ACCEPTABILITY AND PERCEPTION OF SURVEILLANE TECHNOLOGIES – PUBLIC OPINION RESEARCH

Sylwester PNIAK

Military University of Technology

Abstract. The technological advancement creates the necessity to control the progress of the awareness of functioning, usage and commitment, to technological development, within certain social areas. The article presents the public opinion research on the perception of new technologies, in the context of surveillance. Attention is paid to the public awareness of the functioning of technological solutions, and problems related to the adaptation of devices. The increasing technological domination becomes the standard of everyday life, and the society faces a difficult challenge of confronting modernity and universality.

Keywords: surveillance, public control, acceptability of surveillance, surveillance technologies.

Introduction

In recent times, surveillance has become a topic increasingly gaining in importance. Undoubtedly, one of the factors conditioning such a state of affairs is the surge in surveillance in many spheres of social life. The progressive civilization characterized by technological aspiration creates new forms of societies infiltration.

The dynamically developing technology has had a literal impact on citizens, consumers and equipment users. The current society is increasingly being monitored, and living in constant motion erases the border between the consciousness and the certainty of being under supervision, conviction, and lack of certainty. Global forms of observation cause the lack of the possibility to escape from the forms of control. The technological engagement in individual spheres of life creates addiction in the use of technology for the purpose of improving the performance of everyday activities. The penetration of modernity into the private life of individuals is a key dimension of surveillance. The community who is aware, to a greater or lesser extent, of the technological impact on the interference in their private lives, interprets the factor of the technological development as an asset of present times or a perfect imperfection.

The ambiguity in the perception of technological involvement in the life of society and, what is more, in the awareness of the functionality of individual devices, creates the need to analyze the acceptability of the used technologies. The research is aimed at illustrating the attitude of the society towards the implemented surveillance techniques and drawing attention to selected technologies that may induce many emotions in the society in the near future. The result of this work is to present recommendations for the educational activity of the society, which is the result of the analysis of the conducted research.

1. The essence of surveillance

Every society strives to achieve the highest possible level of security, which determines a sufficiently rapid level of human development. Continuously developing technological development contributes to the growing importance of the concept of surveillance in ever-wider areas of life.

Surveillance can be shortly defined as an in-depth observation of a person or a group. *Słownik języka polskiego* (eng. *Polish Dictionary*) defines this concept as a "systematic and discreet observation of people or groups and as a secret observation of someone or a secret supervision over someone"¹. Respectively, *Słownik wyrazów obcych i zwrotów obcojęzycznych z almanachem* (eng. *Dictionary of Foreign Words and Foreign Language Phrases with Almanac*), presents surveillance as "secret surveillance over someone. Discreet, systematic observation of someone by police authorities and detectives"². Furthermore, *Słownik wyrazów obcych* (eng. *Dictionary of Foreign Words*) includes the definition that "surveillance is a systematic, secret observation of someone, secret surveillance over someone, tracking"³. Regardless of the definition given, a common feature can be found that it is an individual or a group of people, defined as a society, whose life is unconsciously infiltrated.

The development of technology has meant that the devices used are directly linked to the user. It can be said that today there is a dissonance between the certainty and uncertainty of the situation in which an individual is under surveillance. It is necessary to draw attention to the fact that the vast majority, as not all devices used, are connected to a global network. This makes tracking and controlling users easier. The entity through a given device constantly transmits messages, sends messages about the current location, interests, circle of friends in which it turns etc .. On this basis, there is virtually 90% effectiveness in predicting the intentions of an individual, and therefore reading potential plans for its future days.

Society, wanting to protect their privacy, is faced with an ambiguous choice whether to keep up with the spirit of time by giving away some of their privacy or limiting the use of new technologies while remaining more anonymous.

Nowadays, the trick is to remain invisible. Anonymity, somewhat underestimated in public opinion, becomes the elementary value of a private life. The emerging trend of continuous communication with the Internet and, moreover, informing through

¹ Internetowy SJP, [online] [in:] http://sjp.pwn.pl/sjp/inwigilacja;2561945 [access of 9.03.2017].

² W. Kopaliński, Słownik wyrazów obcych i zwrotów obcojęzycznych z almanachem, Świat Książki, Warszawa 2000, p. 236.

³ J. Tokarski (red.), Słownik wyrazów obcych, PWN, Warszawa 1980, p. 315.

it about the events from the life of the individual, causes an erosion of anonymity. Today's times show a change in attitude towards an autonomous approach to privacy. The privacy zone has shifted within the individuality and intimacy of each person. A significant proportion of people prefer to display information about themselves publicly, wanting to stay in the center of attention while focusing on themselves the largest number of recipients. There are, however, individuals who strive to preserve their individuality, taking care of their invisibility, and at the same time they do not succumb to social strife, which is the order of the moment. The negative effect of such a state of affairs is the possibility of rejecting them to the social margin, due to the lack of assimilation in the Internet unmasking.

Nowadays, security is multidimensional and integrated. We cannot talk about security as a literal and concrete concept. Security is directly related to threats and it means the possibility of opposing them⁴. In order to maintain the correct level of security, it is necessary to monitor the threats constantly. There are a number of connections, couplings and interactions between individual elements, departments, and sectors that we have to take into account when explaining its essence and character. These connections, appropriately integrated and consistent, operate on the principle of synergy – they ensure greater efficiency⁵.

In regard with the above, the connection of private life with new technologies and, at the same time, the use of it for security purposes, becomes a key element. An intriguing issue is the degree of community's consent to control an individual for the purpose of maintaining security. Subsequently, the development of surveillance methods with new technological systems increasing the degree of hazard identification, which creates a potential barrier to acceptance of the whole in relation to the introduction of technology.

In addition, the accelerating technological development makes it necessary for the general public to become acquainted with the solutions introduced. The society, willing to participate in the creation of security actively and, at the same time, to protect its individuality, must be aware of the full specification of functioning solutions. Therefore, an essential element is the introduction of well-thought-out education, allowing full familiarization with introduced innovations. What is more, this approach will educate a full-scale view of the solutions presented to the entities. Both critical and positive individual analysis shape a holistic view of the consequences of the introduced technologies. Recognizing the strengths and shortcomings of the solutions, the society is able to take possible protective actions or use solutions in its entirety – in its own discretion.

⁴ Cf. K. Jałoszyński, Współczesny wymiar antyterroryzmu, TRIO, Warszawa 2008, p. 14.

⁵ [online] [in:] https://www.bbn.gov.pl/pl/bezpieczenstwo-narodowe/minislownik-bbnpropozy/6035,MINISLOWNIK-BBN-Propozycje-nowych-terminow-z-dziedziny-bezpieczenstwa. html [access of 15.04.2017].

S. Pniak

The lack of the correct transmission of information about the specification and the way devices operate may create a dangerous trend of increasing threats among the community. A division will be on the people who are efficiently involved in technological life and in a literal reflection - on the technologically impaired. The above division, paradoxically, is the most visible among young people. Despite the fact that young people efficiently use technological novelties and acquire new skills in using technologies in a very quick way, their activities are limited to some cursory functions of devices. The lack of commitment to read the full-function operation and destiny of devices, visible in a large part of the youth, creates further risks that are an inseparable part of the lack of awareness and lost in the rough use of plastic devices.

The advancing technology creates the necessity to control the progress on the awareness of functioning, use and commitment to technological development of certain social groups. The increasing technological domination becomes a standard of everyday life, and the society faces a difficult challenge of confronting modernity and universality.

2. Public opinion research in the field of acceptability and perception of surveillance techniques

In April 2017, a research was carried out to determine the public's attitude towards surveillance techniques. The research was conducted on a group of 100 respondents divided into a few age ranges: 16-19 years old (3%), 20-24 years old (69%), 25-35 years old (18%) and over 35 years old (10%). The age range, with attention to education and place of residence, was taken to investigate the relationship between the above-mentioned two factors, and the perception of surveillance (Table 2.1). The survey included a total of 28 questions, and their results are presented below.

Age range	Number of people	Place of residence	Number of people	Education	Number of people
		Village	2	Secondary	3
16-19 years old	3	City of up to 10 thous. people	0	Vocational	0
		City 10-100 thous. people	0	Technical	0
		City over 100 thous. people	1	Higher	0
20-24 years old	69	Village	11	Secondary	29
		City of up to 10 thous. people	8 Vocational		0
		City 10-100 thous. people	16	Technical	7
		City over 100 thous. people	34	Higher	33

Table 2.1. Basic data about respondents

<i>Acceptability and perception of surveillane technologies – public opinion research</i>	Acceptability and	perception of	surveillane	technologies -	public	<i>opinion research</i>
---	-------------------	---------------	-------------	----------------	--------	-------------------------

Age range	Number of people	Place of residence	Number of people	Education	Number of people
		Village 2		Secondary	4
25-35 years old	18	City of up to 10 thous. people	0	Vocational	0
		City 10-100 thous. people	4	Technical	0
		City over 100 thous. people	12	Higher	14
> 35 years old	10	Village	2	Secondary	4
		City of up to 10 thous. people	0	Vocational	0
		City 10-100 thous. people	1	Technical	0
		City over 100 thous. people	7	Higher	6
In all	100	-	100	-	100

Source: Own research

The majority of the respondents – 54% live in cities of over 100 thousand residents. In turn, the largest group of the respondents is at the age of 20-24, which is 69% of the respondents. In the group, one can distinguish 49% of those residing cities above 100 thousand people, 23% residing cities in the number of 10-100 thousand people, 12% living in cities up to 10 thousand people and 16% inhabiting villages.

At the initial stage of the research, the attention was paid to the impression of the society in relation to the general sense of security. On the other hand, in the further part of the survey, there was an interrogation of selected control techniques. The introductory questions referred to the general attitude of the society towards surveillance and a sense of security. The question "Do you feel you are under surveillance?" received a positive response from 53% of the respondents. This shows the public's awareness of technological commitment in everyday life. Then, only 18% of the respondents expressed their concerns answering the question about everyday sense of security. They arise from the possibility of facing acts of violence in public places, possible blackmail and participation in technical or communication accidents or disasters, etc.

In the further part of the research, the attention was paid to the areas that the society considers to be the most affected by surveillance. In the first place, with a score of 69%, the global network was classified, in turn 19% obtained new technologies, and public places achieved a result of 9%. In turn, 3% of respondents recognized all of the above areas supervised equally (Chart 2.1).

In order to check the general attitude towards the introduction of new technologies for state purposes, the attention was drawn to the state's entering the private sphere of citizens. The result of the question "Do you think that the state is entering the private sphere of citizens?" were 78% of answers in the affirmative and 22% of negatives. In addition, a significant proportion of the respondents, 89%, said they S. Pniak

accept the introduction of new technologies to improve safety. In turn, 78% of the respondents confirmed that modern technologies contribute to reducing risks. The results confirm the general acceptability of introducing new solutions for the purpose of raising safety standards. The growing awareness of technological engagement in the control of society, as well as the state's entering the private sphere, is largely adequate to today's realities. Most of the respondents understand the dependence that is associated with the use of new technologies at the private level, and what may be the result of the introduction of innovative safeguards for state-wide purposes. In order to justify the above statement, the questionnaire contained a question about the willingness to sacrifice one's privacy for the purpose of raising the level of security (Chart 2.2).



- Internet (social networks, instant messengers, website pages, etc.)
- New Technologies (computers, smartphones, tablets, etc ..)
- Public places (stations, subways, banks, etc ..)
- Own answer

Chart 2.1. Areas of surveillance according to respondents Source: Own research



Sacrificing some of your privacy for safety

Chart 2.2. Putting some of your privacy to safety Sacrificing some of your privacy for safety

Would implanting chips to people improve the level of state security?



Chart 2.3. Inserting chips and improving state security Source: Own research

Over half of the respondents (54%) did not express their willingness to devote a part of their privacy. The arguments that confirmed their position referred to the abuse by the authorities, the possibility of ensuring security without interference in privacy. In addition, they motivated their attitude by the statement that the privacy itself is a sphere that allows you to feel safe. In addition, concerns have been expressed regarding the level of the carried out control and the used privacy areas. The whole was surrounded by the arguments of the absolute necessity of entering the private sphere of a man, and taking such steps would have to be presented in the form of strong and convincing public perceptions.

In turn, 38% of the people who would agree to give a part of their privacy, justify their arguments in a convincing but different way. The respondents noticed that nowadays it is difficult to feel safe anywhere. In addition, bearing in mind that most people share their private lives on the Internet and through technological innovations, devoting a part of it would make no difference. Another point of view is that despite appearances in today's society, it is difficult to talk about any privacy, because it has already been taken away by the state. In addition, at the moment of threat, being submitted to certain restrictions of freedom, through surveillance, contributes to the increase of security of your own and of the inhabited country. Another view of the case is the conviction of the natural need to give away some privacy, because it is a consequence of living in the state, and people have been doing it for decades.

People who were in the 8% group, did not support any position and presented their views on neutral ground.

In the survey, taking into account the above-mentioned issues, a reference was made to selected technologies that increasingly engage the private life of individuals and reflect the entry of new devices into human privacy. The studies analyzed the society's attitude towards the subcutaneous implantation of population transponders, the improvement of camera systems with the face recognition module and the introduction of biometric control technology.

Starting with the issue of subcutaneous implantation of chips, the respondents approached the matter with a great distance. The awareness of carrying in our body some technology that can collect a lot of information about the individual has raised uncertainty and fear of permanent control. The society unfamiliar with the whole functionality of a given technology is not able to specify clearly its own attitude in this matter. The activities that contribute to the precise determination of your own position, are to explain the full capabilities of chips, including the positive and negative sides of its implementation. The research has shown that 61% of the respondents believe that the appearance of one additional chip in everyday life would slightly change the attitude of the society. This confirms the public's understanding of the current involvement of new technologies. A multitude of activities performed each day with the use of technological innovations, ie smartphones, computers, the

Internet, bank cards, etc., causes that our privacy has been violated in each of the above spectrum, however with a different intensity. Taking into account the above, the statement of the respondents that the introduction of an additional chip will not change the overall attitude to a large extent is completely justified.

The connection of chip technology to the level of security in the country is interpreted in a different way. The discrepancy in the responses of the respondents (Chart 2.3) results from the lack of erudition, and, above all, the lack of direct opportunity to become familiar with the technology. A relatively large number of respondents – 37%, could not state their beliefs unambiguously. The best way of changing the views of those who are undecided seems to be a creation of some initiatives based on presenting the applications of chips. The target point of the activities will be creating a positive attitude to the discussed technology.

A surprising result is a 46% declaration of respondents that adaptation of chips would not affect the level of state security. Such a high result may be a symptom of any problems with chips or the ignorance about their properties. Bearing in mind possible fears, they result from the possibility of recording a lot of information on the transponder, ie ID card, driving license, PESEL number or blood type. The accumulation of much data in one place creates some kind of anxiety (Chart 2.4).



Is it a good solution to save a lot of information on the chip, ei ID card, driving license, PESEL number, etc.?

Chart 2.4. Save a lot of information on the chip Source: Own research

However, it should be borne in mind that as of today, many people use bank cards and other access cards with a chip. The appropriation of information recorded in such a unique form is very rare, and when it comes to such a situation it takes place in a contact manner. This means that the user places the card directly in the compromised reader. From the koeli in subcutaneous chips, the reading takes place contactlessly from a distance of about 3-5 centimeters. In addition, built-in non-contact reader, prevents the installation of an overlay copying information. This makes the technology really safe and any authorization is not possible without the

owner knowing. Nevertheless, with a view of the possibility of lack of acceptance, the respondents were asked whether they think that subcutaneous adaptation of chips is a concept that goes with the times. As a result, only 39% of respondents admitted that implanting chips is a natural consequence of the more automated world.

Turning to the impression of the society regarding the perception of monitoring systems and the face extraction module, the respondents unambiguously expressed the need for camera systems and demonstrated their acceptance of the introduction of the facial recognition system. According to the survey, 97% of respondents confirmed the need for cameras in public places, in particular places of increased population, ie underground, stations, airports, etc. The most frequently provided responses were the arguments about preventing the number of crimes and facilitating and in some cases even completing investigations – through the collected evidence. The respondents also pointed out that at the time of the lack of monitoring systems, a part of the society could feel with impunity, which would result in the escalation of threats. In addition, monitoring systems play a special role when looking for missing persons, as well as in controlling public space in terms of potential threats. Camera operators can quickly capture the aggressor or perpetrator of an incident and at the same time notify the police. The whole activity supervised by the camera's eye allows you to pursue your arguments. The respondents who were in the group of the remaining 3% were in favor of redundant camera operation. They motivated their opinion claiming that cameras do not fulfill their role, because in all terrorist attacks, the cameras there did not protect anyone from death and did not prevent any theft or beating. The above justifications are inconsistent with the current idea of the network of cameras, because their actions are adapted to support the observation and investigation as well as the determination of perpetrators of crimes. The claim that their presence should protect against acts of terror or crime is wrong. Only proper adaptation of cameras to recognize suspects and those in the register of uniformed services may allow the protection and early detection of threats.

Due to the almost one hundred percent acceptability of the presence of monitoring systems, the public approval of the enrichment of the camera network with the facial recognition function was checked (Chart 2.5). As a result, 65% of the respondents agreed to add a face extraction module to the monitoring system. The others who did not agree -25% or had no opinion -10%, justified their attitude with the lack of full knowledge about such an innovative solution and expressed concern about the possibility of tracking not only suspects, but also other citizens. Thus, once again the research shows the need to familiarize the public with technological novelties, before their general popularization for state purposes. The direct connection of the previous question was to draw attention to the introduction of face extraction module, in relation to raising the level of state security. Arguments presented by the respondents were similar, and the result was similar to the previous one (Chart 2.6).





Would the introduction of face recognition function raise the level of state security?

Chart 2.5. Adding face recognition to the camera system Source: Own research

The last elements examined were the examination of the perception of modern biometric readers of the iris and the circulatory system of the hand. Of all the respondents, only 16% had come in contact with iris scans of the eyes and blood vessels of the hands. This demonstrates the low prevalence of biometric identification systems and the few places where they are used. Nevertheless, the people who have been in contact with these systems rate them as a very fast and effective form of authorization. At the time of the inspection, they did not encounter any difficulties in carrying out the instructions, and the contact with the scanners turned out to be comfortable. In connection with the above, it can be concluded that the introduction of such a form of authorization on a wider scale will not cause unwillingness among the public, and will contribute to increasing the efficiency of identifying people.

In the last part of the survey, the respondents paid attention to the development of today's world. Due to ther continuous technological progress, it is likely that the general freedom will be limited all the time – on the pretext of increasing security. Subsequently, the issue of the current control of the society raises many fears. The respondents expressed their anxiety associated with the increasing control of text messages, telephone calls and the use of global networks. In addition, conducting control with the simultaneous collection of a lot of personal information in data banks, creates a desire to use them for purposes that are contrary to their original concept. An interesting and very accurate digression of one of the respondents was the statement that privacy is fictitious, and the biggest problem is that people do not see anything wrong in sharing information about themselves.

The research has outlined a picture of the public's perception of surveillance technology. The issues of individual control systems included in the considerations presented the view of the respondents from different perspectives. Depending on the referenced identity systems, the affirmation of the respondents created greater or lesser acceptability. Nevertheless, the statement that new technologies of public control affect the level of security in the state would be congruence. It can be considered that the acceptability of surveillance techniques depends on how they enter into the private life of citizens, and above all on the way in which it will be presented to the public before its introduction for general use.

3. Recommendations for educational and pedagogical process

Today's technological ubiquity forces the education of public awareness from the earliest age. Recently, a rapid inflow of devices has made it impossible to find a person who would not use any technological novelty. The popularization of smartphones, tablets, laptops, television sets – smart TV etc., has caused that reaching for these solutions is noticeable for younger and younger people. As of today, the view of a seven-year-old using a smartphone becomes a standard of everyday life. This is a frightening fact, because identifying children with the possibilities offered by technologies, on the one hand, allows them to adopt in a faster way with the automated environment, but on the other hand, creates a kind of routine of technological ubiquity and, at the same time, of performing activities dependending on available devices. It is a dangerous connection between *real reality and digital reality*.

The access to modern solutions from an early age shapes children's sense of attachment to devices in which they cannot see any evil. In turn, the attachment is directly related to the simplification of a series of activities. In this way, technologies increasingly penetrate into life. What is more, scientists are concerned that the community prefers to use fast and shallow "plastic knowledge" than to submit to contemplation and reflection. This leads to the lack of building new concepts and ideas, and the society becomes less inquisitive and creative⁶.

In connection with the above, the issue of threats and surveillance arising from the use of new technologies is pushed to the background. The failure to pay attention to the properties of the devices used, omitting the routine, their use creates a problem of unconscious sharing and processing of information. This is due to the ignorance of users with the full capabilities of these solutions, as well as individually

⁶ S. Pniak, *Cyberzagrożenia w ujęciu społeczeństwa informacyjnego*, [w:] red. M. Szetela, M. Kaleta, K. Piech, M. Piech, *Zaplątani w sieci. Społeczeństwo wobec wyzwań nowych mediów*, WSKSiM, Toruń 2017, s. 256.

introduced system additions, which theoretically are to improve the operation of devices. In fact, they create some kind of "wickets" that contribute to the uncontrolled management of information.

For this reason, the element that goes hand in hand with the technological advancement is the educational and pedagogical process. Widely understood prophylaxis involving preparing the society for thought-out use of devices poses a difficult challenge to create an appropriate action program. At present, the society's awareness of new technologies is to a large extent limited and only boils down to the basic functions of the devices used. Creating opportunities for technologies used for state purposes, will create the necessary understanding of the society for the implementation of further futuristic solutions. Today's times show that this is a highly needed issue, and education should take place at the earliest stages.

In connection with the above, the educational program should start in early school education. The content provided would involve an introduction to the technological world that would include familiarizing with the basic functions of selected devices and presenting the associated threats. Thus, in the initial teaching, the content transmitted would focus on the essential functions of using smartphones or computers. Bearing in mind the young age of the recipients, the knowledge transferred would concern matters such as: dialing emergency numbers along with the correct transmission of information to the dispatcher, general making calls and using the basic functions of the device. In turn, training in the face of dangers would be directed at securing one's own data and the intensity of use of the device. This means that children will not be able to give their own phone number to a stranger, as well as to create a time limit for using a smartphone.

The next educational and pedagogical stage would include classes 4-8 of primary school. Knowledge would be passed in a gradation form and directed towards the protection of personal data. In addition, the content would concern the presentation of the consequences of publicizing news and photographs on social networks and through telephone or computer applications. Creating a sense of the value of information in the early stages of education will contribute to reflection and analysis in connection with the purposefulness and possible profits or losses of publicized messages. Today's world shows that the value of the information provided in most cases is disproportionate to the expected results. These activities are particularly visible in this group. Young people intensely put a lot of information about themselves, it can be considered that at the moment it is the quantity, not the quality of the message that counts. Recalling art. 27, ust. 2, pkt. 8, Ustawy o ochronie danych osobowych⁷ (eng. Act on the protection of personal data), *the information made publicly available to the person who made*

⁷ Ustawa z dnia 29 sierpnia 1997 roku o ochronie danych osobowych (DzU 2016, poz. 922).

it public may be processed in any way [...]. It is necessary to draw attention to the fact that information provided to the public can be used – often to the disadvantage of the sender. This is another argument indicating the need for youth education.

The next third stage would be directly related to secondary, technical and vocational schools. At this level, education would enter for a much higher dimension of youth identification with technologies. The transmitted content would oscillate around legal regulations and technological advancement of devices and applications of private use, as well as solutions used for state purposes (ie camera systems, border control devices, government internet applications, etc.). The target element of the transmitted content would be to illustrate the advantages associated with the adaptation of solutions – especially for state purposes, but also to familiarize with the full range of device functionality. The gradual approximation of technology properties will not only allow us to understand their purpose, but it will also fill in the gap in ignorance about their actions. The above steps will bring the community closer to accepting the implemented solutions. Due to the fact that the adopted system will be understandable to the general public, its disrespect for its introduction will generally not occur or will be limited. Thus, the positive side of this educational program will be the creation of habits to analyze the advantages and shortcomings of the introduced system and the clash of insights in order to develop a proper attitude to the matter.

The final result of the program will be high public awareness of the solutions in place. In addition, the decision of an individual to continue education at university or to work, will be enriched with a number of information including legal regulations and technology specifications. The knowledge of each person should be supplemented with basic legal issues that illustrate the consequences of actions taken from ill-considered information or technological novelties. Creating a routine of analysis will allow you to properly shape the worldview in later stages of life.

Educational and pedagogical activities play an important role in the perception of technology as well as the surveillance itself. It is the state's responsibility to create an appropriate educational program that would familiarize the nation with the functionality of the devices used for identification and control. Such a turn of events would allow for proper creation of the sense of value of devices, and in the next phase, a controversial introduction of new solutions for state purposes.

Summary

New technologies play a special role today. Technological engagement in everyday life becomes a common necessity. A necessity which on the one hand, is a top-down force, and on the other hand, an individual choice of each individual.

Bearing in mind the conducted research, the respondents are favourable to the introduction of new control solutions, however only at the moment of justifying the

need to adapt them. In turn, discrepancies in opinions can be observed in relation to the introduction of innovative technologies, which the public did not have contact with, and the information about them is very limited. This proves the necessity to create conditions influencing the perception of the nation. From among many forms of control, actions that enter directly into the private sphere of the unit - ie subcutaneous adaptation of chips, are received with a great distance and in most cases with reluctance to participate in such a complex process. The concerns are justified, however, and as the survey shows, at the moment they are due to the lack of public awareness of this technology.

The activities that can effectively improve the assimilation of the society together with full technological knowledge are directed educational and pedagogical activities. A properly prepared program, enabling legal and technological training in control solutions, will be the main driving force for proper analysis and the final destination of the introduced devices. The introduction of the program at the earliest stages of education will enable proper distribution of the presented content. This will allow you to acquire knowledge gradually, which will be enlarged along with subsequent years with new technological news. Thus, it can be considered that the overall activity is a complex process of education. Proper implementation requires appropriately selected means and, above all, time devoted to the students and educators.

BIBLIOGRAPHY:

- BAUMAN Z., LYON D., *Plynna inwigilacja rozmowy*, przeł. T. Kunz, Wydawnictwo Literackie, Kraków 2013.
- 2. BAUMAN Z., Płynny lęk, przeł. T. Margański, Wydawnictwo Literackie, Kraków 2008.
- 3. BIAŁAS A., *Bezpieczeństwo informacji i usług w nowoczesnej instytucji i firmie*, Wydawnictwa Naukowo-Techniczne, Warszawa 2006.
- 4. GOBAN-KLAS T., SIENKIEWICZ P., Społeczeństwo informacyjne: szanse, zagrożenia, wyzwania, Wydawnictwo Fundacji Postępu Telekomunikacji, Kraków 1999.
- https://www.bbn.gov.pl/pl/bezpieczenstwo-narodowe/minislownik-bbn-propozy/603-5,MINISLOWNIK-BBN-Propozycje-nowych-terminow-z-dziedziny-bezpieczenstwa. html [access – 15.04.2017].
- 6. Internetowy słownik języka polskiego [online] [in:] http://sjp.pwn.pl/.
- 7. JABŁOŃSKI W., Kreowanie informacji. Media relations, PWN, Warszawa 2006.
- 8. JAŁOSZYŃSKI K., Współczesny wymiar antyterroryzmu, TRIO, Warszawa 2008.
- 9. KAŁUŻNY P., *Techniki inwigilacji. Co nam grozi i jak się bronić?*, Wydawnictwo Naukowe PWN, Warszawa 2008.
- 10. KITLER W., Bezpieczeństwo Narodowe RP. Podstawowe kategorie, uwarunkowania, system, AON, Warszawa 2011.
- KOPALIŃSKI W., Słownik wyrazów obcych i zwrotów obcojęzycznych z almanachem, Świat Książki, Warszawa 2000.

S. Pniak

- 12. MAJCHRZAK D., Bezpieczeństwo militarne Polski, AON, Warszawa 2015.
- 13. MALINOWSKI K., *Inwigilacja elektroniczna i bezpośrednia*, Wydawnictwo FTA-Insider Trading 2003.
- 14. MONAHAN T., Surveillance in the Time of Insecurity, Rutgers University Press, New Brunswick 2010.
- 15. OCHENDOWSKI E., Prawo administracyjne. Część ogólna, Dom Organizatora, Toruń 2005.
- 16. PAPRZYCKI L., RAU Z. (red.), *Praktyczne elementy zwalczania przestępczości zorganizowanej i terroryzmu. Nowoczesne technologie i praca operacyjna*, Wolters Kluwer Polska, Warszawa 2009.
- PNIAK S., Cyberzagrożenia w ujęciu społeczeństwa informacyjnego, [w:] red. M. Szetela, M. Kaleta, K. Piech, M. Piech, Zaplątani w sieci. Społeczeństwo wobec wyzwań nowych mediów, WSKSiM, Toruń 2017.
- 18. Токаrsкі J. (red.), Słownik wyrazów obcych, PWN, Warszawa 1980.
- 19. Ustawa z dnia z dnia 29 sierpnia 1997 roku o ochronie danych osobowych (DzU 2016, poz. 922).
- 20. WNUK-LIPIŃSKI E., Socjologia życia publicznego, Scholar, Warszawa 2005.

AKCEPTOWALNOŚĆ I POSTRZEGANIE TECHNOLOGII INWIGILACYJNYCH – BADANIA OPINII PUBLICZNEJ

Streszczenie: Postępująca technologia wymusza kontrolowanie postępu grup społecznych wobec świadomości funkcjonowania, wykorzystywania oraz zaangażowania w rozwój technologiczny. W artykule przedstawiono badania społeczeństwa wobec postrzegania nowych technologii w kontekście inwigilacji. Zwrócono uwagę na świadomość społeczeństwa względem funkcjonowania rozwiązań technologicznych oraz zaprezentowano problemy związane z adaptacją urządzeń. Przybierająca na sile dominacja technologiczna staje się standardem codzienności, a społeczeństwo stoi przed trudnym wyzwaniem konfrontacji nowoczesności z powszechnością.

Słowa kluczowe: inwigilacja, kontrola społeczeństwa, akceptowalność inwigilacji, technologie nadzoru.