# SECURITY DIMENSIONS

ISSN 2353-7000 NO. 23; 2017 (200-212) DOI 10.24356/SD/23/12

# GENESIS OF ADMINISTRATIVE ASPECT OF THE II STREAM OF SECURITY CULTURE. WESTERN PERSPECTIVE

Assoc. Prof. Juliusz Piwowarski, Ph.D.
University of Public and Individual Security APEIRON in Cracow, POLAND

WITOLD M. SOKOŁOWSKI, PH.D.

Sokolowski Consulting Services, Arcadia, CA 91006, USA

#### **ABSTRACT**

Administration is one of the crucial systems for functioning of a state – organisation which is supposed to provide security at collective level for its citizens. Values under which administration operates, are important for security culture of the whole society (II stream of security culture). Concept of Max Weber's ideal type of administration – bureaucracy – was at time of its creation an innovative way of thinking about the state, but as the time passed, several pathologic phenomena had occurred. Authors present here a sketch of Weber's concept and its influence on temporary erosion of values.

#### ARTICLE INFO

Article history

Received: 13.09.2017 Accepted 21.10.2017

Key words

Max Weber, bureaucracy, dehumanisation, postmodernity, security

Some parts of the article are based on published works (J. Piwowarski, *Three Pillars of Security Culture*, "Security Dimensions", 2015, no 14, p. 10–16, DOI 10.24356/SD/14/1 and J. Piwowarski, *Police Officer's Ethics*, Eastern European Development Agency, Podhájska 2013) deepened by further research and analysis.

## Introduction

In 19th century population of Earth reached one billion human beings and the end of the third decade of 20th century doubled the number. The number of people reaches seven billion at the moment. Phenomena occurring in such numerous population, need specific and rational solutions in many categories, including the highly complicated ones in administration-management. That is the main issue of scientific interest of *security studies*. Security system administration, that plays crucial role in such a numerous civilization, also benefits from scientific achievements of this discipline.

The effects of research on security issues (security studies), belonging to the nonmaterial elements of petrified legacy of people, are an important part of a security culture, which used to be only a part of international relations. Over time, this scientific approach gained importance and autonomy. Today, its fields, realism or idealism, thanks to constructivist breakthrough, which came in the 1980s in security studies, can be used for research both the individual or collective active social actors, in different scales, not only in the whole state scientific perspective. They are applied from the scale of the active inviduals by the scale of the collectivities up to the societies- nations and their states. A brief definition of the security culture, is proposed by the author of this article, as follows:

Security culture is the whole material and nonmaterial elements of petrified legacy of people, aimed at cultivating, recovering (if lost) and raising the level of security of specified *individual or collective active social actors*. It can be considered in terms of individual – mental and spiritual, social and physical dimensions.

"In many societies, social research implicate that citizens expect a wider range of public services of a higher level from the state". It is crucial to point out that "specific administration features are connected with the fact that serving common good usually joins with actions durability and noticing the needs of the reality which surrounds administration".

#### CONCEPT OF BUREAUCRACY

Today we can see that simple, rational Cartesian solutions of everyday problems are not sufficient for the purpose of attempts to provide research

<sup>&</sup>lt;sup>1</sup> Administracja publiczna na progu XXI wieku, J. Osinski (ed.), Wyzwania i oczekiwania, Szkola Glowna Handlowa, Warsaw 2008, p. 33.

<sup>&</sup>lt;sup>2</sup> P. Szreniawski, Nauka o polityce administracji, University of Rzeszow, Rzeszow 2008, p. 49.

of reality in a complex manner, in accordance with the guides left by authority figures who reach for holistic interpretations of the already tested concepts. Let's try not to contrast them but to treat them in the spirit of the yin-yang philosophy, as elements which overlap each other.

As far as Max Weber is concerned (who entered on the administration history arena), we can easily assume that he has made a positive (positivistic) revaluation of its development. It happened at the time of a crucial administration metamorphosis process, because from the beginning of the 19th century administration was characterized by a specific, highly developed rule called "personalization". Officials were responsible for their actions only before the king or minister. Furthermore, officials (generally speaking) combined public functions with completely other professions. Nowadays it would be impossible or even highly reprehensible. Unfortunately, nominating particular people is a relatively frequent practice. Patronage<sup>3</sup> and nepotism<sup>4</sup> were quite frequent phenomena accompanying the employment mechanisms. The substantive criteria (at the time) in the existing clerk recruitment (which is difficult to call a system) was unfortunately of secondary importance.

The source of absolute state administration, should be searched in the development of liberal doctrines. They were at that time a counterweight for absolutism. Liberal thinkers indicated the need to limit the state's interference in the citizens life. Furthermore, they underlined the necessity to diminish the range of state structures' activity. In an apparent manner it had a direct impact on the demand to limit the administration influence on the shape of general public's life.

Another important element for the representatives of classic liberal doctrine concept, was to base the demand for restricting the state's interference on legal norms. It was supposed to be a guarantee of respecting the basic human rights. In liberal doctrine, legal norm was supposed to protect the citizen. The linkage of public administration in an act of law was to protect from possible lawlessness of administration and

<sup>&</sup>lt;sup>3</sup> Patronage – is a way to strengthen and expand political influence through biased political nominations for the public administration posts. The phenomenon has not vanished today. See: *Encyklopedia politologii*, W. Sokol, M. Zmigrodzki (ed.), Zakamycze, Cracow, 1999.

<sup>&</sup>lt;sup>4</sup> Nepotism – the posts appoinment due to the misuse of the hold office by the exalted officers who favors their relatives. See: *Slownik wyrazow obcych*, M. Tytula, J. Okarmus (ed.), PWN, Warsaw 2007.

its representatives-administration officers<sup>5</sup>. Therefore, it is hard to ignore Max Weber's achievements. He concentrated his scientific interests on the notion of power, because power has the possibility of deciding about the existence of those who are subject to it.

In the context of our consideration as far as administration is concerned, it is a vital element of the entire public sphere, as well as the security systems. The believes included in Weber's *The Protestant Ethics versus Capitalism Spirit* has a difficult to overestimate influence in the understanding of authentic use of ethics in administration—management processes. It was supposed to rescue the officer's personal sphere from down to earth pragmatism of capitulation. It is effective, yet the later effectiveness effects (which lack moral depth) turn out to be very brief.

Weber, as a politician and philosopher was, a very controversial person. He showed the features of deep nationalism. He had a tendency to depreciate some of the religions, for example Judaism or Catholicism. Generally we might say that he showed an anti-pluralistic attitude. It was also visible in the mechanistic-positivistic description of reality. The description was used by the presented sociologist. However as it was already said, Max Weber was a kind of father of a Copernicus breakthrough in the "clinical" manner of shaping administration through bureaucracy—its standard instrument.

The origin of the bureaucracy term comes from France. It started to be used in the 18th century. The word "bureaucracy" stems from the words *bureau* (French) and *kratos* (Greek). They meant office and authority. The name itself indirectly possesses the features of that institution – impersonality<sup>6</sup>.

Within Weber concept, it was all about the public servant is not meant give importance to the office and to fulfill it with content. Quite the opposite, the clerk's personal traits should evidently not influence the disorder in fulfilling duty. On the other hand, let's remember that bureaucracy is still one of the basic factors establishing the stability of modern civilization. Provided that it works accurately. Yet, in popular belief, bureaucracy means organizational pathology. Especially "bureaucratic inertness". The pathology is caused by the excess of regulations or by clerks indolence.

<sup>&</sup>lt;sup>5</sup> J. Hausner, *Administracja publiczna*, PWN, Warsaw 2005, p. 52.

<sup>&</sup>lt;sup>6</sup> Comp. Slownik socjologii i nauk spolecznych, G. Marshall (ed.), PWN, Warsaw 2006, p. 31.

## SCIENTIFIC ANALYSIS

In terms of political studies, bureaucracy is considered as one of the key elements of of the state as an institution, it is a core of its executive. The form it takes in a particular situation depends on political system of a given country. The simplest typology is either a state constructed from "above", where the aim is to concentrate the maximum authority in the hands of a monarch, or a country established form the ground, where the main aim is to provide effective citizens control over the state.

In the old historic period, administration and bureaucracy were fully dependent on arbitral will of a ruler. It was expressed in edicts, rescripts, addresses or the monarch's decree. Currently, it is a tool of final legitimisation of a particular clerk's decision. States differ among each other in the existing (in bureaucratic systems) arbitrary level. At the same time they cyclically undergo decentralization processes<sup>7</sup>.

The appearance of developed bureaucracy was a characteristic feature of modern administration. At the time it was created, it still needed many improvements. However already in Germany in the 30s and 40s of the 19th century (and wider afterwards) the negative receipt of bureaucracy spread out. Bureaucracy or to be more exact bureaucratism, is a synonym of administrative faults and organizational dysfunction. There were tendencies to excessive work formalization and the officer's post, together with the irreversible administrative personnel overgrowth. The term bureaucratism started to strengthen its main tinge. Currently it is associated with prosaic (yet burdensome for the society) administration faults<sup>8</sup>, which however still need effective facts documentation and at the same time optimal form of bureaucracy.

The bureaucratic deviations have touched and still touch not only the administrative machinery of state but also local self-government or such vital economic institutions as banks. The existence of bureaucratism hinders efficient states work. It also decreases the effectiveness of other organizational structures and may lead to the state where they no longer can reach the fixed goals<sup>9</sup>.

The bureaucratic rules have established hierarchic organization type. It was based on official dependence between superiors and subordinates.

<sup>&</sup>lt;sup>7</sup> Wielka Encyklopedia PWN, vol. 1, J. Wojnowski (ed.), PWN, Warsaw 2001, p. 131.

<sup>&</sup>lt;sup>8</sup> J. Malec, D. Malec, Historia administracji i myśli administracyjnej, Uniwersytet Jagielloński, Kraków 2000, p. 21.

<sup>&</sup>lt;sup>9</sup> P. Winczorek, Nauka o panstwie, LexisNexis, Warsaw 2005, p. 77.

The distinctive feature of modern bureaucracy from its anachronistic forms was the collection (by administrative clerks) of regular payment. In the post appointment they started to guide themselves by professional qualifications. It led to the appointment of posts to people not necessarily belonging to the upper classes. Simultaneously it has allowed the rulers to strengthen their position towards aristocracy<sup>10</sup>.

# IDEA OF MAX WEBER

Weber was the creator of the ideal bureaucracy concept. Bureaucracy based on specific rules – to create civil service. The candidates were supposed to be recruited and appointed on the basis of professional competence. They should also simultaneously preserve political neutrality. According to (at the time) this entirely new theory, civil service was supposed to perform their administrative tasks in a systematic, professional and constant manner.

In the concept of sociological research inspired by the search of an ideal post (Max Weber's idea), the term ideal bureaucracy refers to a specific organization form of human administrative actions, which are characterized by the following assumption data:

- 1. Formal regulation of official actions and behaviors, which causes the previously mentioned impersonality. Proper professional vision and distance to objectively run cases. The offices are therefore bided by a set of abstract rules and their personal features (left behind) lack the possibility of influence on the standard procedures, characteristic for a particular professionalized bureaucracy type.
- 2. **Hierarchic organization** and the relationships connected with them: the orders go down, whereas realization reports up. All official contacts are documented. Special archives serve for documents gathering. They are a kind of tremendous "memory" gathered by the organization.
- 3. **Action rationalization** and optimal resources gathering connected with it. From the angle of assumed effects, which simultaneously are the organizational goals. At the same time, the organization deals with the usage of expenses analysis and the load of work.
- 4. **Meritocracy** is a vital Weber's element. It means the dependence of bureaucratic carrier from officially confirmed credentials and officer competence based on specific work results. The duty fulfillment is the officer's only occupation and the source of his/her income. The work means

<sup>&</sup>lt;sup>10</sup> J. Malec, D. Malec, *Historia administracji...*, p. 20.

essential for the fulfillment of duty belong to the organization and not to the officer on duty.

Max Weber believed that human civilization tends to rationality. The sign of rational order is the prevalence of bureaucracy. At Weber's times, rationality was supposed to reach its apogee in the profit oriented capitalistic enterprise as well as in public service. It all should be rational and objectivized. The main objective which is the creation of work place (by the entrepreneur) for the less enterprising members of community and ensuring them salary through profit earning. Furthermore, means to profit realization that is expenditure which is necessary to bear due to the indispensability of the production factors<sup>11</sup>. Weber called such *status quo* "formal rationality".

As to state actions, they are directed to objectives which are neither rational nor objectivized. Even though the supposed expenditure bearings for their realization (in the market economy) have a measurable value. In reality it means that the organizational aims ought to be redefined constantly. The content of those definitions is determined on the means selection suitable for a particular purpose. Max Weber called that kind of rationality as substantial<sup>12</sup>.

At the turn of 19th and 20th century, Max Weber formulated a type of ideal bureaucracy as a phenomenon characterized by a long term neutrality. At the time in question, developed bureaucracy was essential and was connected with the range of problems of effective authority execution. Weber established three kinds of authority: charismatic, traditional and legal.

- 1. **Charismatic authority** is based on a specific feature charisma. Charisma is a set of special individual leader's traits. The individual who possess the given authority, selects subordinate co-workers gathering them around oneself through influencing the environment.
- 2. **Traditional authority** its basis is the believe that social status is a genetic mainstay of authority. In other words, a significant element is the continuity of certain tradition. The element is present today in the traditional family functioning. Whereas official posts and statuses are not hereditary.

The production factors are material or non-material (work) means necessary for the production process existence. The term was created by Adam Smith – Scot (1723–1790). He used it in his work entitled *Research over Nature and the Reasons for Nations Richness*". It was published in Great Britain. Smith was an extremely versatile man. He was an ethicist, economist, logician classical philologist and lecturer.

<sup>&</sup>lt;sup>12</sup> Wielka Encyklopedia PWN..., vol. 1, p. 131.

3. **Legal authority** – also known as rational. It is connected with a choice or an appointment based on legally specified procedures. Interesting is the fact that after years of using Weber's concept, it turned out that the authority represented by directors, managers or uniformed officers should be more complementary than estimated by bureaucratic model. When thinking about effective administration, a lot is said today about leader concept.

A leader is a person who represents a charismatic kind of authority. But both in traditional and modern aspect. The leader's authority stems from his place in the hierarchy, which he should gain through high and versatile psychological, moral and professional competence. Naturally, in accordance with the present rules, the civil service on one hand needs leaders in the professionally-characteristic sense. On the other hand they must be interchangeably and surely fixed in their posts, in the way that Weber referred to as "legal authority". That last type of authority reinforcement is based on five assumptions:

- 1. There is a possibility of constituting legal regulation which should subordinate the members of a particular organization.
- 2. The law system consists of a set of abstract rules, on the basis of which specific cases have been decided.
- 3. The person who exercises the power is subordinated to legal order which in its own manner is impersonalized.
- 4. The person who subordinates to authority, is doing it all because being a member of the organization with which is fully identified.
- 5. The members of the organization who subordinate themselves to the person exercising power (officer holding an office) in reality subordinate themselves to an impersonalized, generally accepted and legal order<sup>13</sup>.

According to Max Weber, the administrative attribute of legal authority was supposed to be a pure bureaucracy monocratic in character-presenting itself as a pattern of organizational functioning of administrative system.

Weber based his ideal bureaucracy model on legally specified competences, especially separating authorization and duties. The specification of authorized powers in the internal sphere, the usage of constraint measures, the conditions of their rightful usage, hierarchy and a subordinate availability as a result of it. The separation of subordinates from the administrative property means, official posts from personal interests, prohibition of taking additional job by the clerks, responsibility of holding

<sup>&</sup>lt;sup>13</sup> J. Lukasiewicz, Zarys nauki administracji, LexisNexis, Warsaw 2007, p. 37.

proper qualifications, order to document clerical activity and clerk's impersonalized work style. All those elements are still vital for the proper course of duty, which incidentally does not take place without offices or well organized bureaucracy. May it only be properly and perfectly organized this time.

## RULES OF IDEAL BUREAUCRACY

From the idea of legal authority (which had a strictly rational character) Weber had introduced the basic rules of ideal bureaucracy. They were described by Reinhardt Bendix when painted the intellectual portray of Max Weber<sup>14</sup>.

Rule 1. **Stability.** Clerk activities meet the law regulations. They are carried out as a permanent office activity. Office is a specialized entity in that aim, besides the officers of a particular institution who fulfill the above mentioned duties do it in a professional manner. It means that the activities they carry out are their essential and stable occupation (excluded as an additional job). It is supposed to cause honesty and punctuality in handling the appearing cases.

Rule 2. **Competence.** The scope of laid tasks, possessed authorization and competence should be fixed and transparently specified. Precise description of both range and authorization conditions to fulfill orders or to use specific constraint measures. The officers may have the above mentioned entitlements at their disposal only in a formal course, as a result of proper legal acts enactment. Therefore the system prevents from inconsistencies in the application described methods or tools as well as inappropriate institutional service performance.

Rule 3. **Hierarchy.** Weber based his bureaucratic organization on the hierarchy rule. It was supposed to be efficient and legal manner for the officers' actions. A lower rank clerks are subordinate to the clerks who are one level higher in the hierarchy. Clerks who possess authority to give orders, control them and regulate the work mode of subordinate officers. The system eliminates the probability of possible errors or mistakes. Errors

See: R. Bendix, Max Weber. An Intellectual Portrait, University of California, Berkley (CA, USA) 1978; Comp. J. Hausner, Administracja publiczna..., p. 55; A. Kloskowska, Biurokracja, [in:] Encyklopedia socjologii, W. Kwasniewicz (ed.), vol. 1, Oficyna Naukowa, Warsaw 1998, p. 69; B. Szacka, Wprowadzenie do socjologii, Oficyna Naukowa, Warsaw 2003, p. 208–209.

or mistakes that can be the result of overlook, carelessness, lack of competence, pride or insufficient range of practical experience.

Rule 4. The officers' separation from the property. The officers who hold a particular office in the bureaucratic organization, simultaneously represent the state. They themselves are not the owners of bureaucratic measures (administration). They work is in a particular way systematically rewarded.

Rule 5. **The duty and privacy separation.** Weber separated the official posts and proceedings connected with them. They were no longer included in the officers' private affairs and interests. The bureaucratic organization should ensure that its members fulfill their duties in a fully objectivized and optimal way. In such a way that objectivism and impartiality go hand in hand with the entire jobbery elimination in the dominant context of respect for institutional range.

Rule 6. Formal qualifications. They are the basis for employment and to further promotion in the institutional hierarchy. They consist of: education, skills and experience which should be precisely described for the particular work posts in the organization. The recruitment system and its criteria should in effect cause that the employed people will realize their own tasks in a perfect way. Nominations and promotions (and corresponding emolument) should be regulated with transparent and precise regulations in the organization. Yet, the important factor of payment and promotion system is the job tenure. The function of the job tenure is the increase in experience potential and the absorbed knowledge in the professional trainings necessary to raise the officers' qualifications. These are the factors which serve to increase the effectiveness of the institution.

Rule 7. **Documentation.** The officers' activities are based on a precise record keeping, documentation of elements which outside the office are not recorded. It refers for instance to conversations (direct or via telephone). It serves to provide the possibility of accuracy verification within activities which main aim is the proper and efficient citizens' problem solving. At the same time, the standard documentation system (including uniform file register) enables (in case of the necessity to replace the missing officer) to introduce a substitute of equivalent formal qualifications, even in case of smaller (than the predecessor) practical experience necessary in a particular organization cell.

Rule 8. **Depersonalization or impersonality.** Authority, or to be exact officer's authorization, is the consequence of office holding. The authorizations are depicted by proper and transparent (that is straightforward) regulations. Yet, the theoretical assumption that the used legal system is in fact an ideal one is necessary.

It additionally shows how formal legislative<sup>15</sup> and the emotional strengthening of its members in ethical action foundations, are of importance as far as authority and citizens trust to the legal system is concerned. Because it all depends on legislative, which decides how high is the quality of, on which later on bureaucracy is based on.

# Conclusion

Max Weber had firmly stressed the need of professionalism in the public service. It is especially essential that the people who hold executive posts, should be characterized by the highest level of professionalism. Bureaucracy was supposed to be a tool of a logically functioning authority. It ought to effectively serve the social development – in other words, effectively increase the citizens' life standards. His bureaucracy concept was impersonal, rational, specified, universal and oriented on the effective fulfilment of entrusted tasks. The Weber's system was the need of historical moment and has eliminated (at least in a theoretical sense) the arbitrariness and greatly unspecified recognition of an old fashioned clerical apparatus.

It is necessary to emphasize that Max Weber's work had a great impact on the formation of legal and political cultures. Especially in terms of clerical obligations strengthened by law and the separation of privacy from the public sphere, as characteristic standards for the proper functioning of the modern legal state model<sup>16</sup>. Naturally, the mechanistic rationality of Weber's administration form, was optimal for the historical moment of its introduction. After positivistic breakthrough and establishment of Weber's idea as a standard, it turned out with time that human being

Legislative (Lat. *legis latio* – "establishment of law") – it is a law-giving body in the structure of state. The name is mostly given to parliament. It is connected with the division of power. The legislation task is to establish law in opposition to executive power. See: *Stownik języka polskiego PWN*, L. Drabik, E. Sobol (ed.), PWN, Warszawa 2007, vol. 1, p. 344.

J. Szreniawski, Rys historyczny nauki administracji, [in:] Nauka administracji – wybrane zagadnienia, J. Letowski, S. Strachowski, J. Szreniawski, A. Wrobel (ed.), UMCS, Lublin 1993, p. 64.

can to some extent learn how to be a machine but it is not a very beneficial option. Quite opposite, it is a dead end.

The procedure automation as a positive manifestation of self-discipline and professionalism is very important but it is still not enough as far as the necessary efforts to come into being (an automatic human) a self-improvement process.

The dehumanization, in Weber's concept a positive element, is one of the modern major threats to the culture. English philosopher and sociologist, Roger Vernon Scruton, as an apologist of Western *culture*, highlights importantly – "culture is important". This statement, in globalization era, does not reverberate all around us so strongly that it does not need to be repeated after Scruton, and confirmed in the specific actions. To teach others that "culture is important", we must therefore first begin with ourselves. Nowadays the false interpretations of freedom are very common, depriving us of culture, that give us patterns of behaviour in accordance with specific standards and rules. Not everything can be "decomposed", "deconstructed" or simply changed into other false "substitute". Culture means humanity, trying to replace it with not-genuine values is like to try to use eg. sulphur for breathing instead of oxygen.

#### REFERENCES

- 1. Administracja publiczna na progu XXI wieku, J. Osinski (ed.), Wyzwania i oczekiwania, Szkola Glowna Handlowa, Warsaw 2008.
- 2. Bendix R., Max Weber. An Intellectual Portrait, University of California, Berkley (CA, USA) 1978.
- 3. Encyklopedia politologii, W. Sokol, M. Zmigrodzki (ed.), Zakamycze, Cracow, 1999.
- 4. Hausner J., Administracja publiczna, PWN, Warsaw 2005.
- 5. Kloskowska A., *Biurokracja*, [in:] *Encyklopedia socjologii*, W. Kwasniewicz (ed.), vol. 1, Oficyna Naukowa, Warsaw 1998.
- 6. Lukasiewicz J., Zarys nauki administracji, LexisNexis, Warsaw 2007.
- 7. Malec J., Malec D., *Historia administracji i myśli administracyjnej*, Uniwersytet Jagielloński, Kraków 2000.
- 8. Piwowarski J., *Police Officer's Ethics*, Eastern European Development Agency, Podhájska 2013.
- 9. Piwowarski J., *Three Pillars of Security Culture*, "Security Dimensions", 2015, no 14, DOI 10.24356/SD/14/1.

- 10. Slownik socjologii i nauk społecznych, G. Marshall (ed.), PWN, Warsaw 2006.
- 11. Slownik wyrazow obcych, M. Tytula, J. Okarmus (ed.), PWN, Warsaw 2007.
- 12. Stownik języka polskiego PWN, L. Drabik, E. Sobol (ed.), PWN, Warszawa 2007, vol. 1.
- 13. Szacka B., Wprowadzenie do socjologii, Oficyna Naukowa, Warsaw 2003.
- 14. Szreniawski J., *Rys historyczny nauki administracji*, [in:] *Nauka administracji wybrane zagadnienia*, J. Letowski, S. Strachowski, J. Szreniawski, A. Wrobel (ed.), UMCS, Lublin 1993.
- 15. Szreniawski P., *Nauka o polityce administracji*, University of Rzeszow, Rzeszow 2008.
- 16. Wielka Encyklopedia PWN, vol. 1, J. Wojnowski (ed.), PWN, Warsaw 2001.
- 17. Winczorek P., Nauka o panstwie, LexisNexis, Warsaw 2005.

# CITE THIS ARTICLE AS:

J. Piwowarski, W. M. Sokolowski, Genesis of Administrative Aspect of the II Stream of Security Culture. Western Perspective, "Security Dimensions", 2017, no 23, p. 200–212, DOI 10.24356/SD/23/12.

Licence: This article is available in Open Access, under the terms of the Creative Commons License Attribution 4.0 International (CC BY 4.0; for details please see https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided that the author and source are properly credited. Copyright © 2017 University of Public and Individual Security "Apeiron" in Cracow