 2025, <https://www.imf.org/en/News/Articles/2025/04/24/pr25121-armenia-imf-staff-reaches-staff-level-agreement-fifth-review-stand-by-arrangement>

24. World Economic Outlook (April 2025) – GDP, current prices, accessed: May 8, 2025, <https://www.imf.org/external/datamapper/NGDPD@WEO/OEMDC/ADVEC/WEOWORLD>
25. Armenia GDP 1990–2025 | MacroTrends, accessed: May 8, 2025, <https://www.macrotrends.net/global-metrics/countries/ARM/armenia/gdp-gross-domestic-product>
26. World Development Indicators | DataBank, accessed: May 8, 2025, <https://databank.worldbank.org/reports.aspx?source=2&series=NY.GDP.MKTP.CD>
27. Armenia – GDP | 1990–2023 Data | 2024–2025 forecast, accessed: May 8, 2025, <https://ru.tradingeconomics.com/armenia/gdp>
28. Հայաստանի տնտեսություն – Վիքիպեդիա, accessed: May 8, 2025, https://hy.wikipedia.org/wiki/Հայաստանի_տնտեսություն
29. Armenia – GDP Per Capita – 2025 Data 2026 Forecast 1990–2023 Historical, accessed: May 8, 2025, <https://tradingeconomics.com/armenia/gdp-per-capita-us-dollar-wb-data.html>
30. ԱԶԲ-ն կանխատեսում է, որ 2025 թվականին Հայաստանի ՀՆԱ աճը կկազմի 6.0%, accessed: May 8, 2025, <https://banks.am/am/news/newsfeed/28205>
31. World Economic Outlook (October 2024) – Real GDP growth, accessed: May 8, 2025, https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/ARM?year=2025
32. IMF 2025 Data for Economy of Georgia, Armenia, Azerbaijan. (GDP Capita, PPP...) – Reddit, accessed: May 8, 2025, https://www.reddit.com/r/armenia/comments/1k87n62/imf_2025_data_for_economy_of_georgia_armenia/
33. ANALYSIS OF THE STRUCTURE OF ARMENIA'S ECONOMY: KEY DEVELOPMENT TRENDS
Text of scientific article on specialty – CyberLeninka, accessed: May 8, 2025, <https://cyberleninka.ru/article/n/analiz-struktury-ekonomiki-armenii-klyuchevye-trendy-razvitiya>
34. The Country Climate and Development Report for Armenia – World Bank, accessed: May 8, 2025, <https://www.worldbank.org/en/country/armenia/publication/the-country-climate-and-development-report-for-armenia>
35. Armenia government structure and political parties. – CountryReports.org, accessed: May 8, 2025, <https://www.countryreports.org/country/Armenia/government.htm>
36. Armenia – The World Factbook – CIA, accessed: May 8, 2025, <https://www.cia.gov/the-world-factbook/countries/armenia/>
37. Political system of Armenia — Wikipedia, accessed: May 8, 2025, https://ru.wikipedia.org/wiki/Политическая_система_Армении
38. Political parties of Armenia – Wikipedia, accessed: May 8, 2025, https://ru.wikipedia.org/wiki/Политические_партии_Армении

39. How Armenia is Strengthening Information Integrity - Open Government Partnership, accessed: May 8, 2025, <https://www.opengovpartnership.org/armenia-information-integrity-story/>
40. Armenia: Freedom on the Net 2021 Country Report, accessed: May 8, 2025, <https://freedomhouse.org/country/armenia/freedom-net/2021>
41. Armenia: Freedom on the Net 2023 Country Report, accessed: May 8, 2025, <https://freedomhouse.org/country/armenia/freedom-net/2023>
42. Armenia Has Improved Its Internet Freedom Score By 2 Points: Freedom House - media.am, accessed: May 8, 2025, <https://media.am/en/newsroom/2024/10/22/40818/>
43. MFA of Armenia published the text of the Statute on strategic partnership signed by Armenia and the USA - ARMENPRESS Armenian News Agency, accessed: May 8, 2025, <https://armenpress.am/ru/article/1209504>
44. As Armenia legislates libel and insult, journalists worry 'selective justice' will be used against the press, accessed: May 8, 2025, <https://cpj.org/2022/01/as-armenia-legislates-libel-and-insult-journalists-worry-selective-justice-will-be-used-against-the-press/>
45. Armenia: Freedom on the Net 2022 Country Report, accessed: May 8, 2025, <https://freedomhouse.org/country/armenia/freedom-net/2022>
46. Condemning attacks and persecutions against journalist Ani Gevorgyan, accessed: May 8, 2025, <https://uaj.am/ru/6062.html>
47. In Armenia, the court decided to freeze the assets of journalist David Sargsyan and the publication 168.am - Committee to Protect Journalists, accessed: May 8, 2025, <https://cpj.org/ru/2023/06/%D0%B2-%D0%B0%D1%80%D0%BC%D0%B5%D0%BD%D0%B8%D0%B8-%D1%81%D1%83%D0%B4-%D0%BF%D0%BE%D1%81%D1%82%D0%B0%D0%BD%D0%BE%D0%B2%D0%B8%D0%BB-%D0%B7%D0%B0%D0%BC%D0%BE%D1%80%D0%BE%D0%B7%D0%B8%D1%82%D1%8C-%D0%B0/>
48. www.google.com, accessed: May 8, 2025, <https://www.google.com/search?q=administrative+division+of+Armenia>
49. About: Administrative divisions of Armenia - DBpedia, accessed: May 8, 2025, https://dbpedia.org/page/Administrative_divisions_of_Armenia
50. Administrative-territorial division of Armenia ..., accessed: May 8, 2025, https://ru.wikipedia.org/wiki/Административно-территориальное_деление_Армении
51. Administrative-territorial division ... - parliament.am, accessed: May 8, 2025, <http://www.parliament.am/legislation.php?sel=show&ID=2243&lang=rus>
52. Հայաստանի վարչական բաժանում - Վիքիպեդիա, accessed: May 8, 2025, https://hy.wikipedia.org/wiki/Հայաստանի_վարչական_բաժանում
53. ՀՀ վարչատարածքային կառուցվածքը — դաս: Աշխարհագրություն, 9-րդ դասարան., accessed: May 8, 2025, <https://www.imdproc.am/p/ashkharhagrutyun/9-dasaran/hayastani-hanrapetutyun-yndhanur-a>

knark-29727/hh-sahmannery-ashkharhagrakan-dirgy-varchataratsqayin-karucvatsqy-29728/re-16c2c659-746e-4dbb-84aa-bc758a1bf6c5

54. Reports Archives - NetBlocks, accessed: May 8, 2025, <https://netblocks.org/reports>

55. State of Emergency Archives - Բազմակողմանի տեղեկատվության ինստիտուտ, accessed: May 8, 2025, <https://mdi.am/en/archives/tag/state-of-emergency>

56. Armenian law must prohibit internet shutdowns, not enshrine them - Access Now, accessed: May 8, 2025,

<https://www.accessnow.org/press-release/armenian-law-must-prohibit-internet-shutdowns/>

57. .am - ICANNWiki, accessed: May 8, 2025, <https://icannwiki.org/.am>

58. .am - Wikipedia, accessed: May 8, 2025, <https://en.wikipedia.org/wiki/.am>

59. AM NIC - ICANNWiki, accessed: May 8, 2025, https://icannwiki.org/AM_NIC

60. .am Domain Delegation Data, accessed: May 8, 2025,

<https://www.iana.org/domains/root/db/am.html>

61. From Estate to Online Space: The Origins of the Word "Domain" - Internet Society NGO, accessed: May 8, 2025,

<https://www.isoc.am/from-estate-to-online-space-the-origins-of-the-word-domain/>

62. am - Wikipedia, accessed: May 8, 2025, <https://ru.wikipedia.org/wiki/.am>

63. .AM ccTLD - Globalr.com, accessed: May 8, 2025, <https://globalr.com/am>

64. POTENTIAL MODELS OF INTERNET GOVERNANCE AND ARMENIA'S APPROACHES, accessed: May 8, 2025,

http://www.noravank.am/eng/articles/security/detail.php?ELEMENT_ID=13372

65. Technology in European Neighbourhood East countries - Statistics Explained, accessed: May 8, 2025,

https://ec.europa.eu/eurostat/statistics-explained/index.php/Technology_in_European_Neighbourhood_East_countries

66. Digital 2025: Armenia — DataReportal — Global Digital Insights, accessed: May 8, 2025, <https://datareportal.com/reports/digital-2025-armenia>

67. Digital 2024: Armenia — DataReportal — Global Digital Insights, accessed: May 8, 2025, <https://datareportal.com/reports/digital-2024-armenia>

68. Number of internet users in Armenia increased by 6.7% in 2019, exceeding 3 million., accessed: May 8, 2025,

https://arkatelecom.am/news/internet/chislo_internet_polzovateley_v_armenii_uvelichilos_na_6_7_v_2019_godu_prevysiv_3 mln_/

69. Armenia ranked among countries with free internet: Freedom House - 1Lurer, accessed: May 8, 2025,

<https://www.1lurer.am/en/2024/10/16/Armenia-ranked-among-countries-with-free-internet-Freedom-House/1204891>

70. Mapping The Online Media Market in Armenia, accessed: May 8, 2025, <https://mdi.am/wp-content/uploads/2017/08/2016-Mapping-The-Online-Media-Market-in-Armenia.pdf>
71. The number of Team mobile subscribers is over 1 million, accessed: May 8, 2025, <https://www.telecomarmenia.am/en/news/2024/03/13/the-number-of-team-mobile-subscribers-is-over-1-million/992/>
72. accessed: January 1, 1970, https://www.psrc.am/images/docs/nerqin_texekatvutyun/Hashvetvutyunner/2023/Gorconeutyun_hashvetvutyun_2023.pdf
73. Who owns the internet in Armenia - Hetq.am, accessed: May 8, 2025, <https://hetq.am/ru/article/62887>
74. 95% of Broadband Internet Market in Armenia Controlled by 5 Companies - Hetq.am, accessed: May 8, 2025, <https://hetq.am/eng/news/72097/95-of-broadband-internet-market-in-armenia-controlled-by-5-companies.html>
75. “Ucom” CJSC Report on the Main Economic and Technical Indicators of Mobile Services for 2024 3rd Q, accessed: May 8, 2025, https://old.ucom.am/file_manager/Report%202024/Mobile%2024-3%20eng.pdf
76. Calix Powers Armenia's Growth in Fiber Services Delivered by Ucom, accessed: May 8, 2025, <https://investor-relations.calix.com/news-releases/news-release-details/calix-powers-armenias-growth-fiber-services-delivered-ucm?mobile=1&mobile=1&mobile=1&mobile=1>
77. Հայաստանի հանրապետության ..., accessed: May 8, 2025, <https://psrc.am/>
78. VIVA 2023 Annual Report, accessed: May 8, 2025, https://www.viva.am/docs/default-source/annual-report/viva-2023-annual-report.pdf?sfvrsn=e208d320_1
79. Armenia data - ITU DataHub, accessed: May 8, 2025, <https://datahub.itu.int/data/?e=ARM&Markets=Market+structure&Connectivity=Use&Trust=Trust&Affordability=Broadband+services+pricing&Sustainability=Environment+%26+e-waste>
80. Armenia data - ITU DataHub, accessed: May 8, 2025, <https://datahub.itu.int/data/?e=ARM&Markets=Market+structure&Connectivity=Use&Trust=Counterfeit&Affordability=Broadband+services+pricing&Sustainability=Emergency+telecommunications&Governance=ICT+Regulator>
81. Armenia Internet Resilience Rebounds: Internet Society Pulse Country Report 2024, accessed: May 8, 2025, <https://www.isoc.am/armenia-internet-resilience-rebounds-internet-society-pulse-country-report-2024/>

82. Telecom Armenia Sustainability-Linked Bond Project: FAST Report – Asian Development Bank, accessed: May 8, 2025, <https://www.adb.org/sites/default/files/project-documents/58380/58380-001-fast-en.pdf>
83. Pioneering a Sustainable Digital Transformation in Armenia, accessed: May 8, 2025, <https://www.ifc.org/en/stories/2025/pioneering-a-sustainable-digital-transformation-in-armenia>
84. Communications in Armenia – Wikipedia, accessed: May 8, 2025, https://ru.wikipedia.org/wiki/Связь_в_Армении
85. MTS (telecommunications) – Wikipedia, accessed: May 8, 2025, [https://en.wikipedia.org/wiki/MTS_\(telecommunications\)](https://en.wikipedia.org/wiki/MTS_(telecommunications))
86. Viva | Mobile communication, internet ..., accessed: May 8, 2025, <https://www.mts.am/>
87. The largest telecommunications operator in Armenia OJSC "Telecom Armenia" goes public | Finport.am, accessed: May 8, 2025, https://finport.am/full_news.php?id=48320
88. Team, accessed: May 8, 2025, <https://www.telecomarmenia.am/>
89. Results and reporting | Team, accessed: May 8, 2025, <https://www.telecomarmenia.am/en/results-reporting/>
90. accessed: January 1, 1970, <https://www.ucom.am/>
91. accessed: January 1, 1970, <https://www.ucom.am/en/about/reports/>
92. Armenia's Mobile and Broadband Internet Speeds – Speedtest ..., accessed: May 8, 2025, <https://www.speedtest.net/global-index/armenia>
93. Armenia ranks 81st in global mobile Internet speed, lagging behind neighbors, accessed: May 8, 2025, https://arkatelecom.am/en/news/internet/armenia_ranks_81st_in_global_mobile_internet_speed_lagging_behind_neighbors/
94. Armenia is behind Azerbaijan and Georgia by mobile Internet speed – Telecom.arka.am, accessed: May 8, 2025, https://arkatelecom.am/en/news/internet/armenia_is_behind_azerbaijan_and_georgia_by_mobile_internet_speed/
95. Armenian internet occupies 2nd place in the world in accessibility according to Digital Quality of Life Index 2022 – Invest In Armenia Platform, accessed: May 8, 2025, <https://investin.am/ru/news/armenian-internet-is-the-2nd-in-the-world-in-terms-of-accessibility-according-to-the-digital-quality-of-life-index-2022/>
96. Armenia ups 62 notches in Digital Quality of Life Index 2022 – Telecom.arka.am, accessed: May 8, 2025, https://arkatelecom.am/en/news/internet/armenia_ups_62_notches_in_digital_quality_of_life_index_2022/
97. Armenia ups 62 notches in Digital Quality of Life Index 2022 – Telecom, accessed: May 8, 2025,

https://telecom.arka.am/en/news/internet/armenia_ups_62_notches_in_digital_quality_of_life_in_dex_2022/

98. accessed: January 1, 1970, <https://surfshark.com/dql2023/country/armenia>
99. accessed: January 1, 1970, <https://surfshark.com/dql2024>
100. Armenia - Network Readiness Index, accessed: May 8, 2025, <https://download.networkreadinessindex.org/reports/countries/2023/armenia.pdf>
101. Armenia - Network Readiness Index, accessed: May 8, 2025, <https://download.networkreadinessindex.org/reports/countries/2024/armenia.pdf>
102. Բարձր տեխնոլոգիական արդյունաբերության նախարարություն - infocom.am, accessed: May 8, 2025, <https://infocom.am/hy/Infotags/infotag?i=509>
103. RIPEstat - RIPE NCC, accessed: May 8, 2025, <https://www.ripe.net/publications/ipv6-info-centre/statistics-and-tools/ripestat/>
104. Member Lunches 2019 - RIPE NCC, accessed: May 8, 2025, <https://www.ripe.net/membership/member-support/member-lunches/member-lunches-2019/>
105. List of Country Codes in the RIPE NCC Region | The Number Resource Organization, accessed: May 8, 2025, <https://www.nro.net/list-of-country-codes-in-the-ripe-ncc-region/>
106. List of Country Codes and RIRs - RIPE NCC, accessed: May 8, 2025, <https://www.ripe.net/community/internet-governance/internet-technical-community/the-rir-system/list-of-country-codes-and-rirs/>
107. Kingdom of Armenia (antiquity) - Wikipedia, accessed: May 8, 2025, [https://en.wikipedia.org/wiki/Kingdom_of_Armenia_\(antiquity\)](https://en.wikipedia.org/wiki/Kingdom_of_Armenia_(antiquity))
108. Routing History - RIPEstat, accessed: May 8, 2025, <https://stat.ripe.net/widget/routing-history>
109. accessed: January 1, 1970, <https://stat.ripe.net/country/AM#tabId=routing>
110. EXTRACT from the Session Protocol No 34 as of 14th of August 2014 of the Government of the RA 12. On Approving the Principles, accessed: May 8, 2025, https://igc.am/wp-content/uploads/2022/03/IG_Principles_EN.pdf
111. IPv6 Measurement Maps - APNIC Labs, accessed: May 8, 2025, <https://labs.apnic.net/ipv6-measurement/>
112. IPv6 Per-Country Deployment for AS215416: MAGNET, Armenia (AM), accessed: May 8, 2025, <https://stats.labs.apnic.net/ipv6/AS215416?c=AM&p=1&v=1&w=60&x=1>
113. IPv6 Per-Country Deployment for AS42688: ARCA, Armenia (AM), accessed: May 8, 2025, <https://stats.labs.apnic.net/ipv6/AS42688?c=AM&p=1&v=1&w=60&x=1>
114. IPv6 Capability Reaches 50% in the APNIC Region – What It Means for You, accessed: May 8, 2025, <https://blog.hosteons.com/2025/04/24/ipv6-capability-reaches-50-in-the-apnic-region-what-it-means-for-you/>
115. Statistics per country - 6lab IPv6 website, accessed: May 8, 2025, <https://6lab.cisco.com/stats/search.php>

116. Use of IPv6 for Armenia (AM) - IPv6 Capability Metrics, accessed: May 8, 2025, <https://stats.labs.apnic.net/ipv6/AM>
117. accessed: January 1, 1970, <https://data1.labs.apnic.net/v6stats/v6economy/AM.json>
118. ՀՀ Ինտերնետ կառավարման համաժողով ..., accessed: May 8, 2025, <https://igc.am/>
119. Armenia | Digital Watch Observatory, accessed: May 8, 2025, <https://dig.watch/countries/armenia>
120. Совет по управлению Интернетом | ash, accessed: May 8, 2025, <https://igc.am/ru/главная/>
121. LAW OF THE REPUBLIC OF ARMENIA ON ELECTRONIC COMMUNICATIONS CHAPTER 1 INTRODUCTION - Arlis, accessed: May 8, 2025, https://www.arlis.am/Annexes/4/elektr_com_en.pdf
122. Law of the Republic of Armenia on Protection of Economic Competition, accessed: May 8, 2025, <https://aipo.am/en/pages/show/TMPP>
123. закон ра об электронной связи - Arlis, accessed: May 8, 2025, <https://www.arlis.am/documentview.aspx?docid=82221>
124. accessed: January 1, 1970, <https://www.arlis.am/DocumentView.aspx?docid=155789>
125. ՀԾԿՀ - infocom.am, accessed: May 8, 2025, <https://infocom.am/hy/Infotags/infotag?i=305>
126. accessed: January 1, 1970, <https://www.psrc.am/am>
127. հանրային ծառայությունները կարգավորող հանձնաժողով, accessed: May 8, 2025, https://erranet.org/wp-content/uploads/2024/07/Armenia_PSRC_Annual_Report_2023_in_Armenian.pdf
128. Ministry of High-Tech Industry of the Republic of Armenia, accessed: May 8, 2025, <https://hightech.gov.am/en/>
129. accessed: January 1, 1970, <https://hti.am/en>
130. Հայաստանի Հանրապետության Բարձր ..., accessed: May 8, 2025, <https://hti.am/>
131. DIGITAL CONNECTIVITY - UN in Armenia, accessed: May 8, 2025, https://armenia.un.org/sites/default/files/2025-02/UN_Armenia_DigitalConnectivity_2025_F.pdf
132. Structure, accessed: May 8, 2025, <https://hightech.gov.am/en/ministry/structure>
133. Ministry of High-Tech Industry of the Republic of Armenia - Government - Structure - Government of the Republic of Armenia, accessed: May 8, 2025, <https://www.gov.am/ru/structure/277/>
134. Law of the Republic of Armenia on Protection of Economic Competition, accessed: May 8, 2025, <https://aipo.am/en/pages/show/TMPP>
135. տնտեսական մրցակցության պաշտպանության մասին - Arlis, accessed: May 8, 2025, <https://www.arlis.am/documentview.aspx?docid=151201>
136. О внесении дополнений в Закон Республики Армения «О правовом режиме чрезвычайного положения - Legislation: National Assembly of RA, accessed: May 8, 2025, <http://www.parliament.am/legislation.php?sel=show&ID=7048&lang=rus>

137. О внесении изменений и дополнений в Гражданский кодекс Республики Армения - Legislation: National Assembly of RA, accessed: May 8, 2025, <http://www.parliament.am/legislation.php?sel=show&ID=3849&lang=rus>
138. ՀՀ Կոնսტიտուցիոն օրենսդրության մասին օրենքի մասին - Arlis, accessed: May 8, 2025, <https://www.arlis.am/documentview.aspx?docid=62084>
139. Armenia: Freedom on the Net 2020 Country Report, accessed: May 8, 2025, <https://freedomhouse.org/country/armenia/freedom-net/2020>
140. Amid Azerbaijani fake news campaign, Armenia reiterates offer to launch joint investigative mechanism, accessed: May 8, 2025, <https://armenpress.am/en/article/1216781>
141. Armenia Data Protection Law: Your Ultimate Guide to Privacy and Compliance for Armenia, accessed: May 8, 2025, <https://captaincompliance.com/education/armenia-data-protection-law/>
142. Закон РА «О защите личных данных» - Arlis, accessed: May 8, 2025, <https://www.arlis.am/documentview.aspx?docid=114851>
143. «ՕՏԱՐԵԿՐՅԱ ՊԵՏՈՒԹՅՈՒՆՆԵՐՈՒՄ ԿԱԶՄԱԿԵՐՊԱԾ ԵՎ ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ ՕՐԵՆՍԴՐՈՒԹՅԱՄԲ ՍԱՀՄԱՆՎԱԾ ՀԱՄԱՊԱՏԱՍԽԱՆ ԼԻՑԵՆԶԻԱ ԶՈՒՆԵՑՈՂ ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆՆԵՐԻ ԿՈՂՄԻՑ ԿԱԶՄԱԿԵՐՊԱԾ ԻՆՏԵՐՆԵՏ ՇԱՀՈՒՄՈՎ ԽԱՂԵՐԻ ԵՎ ՎԻՃԱԿԱԽԱՂԵՐԻ ԱՐԳԵԼԱՓԱԿՄԱՆ ԵՆԹԱԿԱ ԿԱՅԹԵՐԸ ԲԱՑԱՀԱՅՏՈՂ ՄԻՋԳԵՐԱՏԵՍՉԱԿԱՆ ՀԱՆՁՆԱԺՈՂՈՎԻ ԱՆՀԱՏԱԿԱՆ ԿԱԶՄԸ ԵՎ ԱՇԽԱՏԱԿԱՐԳԸ ՀԱՍՏԱՏԵԼՈՒ ՄԱՍԻՆ» ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ ՎԱՐՉԱՊԵՏԻ ՈՐՈՇՈՒՄ - e-draft.am, accessed: May 8, 2025, <https://www.e-draft.am/projects/7346/about>
144. Sanctions List Search, accessed: May 8, 2025, <https://sanctionssearch.ofac.treas.gov/>
145. Prohibitions and restrictions under resolutions 311, 312, 313 - Alta-Soft, accessed: May 8, 2025, https://www.alta.ru/tnved/forbidden_export/
146. "Frequently Asked Questions" (FAQ) | OONI - Open Observatory of Network Interference, accessed: May 8, 2025, <https://ooni.org/ru/support/faq/>
147. Internet Censorship in Armenia - OONI Explorer, accessed: May 8, 2025, <https://explorer.ooni.org/country/AM>
148. Freedom of the internet in Armenia in 2021, accessed: May 8, 2025, <https://mdi.am/ru/archives/1387>
149. anonymity problems in armenia: the extent and consequences of using vpns and other similar tools, accessed: May 8, 2025, https://mdi.am/wp-content/uploads/2023/06/Issues_of_Anonymity_and_VPN_Use_In_Armenia_ENG.pdf
150. STATEMENT – ԽԱՊԿ/CPFE/K3CC, accessed: May 8, 2025, <https://khosq.am/en/2025/03/21/statement-129/>
110. IDC Opinion on “Strategic Lawsuits against Public Participation (SLAPP)” Legal Proceedings in Armenia - FOICA — Freedom of Information Center of Armenia -

հնֆորմացիայի ազատության կենտրոն, accessed: May 8, 2025,

<https://foi.am/en/information-dispute-council/37606>

151. Ինչպես խուսափել դատական հայցերից և այլ իրավական վտանգներից. ուղեցույց լրագրողների համար – Hetq.am, accessed: May 8, 2025, <https://hetq.am/hy/article/158793>

152. Հայաստանում շարունակվում է SLAPP գործընթացների պրակտիկան – Cvmedia.am, accessed: May 8, 2025, <https://cvmedia.am/page2-6338--88->

153. 2023 Country Reports on Human Rights Practices: Armenia – State Department, accessed: May 8, 2025,

<https://www.state.gov/reports/2023-country-reports-on-human-rights-practices/armenia/>

154. Home | ArmiGF, accessed: May 8, 2025, <https://armigf.am/2019/en/home/>

155. Armenian Internet Governance Forum (ArmiGF) – Digital Watch Observatory, accessed: May 8, 2025, <https://dig.watch/event/armenian-internet-governance-forum-armigf>

156. ISOC Armenia NGO – The GFCE, accessed: May 8, 2025,

<https://thegfce.org/member-and-partner/isoc-armenia-ngo/>

157. Internet Society NGO – Home, accessed: May 8, 2025, <https://www.isoc.am/>

158. FOICA – FOICA — Freedom of Information Center of Armenia, accessed: May 8, 2025, <https://foi.am/en>

159. General Information – FOICA — Freedom of Information Center of Armenia, accessed: May 8, 2025, <https://foi.am/en/about-foica/general-information>

160. FOICA – FOICA — Freedom of Information Center of Armenia, accessed: May 8, 2025, <https://foi.am/en/>

161. ԽԱՊԿ/CPFE/K3CC – Խոսքի ազատության ..., accessed: May 8, 2025, <https://khosq.am/en/>

162. About Us – Media Diversity Institute, accessed: May 8, 2025, <https://www.media-diversity.org/about/>

163. accessed: January 1, 1970, <https://mdi.am/en/>

164. ARMENIA 2021 HUMAN RIGHTS REPORT, accessed: May 8, 2025, <https://am.usembassy.gov/wp-content/uploads/sites/92/hrr2022.pdf>

165. HCAV, accessed: May 8, 2025, <https://hcav.am/en/>

166. CASE OF MINASYAN AND OTHERS v. ARMENIA – HUDOC, accessed: May 8, 2025, <https://hudoc.echr.coe.int/eng?i=001-240280>

167. HELSINKI COMMITTEE OF ARMENIA v. ARMENIA – HUDOC, accessed: May 8, 2025, <https://hudoc.echr.coe.int/fre?i=001-153308>

168. Helsinki Committee of Armenia v Armenia – European Human Rights Advocacy Centre (EHRAC), accessed: May 8, 2025, http://ehrac.org.uk/en_gb/key-ehrac-cases/helsinki-committee-of-armenia-v-armenia/

169. accessed: January 1, 1970, <https://www.armhels.org/en/>

170. Where are VPNs legal & illegal / banned? Check by country – Comparitech, accessed: May 8, 2025, <https://www.comparitech.com/vpn/vpn-where-are-vpns-legal-banned/>

171. VPN in Armenia | Reliable and fast servers | PIA VPN - Private Internet Access, accessed: May 8, 2025, <https://www.privateinternetaccess.com/ru/vpn-server/armenia-vpn>
172. VPN №1 for Armenia in 2025 — get Armenian IP - ExpressVPN, accessed: May 8, 2025, <https://www.expressvpn.com/ru/vpn-server/armenia-vpn>
173. The Best VPN Armenia - BeAdvice - Muffin Group, accessed: May 8, 2025, <https://muffingroup.com/advice/best-vpn/in-armenia/>
174. Arlis, accessed: May 8, 2025, <https://www.arlis.am/>
175. VPN Demand Surges Around the World - Top10VPN, accessed: May 8, 2025, <https://www.top10vpn.com/research/vpn-demand-statistics/>
176. 30+ VPN Statistics, Trends & Facts (2024-2027) - Exploding Topics, accessed: May 8, 2025, <https://explodingtopics.com/blog/vpn-stats>
177. VPN Users Around the World - GWI, accessed: May 8, 2025, https://www.gwi.com/hubfs/Downloads/VPN_Usage_Around_The_World.pdf
178. Statista - The Statistics Portal for Market Data, Market Research and ..., accessed: May 8, 2025, <https://www.statista.com/>
179. Real news from the cybersecurity world | NordVPN, accessed: May 8, 2025, <https://atlasvpn.com/blog>
180. media.am | People are the media | Home • media.am, accessed: May 8, 2025, <https://media.am/en/>
181. Ban on popularization of VPN: essence of the law and its limitations - Rusbase, accessed: May 8, 2025, <https://rb.ru/story/zapret-na-populyarizaciyu-vpn/>
182. NordVPN: The best VPN service online for free, open internet, accessed: May 8, 2025, <https://nordvpn.com/>
183. OpenVPN: Business VPN For Secure Networking, accessed: May 8, 2025, <https://openvpn.net/>
184. Lives on hold: internet shutdowns in 2024 - Access Now, accessed: May 8, 2025, <https://www.accessnow.org/internet-shutdowns-2024/>
185. #KeepItOn: fighting internet shutdowns around the world - Access Now, accessed: May 8, 2025, <https://www.accessnow.org/keepiton/>