

The use of technology in civil and family oral trials as an innovative source of human rights in Mexico*

El uso de la tecnología en los juicios orales civiles y familiares como fuente innovadora de los derechos humanos en México

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ABSTRACT

The Declaration of the Rights of Man and of the Citizen of 1789 recognizes basic rights, including the right to life, liberty, security, equality, property and the expression of ideas and opinions through

* This paper is an article of research and reflection on the regulation of the human right to freedom of expression and communication through the use of the Internet via electronic devices, in light of the entry into force of a new national Code of Civil and Family Procedure. It should be noted that the research is not the product of a funded project.

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the press or any other medium. This would mark the starting point of freedom of expression, which today is complemented by the use of technology and the Internet. Since this historical event, people's rights have evolved, and new rights have arisen in accordance with the times, such as the right to express oneself and to be communicated through the Internet, using appropriate devices. In 2013, the Mexican Constitution was reformed to recognize the right of people to be communicated, including access to the internet, in Articles 6 and 7. According to the United Nations Resolution of July 2, 2018 on the promotion and protection of all human rights—civil, political, cultural, economic and social rights, including the right to development—the human right to have access to the internet is mentioned; however, Mexico had already included it in its regulatory framework since 2011. The final section of this paper focuses on the study of the use of technology and the Internet in the current regulations, as well as on the challenges faced by civil and family procedural law with the entry into force of the new Code of 2023.

Keywords: Mexican Constitution, right to information, human rights, internet, technology.

RESUMEN

La Declaración de los Derechos del Hombre y del Ciudadano de 1789 reconoce los derechos básicos, entre los que destacan el derecho a la vida, la libertad, la seguridad, la igualdad, la propiedad y la manifestación de ideas y opiniones por medio de la prensa o cualquier otro medio. Esto marcaría el punto de partida de la libertad de expresión, que hoy se complementa con el uso de la tecnología y el internet. A partir de este acontecimiento histórico, los derechos de las personas han evolucionado, y han surgido nuevos derechos acorde con la época, como el derecho a expresarse y a estar comunicado a través del internet, utilizando dispositivos adecuados. En el año 2013, la Constitución Mexicana fue reformada para reconocer el derecho de las personas a estar comunicadas, incluido el acceso a internet, en los artículos 6 y 7. De acuerdo con la Resolución del 2 de julio de 2018 de la Organización de las Naciones Unidas sobre la promoción y protección de todos los derechos humanos —civiles, políticos, culturales, económicos y sociales, incluido el derecho al desarrollo—, se menciona el derecho

humano a contar con acceso a internet; sin embargo, México ya lo había incluido en su marco normativo desde 2011. El apartado final del presente trabajo se enfoca en el estudio del uso de la tecnología e internet en la normativa vigente, así como en los desafíos que enfrenta el derecho procesal civil y familiar con la entrada en vigor del nuevo Código de 2023.

Palabras clave: constitución mexicana, derecho a la información, derechos humanos, internet, tecnología.

1. INTRODUCTION

This research focuses on the study of human rights from their conception, evolution and regulation within the internal regulations of most democratic countries. The research questions that arise in the development of the work are: Is the use of internet and technology as a constitutional right really enjoyed by all people in Mexico? What are the main challenges that the judiciary will face in the face of oral trials combined with the use of the internet as a human right and the need for technology?

As this is an article of reflection and research, current topics have been developed, such as the use of internet and technology as human rights, particularly referencing the constitutional reforms of 2013 (Official Gazette of the Federation [DOF], 2013) on communications, which regulate the right to free internet in public spaces. Finally, the challenges that the judge and the parties involved will face when applying the new National Code of Civil and Family Procedures are contemplated, in order to make effective the procedural principles and the obligation to record and reproduce the hearings through electronic devices, using the Internet to conduct hearings that serve as evidence of what happened in the litigation in civil and family matters (National Code of Civil and Family Procedures [CNPFC], Book eight, 2023).

The legal method has been used in this research, since the topic is approached from a legal perspective, in addition to the application of the historical method to refer to the evolution of technology and the right to information. Statistical data provided by the Mexican government are also used to reinforce the theme. Several reflections are made on the use of the Internet as part of the human rights of individuals.

2. DEVELOPMENT

2.1. HISTORICAL REFERENCES OF HUMAN RIGHTS

Along history, human rights have been in constant evolution according to the social, economic and political context. A notable development includes the use of the internet and technology to stay informed, to know what is happening in the world, and even to receive education through a device with internet connectivity (Padrón, 2014).

The first document to recognize the rights of individuals is the Declaration of the Rights of Man and the Citizen of 1789 (Conseil Constitutionnel, 1789), which acknowledges basic rights such as life, liberty, security, equality, property, and the right to express ideas and opinions through the press or other means. Since then, additional rights have been added on the social evolution of human beings (Troper, 2024).

The protection and dissemination of human rights have spread throughout the world and have been incorporated into the legislation of countries that have become aware of the issue. Mexico has not been an exception; since its independence in 1810, most historical events have been aimed at the defense and recognition of human rights.

Among the most important national legislative developments in Mexico, where human rights have been gradually regulated, are:

1. The Constitution of Cadiz (Spain) of 1812, with influence in Mexico.
2. The Constitution of Apatzingán of 1814.
3. The Provisional Political Regulations that showed Mexico as an independent country (1822).
4. The Mexican Constitution of 1824.
5. The Federal Constitution of the United Mexican States of 1857.
6. Reform laws promoted by President Benito Juárez in 1859.
7. Beginning of the Mexican Revolution in 1910.
8. Entry into force of the Political Constitution of the United Mexican States in 1917.

9. The inclusion of the individual guarantees of the people in the 1917 Constitution.
10. The establishment of the General Directorate of Human Rights in the Ministry of the Interior in 1989.
11. The creation of the National Human Rights Commission in Mexico, known as CNDH, in 1990.
12. Amendments to the Political Constitution of the United Mexican States of 1917 in 2011, on human rights.

The above has significantly contributed to prioritizing individuals in Mexico, as well as respecting their human rights. In this specific case, the right to expression and communication is regulated in Articles 6 and 7 of the Constitution (Political Constitution of the United Mexican States [CPEUM], 2024).

2.2. THE HUMAN RIGHT OF THE PEOPLE TO BE INFORMED

Individuals have always been informed through various means. In Mexico, of course, printed media stands out since colonial times in 1722 (General Archive of the Nation, 2023)¹, and from 1923 onwards, the radio (General Archive of the Nation, 2024). Subsequently, in a more modern era, in 1946, television began to be broadcast in Mexico.

The 1980s would be called the technological era, even though in 1969 the so-called ARPANET emerged in the United States. Mexico's first connection was between the Technological Institute of Higher Studies of Monterrey (ITESM) and the Medical School of the University of Texas, in San Antonio, which was for academic purposes. We know the subsequent history and we live it today through the latest technology, the use of the internet and smart phones.

¹ In 1722 the *Gazeta de México* appeared, a monthly publication founded and edited by the theologian Juan Ignacio Castorena, but regulated by the viceregal government. This publication, considered the first newspaper to circulate in Mexican territory, included information on the territory about the New Spain and other regions of the world, as well as religious, commercial, social, mining and maritime topics, although it excluded political issues. Around 1810, it became the *Gazeta del Gobierno de México* and laid the foundations for what would later become the *Official Gazette of the Federation*.

The importance of communication and exercising the right to express oneself has been so significant for humanity that, in addition to being a human right, the Mexican Constitution currently regulates the use of free Internet in public places. Eventually, it may be free of charge nationwide and only a device will be required to use it.

However, starting in 2020, with the onset of the COVID-19 pandemic, the global need arose to address the health emergency and, with it, the importance of meeting society's new urgent requirements, such as providing internet services and computer equipment that would allow people to work and study virtually. These circumstances significantly be advantageous to technology sector and companies that provide Internet services.

Despite this, the service has not reached one hundred percent of the population, even though it is linked to the right to free expression, communication and even the right to education. Particularly in emerging countries, where there is poverty and economic and development inequality, it is necessary to invest greater resources and public budgets to achieve these objectives.

Therefore, there is a worldwide need to include in constitutions the human right to communication through technology. This includes providing basic internet at an affordable price in homes, and free access in schools and public places.

Articles 6 and 7 of the Mexican Constitution refer, among other rights, to the freedom of expression of citizens, which implies the right to use the Internet and technology to communicate and self-expression. These rights must be guaranteed by the State.

Paragraph 3 of Article 6 of the Constitution (CPEUM, 2024) states the following:

The State shall guarantee the right of access to information and communication technologies, as well as to broadcasting and telecommunications services, including broadband and internet. For such purposes, the State shall establish conditions of effective competition in the provision of such services.

Meanwhile, Article 7 of the Constitution (CPEUM, 2013) complements Article 6 by stating in paragraph 1 as follows:

Article 7.º. The freedom to disseminate opinions, information and ideas through any media is inviolable. This right may not be restricted by indirect ways or means, such as the abuse of official or private controls, of newsprint, of radio frequencies or of equipment and apparatus used in the dissemination of information, or by any other means and technologies of information and communication aimed at preventing the transmission and circulation of ideas and opinions.

Therefore, the Ministry of Communications and Transportation issued the Connectivity Program in Public Places for 2023 and 2024 (DOF, 2024). In that program, the Ministry of Infrastructure, Communications and Transportation, in accordance with the Federal Telecommunications and Broadcasting Law, is responsible for annually proposing social connectivity programs in public places for the enjoyment of users, especially in public schools, with the purpose of complying with Articles 6 and 7 of the Constitution.

Despite the above, it has not been possible to provide quality Internet in all public institutions across the country. This has been done gradually in order to achieve the goal set. This policy is reflected in the National Development Plan 2019-2024 of the current government, giving priority to marginalized areas, where public spaces are located, especially for educational purposes. This program will continue in 2024 and 2025.

The Inter-American Court of Human Rights, in the case of *Maya Kaqchikel Indigenous Peoples of Sumpango et al. vs. Guatemala* (2021, October 6), highlights the importance of freedom of expression, communication and the use of radio and internet as human rights, including for indigenous peoples. The content of the resolution should be taken as a model for countries that have accepted the jurisdiction of the IACHR, as is the case of Mexico. The following is a paragraph from the concurring vote of Judge Patricio Pazmiño Freire, which is related to the topic developed in this article:

4. The right to freedom of expression, in order to be exercised, must have communication channels that allow the real participation of the greatest number of voices, regardless of their economic capacity and/or ownership of broadcasting frequencies. The Internet and the use of new technologies have been expanding the ability to communicate and transmit knowledge.

The IACHR, in its rulings, recognizes the importance of bringing communications to rural areas. In these rulings, radio and the Internet are mentioned as fundamental technologies for the development of people.

3. CONSTITUTIONAL REFORMS IN MEXICO IN 2013 IN THE FIELD OF COMMUNICATIONS

According to the United Nations (UN) Resolution of July 2, 2018, on the promotion and protection of all human rights —civil, political, cultural, economic and social rights, including the right to development— the human right to access the internet for communication was discussed for the first time (UN, Human Rights Council, 38th session, 2018). However, in Mexico, since June 11, 2013, then-President Enrique Peña Nieto had already presented a constitutional reform related to telecommunications, which was approved and modified several articles of the Constitution, recognizing the internet as a human right.

In the 2018 UN Resolution, 45 countries participated, drafting a document that developed the most important points related to the use of the internet as a human right at the international level, aiming to achieve its regulation in the domestic legislations of the signatory countries. The need to create and implement public policies that benefit the population in order to guarantee access to the Internet was also pointed out. One of the main objectives is that, by 2030, connectivity will be global for human progress. This will enhance, in particular, the rights to privacy, freedom of expression and freedom of peaceful assembly and association, in addition to improving communications for people with disabilities and boosting gender equality, closing digital divides in the various social groups of each nation.

Article 6 of the Mexican Constitution was amended to guarantee the insertion of the population in the information and knowledge society, as well as access to information technologies, including broadband and internet as telecommunications services. It was stated that these services must be provided under conditions of convergence, competition, universal coverage, interconnection,

quality, plurality, free access and continuity; characteristics that were highly criticized for not being fully met. Internet access is also considered a human right. In this regard, Isaías Acata states:

The right to free access to the Internet was only professed as a very distant aspiration: countries such as France and Finland began to promote the idea that all human beings, by virtue of being human beings, have the right to access the connection to the most important virtual space in the history of mankind. (Acata, 2011, p. 46)

Miranda also points out about the Internet as a human right: “Among the instruments that have contributed to the evolution of our society, the internet has been one of the main ones: it has revolutionized the mode of communication and has influenced the economy, politics and law” (Miranda, 2016, p. 9).

With the reform, the main bases were established to guarantee greater competitiveness in the supply of telecommunications services. However, in Mexico, some companies practically have a monopoly on services, while others offer the service at high prices, as the Organization for Economic Cooperation and Development (OECD) noted in 2011, comparing the situation with that of European countries such as Switzerland and Greece (The Economist, July 1, 2011).

As mentioned, Article 6 of the Mexican Constitution establishes that “the State must guarantee the right of access to information and communication technologies in an effective manner to the population”.

After the 2013 reform (DOF, 2013) on communications, the Mexican government created the National Human Rights Program 2014-2018 (Web SEGOB, 2024), which sets out six objectives to achieve the effective implementation of the program. One of them is the item 3.3.10: “ensuring the exercise of freedom of expression as one of the foundations of a democratic state based on the rule of law”.

The mentioned document is very important, as it lists national and international norms that Mexico has adopted in order to comply with the constitutional reform and the application of the conventional law to which it has been committed since 2011. It includes international instruments, the competence of the Inter-American

Court and Commission on Human Rights, current declarations, charters and other instruments, model treaties, Mexican federal laws, regulations, agreements, circulars, guidelines, plans, programs and agreements.

In this regard, the UN states:

[...] universal access to cyberspace, which must be understood as equitable access, at an affordable price for all citizens, both to the information infrastructure and to the information and knowledge essential for human, collective and economic individual development. (UN, Human Rights Council, 38th session, 2018)

The UN also indicates in the same 2018 resolution that internet access should be understood in two dimensions:

[...] access to online content without restrictions, except in some cases limited by international human rights laws; and in the availability of communication and information infrastructure and technologies, such as cables, modems, computers and software to use the Internet. (UN, Human Rights Council, 38th session, 2018)

According to the National Institute of Statistics, Geography and Informatics (National Institute of Statistics and Geography [INEGI], 2024), in 2023, 97 million people used the internet, which is equivalent to 81.2 % of the population, including children of 6 years onwards (ENDUTIH 2023 Survey).

As for the use of cell phones in the same year, 97.2 million people, including children aged 6 years and older, equivalent to 81.4 % of the population, had a mobile device (ENDUTIH 2023 Survey). 43.8 % of households had a tablet, laptop or PC, which is equivalent to 16.9 million people. Finally, 90.4 % of households had a television (ENDUTIH Survey, 2023). According to the Organization for Economic Cooperation and Development (OECD), citizens in Mexico pay one of the highest fees for this service, compared to European countries such as Switzerland and Greece (The Economist, July 1, 2011).

A survey conducted among U.S. citizens in Washington, D.C., on November 19, 2020, indicated that as the coronavirus spread

globally, the Internet became central to everyday life. In another survey conducted by the Internet Society, 80 % of the participants stated that the Internet became very important in their lives, as it was the means to communicate and keep in touch with their family and the world (Internet Society, 2020).

Most respondents were unaware of the digital divide, as only one in four people worldwide has internet access, a gap that needs to be bridged globally. During the COVID-19 pandemic in 2020, citizens in the United States and the United Kingdom reported that the Internet was crucial for keeping in touch with family and the outside world, and had become part of their daily lives. Returning to Mexico, according to the Federal Telecommunications Institute (IFT), 71.3 % of women and 72.7 % of men used the Internet (IFT, 2021); most people were located in urban areas, and to a lesser extent in rural areas.

The top three devices used for internet connection in 2020 were: smartphone (96.0 %), laptop (33.7 %) and internet-enabled televisions (22.2 %). The main activities performed by internet users in 2020 were communicating (93.8 %), searching for information (91.0 %) and accessing social networks (89.0 %) (IFT, 2021).

In rural areas, it is challenging to have internet service due to the lack of infrastructure to receive a signal. In the year 2023, in urban areas, 85.5 % of the population had internet access, while in rural areas the percentage was 66.0 % (ENDUTIH Survey, 2023, p. 6). To increase the number of people with internet access, proposals should focus on making technology use more efficient, including:

1. Recognizing Internet access as a right in the constitution of each country.
2. Governments must allocate greater resources to make this right effective.
3. Allocate government resources to guarantee Internet access.
4. Implement, at all educational levels, training for Internet access and the appropriate use of technology.
5. Provide free Internet access in public schools, complemented by free packages in the homes of low-income students.
6. Encourage responsible use of the Internet in public spaces, such as entertainment sites.

7. Promote the use of the Internet as a source of education, culture, development and communication for human beings.
8. Include, in the countries' development plans, the priority need for Internet access throughout the country, as well as create public policies that benefit the population in this regard.
9. Establish public policies to ensure the security and trust of Internet users, especially in terms of privacy, personal data protection and freedom of expression, and promote the use of the Internet as an enabler of development and innovation, in collaboration with governments, civil society, the private sector, the technical community and academia, among others.
10. Government and companies have a duty to respect the rights of all individuals in the Internet environment, and each country is responsible for adopting, implementing and, if necessary, reforming laws, regulations, policies and measures related to the online protection of personal data and privacy, in order to prevent, mitigate and correct the arbitrary or unlawful collection, retention, processing, use or disclosure of personal data on the network.

Despite the Connectivity Program in Public Places 2020-2021 of the Ministry of Communications and Transportation in Mexico, based on the National Development Plan 2019-2024, which establishes the public places that must have internet access, the reality is different, since there is still a long way to go to achieve connectivity for all people in the country. This problem is also present worldwide.

4. USE OF INTERNET AND TECHNOLOGY IN ORAL TRIALS IN CIVIL AND FAMILY MATTERS UNDER THE NEW NATIONAL CODE OF CIVIL AND FAMILY PROCEDURES OF 2023

Since 2008, in criminal matters, the introduction of oral proceedings in the Mexican procedural system was successfully received by means of a constitutional reform (DOF, 2008). This modality has been extended to other legal areas, such as commercial, labor, administrative litigation, and recently, in 2023, to civil and family law.

It is important to note that, within these oral procedures for the administration of justice, the use of internet and technology has been incorporated in the hearings, through which full evidence of the development and solution of the litigation is generated (García, 2008).

In civil and family matters, the new National Code of Civil and Family Procedures (CNPCF, 2023) not only regulates the mandatory nature of oral proceedings, procedural economy, immediacy, contradiction, concentration, continuity and abbreviation in trials of this nature, but also mentions conflict resolution through restorative justice, incorporating alternative means of conflict resolution, such as mediation.

But why discuss this, and what does it have to do with technology and the use of the Internet in the Code? The answer lies in the fact that, in addition to the preparation and certification of lawyers, judges, the Public Prosecutor's Office and the parties to participate in the oral trial, Title VIII of the Code, titled "Digital Justice", states that the hearings will be recorded on video. In this way, the aforementioned principles may be subsequently collated in the recording, and the litigants, once the hearing or trial has concluded, may request a copy of those recordings.

Mexico City will be the first to initiate the oral proceedings regulated by the new Code, starting on December 1, 2024. Therefore, today one can only give opinions based on the norm as to what will happen.

In order to carry out such hearings, it will be necessary to invest economic resources to set up the spaces that will be used by the Mexican Judicial Branch. The Sixth Transitory of the National Code of Civil and Family Procedures (CNPCF, 2023) states the following:

In the case of the Federation, the Chamber of Deputies, taking into account the estimated revenues approved for each fiscal year, and based on the principles of austerity, efficiency, effectiveness and economy, will consider in the fiscal years following the publication of this Decree, an allocation of budgetary resources for compliance with this Decree [...] The Local Congresses, within the scope of their attributions, will approve the corresponding budget resources for the Judicial Branches of the Federal Entities, for compliance with this Decree. (pp. 268-269)

It is clear from the previous text that the resources necessary for the implementation of the Code should already be included in the Federal Expenditure Budget for 2025, which will be available for consultation on December 31, 2024. The Code mentions that the deadline to make the local adjustments in each state will be June 7, 2027. This is not an option, but an obligation for state authorities to comply with the norm.

The main contribution of the Code is to avoid the proliferation of physical files of hundreds of pages; it seeks that judges, individuals, authorities and prosecutors migrate to digital justice and impart oral justice in a prompt and expeditious manner, which will also be beneficial for the environment as a human right (Martínez and Mariscal, 2022), since the use of paper will be considerably reduced. A phenomenon that emerged from the COVID-19 pandemic affected older adults, who did not use technology or were unwilling to do so, leading many to request retirement or withdraw to engage in other activities.

According to Title VIII of the CNPCF, the use of technology will be of great support to send electronic exhortations in order to notify a person who is outside the judicial domicile about documents for his or her knowledge, relief or defense.

Another way in which technology supports oral trials is by allowing the judge to quickly contact the National Banking and Securities Commission or the Tax Administration System to obtain financial information from the parties, in order to force the responsible party to pay or to seize accounts in their name.

Another of the benefits offered by the new oral system in civil and family matters is the possibility of holding remote hearings for the presentation of evidence, such as witness or expert testimony, with people who live in distant places or have disabilities and find it difficult to travel. The judge may also make personal notifications using the advanced electronic signature, which will be useful for interrogating other authorities, court clerks and witnesses, among others.

The aforementioned digital modality is optional, applying the principle of eligibility for the parties to decide to make use of digital justice. The advantage of this modality is the speed in time, thanks to the use of technology and the internet. By implementing

technology as part of oral trial courtrooms, the Judiciary should recognize electronic platforms, systems and tools for the benefit of the parties. The CNPCF mentions the concept of metaverse in allusion to the use of technology for the administration of justice, which states:

Article 2. For the purposes of this National Code of Civil and Family Proceedings, the following shall be understood as:

XXVI. Metaverse. A virtual space that enables social interaction in digital worlds through immersive 3D graphical experiences, often using virtual reality, augmented reality, mixed or hybrid reality, tokens and blockchain technologies. (CNPCF, 2023).

The Federal Law of Contentious Administrative Procedure (LFPCA, 2009) includes the online trials, regulated in Chapter X, Articles 58-A to 58-S. Even before the 2013 reform to the Constitution regarding communications, such federal procedure was already in force, being a pioneer in the use of technology. The judicial authority in charge of these lawsuits is the Federal Court of Administrative Justice.

For its part, Article 108 of the Protection Law establishes that the complaint for indirect amparo must be filed in writing or by electronic means in those cases authorized by law.

Although the Mexican Constitution regulates the use of the Internet as a human right, it is necessary that public spaces receive a quality service from the Mexican government, since the contrary would affect the administration of justice and would violate the principle of procedural celerity, by deferring the procedural moments regulated in the adjective norm. What individuals want most is to conclude their trial and obtain a ruling.

Regarding the actors involved in the judicial process, such as judges, lawyers, court clerks, mediators, secretaries and experts, they must receive training in the content of the new CNPCF and in the use of technology for the development of oral trials. To complement this, the Judicial Branch of Zacatecas and the State of Mexico, in this year 2024, are providing training courses nationwide for those interested in the subject (Judicial Branch of Zacatecas, n. d.).

The central issue of this topic has been to determine whether the population in Mexico really enjoys the human right to be communicated through the Internet, in accordance with Article 6 of the Constitution. According to this research, it should be noted that the current National Development Plan (2019-2024) mentions the mandatory nature of free connectivity in public places, mainly in schools. Although progress has been made in this regard, there is still a need to implement public policies and allocate a larger budget to allow for the participation of more companies in the provision of the service and to prevent monopolies. In addition, it is necessary for the Mexican Judicial Branch to provide the corresponding training to judges and other personnel in order to comply with the requirements of the CNPCF.

Since 2018, public spaces in Mexico have access to public internet, but it is necessary that this service is of quality and does not present failures, so that individuals can truly enjoy this human right through cutting-edge technology.

Although the government has made efforts since the 2013 reform to the Constitution to implement measures to bring internet access to public spaces, economic resources are still needed to effectively guarantee connectivity.

5. CONCLUSIONS AND RECOMMENDATIONS

The Declaration of the Rights of Man and of the Citizen of 1789, as a pioneer in the regulation of human rights, recognized the right to express oneself freely. Currently, in Mexico, this right is also exercised through the Internet in public spaces.

Since Mexico's Independence, human rights have been consolidated and adapted to the needs of each era, as is the case of the right to expression and to be informed through the Internet and the use of technology. Most of the population in Mexico is communicated and informed, not only in public places, but also through private companies that provide Internet services. There is a need to open a larger market for internet services and technology sales at more affordable prices, since currently the services available are expensive and of poor quality.

It is worth remembering that in Mexico the printed media began to be distributed in 1722, the use of radio began in 1923, while television took its first steps in 1946. In 1969, technology and the Internet emerged, first in the United States and later in the rest of the world.

In Mexico, the reforms made to the Constitution in 2011 in the area of human rights gave rise to another constitutional reform related to telecommunications, which was presented by the president in office in 2013. This reform was approved and modified, among others, articles 6 and 7, guaranteeing freedom of expression and internet access in public spaces.

By resolution of July 2, 2018 of the United Nations (UN), on the promotion and protection of all human rights —economic, civil, cultural, political and social, including the right to development— highlights the human right to have access to the internet to communicate.

According to the Federal Telecommunications Institute (2021), 71.3 % of women and 72.7 % of men use the Internet; most people are located in urban areas, and to a lesser extent in rural areas. Most people pay for Internet service privately at home.

The Program for Connectivity in Public Places 2020-2021 of the Ministry of Communications and Transportation in Mexico, based on the National Development Plan 2019-2024, mentions that public places must have internet. However, the reality is different, since many institutions do not have connectivity or have poor-quality service.

The use of technology and internet access in public spaces has been regulated as a human right to guarantee communication and its use has been made mandatory in various areas of Mexican procedural law, such as litigation, labor, commercial and, recently, civil and family law. Oral trial hearings will be recorded and will serve as evidence of what happened between the parties. However, the challenge facing the Mexican justice system is to train those involved and allocate economic resources in the federal and state budgets to adapt the necessary infrastructure to comply with the new National Code of Civil and Family Proceedings of 2023.

Other benefits offered by the CNPCF 2023 in civil and family matters are the possibility of holding remote hearings for the

presentation of evidence, such as testimonial or expert evidence, especially for people who live in distant places or have disabilities that hinder their travel. Likewise, the judge will be able to make personal notifications using the advanced electronic signature, which will be useful for interrogating other authorities, court clerks and witnesses, among others.

Practical results are expected as of December 1, 2024, when Mexico City begins implementation of the reform. So far, only a study based on the normative content of the Code itself has been conducted.

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