

The Evolution of Public Surveillance Systems in Europe

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Video surveillance systems are used today in many parts of the world in public spaces. Although most publications date the appearance of the systems in public spaces to the 1980s, the use of the systems by the British police dates back 60 years. However, the actual spread of these systems has only been significant since the 1990s, as the development of technology made it possible to produce images of a quality that can be well utilised for the suppression and detection of crime through constant and intensive surveillance of public spaces at a cost-effective price. The speed of spread, size of infrastructure, mode of supervision and use, and the purpose of installation of the systems vary from country to country in Europe. This is mainly determined by the political, social, criminal, economic and legal context of the country.

Keywords: CCTV, video surveillance system, public surveillance system, camera, privacy

Introduction

Video surveillance systems have become an important component in ensuring security. Security, as a complex concept, is a protected state free from the harmful influencing effects and risk factors of existence and operation.² Security can also be considered a state that “inherently encompasses the absence of threat to economic, cultural, and moral goods”.³ Video surveillance systems, as part of the electronic alarm system, play an important role in creating physical security. The resources used to create physical security, the sum of protective systems in physical space define physical protection. Therefore, this definition places video surveillance systems in the physical protection category. It does not provide physical protection on its own, but its preventive and deterrent role, among other functions, has been proven.⁴ In public and private security applications, their use is usually primarily “post factum”, i.e. serving as a legal tool for tracking potential lawbreakers and reconstructing the chain of events.

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² BODA 2019: 66.

³ CHRISTIÁN-ROTTLER 2019: 13.

⁴ GILL-SPRIGGS 2005.

The evolution of video surveillance systems in Europe

The cameras of video surveillance systems were initially developed using the electronic foundations and technical innovations of cameras used in television broadcasting. Later, tracking development ceased and the security camera manufacturing industry developed into a stand-alone industry. The first camera to produce moving images⁵ for security purposes was used in 1927, two years after the first experimental wireless television broadcast. At the beginning of that year, the CTO⁶ in the Soviet Union commissioned physicist Leon Theremin⁷ to design a special “remote viewing” device for the border guard. The device had strict requirements: it had to work in daylight and have sufficient resolution to identify the subject’s face and be able to track the movement of a moving object, which was a significant challenge considering the state of television research at the time. By June 1927, the secret fourth version of the “remote viewing” device was completed and was presented to officials in the Kremlin. Kliment Vorosilov, the People’s Commissar for Military and Fleet Affairs, led the committee examining the project. The first test was conducted in his office in the presence of Stalin and some high-ranking officials to examine the possibilities of observation. The portable receiver of the system was placed in the secretary’s office next to Vorosilov’s office so that the commissioner could keep track of visitors to the Kremlin. A scanning-transmitter camera installed on a tripod outside the building was rotated by an operator to follow people passing by in the courtyard, at a distance of 30 to 48 meters from the camera.⁸ The first video surveillance system using an electronic-scan system camera was installed in Peenemünde, Germany under Nazi occupation in 1941 to monitor the launch of long-range guided ballistic missiles. The installation team was led by Walter Bruch, an engineer from Siemens AG. The October 1942 launch was watched by two cameras, and the images were transmitted to a concrete bunker 2.5 km away via cable.⁹ A year later, in 1943, the Remington Rand¹⁰ company developed the Vericon Television System for a similar military task, visually controlling the disassembly of military missiles in the United States. The signal transmission was through a coaxial cable, and the camera image could be transmitted to up to 10 different observation locations. The portable-sized system did not require complex installation or operation knowledge.¹¹ In 1953, a temporary CCTV system was used in the United Kingdom during the coronation of Queen Elizabeth II. During this time, cameras appeared on the streets throughout London and were used for security reasons at events where members

⁵ Paul Nipkow, a German inventor, patented the basic idea in 1883, based on which the so-called mechanical television operated, where the image was produced by mechanical scanning.

⁶ CTO (Совет труда и обороны) – Council of Labour and Defence.

⁷ Leon Theremin (born: Lev Sergeyevich Termen), Russian physicist and inventor (1886–1993).

⁸ GLINSKY 2000: 45–47.

⁹ ABRAMSON 2007: 6.

¹⁰ An American manufacturing company formed in 1927.

¹¹ Military Notes 1949: 65.

of the royal family appeared.¹² A few years later, in 1960, before the visit of the Thai royal family, the British Police borrowed two cameras from EMI¹³ and installed them on a temporarily built stand in Trafalgar Square. In 1964, the Liverpool City Police experimentally fitted hidden cameras at various locations. The four cameras were also borrowed from electronic companies in this case.¹⁴ In 1969, the London Metropolitan Police used two temporary cameras in Trafalgar Square to observe Guy Fawkes Day events.¹⁵ In 1985, a year after the Brighton bombing, the first significant public camera system was built in Bournemouth with the participation of the local council. From the late 1980s, the camera system became increasingly central to the crime prevention program. The real breakthrough came in 1994 when the ruling Conservative government made surveillance camera systems an integral part of its “law and order” policy and financed them with significant financial support.¹⁶ The government announced the “City Challenge Competition”, in which two million British pounds¹⁷ of central government money was earmarked for the public video surveillance system. Out of a total of 480 submissions, 106 projects were supported and the budget was increased to five million British pounds.¹⁸ The competition was repeated between 1995 and 1998 and a total of 85 million British pounds¹⁹ was provided to finance 580 CCTV systems. In 1999, as part of the ambitious crime reduction program of the new Labour government, 153 million British pounds²⁰ was earmarked for supporting the dissemination of CCTV. There were 1,550 applications for the two rounds of the program; and nearly 450 of these were funded. The government also significantly supported the implementation of video surveillance systems in schools, hospitals, and transportation facilities. It is estimated that by 2005, over 500 million British pounds²¹ in central and local government funding was allocated for the implementation of video surveillance systems. At the same time, it is estimated that approximately 4.5 billion British pounds²² was spent from private sources for the installation and maintenance of video surveillance systems.²³ The exact number of cameras or systems cannot accurately be determined, although it was estimated in 1999 that in the U.K., on a busy day in an urban environment, one person’s image might have been recorded by more than 300 cameras from over 30 different CCTV systems. Based on a survey conducted in a London borough by Norris and McCahill, it was estimated that there could be as many as 4.2 million

¹² HOLOGA 2013: 224.

¹³ EMI Group Limited, a British transnational conglomerate founded in 1931.

¹⁴ WILLIAMS 2003: 27–37.

¹⁵ DOYLE et al. 2013: 219.

¹⁶ WILLIAMS et al. 2014: 170–171.

¹⁷ Approximately 3.6 million pounds, or 1.7 billion forints at current value.

¹⁸ Approximately 9.1 million pounds, or 4.4 billion forints at current value.

¹⁹ Approximately 156 million pounds, or 76 billion forints at current value.

²⁰ Approximately 257 million pounds, or 125 billion forints at current value.

²¹ Approximately 768 million pounds, or 373 billion forints at current value.

²² Approximately 5.3 billion pounds, or 2,603 billion forints at current value.

²³ NORRIS 2012: 252.

cameras equipped for public and private security purposes in the U.K., or one camera for every 14 residents.²⁴ Another estimate from 2011 put this number at only 1.85 million, meaning one camera for every 32 residents.²⁵ The large discrepancy can be explained by the differences in estimation methods. In both cases, cameras were counted in a given area and then extrapolated to the entire country. After 2013, the BSIA²⁶ published the latest report at the IFSEC International Exhibition in May 2022. According to this, the number of cameras, which was nearly 6 million in 2013, grew to 21.1 million by 2022.²⁷

In 1956, the police in Hamburg started the first street camera system was in a trial run. Although the devices were not installed for public safety reasons, but rather to monitor the increased traffic flow. With the help of the “remote eyes” or “Fernaugen” (as the cameras were called), the police hoped to better monitor traffic situations and possible congestion. With the help of the system, a person sitting in the central control room could decide in real-time whether the traffic lights should be controlled by pre-programmed settings or whether manual intervention was necessary. The system was presented to the local and national press at a press conference held in a small dance hall in June that year. The television used for the presentation was called the “Zauberspiegel”, or magic mirror. Despite the successful presentation, the Hamburg system only operated temporarily.²⁸ It was not until the opening of the Munich traffic control centre in 1958 that cameras became a part of public space.²⁹ The Munich system had nineteen traffic cameras by 1965, referred to as “Verkehrsfernsehanlagen” in German.³⁰ These cameras were already movable and referred to as PTZ³¹ cameras. In 1959, Hannover used the CCTV system regularly only during the annual industrial fair. Radio frequency was used to transmit the images. In 1961, the Hannover police equipped a helicopter and a Volkswagen Beetle with technology for recording and transmitting video images. The converted Volkswagen was not actually used at the fair, but at the May Day events.³² In the following years, more and more cities installed permanent surveillance camera systems, including Stuttgart, Hamburg and Nürnberg. In the 1960s, police propaganda related to CCTV began to change. Cameras were no longer exclusively tools for monitoring traffic flow, but also took on public surveillance and enforcement functions. In 1960, the Frankfurt police introduced the first “photographic and automatic red light surveillance” to prove violations of traffic regulations. The use of cameras was also supplemented by monitoring large crowds, rallies, outdoor gatherings, possible

²⁴ NORRIS et al. 2004: 112.

²⁵ LEWIS 2011.

²⁶ British Security Industry Association.

²⁷ MOORE 2022.

²⁸ KAMMERER 2009: 43–47; Der Spiegel 1956: 42–44.

²⁹ MARTIN 1959: 503–507.

³⁰ LUTHER 1965: 46–51.

³¹ Pan-Tilt-Zoom, it refers to a type of camera that can move both horizontally (pan) and vertically (tilt) and has the ability to zoom in or out (zoom) on an image.

³² BIRKEN 1962: 161–164.

strikes and disturbances. As a result, the functions of traffic control and crowd control gradually began to merge during the planning phase. In November 1964, the Munich police started using a mobile camera equipped with a telephoto lens and a vehicle equipped with an image recording device, which not only made local observation of images possible, but also enabled the images to be transmitted to the operational centre through a wireless connection.³³ In December 1976, the Hanover police, with years of experience in the field of fairground surveillance systems, created Germany's most modern and largest surveillance system at the time, with a cost of 7 million marks, using nineteen PTZ cameras to monitor the city centre. The images from the Bosch cameras were transmitted via a wired network to the observation centre located in the police headquarters building. In an interview with *Der Spiegel*, Peter Schweizer, the director of the "Bosch" manufacturer said that the surveillance system's camera images are enhanced through amplifiers, "so the image at night is sometimes better than the original. So far, fourteen kilometers of cable have been laid, but this distance will be quadrupled and the number of cameras will be more than doubled".³⁴

Even though the first closed-circuit television system equipped with electronic-scan system cameras was installed in Germany, the development speed of the country's public camera system in the 1980s and 1990s lagged far behind than that of the United Kingdom's. The U.K.'s uncodified constitution³⁵ does not contain strict provisions regarding the right to privacy. Until the incorporation of law on human rights into British law, there was no legal provision for the protection of privacy, and thus no legal or constitutional basis to impede the spread of video surveillance systems or to give legal opportunities to opponents of surveillance systems. In contrast, in Germany, the Constitutional Court already declared in 1983 that "it is of fundamental importance for the democratic society and the autonomy of citizens to be aware that they are under surveillance and why and by whom".³⁶

Similarly, in Denmark there is a general legal skepticism towards the surveillance of public spaces by private organisations, and the police's recording of images is also strictly regulated. In Norway, where the rights related to private life are constitutional, there is also a strong data protection system in place, which deals explicitly with the regulation and mandatory authorisation procedures of the public camera system.³⁷

³³ KISTLER 1965: 166–168.

³⁴ *Der Spiegel* 1977: 52–53.

³⁵ The European Convention on Human Rights defines the minimum declaration of rights to be protected in each of the signatory states. In relation to state surveillance, the right most clearly threatened is the right to respect for private life, which is contained in Article 8.

³⁶ TÖPFER et al. 2003: 6.

³⁷ WIEBEK-SÆTNAN 2022.

The 2004 UrbanEye³⁸ survey of six European capitals clearly shows that the number of cameras in the U.K. at the time exceeded by far that of other countries'. At that time, there were no public camera systems in Denmark, Sweden and Austria. In Norway, there was only one (consisted of only six cameras), 14 in Budapest and 15 in Germany. In contrast, there were already more than 500 systems operating in the U.K. It is important to note that in other European countries not included in the UrbanEye survey, we can also find a larger number of public space camera systems.³⁹

In France, the installation started in Levallois-Perret, a suburb of Paris, in 1991.⁴⁰ The public surveillance caused great outrage among the population. In 1995, the parliament passed the so-called Pasqua law,⁴¹ which allowed the installation of public surveillance cameras in crime-ridden areas. This step legalised the Levallois-Perret system. By 1999, more than 200 French cities had received permission⁴² to install public video surveillance systems.

Similarly, in the Netherlands, between 1997 and 2003, more than 80 municipalities out of 550 used video surveillance systems on public spaces.

In the Republic of Ireland, the first CCTV system was installed in Dublin in the mid-1990s and was expanded in 1997. In 2004, the Irish Minister of Justice announced funding for the establishment of additional public surveillance camera systems at 21 different locations.

In response to growing concerns about crime in Italy, the Ministry of the Interior announced plans to install CCTV in 50 Italian cities.⁴³

After 2004, the accelerated spread of publicly funded street video surveillance systems in Western Europe was catalysed by the Madrid and London terrorist attacks. In Spain, Law 4/1997 came into effect on 4 August 1997, "regulating the use of video cameras by security forces and agencies in public places". The installation of the street surveillance system had to be approved by the local autonomy government representative.

In Belgium, the 2000 UEFA⁴⁴-organised European Football Championships provided an opportunity for cameras to appear in the vicinity of the Heysel stadium and the small ring road surrounding the historic district, but the real breakthrough came in 2003, when the Brussels regional government allocated a budget of 1.5 million euros for the development of street video surveillance systems by local governments. 17 out of 19 mayors submitted applications for 157 cameras, which were supported

³⁸ The research project supported by the European Commission, which was completed in 2004, brought together criminologists, philosophers, political scientists, sociologists and urban geographers from six countries.

³⁹ HEMPEL-TÖPFER 2004.

⁴⁰ It is likely that Hyères, a seaside resort on the Côtés d'Azur, was the first settlement to install a CCTV system in the late 1980s.

⁴¹ Loi d'orientation et programmation relation à la sécurité no 95-73 (LOPS). The proposal was put forward by Charles Pasqua, a conservative interior minister.

⁴² The systems must be approved by the prefects of each county after consulting with a special local body called the Commission Départementale de Vidéosurveillance.

⁴³ HEMPEL-TÖPFER 2002.

⁴⁴ Union of European Football Associations.

by the regional government. By the end of the 2000s, the street surveillance systems (excluding Koekelberg) under the control of the local government were transferred to the police. By 2015, the number of cameras had nearly reached 1,000.⁴⁵

In 1980, in the town of Hobro in Denmark, a local commercial organisation installed a system consisting of multiple cameras and a recording device to combat vandalism in the streets. The images from the cameras were not monitored continuously, but were recorded only between 11:00 p.m. and 4:00 a.m. If there was no disturbance during the recording time, the recordings were deleted, otherwise they were handed over to the police. Although a survey conducted the following year found that 65% of the population supported the public cameras, the local cameras were soon discontinued due to pressure from the local opinion.⁴⁶ A more recent survey conducted by YouGov⁴⁷ in 2017 found that more than half of the population would like the previously installed 500,000 surveillance cameras to be expanded.⁴⁸ The Danish Industrial Association, SikkerhedsBranchen, estimated in 2021 that this number has increased to approximately 1.5 million, of which about 300,000 are cameras that ensure the safety of public transportation and public space surveillance monitored by the police.⁴⁹ Up until 2020, local governments did not have the legal authority to operate camera systems. The amendment to the law in May 2020 lifted this restriction, and in justified cases, private individuals were also given the opportunity to monitor public space within a 30-meter radius from the entrance of their property.⁵⁰

Public surveillance systems in Portugal were only deployed after 2005. This was due to the fact that earlier, video surveillance of public spaces was considered an exceptional measure, as its application could only be justified under exceptional circumstances due to its potential violation of privacy and its impact on democratic rights and freedoms. At that time, video surveillance was limited to private spaces and private spaces open to the public, and was only monitored by private security companies. In January 2005, the adoption of Law 1/2005 created the opportunity to install video systems in public spaces. The law granted the police⁵¹ and the National Republican Guard⁵² the authority to monitor and store images from public cameras. Due to the complexity of the authorisation process, only ten applications were submitted for video surveillance of public spaces between 2005 and 2010, of which only five systems were approved by the authorities. By the end of 2010, only three of these systems were fully operational in tourist areas of Porto, Coimbra and Lisbon.

⁴⁵ KEERSMAECKER–DEBAILLEUL 2016: 2.

⁴⁶ LAURITSEN–FEUERBACH 2015: 528–538.

⁴⁷ YouGov is a British international internet-based market research and data analysis company.

⁴⁸ The Local 2017.

⁴⁹ LASSE 2021.

⁵⁰ Folketinget 2020.

⁵¹ Officially known as Polícia de Segurança Pública [Public Security Police], Portugal's national civilian police force.

⁵² Officially known as Guarda Nacional Republicana, Portugal's national police force.

Due to problems with financing operating costs, this number decreased further, and by the end of 2012 only two systems remained operational.⁵³

According to the data protection guidelines issued by the Greek data protection authority in 2000, closed-circuit video surveillance systems could only be installed for traffic monitoring and protection of goods, with a proper purpose and taking into account the necessity and proportionality. The country's first video surveillance system, consisting of hundreds of cameras and including the first public space, was installed for the safe conduct of the 2004 Olympic Games. However, after the event, the data protection authority did not agree to the continued operation of the system. The prosecutor's office who lobbied for the easing of the strict data protection law achieved that the 1997 data protection law was amended in 2007, allowing for the installation of public space surveillance systems. However, the amendment raised serious questions and concerns about the constitutional right to protect personal data.⁵⁴

In Poland, as in most of the former socialist countries, the sudden increase in the number of crimes after the change of system can be attributed to the complex changes in the political, social and economic system that followed the fall of communism. The social order, the fundamental value of civil rights, and the role and social function of the police were redefined. The first public video surveillance systems were introduced in 1999 in Gdansk, Radom and Wrocław and between 2000 and 2002 in Kalisz, Poznan, Płock, Krakow, Kielce, Katowice and Warsaw. There is no uniform solution in terms of installation and supervision. The police, the municipal police,⁵⁵ the railway guards⁵⁶ and civilian employees participate in the surveillance.⁵⁷

The installation of a camera system in the Czech Republic began in Prague in 1997. The development concept was approved by the Prague City Council on 5 October 2000, with Resolution 22/13. The initially seven-camera system grew to 34 in 2000, 279 in 2005 and doubled to 570 by 2010. In order to improve the utilisation of the investment, a multi-user access large-city camera system will be installed, which can also use the cameras of the Prague Transport Company and the Prague Technical Directorates of Communications video surveillance system. This means that the system not only provides services to the police at both city and district levels in Prague, but also provides images to the fire and rescue service,⁵⁸ the medical rescue

⁵³ FROIS 2011: 35–53.

⁵⁴ MITROU et al. 2017: 128.

⁵⁵ Officially known as Straż miejska [City Guard].

⁵⁶ Officially known as Straż Ochrony Kolei [Railway Security Guard].

⁵⁷ LEWANDOWSKI–MATCZAK 2015: 126–143.

⁵⁸ Officially known as Hasičský záchranný sbor České republiky [The Fire and Rescue Service of the Czech Republic], whose primary mission is to protect the life and health of the population, the environment, animals and property from fires and other extraordinary events and crisis situations.

service,⁵⁹ the city crisis management authorities, the transport company and the communications technical directorates. The placement of cameras is based on the needs of the Prague districts, the Czech Republic Police and the Prague City Police.⁶⁰

Generally speaking, throughout Europe, by 2009 Austria, Bulgaria, Croatia, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland and the United Kingdom all boasted public video surveillance systems.⁶¹

The emergence of surveillance systems in Hungary

The first mention of cameras in relation to security in Hungarian media was in the *Magyar Híradástechnika* magazine in 1959. “An industrial television camera is placed on the highest point of the small boats for safer port navigation, and the ship can be navigated more safely based on the transmitted image than if only watched from the command bridge.”⁶² At this time, the term “industrial television camera” or simply “industrial TV” was used, taken from television technology.⁶³ In 1963, the term “closed-circuit industrial TV” appeared in György Ligeti’s article on Production Control Devices in the *Népszerű Technika* magazine.⁶⁴ The appearance of the term in Hungary was induced by the CCTV term used from the mid-1940s abroad. A little later, the term “industrial TV chain” can also be found, which can be read in the article “Industrial TV Chain Spreads” published in the *MTI Népszabadság* in 1965. The article reports that “the Híradástechnika Ktsz. is now preparing for the premiere of the industrial TV chain of the Ferihegy airport”.⁶⁵ The CCTV term and its explanation can be found in the 1966 issue of the *Technika* magazine. “The conquest of industrial television is unstoppable: it has become an important helper not only in many areas of industrial activity, but also in many branches of scientific research and medicine. That is the reason why it’s better to call it closed-circuit television (the English and Americans use the closed-circuit television, CCTV name instead of industrial television)”.⁶⁶ One year later, in 1967, the term “surveillance camera” first appeared in the *Magyar Nemzet* newspaper, Daily Chronicle column. A short article says “as an experiment, the traffic office’s television screen shows the incoming or departing buses with a surveillance camera, so the traffic officer can always take

⁵⁹ Officially known as Zdravotnická záchranná služba hlavního města Prahy [The Medical Emergency Service of the Capital City of Prague], the cooperating organisation and operator of emergency medical services in the capital city of Prague.

⁶⁰ WOLF 2010.

⁶¹ NORRIS 2009: 8.

⁶² HARGITAI 1959: 32.

⁶³ Kép- és Hangtechnika 1959: 50.

⁶⁴ LIGETI 1963: 271.

⁶⁵ Népszabadság 1965: 4.

⁶⁶ Technika 1966: 12.

action according to the situation”.⁶⁷ Subsequently, the domestic literature alternates in using the various expressions listed so far, and even a simplified “TV camera system” expression appears in the *Zalai Hírlap* newspaper published on 26 October 1980. In this newspaper, the author of the article “Winter Shopping Centre in the BNV area” writes: “The security of the goods is provided by the TV camera system.”⁶⁸ The first public but only traffic-supervising cameras were installed in Budapest in 1979. As a result of a joint investment by the Budapest City Council and the Police, 30 non-movable black-and-white cameras were installed.⁶⁹

In Hungary, the 1994 Police Act paragraph 42 provided legal authority for the placement and recording of public area cameras. After the law came into effect, the installation of public area camera systems began throughout the country within half a year. The first system, consisting of three cameras, was established in Zalaegerszeg in early 1995 and was constantly monitored by the police. A few months later, public surveillance cameras were put into operation in Siófok to prevent prostitution, pickpocketing and car theft. In the summer of 1996, three cameras were installed in Kaposvár to reduce vandalism, offenses and the increasing number of car break-ins. 80% of the cost of the system’s installation and operation was financed by the local government, while the remaining 20% was financed by the police. At the same time, a three-camera system was being tendered in Tatabánya.⁷⁰ During a mass demonstration organised by MIÉP⁷¹ on 22 October 1995, the police used ten temporarily set up surveillance cameras in Budapest. Although similar image recording had previously occurred during police security at other peaceful events that exercised the right to assembly, this was the first time that the data protection ombudsman initiated an investigation on a citizen’s complaint. His conclusion was that the placement of the cameras was lawful, but he developed recommendations for the retention period of the images.⁷²

On 27 October 1997, Budapest’s first public video surveillance system consisting of five PTZ cameras was handed over. The 30.5 million forints⁷³ investment was financed by the municipality, while the operating costs were covered by the public safety foundation.⁷⁴ By the end of May 1999, the Józsefváros public area surveillance system started with 14 cameras. During the three-week trial period, three car break-ins and one burglary were caught with the help of the surveillance system. The setup of the system cost a total of forty-eight million forints.⁷⁵ The costs were borne by the Budapest Police Headquarters, from the 225.5 million forints budget

⁶⁷ Magyar Nemzet 1967: 6.

⁶⁸ KAISER 1980: 4.

⁶⁹ Népszabadság 1999: 29.

⁷⁰ DUSZA 1996: 18.

⁷¹ Magyar Igazság és Élet Pártja [Hungarian Justice and Life Party].

⁷² NAIH 1997: 103–104.

⁷³ Approximately 114 million forints at current value.

⁷⁴ TENCZER 1997: 3.

⁷⁵ Approximately 133 million forints at current value.

provided by the capital's municipality the previous year, among other things, for the installation of surveillance systems and alarm systems in endangered public areas.⁷⁶

The installation of the systems was catalysed by Act LXIII of 1999 on Public Space Supervision, which provided the opportunity for the public space supervision to place cameras in the public space for security and crime prevention purposes, and to make recordings. Subsequently, the Budapest districts joined the development of surveillance systems using local government funds. On 7 November 2000, a 12-camera surveillance system was handed over in the 19th district, followed by a 16-camera system in Óbuda three days later. By this time, the installation of public surveillance cameras was already underway in the 10th, 11th and 15th districts.⁷⁷ A 10-camera public surveillance system, funded by local government but operated by a private security company, was handed over in the 13th district in mid-December 2000.⁷⁸ By 2003, the expanded system had 111 cameras. The monitoring and recording of public camera images was carried out by a private security company for several years in an illegitimate manner.⁷⁹ Unfortunately, this solution was not unique, and the involvement of a private security company was also used in the monitoring of cameras in the 10th district system in the fall of 2000.⁸⁰

By 2002, the number of surveillance systems in Budapest had increased to nine.⁸¹ In 2004, the Association for Civil Liberties (hereinafter: TASZ) human rights association sent an 80-question inquiry to the Budapest district police headquarters, which covered the installation, technical conditions, legal and economic background, public attitude, monitoring, personnel and training of public surveillance cameras. However, the response compiled by the BRFK did not contain many data, so TASZ filed a lawsuit for the release of public data. In March 2007, the Supreme Court of Hungary obliged the BRFK, among others, to transfer the statistics of the operation of the surveillance system, the relevant impact study and the documents on the location of the cameras.⁸² Based on the transferred documents, 17 districts, with a total of 430 cameras, were already monitoring the public spaces of Budapest.⁸³ Along with the Budapest investments, the installation of public surveillance cameras also started in several other large cities in the countryside. Upon the opening of the 2009 academic year of the Police Academy, the Prime Minister announced a 10-point public safety program called Order and Security. Its sixth point was to double the number of surveillance cameras, which were already equipped with approximately 1,500 cameras, using domestic and EU funds.⁸⁴

⁷⁶ SÁNDOR 1999: 39.

⁷⁷ Magyar Hírlap 2000: 15.

⁷⁸ Népszava 2000: 20.

⁷⁹ PILHÁL 2003: 17.

⁸⁰ Népszabadság 2000: 36.

⁸¹ L. LÁSZLÓ 2002: 8.

⁸² A Magyar Köztársaság Legfelsőbb Bírósága 2007.

⁸³ NAGY 2007.

⁸⁴ L. LÁSZLÓ 2002: 8.

Summary

The technology of video surveillance systems has been continuously evolving since the 1920s. For much of the past hundred years, the development of surveillance cameras has primarily focused on improving image quality, increasing sensitivity, and enhancing the physical and software capabilities of the camera hardware. The gradual spread of public space cameras is characterised by the initial establishment of systems focused on specific local problems in the central business, sports and leisure areas of the city. Then, based on these specific local successes, it spread to all publicly accessible areas in the city centres and streets. In Europe, the financing of installation and operation of the systems is mostly borne by local governments, while the monitoring of camera images, i.e. the operation of the system, varies from country to country. It can be observed that in countries where relatively stable, welfare-oriented governments have operated, such as Austria, Germany, Norway and Sweden, the spread of public space cameras is more limited. The other influencing factor is the legal/constitutional environment, which has hindered the spread of open street surveillance cameras in many countries. In countries where there are weak constitutional guarantees for the protection of privacy and where data protection laws are less strict, the spread of public space video surveillance systems has also taken place more quickly. In addition, in different countries, at different times, certain events such as serial killings, terrorist attacks, increasing drug trade or increasing concerns about crime have catalysed the deployment of public surveillance systems.

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