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New challenges of recruiting personnel for the national security services in light of the information society

Abstract
For members of society, cyberspace has become an indispensable scene of their communication and everyday interaction, thus contributing to the emergence and functioning of the global information society. Depending on the stage of their lives in which the members of each generation have encountered ICT tools, different qualities, skills, abilities and expectations can be observed in them. The members of the Y, the Z, and now the alpha generation have a completely different set of values and adaptability than their predecessors. From the point of view of the national security services, it is important to examine the main characteristics of these generations and social groups, since among other things, the newly recruited members of the national security services are members of society. In order to ensure the operation of effective national security services based on traditional values, knowledge and age specifics, it is necessary to optimize recruitment systems that meet the needs of the next generation and are able to attract their attention and measure their suitability. The aim of this publication is to identify the main groups of challenges and to formulate possible solutions that can support the efficiency of both selection and recruitment activities for each national security service.

Keywords: national security service, information society, selection of personnel, recruitment, knowledge-based

Introduction
Thanks to the information society that evolved in the 21st century, cyberspace completely permeates the citizens’ everyday lives. It is here where people keep
in touch with each other, it is the main scene of their interactions. Due to the vast amount of information available, which is difficult to process, and to the expectations of fast response and learning, members of the Y, Z and now the alpha generations have an entirely different set of values, and adaptation skills than those before them. The reason for generational change is emerging as a new kind of challenge in national security services.\(^1\) The general behavior, skills, abilities, expectations and competences of each generation have different characteristics from their predecessors. It is noticeable that the stage of life in which members of the society get acquainted with various means of ICT (information and communication technologies) and, through them, with the virtual information space, plays a significant role in the change of the former criteria. From the point of view of the national security services, it is necessary to monitor the specific features of each generation of society from 3 aspects, as the society includes groups protected by the national security services, groups affected by their operations and the layer forming their recruitment pool. The aim of this publication is to examine the difficulties and challenges that the services have to face in the field of recruiting newer generations as a result of the development of the information society. Setting up a kind of scientific taxonomy in the article, updating my earlier research results, I wish to identify the main groups of these challenges, and present some solutions for resolving them, possibly producing positive results even now, that may be suitable for optimizing the selection system and recruitment activities of the national security services. It can be noted that the importance of knowledge-based security services in Hungary is going to be increasingly valued in the future, and its main pillar will be a staff of professionals combining interdisciplinary knowledge, which is essential for overcoming future security challenges in a preventive and effective manner. This publication, in addition to its main subject, while creating a sense of unity of thought, intends to draw attention to the utmost importance of knowledge-based security services that will function as key elements of the efficiency of future national security activities.

\(^1\) Within the scope of national security services, this publication uses the term only in relation to the following in relation to civil national security services: Office for Constitutional Protection, Information Office, National Security Technical Service. The National Military Security Service intends to recruit its staff mainly from the ranks of the Hungarian Defense Force, while the Counter Terrorism Information and Crime Analysis Center has a staff of seconded officers working on a long TDY (temporary duty assignment) basis, thus these two organizations do not ensure recruitment of most of their personnel from the classic, open labor market.
Identifying the various groups of challenges in the light of information society

Information-gathering organizations, including the national security services, are affected by certain external factors which can be divided into direct and indirect effects of influence. Considering human resources, mainly individual direct effects prevail and within them, changes in the social and technological environment are of special importance (read more in: Tóth, 2020/a). These have a significant impact on the personality, abilities, knowledge base and integration skills of individuals applying to national security services. Those born between 1995 and 2009, i.e. members of Generation Z, have already socialized in the global information space, living their daily lives in cyberspace created by ICT tools, the information flowing through them and the users of them. Members of Alpha Generation, born after 2010, i.e. children now attending school, despite their early age seemingly put adults to shame when it comes to their confidence in using ICT tools. (Pintér, 2016, 27.) ‘Large-scale spreading of info-communication tools also change the nature of communication.’ (Kováts, 2006, 20.) Individuals communicate with each other mainly in the info-communication space, during their socialization it has become a basic scene of their communication, so it is part of their comfort zone, therefore direct communication between persons can be detected as a factor threatening their individual security. With regard to the Alpha Generation, it is almost only the virtual space that can meet their needs, so in many cases their personal relationships are pushed into the background to a greater degree than before. They will have an extremely low level of communication conducted in real life (Pálinkás-Purgel, 2019, 30.). They will perceive such situations as stress, so applicants coming from the generation in question have a lower level of conflict management and temper management skills. In contrast to this, thanks to the information space, advanced problem-solving skills, performance of versatile tasks, and pragmatism have become their basic skills (Zalai, 2016, 36-37.). ‘The information society is characterized by the use of electronic info-communication tools for storing, processing, transmitting knowledge, creating new knowledge, as well as information saturation, overload, which changes people’s attitude to information and knowledge, selective memory and thinking. It requires information management at the individual level as well.’ (Tóth, 2019a, 103.) A further distinctive feature of the period is the dynamic environment that presents constant opportunities, but risks and threats as well. On the one hand, it is constantly changing the information needs of the members of society, and it requires permanent and consistent adaptation to new knowledge. (Kováts, 2006, 21.) People’s lifestyle is
characterized by intensive information processing and the ability to quickly adapt to changes, which in their choice of a career, results in being ready to change jobs instantly, even at the cost of reducing their own sense of comfort. Another challenge is that an increasing proportion of members of Generation Z try and occasionally use designer drugs, which, after certain quantitative limits, is also a reason to exclude them from the recruitment process of the national security services.

The above demonstrates that the integration skills of the generation born after 1995 show a declining trend, although it is one of the main expectations for the active duty personnel, as well as for all public service employees. The majority of applicants from these generations primarily look for a job motivated by curiosity, and a desire for adventure or self-discovery, rather than finding a lifelong commitment to public service, without which public service (professional and civil servants) cannot be pursued responsibly. The main motivation for them is to fulfill their individual desires, which they place before organizational interests, so it is difficult for them to function as an integral part of an integrity-focused organization. This also inherently poses a security risk for the national security services, because rapid acquisition of new work procedures is a basic requirement for the personnel, for which access to classified data, and to means and methods of covert information gathering is indispensible. In case an applicant admitted to the services handles this kind of information without the appropriate security-consciousness and allows an unauthorized person to have access to it, they are guilty of the crime of misusing of classified information (Section 265, Act C of 2012 /Criminal Code/). In addition, it may seriously endanger the national security of Hungary, the interests of crime prevention and detection, as well as a range of public interests that can be protected by other types of classification. It can be seen that there can be limited common ground of expectations for traditional national security services based on traditional values and for the younger generations of the information society. On the part of the services, the requirement of common sense, stable values, innovation, knowledge and reliability has increased. Unfortunately, professional humility can be considered as a disappearing virtue, therefore a sufficient degree of inclusiveness, openness and adaptability are important aspects in the selection procedures. Based on trends currently observed, a lack of loyalty, sense of vocation and innovation skills - i.e. a tendency to integrate - can be seen among new recruits (Zalai, 2012, 98.). In addition to deficiencies in integrity, a serious problem is that current applicants from Generation Z have limited psychological and physical fitness, therefore they are less able to meet the requirements of the national security services. There are no data on the Alpha Generation yet,
due to their young age. This phenomenon may be explained by some characteristic features of the generations, as members of Generation Z spend less time on real physical activity or personal interactions, since they spend a significant portion of their time in cyberspace. Their interactions in cyberspace, however, can also pose a security risk, as counter-interested secret services or criminal organizations hidden behind fake user profiles may pursue their illegal activities, by way of conducting social engineering, for example (Tóth, 2020b, 87-110.).

The contrast between the increased demand for information by members of the information society and the confidentiality typical for the operations of the national security services, also generate further significant challenges. Unlike in the case of other law enforcement agencies, the specific responsibilities of the services, and the means and methods used by them are less visible to the public eye, their activities are mainly covered by fantasies in the public mind. As a result, applicants have a lack of knowledge about the profile of the organizations and the jobs they are required to undertake. The system of tasks and self-image of the national security organizations was also associated with a negative image for historical reasons, the overcoming of which posed a real challenge for democratically functioning national security services. Today, however, great successes have been achieved in this area, thanks to the additional information flowing through the information space. Nevertheless, there are still some people among certain social strata, who, due to a lack of appropriate information, mistakenly identify the national security activities with the activities aimed at protecting the former one-party state and identify affiliation to national security services as a moral issue. Nowadays, the number of people with this way of thinking is diminishing, but it is still difficult for applicants to adapt the expectations of the national security sector to their own self-image, as this differs significantly from the standards and norms customary in civil society. For example, agencies authorized by Act CXXV of 1995 on National Security Services are authorized to limit the constitutional rights of individuals subject to such activities, such as they are restricted in their rights to the privacy of their homes and correspondence for purposes of national security, criminal prosecution and criminal intelligence, naturally in proportion to the objective to be attained, along with professionalism and legitimacy (Horváth, 2018, 173.). According to Ferenc Horváth, ‘It is important that this morally tinged inner conflict is quickly understood and effectively dissolved. Since, belief in the positive moral content of the work done has great motivational potential.’ (Horváth, 2015, 86-87.)

When conducting national security activities, it can be seen that optimal responses to the challenges of the future can only be ensured in possession of a
personnel with interdisciplinary knowledge and of innovative, sustainable technologies, including their sufficiently integrated application. Examining the aspect of knowledge base, the brain-drain effect of the private sector can be observed regarding the highly qualified technical, ICT etc. professionals, one of the most crucial reasons of which, in my opinion, is the extent of salaries. Wage tensions do not even occur mainly among career starters, since, if we examine the average salary of a new IT programmer and development engineer with a higher education degree in 2020, it can be ascertained that it is about HUF 300.000 – 350.000 net/month (URL2, URL3, URL4). According to the regulations in force\(^2\) in the national security services, a fresh recruit with a higher education degree in the active duty personnel also has a starting salary of HUF 300,000 - 350,000 net, not including other fringe benefits, of course. The difference is already more significant for development engineers with more than 10 years of professional experience, as the net salary in this category in the private sector is approximately HUF 700.000 – 750.000 HUF (URL2, URL3, URL4), while in the case of a national security employee with 10 years of service and the highest subordinate officer position, the basic salary is approximately HUF 400.000 - HUF 450.000 net, also without other fringe benefits. From this tendency, it can be seen that the wage gap relative to years of professional experience, among those with higher education is expanding between the private sector and the national security. This is a serious problem for knowledge-based national security services, as the existence of experience and human resources with high professional and related knowledge is vital. This problem is, of course, a factor affecting the whole administration, but its analysis is not the subject of this publication. Based on my previous research, the conclusion that the factors, complicating the selection of personnel as an outcome of the evolution of the information society, can be divided into four major groups is valid, but based on the above-mentioned new research, a fifth group can also be identified. Within the four factors, the lack of physical and psychological fitness is in the first place, dynamically followed by a low tendency to individual integrity among applicants and new entrants, after that a lack of security-awareness and finally the tension caused by the conflict between secrecy and information needs (Tóth, 2019b, 65.). Based on my conclusions, the fifth group of challenges can be identified as the higher - market-conform - wage demand of highly qualified human resources, which is not a shortcoming, but

\(^2\) Base pay (Section 154 (2) of Act XLII of 2015) = position allowance (Annex 8 to Act XLII of 2015) + professional allowance (13/2015 (VI.19.) MOI instruction appendices 2 and 3) + time in service allowance (Act XLII of 2015, appendix 10)
a feature of an information society based on a free market economy. After all, human resources are capital goods in market economy, which are subject to supply and demand, the value of which is determined by the productivity indicators achieved by their work (Bartus - Szalay, 2014, 364.). However, my theoretical thesis with the title of ‘National Security Services As Profit-Oriented Producer Organizations’ will be the main topic of another publication.

Some recommendations for the optimization of the selection and recruitment system

Meeting the criteria of physical and psychological suitability remains a basic requirement for selection procedures, as the required qualities and competences are essential for the professional and safe execution of national security tasks. Before 2005, most of the applicants joined the national security service after having completed their military service, so they already had a certain mental and physical preparedness, they already knew the system of norms for active duty service, thanks to which they had the required physical and psychological qualities. However, after the abolition of compulsory military service (MOD Decree 16/2004 (VI. 29)) the democratically functioning security services, apart from other public service organizations, could only turn to the open labor market for recruitment. As a result, a significant number of totally civilian applicants, with no prior military training entered the recruitment process, which greatly increased the rate of those unfit for service. In my view, positions related to active duty legal status, the requirement of a prior law enforcement training can be justified, because it can function as a kind of pre-filter for the applicants in terms of physical and psychological competences, but currently it is only possible in the case of active-duty or reactivated former members of partner agencies e.g. law enforcement, armed forces. Furthermore, a transformation of the selection systems that allows for testing the applicants’ skills based on complex, competence-based examinations can have a positive effect. The existing selection procedures should be optimized for generational specificities. It would be appropriate to introduce practical tasks examining the reactions, abilities and skills of candidates in specific situations. The introduction of the Evaluation/Development Center (AC/DC), which has been used to achieve significant results in the home affairs leadership selection system, may be suitable for a broader examination of competences during recruitment procedures (Zalai, 2014, 31-39.). During the successful execution of tasks, high stress tolerance also plays an important role, measuring of that would also be appropriate.
tain previous research supports that the ability of cognitive flexibility is related to the change in cortisol-level following stress effects, thus measuring the salivary cortisol levels could be used to infer the applicants’ stress-tolerance capability (Papp, 2018, 25-40.). Taking the different systems of requirements in certain positions into account, the introduction of specific, functional tasks may also be justified in the recruitment procedures, since the more individual-specific and complex the selection system is, the higher the admitted applicants’ success rate is (Tóth, 2019/a, 107.). The operation and development of integrity-based organizational structures are extremely important for national security services, as only a staff with a strict system of values and a high level of professionalism can perform their public service tasks professionally.

In order to ensure the continuous supply of human resources, it is worth introducing new values in the organizational culture that meet the expectations of the next generation, of course in accordance with the basic values of the organization, and not by pushing them into the background. Emphasis can be placed on increasing creativity, the willingness to innovate, the continuous development of individual competences, and the integration of the need for knowledge and learning into the organizational values. Of course, the reform cannot be one-sided, the applicants must have a high degree of adaptability, as they must first conform to organizational values, expectations and norms. The planning, development and implementation of these processes is only possible during proper integrity management, to which for example, the National Security Service and the Office for the Protection of the Constitution also pay special attention (Horváth, 2016, 61-62.). In the course of ensuring that the scientific activity is carried out, exploiting the potential of a scientifically oriented human force with a research talent may be appropriate to enhance the individual integrity skills, for example. On the one hand, it has a positive effect for the individual on the development of his researcher’s attitude, and on the other hand it represents added value for the organization, as, in my opinion, the implementation of individual research results into organizational processes is one of the most important cornerstones of future efficiency. This model fully reflects the positive impact mechanism of the individual and organizational integrity operating in a closed system. The efficiency of the national security work of the future lies in the knowledge-based structure. This statement is supported by Mrs. László Hazai, PhD. ‘We believe that the scientific approach and scientific work are investment in the future, and that the increase of knowledge, professional work with scientific standards, assessment analysis, research in line with the strategic goals and the development of their effectiveness are the pillars of high quality service.’ (Hungarian, 2018, 282-283.) Furthermore, the support for
scientific activities can be a solution for the integration of expertise into the organization, since if establishing the integrity of the individual is successful, and along this they acquire useful knowledge for the national security service, the organization can have a loyal, highly qualified professional in the service’s own staff. Highly knowledgeable national security professionals trained along such a principle are less affected by the brain-drain effect of the private sector due to overrated wages, as existing individual integrity commits a highly qualified national security human resource to the civil service. In my opinion, a knowledge-based national security service can be established by building on such human resources, at organizational or sectoral level alike. The staff of the national security services, both in their official duties and in their private lives, must pay special attention to appropriate security-conscious behavior, as almost all the knowledge arising from national security activities includes classified data. It can be defined as a serious risk, for example, if applicants do not have adequate knowledge, for example in the field of electronic information security, as this may lead to inadvertent access to protected information by unauthorized persons. The absence of security awareness is not a specifically law enforcement-specific problem, but a global social issue which is one of the major challenges of information societies (Horváth, 2013, 7.). According to the Impact Assessment published by the European Commission in 2017 (see European Commission, 2017), the end-users of ICT devices do not have a sufficient degree of security awareness in the field of their use, which contributes to the growth of information asymmetry. In my view, the solution of this problem is extremely important, because the use of ICT tools is wide-spreaded among the members of society, and the potential risks of certain assets during the development of the Internet of Things (IoT) are soon to become network-wide anomalies due to connectivity (Tóth, 2019c, 107.). With regard to the recruitment procedures of the national security services, the measurement of security-conscious behavior during the national security audit can be a solution, as well as its continuous improvement in relation to the personnel already recruited. The existence of social awareness campaigns, which have been carried out by the National Institute for Cyber Defense in Hungary, for example, for several years now, have also produced significant added value. On the one hand, their effectiveness can also be measured in the selection system of national security services, as applicants come from all walks of life. As perceived by society as a whole, a kind of enhanced information protection is present in connection with the activities related to national security services, which hinders meeting the potential job seekers’ extremely high demand for information. Job seekers must become aware of the existence of the national security services, introducing the
organization, scope of activities, expectations and opportunities to make them attractive to them. However, it is very difficult to find the balance between meeting the secrecy requirement of the organization and providing sufficient information about itself suitable for arousing the interest of latent applicants. A kind of information asymmetry - lack of knowledge and orientation – occurs in jobseekers, which should be reduced to the optimal level for the given service according to the principle of secrecy. This challenge causes serious difficulties not only in the field of human resources but also in the research and development activities of national security services. After all, cooperation between external research sites and internal research activities of the organizations are also an extremely sensitive point of compliance with the principle of confidentiality. According to Imre Dobák, information gathering organizations ‘have special goals and professional needs due to their task systems, which can result in unique development directions. There is a high degree of conspiracy connected to their operation, and thus to some of their device systems, which is important not only during the period of application, but also during developments. (Dobák, 2013, 66.) Returning to the topic of human resources, jobseekers may have additional motivations in their choice if their salaries and fringe benefits are presented, the opportunities offered by a predictable career model are described (New Civil Service Career, 2014), and the privileges and benefits of belonging to the staff of services are emphasized. Further results in the increase in the number of applicants can be achieved by a broader expansion of recruitment activities in the digital space. The demand for higher, market-conform salaries of highly skilled human resources is a completely natural need in societies based on a free market economy, but on the part of national security services it can be identified as a kind of challenge in ensuring their human supply. The challenge is very strong here, as applicants with high professional experience relevant to the services should be included in the selection systems. Answering this challenge is perhaps the most difficult of all the others. It is extremely difficult to find an optimal solution, because if the regulatory environment would allow the employees of certain priority fields (e.g. technical, ICT, etc.) to find a salary that corresponds to the market level but much higher than the salary paid in other areas within the organization, it would create a wage tension in the national security organization system that would seriously jeopardize the existence of integrity with employees with much lower salaries. In my opinion, the method already explained could be expedient. According to it, lower-skilled, career starting employees should be integrated into the organization first, and their organizational integrity should be established, as a result of which they will be loyal to the organization and
feel an internal motivation for self-education, as only in this way will they be able to perform their duties in the highest quality expected of them. In this model, it is very important to create a wage level that still ensures the existential conditions of the employee and is already high enough to withstand the brain-drain effect of the private sector. Another solution is coded into the market economy system which economics identifies as a job loss risk. Basically, this indicator can be used to quantify the existential risk that significantly influences the development of wages in the labor market. Based on Bence Papp’s previously proven research findings, it is the private sector that shows higher rates and extreme volatility of job losses during crises. Thus, wages in the private sector may be higher, but the existence of job opportunities is much more crisis-sensitive than in the public sector. The public sector is much less sensitive to economic crises, as, for example, during the first two years of the economic crisis started in 2008, the job loss rate did not really shift (Papp, 2015, 25-40.). This is also supported by economic mechanisms of action caused by the current corona virus pandemic. It can be well seen that while the micro actors of the national economy laid off their employees or sent their employees on unpaid leaves, the macro-economic actors, the public sector, did not move in this direction. It can be concluded that compared to the private sector, national security services are proving to be stable workplaces, which may provide better benefits in the long run for maintaining the existential security of employees than higher wages in the private sector with significantly worse job loss rates. In my opinion, there is also a kind of information asymmetry in this case among jobseekers. To eliminate this, giving information can offer a solution that is, the public sector job loss rate could be featured more prominently in publications for the community and thus bring additional value for national security services with stable jobs, as opposed to the private sector with extremely high and volatile job loss indicators.

Conclusions

In my paper, I managed to examine comprehensively the new challenges of human supply of the national security organization system in the light of the information society. By performing an analysis affecting many areas of social sciences, certain challenges appearing in the selection system of the national security services were identified. The major groups of challenges can be identified as lack of meeting the physical criteria, the low propensity for integrity, lack of security awareness, the contrast between confidentiality of information and de-
mand for information, and the applicants’ ‘market-conform’ wage demands. A solution to these can be found either by optimizing the recruitment procedure systems or by rethinking the organizational expectations and the organizational identity, of course only while preserving the traditional values. Along with some factors affecting national security services, it can be concluded that only a knowledge-based system of national security organizations will be able to provide appropriate answers to the challenges of the future. This requires an convenient basis of a professional staff with high professional knowledge, which is motivated to operate an efficient, knowledge-based, innovative, easily adaptable and constantly evolving system of national security institutions, responsive to all challenges. This type of personnel can effectively contribute to the maintenance of complex security, as ‘the basic task of the national security services is to protect Hungary’s independence and legal order, and to enforce its national security interests.’ (Basic Law of Hungary, 2011, Article 46.) The main pillar of the knowledge-based national security service is the highly qualified staff, which can be solved by the process of integrating career starters in the relevant field of national security – as there is not yet such a brain-drain effect of the private sector due to its more advantageous wage conditions. Thereafter, in addition to taking individual and organizational interests into account, it is necessary for the integrity management system to develop the optimal level of individual integrity of the employee. Exploiting scientific and technical attitudes can be a good approach to do this, as it has a positive effect on both the individual and the organization, for example in the implementation of the achieved research results in work processes. As a result of the organizationally controlled support of individual efforts, the national security service can acquire a loyal, highly qualified and widely knowledgeable specialist in its own staff. After this, it is necessary to ensure the optimal level of salary that makes the loyal, highly qualified employees with significant work experience stay in the staff of the given organization, resisting the wage-based brain-drain effect of the competitive sector, which produces an increased job loss rate. In my view, such a ‘bottom-up’ approach to personnel based on loyalty, integrity and a high level of expertise, can provide a knowledge-based, efficient and sustainable national security service capable of responding to future challenges.
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New Civil Service Career. Budapest: Belügyminisztérium
http://bmprojektek.kormany.hu/uj-koszoszolgalati-eletpalya


Legislation used

Basic Law of Hungary (25 April 2011)
1995. évi CXXV. törvény a Nemzetbiztonsági Szolgálatokról [Act CXXV of 1995 on National Safety Services]
2012. évi C. törvény a Büntető törvénykönyvről [Law C of 2012 on Criminal Code]
2015. évi XLII. törvény a rendvédelmi feladatokat ellátó szervek hivatásos állományának szolgálati viszonyáról [Law XLII of 2015 on employment of the officel staff at organisations providing law enforcement tasks]

13/2015. (VI.19.) BM utasítás az Alkotmányvédelmi Hivatal és a Nemzetbiztonsági Szakszolgálat hivatásos szolgálati beosztásairól és a betöltésükhöz szükséges követelményekről, valamint az idegennyelv-tudási pótlék és az egyéb pótlékok szabályairól [Ministry of Interior decree no. 13/2015 on official service dispositions at the Office for Protection of the Constitution and at the National Safety Service and on requirements to fill them, and on regulation of foreign language allowance and other allowances]


**Online Links in This Article**

URL1: *IT biztonsági tanácsok [IT safety advices]*. https://nki.gov.hu/it-biztonsag/tanacsok/

URL2: *Pozíciók listája [List of positions]*. https://www.fizetesek.hu/fizetesek


URL4: *Hasonlítsa össze fizetését [Compare your salary]*. https://www.randstad.hu/allaskeresoknek/berkalkulator/