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THE MEANING OF MULTIBUSINESS STRATEGY IN SEARCH OF A NEW ANALYTICAL FRAMEWORK

ABSTRACT

What does it mean to be a multibusiness organization? This article examines the meaning of this term and its implications for the strategic analysis of such organizations.

STRATEGIC ANALYSIS

As noted by the author of the classic book on the subject, "The business strategy concept has led to numerous misunderstandings, and this is not surprising."¹

The goals for this article are to explore the analytical implications of the term "multibusiness" and to identify the key issues that are raised by this term.

Being a multibusiness organization means that a firm is engaged in more than one business. This is a simple statement, but it is not self-evident.

One common view is that a firm is a multibusiness organization if it has more than one business unit. This view is based on the idea that a business unit is a distinct and identifiable part of a firm.

1. This article is based on the author's research for his book, *The Business Strategy Concept: A Critical Analysis* (London: Sage, 1987).

2. This article is based on the author's research for his book, *The Business Strategy Concept: A Critical Analysis* (London: Sage, 1987).

3. This article is based on the author's research for his book, *The Business Strategy Concept: A Critical Analysis* (London: Sage, 1987).

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THE MEANING OF MILITARY VICTORY. IN SEARCH OF A NEW ANALYTICAL FRAMEWORK

Robert KUPIECKI¹

In my essay I wish to take up the concept of military victory in the context of current scholarly debate on the subject, focusing on the research problems, emerging areas of consensus and diverging views. A few outstanding studies² set the tone for many more publications on the subject. They suggest a theoretical approach to the issue, intending to inform policies of democratic governments about how to transform victory into long-term political benefits. It is so because, the goals for which wars are fought can only be understood if they are perceived in a broader context, extending beyond the very act of violence³. The “victory theory”, emphasizing the dynamics of the problem, the perception element, flexible relations between (changeable) war objectives and its actual results, encourages more research into the conditions that will guarantee permanent and optimal termination of military conflicts.

¹ Associate professor at the National Security Department of the National Defense Academy in Warsaw. Undersecretary of State in the Ministry of National Defense of Poland. The text contains the author's personal opinions exclusively.

² See especially: R. Mandel, *The Meaning of Military Victory*, Lynne Rienner Publishers, Boulder 2006., W.C. Martel, *Victory In War. Foundations of Modern Military Policy*, Cambridge University Press, Cambridge 2007., Martel, *Victory In War. Foundations of Modern Strategy*, Cambridge University Press, Cambridge 2011., I. Bickerton, *The Illusion of Victory. The True Costs of War*, Melbourne University Press, Melbourne 2011., C. Gray, *Defining and Achieving Decisive Victory*, Carlisle Barracks 2002, US Army War College, www.strategicstudiesinstitute.army.mil/pubs/display/cfm?pubid=272, pp. 11–13, May 2009., B. Bond, *The Pursuit of Victory. From Napoleon to Saddam Hussein*, Oxford University Press, Oxford 1998., J. Angstrom, I. Duvesteyn (red.), *Understanding Victory and Defeat in Contemporary War*, Routledge, London 2007.

³ Fred C. Ikle, *Every War Must End*, Columbia University Press, New York 1991, p. 14.

Points of reference

Let's start with a few general questions: Did Poland win World War II? After all it was a part of the victorious coalition. But the consequences of this victory were ambiguous, producing a much lower starting point in the aftermath of 1989, than for its war allies and even for the losing side - Germany. Did the USA lose the Vietnam War? It was not a military defeat. But the government lost public support for the military activity, and the signed truce evoked a long-lasting trauma for the generation of American politicians, soldiers and society. However after forty years since the war in Vietnam ended, the country itself and its relations with the USA remain stable. In May 2003 president George W. Bush declared victory in the war against Iraq, in which Poland also took part (*mission accomplished*). The tactical and operational military objectives had been achieved: the enemy was crashed, its territory and capital occupied. But the old war transformed into a new one, with new rules of engagement and new players. After the US President had declared the end of major combat operations in Iraq, over 8 thousand American and coalition troops and tens of thousands of Iraqi civilians were killed. The response of the public has changed, which influenced American operational decisions and politics. Then, the international military operation in Afghanistan has been the longest-ever military conflict for America – and, in the most recent era, for Poland, too. So what describes victory in this conflict? Apart from the definitional morass – is the “war with terrorism” to be won at all? What is the relation between the way western civilization perceives victory and its reflection among our opponents? The answer to these questions can be strongly determined by the way we want to understand military victory.

Modern perspective on the issue is broader than viewing war as a simple instrument of politics of “now and here”, and of defeating the opponent on the battlefield. Thomas Schelling thought that: “the term *victory* does not adequately describe what the public expects from the country's armed forces /.../ The way we can use the military victory for our own national, or even broader interest, is of the same value as the winning itself /.../”⁴. Scientific research of the last two decades places this problem at the very heart of modern military conflict analysis. It also draws

4 T. Schelling, *Arms and Influence*, Yale University Press, New Haven 1966, p 31.

from the critical insight into military history. It does not deny the achievements in the field of science and the art of war, but is far from the traditional restricting of the research field to the "way of winning battles and campaigns"⁵. The postulate has been put forward that through scientific and objective results analysis, synthetic methodological database of the "victory theory" can be created.

Most research in this field actually describes the utility of wars as states' strategic instruments in achieving their political goals. It also focuses on peace treaties and the sources of changes in international relations. And even if "political actions expressed through the acts of violence" are invariably going to lead to victory, the methods and the context, in which we interpret the long-lasting outcome of a war are all changing. Contemporary researchers don't view the victory as the end to a war, but as a moment at which the winning side faces the question how to best use the newly won power over the defeated opponent. They also investigate into the field of politics, diplomatic relations, time factor and public opinion. The winner's decision (domination, resignation, self restriction) determines the shape of the new post-war international order. Of course, it does matter how decisively and who has won the war, but also who and when judges its outcome in a subjective manner. What results from military victory? What changes does it bring to the fighting nations, to the region, international relations? What is the relation between the outcome and initially declared objectives of the war? Are they flexible and can they shift our expectations as far as the shape of the victory is concerned? Is it possible to win and lose at the same time? What matrix to apply when rating the victory and how to improve the results of war? What is the price of overly superficial approaches to victory or of abusing them?

It was already Jan Gottlieb Bloch, a 19th century pacifist and visionary of the "contemporary war", who noticed both human and material costs of winning modern wars. The potential and innovation of the age of industry got applied for that purpose⁶. In his study, based on the analysis of social, political, economic

5 This trend in research is also widely represented in modern publications on war, see: Ch. P. Potholm, *Winning the War. Seven Keys to Military Victory Throughout History*, Rowman and Littlefield Publishers, Boulder 2010., Stephen Biddle, *Military Power. Explaining Victory and Defeat on Modern Battle*, Princeton, Princeton University Press, Princeton 2004.

6 See. J.G. Bloch, *Future War in Technology, Economics and Politics*, / *Przyszła wojna pod względem technicznym, ekonomicznym i politycznym*, Polski Instytut Spraw Międzynarodowych, Warsaw 2005.

factors, and also those connected with international relations, the victories were no longer even to be considered *pyrrhic* ones, but simply impossible to reach at all.

However, it was the *nuclear* strategy luminaries that actually laid down the intellectual foundations for contemporary reflection on the meaning of military victory. The scholars (and political practitioners) of the period – Zbigniew Brzezinski, Henry Kissinger⁷, Klaus Knorr, Bernard Brodie, Arnold Wohlstetter, William Kaufmann, Herman Kahn, Thomas Schelling, and, in broader context, Raymond Aron and Kenneth Waltz, have not just created intellectual framework of the nuclear strategy, but also introduced some ambiguity into the very concept of victory in a such a conflict. Due to their propositions, politics in general had to find its way more into the area of defence/deterrence strategy and the improvement of peace. They did not *de facto* rule out the concept of military victory in a nuclear war, but they acknowledged that it cannot be adequately applied to describe what follows it. They were looking for more depth and understanding of the issue in the strategy of deterrence – the combination of military, economic, social, technological, educational, political and diplomatic means and solutions. What connects the “victory theoreticians” of the Cold War era with their modern followers, is the way they describe the victory through extensive research results, time factor, and separation from the actual war termination moment.

Contemporary wars have often been clashes between states and their coalitions with non-state agents. With different cultural background, operating in diverse understandings of time and space logic, with no democratic provision for legitimate activities, and not scared off by technologically or financially/materially stronger enemy. Contrary to classic wars – when an uniformed opponent represented and fought in the name of his/her country and according to some established rules of warfare. Today’s fighter frequently does not identify himself or herself with any authority whatsoever, has unclear goals and will often choose death over life. This fact must influence the perception of a victory and a failure. Success can be measured with positive things, such as periods of time without acts of violence, brutal attacks or the renewal of fighting. But it is hard to describe it within the

7 See also: C.S. Grey, *Nuclear Strategy. The Case for Theory of Victory*, “International Security”, No 1, Summer 1979, pp. 54–87.

categories of national strategy or foreign policy, where a victory must constitute a clear and measurable sense of profit and well-being for the citizens.

The research material is mostly based on the wars in Iraq and Afghanistan, where winning over an armed enemy did not bring about a conventionally understood victory, the enemy has changed over the time of war, and the goals had to be modified accordingly to the changes in the overall situation. There has appeared a pressing challenge to transform the battlefield success into the long-lasting, permanent political victory. Richard Holbrooke⁸, an outstanding American diplomat and negotiator, did predict that problem while reflecting on the meanders of discussions on victory in modern military conflicts. He thought that in treating victory as a basis for the realization of long-term post-war goals, "here and now" one can only talk about its acceptable scale⁹ or call it in another way.¹⁰ Building his reflections on *decisive victory* Colin S. Gray proves that this concept has to be supported with the ideas of *strategic success* and *strategic advantage*. In his own words these three terms "comprise a simple three-level view of relative military achievement"¹¹.

8 His opinion on war in Afghanistan: „.../this war will not end with an unquestionable victory declared on board of a warship, or a new Dayton just like the war in Bosnia.../ It is going to have a different type of closure, probably in form of some sort of truce or treaty, but we cannot, obviously, sign a truce with Al-Qaida. .../ We do not use the word *victory*, instead we talk about *success*", see: www.alertnet.org/thenews/newsdesk/LDE6550.htm, June 2011.

9 See also: T. Franks, S. Biddle, P.Ch. Choharis, J.M. Owen, D. Pipes, G. Rosenau, D. Zakheim, *Is This Victory?*, "The National Interest" 20/10/2006, www.nationalinterest.org/article, March 30 2012.

10 Strategic studies use the term "military victory", "wartime success", "termination of war". But each of these terms seem to associate victory with defeating the opponent in battlefield, depriving it of the will to build up resistance and forcing in the capitulation conditions. These terms don't reveal much about the world that emerges from the Clausewitz *fog of war* and the usefulness of that political instrument for obtaining conditions better than those proceeding the outbreak of the military conflict. In the world, where total destruction of the enemy and conquering it are in denial, this "better peace" must become the domain not only for the victors, but for the losers, too.

11 Gray perceives strategic victory as a uniform concept, that on the tactical level describing victorious battles, on the operational one – campaigns, strategic – wars and political – it enables the transition phase towards the post-war stabilization period. According to Gray, achieving decisive victories is possible, though not guaranteed by the technological superiority, see. C.S. Gray, *Defining and Achieving Decisive Victory*, Carlisle Barracks 2002, US Army War College, www.strategicstudiesinstitute.army.mil/pubs/display/cfm?pubid=272, pp. 11–13, May 2009.

The "victory theory" is still "a living" subject matter for research, rather than an established scientific paradigm, or theory¹². It is not surprising as strategic studies recorded a number of similar issues, around which the academic discussion is developing, for example the "alliances theory", and the fundamental concepts of *strategy* or *security*. In the case of *victory theory* for instance, basic goal is to bring some order into the realm of terminology. It provides critical insight into the historiography of armed conflicts, but acknowledges the analysis of the past as the comparative data for the evaluation of the effects of wars of our time¹³. This theory doesn't belong directly to any *school* of international relations, though it borrows state-centrism from realism, and power as a method of will expression and influence of over a state. And from liberalism – subjective approach to other actors and forms of international cooperation. The "victory theory" is highly influenced by its context, and by far it is not universal, nor will ever be constrained within widely approved rules and standards. Every type of war and every cultural context in which it is set creates its own perception of victory – it is different for classical wars between states, and also specific for nuclear or war against terrorism¹⁴.

12 For J. Boone Bartholomees, *the victory theory* is a cognitive theoretical phenomenon, within which political leaders define most effective and optimum methods of achieving military victories and transforming them into long-lasting political benefits, *Theory of Victory*, "Parameters", Summer 2008, p. 25. Therefore, indicating a victory depends on the way we define the problem and the level of flexibility built into that definition.

13 M. Motten, ed., *Between War and Peace. How America Ends Its Wars?*, Free Press, New York 2011. Based on the experience of wars fought by America this study formulates hypothesis useful for analysing the nature of victory, like the one that victories must be viewed not through their final stages, but through the limitations; the goals of war change as the war continues, and with that so does the expectation concerning the shape of victory; opposing objectives of the sides of a conflict grow closer and closer up to a point when one can establish a cease-fire. See more.: R. J Spiller, *Six Propositions*, in: *ibid.* pp. 1–20.

14 Interesting case studies on the "victory theory" concern terrorism. For example, a British political scientist and terrorism expert Jeffrey B. Cozzens presented his analysis of "strategic thought" of the leaders of world Jihad (*Victory from the Prism of Jihadi Culture*, "Joint Forces Quarterly" 2009, no 1, pp. 86–91.). Based on that analysis he also constructed a "Jihad victory theory", comprising six criteria that classify victory as: ability to fight forever, fulfilling a duty to fight all the non-believers as an obligation of every true Islamist, to die a martyr in the name of religion and legitimizing the martyrdom, maintaining the identity by naming and fighting the enemies, pride, unity and brotherhood of the Jihad fighters, arriving at the situation when the enemies of Islam will suffer the same like the devotees of Islam from the hand of their oppressors.

Between the „Fogs of War and Victory“

In chapter three, volume one, of Carl von Clausewitz's work "On War" (highly recognized by the *victory theory* researchers) the author mentions "a fog of lighter or heavier uncertainty" as a regular phenomenon accompanying the conflicted sides, resulting from the dynamic and changing nature of the war actions¹⁵. He wanted to undertake an intellectual effort that would eventually lead to introducing some order to a naturally messy area. The same postulate could be applied today to the analysis of victory. The limitations of traditional forms of war (international wars) the exposition of old, but used in a new way (asymmetric or hybrid)¹⁶ methods of warfare, the evolution of accompanying goals, the ambiguity in viewing success, the time factor, which changes the way we look at the outcome of victory – all force us to ponder the issue. If war as an instrument of politics does change, so must change our thinking about victory. This problem was touched upon by many authors of classic works on the history of war, warfare and strategy.

A Chinese general Sun-Tzu was aware that even though we know how to win, we cannot control the victory. Ancient Greek historian Thucydides wrote about the frailty of Sparta success in the Peloponnesian War. A Roman historian Titus Livius put down in his work a question put forward to Hannibal by a Cartagena cavalryman – why he knows how to win a war, but is not able to use this victory. Yet another Greek historian of the Hellenistic Period – Polybius, appreciated the taste of victory after a well-led war campaign, but thought that it takes much more wisdom to make proper use of that success. He pointed out that the number of those who had won their battles is much higher than those that had been able to accurately apply the victory to their benefit. Niccolò Machiavelli understood that victory bears a number of various consequences to the victorious side. The classics of revolutionary war: Vladimir Ilyich Lenin and Leon Trotsky distinguished between the military victories and their strategic consequences for the Revolution. Basil Liddel-Hart warned against the equal treatment a real victory and reaching immediate (tactical and operational) war goals. Henry Kissinger along with other

15 C. von Clausewitz, *On War*, Wydawnictwo Test, Lublin 1995 /translated by A. Cichowicz, L.W.Koc, F. Schoerner/.

16 See. W Murray, P, Mansor, *Fighting Complex Opponents from the Ancient World to the Present*, Cambridge University Press, New York 2012.

nuclear era strategists noticed, that searching for total, complete war victory can in fact lead to a country's political stupor¹⁷.

Clausewitz himself did see the victory as more complex than just a campaign or battle result, but he did not further examine the issue¹⁸. Still, he demanded that one should know and predict what war results are to be obtained and how to measure the extent to which they are to be realized – even before the war starts. According to him, war victory is not to be understood as abstract, but as something directly related to a particular type of war. He introduced three victory assessment criteria: more material damage on the opposite side, decline in “morale” and, openly admitted, withdrawing from reaching one's own military goals. This last aspect directly invites the discussion on the essence of victory perceived as a unity with the post-war period (time of peace), and not just an end to a conflict. Seeing victory as a continuum, bridging over the moment of cease-fire and the time of peace, allows the researchers to distinguish between the paths leading to a military victory, reached through successful tactical and operational victories, and a **strategic victory** – a more complex, projected against longer, extensive period of time, often subject to open interpretation¹⁹.

In numerous academic studies, the direction of research is determined by attempts to describe military victory as a condition in which a winning country can realize its strategic goals using force and other attributes of power. From the practical

17 An excellent example of the compilation of classic authors views (historians, strategists and leaders) concerning the military victory is presented in W.C. Martel's work, *Victory In War. Foundations of Modern Military Policy*, Oxford University Press, Oxford 2007, pp. 15–82. It presents both the changes over time, and the lack of clarity of the idea as seen in various contexts of reality description and a different definition content applied by individual authors.

18 An excellent attempt at contemporary interpretation of Clausewitz's work is found in a book by B. Heuser, *Reading Clausewitz*, Polski Instytut Spraw Międzynarodowych, Warsaw 2008.

19 Military historian Brian Bond, presents in his excellent work historic (from Napoleon era to the war in Iraq) context of today's considerations on victory, pointing to two questions tied permanently to the issue. The first one is operational problem concerning the methods of reaching clear-cut victories in battlefield conditions, the second is transforming them into long-lasting, permanent political outcome. Over the period of 200 years social and technological change have changed the way wars are fought, influencing the way we perceive victory, the means of achieving it, sometimes its ephemeral and short-lived nature: B. Bond, *The Pursuit of Victory. From Napoleon to Saddam Hussein*, Oxford University Press, New York 1998, pp. 199–202.

point of view, this analysis could provide politicians with more appropriate tools to be used in international relations and defense strategy. The investigation is conducted on three layers of analysis. First – pertaining to tactics and operations (military criteria) – where the focus is on defeating the opponent in battlefield conditions or in any other form of skirmish. Second – strategic level (political and military criteria), where battlefield victory leads to the realization of the earlier established goals and the outcome is important in the following time of peace and for the regional situation. Third – grand strategy level, where victory leads to changes in global order. The researchers generally agree on the following components forming the “victory theory”:

First of all, without disregarding other opinions, it is mainly focused on the level of strategic assessment that combines the original goals with the actual results and their future consequences. It considers them in regard to internal and external aspects of the current situation of the winning side.

Second, it is looking for the connection between theory and thoughtful political decisions.

Third, it recognizes the priority of politics over war and political nature of victory, exceeding with its content and meaning beyond the horizon of military success.

Fourth – it respects geography, culture²⁰ and time as contexts in which the event is viewed.

The popular perception of victory (a changing one by nature) is considered to be a legitimizing factor for a nation’s actions and a source of its policy. Also the

20 In the clash of cultures between the countries at war, victory will usually have a different meaning for the winners and losers. An example of such opposite approach/perspective is the result of the First Gulf War: the declaration of success by the American side /.../ with reclaiming Kuwait. For Saddam Hussein the measure of his success was regaining his power. Audrey Kurth Cronin in her work, *How Terrorism Ends. Understanding the Decline and Demise of Terrorist Campaigns*, Princeton University Press, Princeton 2009, presents the historical experience of fighting the movements that derive from terrorism as the method of warfare and recalls the victorious strategies: eliminating the leaders, including some of them to the political process, supporting the internal breakdown of a system, forced elimination of the whole movement, support for the transformation into a different, less radical form of violence. She also understands, that the effective victory theory in war on terror must be based on raising social awareness, isolating the terrorists and creating an alternative identity that will condemn the crimes and deprive the fanatics of the martyrdom splendor.

power of instruments shaping public opinion (worldwide 24/7 news media) is not to be underestimated. In fact, we need to address three basic questions that are of equal importance for the strategy of a country at war and its government, three issues sanctioning the war goals and ensuring social acceptance for actions leading to them: What shape should the victory take? What are the means to achieve it? What is its overall cost (post-wars years included)? It is the framework within which it is important to clearly formulate the goals to be achieved with the use of armed forces, which is of basic importance for deciding on the required means and time to do it. Lacking that clarity can lead to losing public support for the government activity – an unalienable factor in democratic countries. Setting out clear war goals must also be connected with the responsibility for the state of affairs after it has ended. Every recent military conflict meant an actual long-lasting “gridlock” (financial, military, political) for the winning country. It could not go forward from the point where the conflict ended. Two major ones – in Iraq and Afghanistan did question whether the achieved final outcome of war was coherent with the originally declared goals and the expected shape of victory.

The “victory theory” wants to, within political, economical and military criteria, build the understanding of the changes brought about by the fact of victory for the winning party’s politics and international relations. The scope and method of the mobilization of the country’s resources for the realization of the primarily outlined goals, as well as the scale of the country’s obligation and responsibility after the conflict, are also subject to research. A number of researchers agree that the perspective of one generation (25 years) is required and sufficient for analyzing the phenomena connected with the consequences of a military victory. The time frame of about a quarter a century is accurate as a war shapes the psychology and emotions of the nation for at least one generation of all its citizens (those who waged, fought or survived it without active participation). That’s why the proposed time allows for credible analysis of victory viewed as the whole set of variables directly connected with the finished conflict, although not always planned or intended. An Australian scholar and proponent of this concept writes that “the victory can be only measured when the outcome of war is treated as continuum”²¹

21 See I. Bickerton, *The Illusion of Victory. The True Costs of War*, Melbourne 2011, Melbourne University Press, pp. 18–22. In his research the starting point is a peace treaty, a truce that ends a military conflict and then analyses to what degree and with what results

– as that changes the method of evaluating victory and failure. Every analysis of the meaning of victory must include the research results of its long term consequences. If the war result did not significantly change the *status quo* in the sphere of economy, politics and social life over a certain period of time, including the conditions imposed on the defeated and the way in which it took place, then taking into consideration the total cost of a war, we see that the victory has not been in fact reached²². In consequence, this means that the military victory isn't identical with reaching political goals. In this view Bickerton is close to Basil Liddell-Hart, who describes in his seminal work "Strategy" that victory – the object of war – has to lead "to a better peace – even if only from your own point of view"²³.

The value of victory is measured by the durability and quality of peace. For the trend of research described above ("victory theory") the importance of Bickerton's work, which is rich in cross-references to other scientists' findings, lays in the fact that he picks up the problem at the point where others have left off and are no longer interested in the outcome, the aftermath of war. Bickerton doesn't analyse the immediate consequences of wars, but their longstanding after-effects, as seen with the eyes of both sides of conflict. The victory, as he proves it, needs to be analyzed not as something momentary and temporary, but in view of its prolonged

its conditions have been realized 25 years later. He looks at the historic period spanning from the Napoleon era till the war in Afghanistan, just like Brian Bond, quoted earlier. The tendency to assess victory in long-term perspective appears more and more often in contemporary analyses of military conflicts, see: W.L. Peace, *End Game Strategies. Winning the Peace*, US Army War College, Carlisle, July 2012.

22 Ibid, p. 18.

23 B.H. Liddell-Hart, *Strategy*, Meridian, London 1991, p. 353. He concentrates not only on the quality of peace, that should be better than pre-war, but also on the better situation of the winning side. He doesn't yet directly see the durability of peace as a point of relative balance of benefits for both sides of a finished conflict. Nevertheless, he does take a step forward in that direction, seeing that "the end must be correlated with the means", what can make peace negotiations a better component of victory (and a permanent peace), rather than fighting till the very end. That approach can be accurate in certain situations for the conflicted sites, though today's research questions the universality of the peace talks as a guarantor of permanent and "better" peace. Harvard University Institute for Strategic Studies Professor, Monica Duffy Toft proves that, statistically, in wars fought from 1940–2000, the negotiated peace conditions did not bring about the renewal of fighting in only 22% of cases, and only 12% of those that ended in a battlefield victory were reignited. See: *Peace Through Victory. The Durable Settlement of Civil Wars*, www.yale.edu/macmillan/ocvprogram/papers/OCV – January 2013.

limitations and determinants. An absolute victory is in fact only abstract, its price is likely to increase as the time goes by, both for the winners and losers. And war is always a risky business where one rarely arrives at its original goals.

The classics of *victory theory*

Two American scholars and their work are certainly to be credited for the shape of modern *victory theory* – Robert Mandel²⁴ and William C. Martel²⁵. Their publications provide in-depth, extensive analysis of the problem of military victory, in the most practical and politically useful way²⁶. According to Mandel, victory is subjective, its evaluation is based on subjective opinions and assessments, which are much more often based on political rather than military criteria. He suggests that we forget the traditional dichotomy: victory vs. failure and perceive that process in two separate categories of military and strategic victory. The latter being related to the period of peace and comprising the realization of short, medium and long-term national objectives, regional and global causes of waging a war. The first one, according to the Clausewitzian school of thought, is nothing more than defeating the opponent in combat, crushing its forces, reducing its ability to continue current military operation and prevent against new threats. Strategic victory for Mandel means reaching the state of control over the losing nation, which will allow for the transformation process – of its both political and economic systems so that they can function legitimately in international environment, as in the case of Germany after World War II. What is important, in

24 R. Mandel, *The Meaning of Military Victory*, Lynne Rienner Publishers, Boulder 2006., id., *Reassessing Victory in Warfare, Armed Forces and Society*, no 4, July 2007, pp. 461–495., *Defining Postwar Victory*, in: J. Angstrom, I. Duyvesteyn, *Understanding Victory and Defeat in Contemporary War*, Routledge, London 2007, pp. 13–46.

25 W.C. Martel, *Victory In War. Foundations of Modern Military Policy*, Cambridge University Press, Cambridge 2007, op.cit., *Victory In War. Foundations of Modern Strategy*, Cambridge University Press, Cambridge 2011.

26 Martel found himself during a recent election campaign in the USA within a wide circle of foreign affairs advisors to the Republican presidential candidate. His interest in the application level of his study is therefore unquestionable.

strategic victory? We assume that succeeding in both phases of the whole process is the answer²⁷.

In his research Mandel analyses modern strategic victories, based on the observation of the activity of western democracies after the Cold War. He confronts these findings with the “pre-modern” understanding of victory, i.e. destroying the enemy with all one’s force, occupying of its territory and resources, establishing new authorities, whose decisions will always be in line with the winner’s policy, not minding economic or social issues. His *theory of strategic victory* following the battlefield one, is a six-layer construction²⁸, preventing the escalation of post-war hostilities, political disorder, and compromising the international politics of the winner.

Strategic victory criteria according to Robert Mandel	
Information control	Analysis of the potential sources of post-war destabilization, prospect of relaunching military action by the opponent, sustaining one's own information systems, manipulating or destroying the opponents' systems.
Military deterrence	Military deterrence and safeguarding of the defeated country against potential internal and external aggressors with the threat of imminent, unavoidable punishment.
Political stability	Providing the defeated nation with a legitimate government and administration, whose members are chosen from among its citizens and will cooperate with the winning side.
Economic revival	Ensuring access to the strategic resources and the reintegration of the losing country with regional and international economic system.
Social justice	Social order control in the defeated country. Progressive transition towards solving internal conflicts in a peaceful way using local judicial system.
Diplomatic legitimacy	Recognition and approval of the winner's policy on all levels – by its citizens, allies and international organizations.

Based on: R. Mandel, *The Meaning of Military Victory...*

27 Military victory, in Mandel, for it to create conditions for strategic victory, must meet the following four criteria: effective win over an enemy at the lowest possible level of incurred losses, reduction of the possible future capabilities of the losing side to fight an offensive war, creating conditions for its effective self-defense, minimizing the damage to local infrastructure and number of civilian casualties: see: R. Mandel, *The Meaning /.../*, pp. 15–16.

28 W.C. Martel, *Victory In War. Foundations of Modern Military Policy*, Cambridge University Press, Cambridge 2007, pp. 17–29.

According to these theoretical guidelines, the author's conclusion is somewhat pessimistic, as the impediments on the way to strategic victory defined in this way make it almost impossible to find at least one recent example that could be called a textbook one²⁹. Mandel points out that the victories like the ones described above are extremely rare, as most wars have limited objectives and hardly ever the reconstruction of the defeated system is one of them. Additionally, today's wars are often fought against non-state actors, where the ultimate win is hard to reach and so is ensuring conditions for "winning peace". He also describes a specific paradox which shows the collision of expectations and reality. If the strategic victory is so rare, then why expect that it can actually take place? In that view Mandel analyses modern conflicts – the Gulf War, Kosovo, Afghanistan and Iraq. In each of these cases the victories didn't, in his opinion, lead to strategic victories, mainly because the winner overestimated its post-war benefits, had set out unclear objectives and underestimated the sources of permanent resistance among the defeated. Based on these observations he came to a conclusion that although strategic victory is more ephemeral and more difficult to reach than the battlefield one, it is still possible and attainable.

As for application level, Mandel's reflection is built the way most American studies are – their authors focus on the international role and national interest of the USA. He thinks, that in the future America should limit its participation in wars only to those absolutely necessary for securing the country's vital interests, where the chances, scale and significance of the benefits will justify the efforts. He calls upon the politicians to recognize the integrity between the methods wars are fought, and the way the post-war situation is managed. Careful, yet clear formulation of the war objectives, precise selection of the forces required for obtaining that goal and building credible exit strategies are also crucial. At preparation level, recognizing the vagueness of the strategic victory, Mandel suggests we construct political-military strategies and designate appropriate means to develop instruments necessary for "winning peace". The chances for reaching strategic victory increase when we focus more closely on *human intensive strategies* and not those based on technological superiority. This will guarantee future, gradual adjustment of

29 Ibid. pp. 27–29. An interesting example of using this 6-point model of victory is presented in chapter 4, where the author presents the pitfalls of decisive process, based on unrealistic, difficult to match, demanding assumptions, plans and calculations.

the victorious side of conflict to the post-war reality, its focus on preventing destabilization and escalation of violence, as well as promote civil society in the defeated country.

The purpose of Martel's research, a professor of international relations at Tufts University in Massachusetts, is not specific in defining victory, but searching for useful analytical tools and instruments, a set of clear guidelines, according to which the variables and their influence on the outcome of research can be measured. Martel's assumption is that the way we reflect on victory has to be dynamic in nature. New methods of using power in order to gain political goals, during peace-keeping, and stabilization missions, promotion of democracy, military prevention actions and so on, force us to take a new look at the issue. The term in itself is ambiguous for him, too. Its wording has caused a lot of problems in proper and effective use of the armed forces and good rapport with public opinion. The value of his work for academics is in precise description of the subject matter, and enabling other scholars to analyze the problem in changing situational contexts, and with critical review of the subject matter literature. But his deliberations start with a broad and admirable review of the problem of victory in military and strategy historiography, starting from Sun-Tzu and ancient Greece and arriving at the Cold War strategists³⁰. This compilation is regarded highly not only due to its vast, far-reaching scope of observation, but also because of outlining the shape of critical analysis of the issue throughout history. But the question whether it is possible to indicate the common intellectual roots of the "victory theory" by analyzing the works of world leaders and historians from various periods still remains. That historical introduction is followed by the actual theoretical investigation to the problem. He applies coherent, concise and innovative way for analyzing some constant elements of strategy, i.e. goals, means and methods, without unnecessary integration and generalization. Martel introduces four specific categories in which to measure victory:

The first one relates to the analysis level. Martel distinguishes between tactical, political-military and strategy level. However, he isn't concerned with strict military categories connected with military activity – tactics, operations, and strategy, but

30 W.C. Martel, *Victory In War. Foundations of Modern Military Policy [...]*, pp. 15–82. See also interesting chapter on the "American theory of victory", pp. 104–148.

with the scale and the outcome of victory. The tactical layer, according to Martel, integrates the military layer of tactics with operations, i.e. the effects of individual battles and campaigns. The political-military, corresponds to the overall strategy and will be closer to reaching by one side of the conflict partial or complete goals. The level of victory from the category of *overall* strategy does not relate to the *grand strategy*, that is integration of all available country's resources in order to obtain the objectives on the national level. According to Martel, that is equal to a decisive victory, bringing about significant changes in the international system. The value of that scheme does not only lie in giving new meanings to old terms, but in showing varied scale of possible effects of victory.

The second criterion for assessing victory proposed by Martel is the scale of the change in the *status quo* implemented by the winner. It can be, for example, limited and bring about the change in the opponents' behavior (as in 1986 United States air strikes against Libya), or widespread and lead to the elimination of the enemy regime (the outcome of war in Iraq in 2003).

The third criterion is connected to the costs of war, the scale of engagement and deployment of the country's political, economic and social resources that are required during a war. That mobilization can be restricted, but also broad and far-reaching.

The last one has to do with the scale of post-war commitments and obligations imposed on the victorious nation (economic help, political support), and these can also be both limited or far-reaching and long-lasting.

What may seem problematic is the way Martel relates to the definition guidelines for grand strategic victory, but also his inconsistent application of the proposed criteria. In his opinion it is both the deep change in international relations (system), similar to the outcome of a war between hegemons, but also the change in balance of power on regional level, and finally – “the outcomes of wars in which the state defeats the economic, political and military sources of power of another state, that prevents it from using military power or posing a threat, and intends that those changes will have strategic consequences”³¹. From this perspective the vast majority of all resolved military conflicts can fall into this category, can fit

31 W.C. Martel, *Victory In War. Foundations of Modern Military Policy /...*, p. 98.

those definition criteria and it does not have to bring about significant changes in international order³². The defeated country would have to be a superpower for that scale of change to come to existence.

Just like in the case of Robert Mandel's work, Martel also refers his analysis to the US foreign and security policy. Based on case studies and the analysis of the variety of conflicts ranging from American Revolutionary War, War of 1812, both World Wars, Korean and Vietnam Wars, he builds the "American victory theory". It is based on the model of the American success during World War II. Martel takes that model further in the analysis of 1986 US bombing of Libya, invasion of Panama in 1989, the Gulf War, conflicts in the Balkans in 1990s, 2001 war in Afghanistan and in Iraq two years later. What can be interesting, is that Martel's criteria are in many ways related/close to those suggested by Mandel. Especially in the context of post-war reconstruction time and reintegration of the defeated country with the international system.

American „victory theory“ according to W.C. Martel ¹
Military victory over the enemy and disintegration of its resources
Gaining control over the defeated state's territory
Launching political and administrative reforms in the defeated country
Reconstruction of its economy and infrastructure
Changes in foreign policy of the losing country with regard to benefits of the winner
Setting up new strategic relations with the previous opponent

¹ W.C. Martel, *Victory In War. Foundations of Modern Military Policy /.../*, pp. 136–148.

Based on: W.C. Martel, *Victory In War. Foundations of Modern Military Policy...*

32 The influence of victory on international order from the Congress of Vienna to the post Cold War era is analyzed by G. John Ikenberry, *After Victory. Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars*, Princeton University Press, Princeton 2001. The point of reference is the method of ensuring post-war stabilization, its cost and durability. His remarks are focused on three issues: the logics behind the choice of behavior after a victorious war, the reasons why they prefer institutionalized or legitimate solutions for establishing a stable international order and the sources of long-lasting international order after WW II (despite the changes that take place within it).

The *victory theory* – an outline

“The victory theory” *in statu nascendi*, is in fact an academic reflection (with certain pretenses to possible application in practical politics). Still, it is hard to try to find it in academic handbooks and any reader-friendly studies. That is why it is of vital importance to pay special attention to the one and only such attempt (that I have been able to find in the course of my research). Commissioned by the US Armed Forces, it was prepared by the US War Army College Professor – John Boone Bartholomees.³³ He argues victory theory to be the biggest theoretical challenge security experts are confronted with. His study points to an inadequate understanding of the problem of military victory, insufficient terminology, but also, in broader aspect, intellectual framework for creating a consistent concept. Therefore by introducing some order into this area of academic research, he views his essay as a contribution to the general discussion rather than an exhaustive description of the issue. Thus, the biggest value of Bartholomees’s work lies in its generalizations and critical, systematic and synthetic review of prior, other scholars’ findings in the field of military victory. Following that trail, we could attempt to point out the main directions of the relevant research:

First, subjectivity of perception. In scholarly literature it is often noted that a war victory is more of a *post-factum* evaluation, an estimation of the situation, rather than a fact resulting from completing a certain condition. The perception is based and focused on the outcome of war (evaluated in separation from the actual moment of termination of conflict), and not the effort (measured in death toll, missile yield, the extent of destruction on the side of the opponent). This prevents us from generating an objective understanding of the phenomena, as it introduces the variables that depend on the conditions and the point of view of the observer. The majority of scholars used to put a parallel line between victory and the goals that had been put forward at the onset of the war. But these can be subject to change, during an ongoing conflict, as the surrounding conditions where the conflict takes place change, too. The “theory of victory” cannot therefore be, by definition, a solid, and never changing reflection. It needs to demand from the

33 J. Boone Bartholomees, *A Theory of Victory*, in: *ibid* (ed.), “US Army War College Guide to National Security Issues”, vol. 1, pp. 79–94, Washington DC 2008.

politicians and the military precision and clarity of the declared goals and adequate response to the society's expectations. This last factor is of crucial importance in democratic countries, where public approval and support is indispensable for politically legitimate actions. Raymond Aron was among the first to notice in his reflections on war and peace dialectics, that the ultimate victory does not necessarily belong to the one who dictates the peace conditions³⁴. Brian Bond points very accurately to the ambiguity of victories, however spectacular they seem at first. In fact, a military victory, or some remarkable success, some gain, are not required or sufficient to recognize the victory as ultimate. Not required, as the victory can be declared independently from the net losses, and not sufficient, as even evident gains do not guarantee final success. The fact that one side wins a great victory over another does not imply that the losing side sustains a total defeat. A good reflection of that problem can be found in opposing narratives formulated in France in Germany after the end of World War I.

Second – a cost-benefit ratio in assessing victory. In general understanding, the victory should be “worthy” of the incurred costs, casualties and efforts. In this rational approach there is still hidden one significant dilemma that boils down to the question whether in specific conditions it is better and more rewarding to go on fighting, or to cease the hostilities. Putting an end to a war can be a better solution than continuing it or prolonging a stalemate situation – although it does not have to mean victory. Lack of failure is of course better than experiencing it and the lack of victory better than a Pyrrhic victory. But it is clear that a war is not going to finish until conflicted sides don't admit that peace is a better choice than going on fighting. According to the military theory scholars and strategists, if the cost of war exceeds the value of prospected political goals, it is advisable to give up fighting. In traditional studies, the victory is measured by whether the victorious side experiences any improvements / is better off compared to the situation from before the war. Currently it is accepted to agree on the increased responsibility of the winner for the situation of the loser and the shape of international relations resulting from the post-war balance of force.

34 See: R. Aron, *Peace and War. A Theory of International Relations*, Praeger Publishers, New York 1970, pp. 150–173.

Third – the time factor in victory evaluation. Our most natural, conventional associations with war are based on instinct, history and mass media. This remains true regardless from the fact that along with the civilization progress, changes in international law, media, and humanitarian ideals the way wars have been fought have changed, as well as the perception of failure and success. This situation creates the clash between our expectations and reality, which is followed by serious consequences – the wars do not often bring clear, evident solutions, or at least a logical understanding of the position fighting countries have found themselves in. If then war is in fact a multilayered phenomenon, so has to be a victory. A criterion that puts limitation on the judgment subjective value is the length or the period of time which has elapsed from the actual military victory until the process of evaluation its influence on post-war aftermath and its positive side effects.

Fourth – victory as a political phenomenon. The reflection of that idea is found in the perception of victory as a political act. It is implied that a military victory, without any clearly visible political gains, deforms the comprehension of it. This deformation could result in potentially wrong political decisions. Liddel-Hart reminds that what has been won in battlefield does not have to be necessarily transformed into a better and safer world. Napoleon victories did not change social systems of the nations defeated in those wars (Prussia, Austria, Russia). After World War I – military victory did not develop into strategic reconstruction, due to abandoning the transformation process of Germany (which in fact did happen after the next world war). That is why military victories do not determine the result of war *per se*. They present their winners with opportunities – but when constrained by current conditions, they remain beyond their control.

Fifth – the negligence of the time when the peace conditions are set up in research does not help in understanding the meaning of strategic victory. The analysis of modern wars leads the scholars to a reflection that they are becoming a less and less profitable political tool. The statistics of military conflicts after 1945 shows that over half of them, just after they had ended, were followed by new waves of violence and decreased regional stability. The researchers seem to generally agree that strategic victory can be reached when in the post-conflict phase the winning country is able to set the foundations for political stability allowing for cooperation after the war is ended. Apart from that there have to exist ways and

methods to help solving problems generated by post-war chaos, such as possible violence resulting from ethnical or national differences / clashes. The winner has to be able to control the sources of information that can be potentially dangerous in building post-war stability and to hold onto both the international and internal mandate for action. They also participate in overall efforts leading to rebuilding the broken country, which is a warrant for its security. All this put together does not lead the victory theory researchers to postulate full effectiveness of all of the above issues. Nonetheless the aim is to assure synergy of success in all of the actions leading to and included in the definition of the term – strategic victory.

Sixth – victory and failure, clearly two opposite ends are equally unclear.

There are many levels of success, many points of reference lower from what we could call victory, yet to some extent reaching certain political goals of war. The academics suggest a 7-point grading scale of victory, where both positive and negative components are arranged in the following order: DEFEAT – FAILURE – NO VICTORY – NO SOLUTION – NO FAILURE – SUCCESS – VICTORY. On that scale the (strategic) victory will stand for complete realization of the war objectives, providing solution to all of the problems connected with the victorious war, and a defeat will mean a catastrophe. The rest of the scale levels combine the elements of success and failure. Success, possible without complete realization of goals, is not synonymous with victory. It isn't of course the only, and very strict, too, division put forward by the theoreticians. Some researchers go even further in classification of victory – by offering separate types of grading scales for measuring various levels of war achievement³⁵.

* * *

The “victory theory” rejects simple zero-sum constructs concerning war, peace and victory. For today's analysts the *victory* results from the evaluation of the effects of war and their reinforcement over the period of time on the level of tactics and operations, strategy and the grand strategy. On the first level, victory is a military assessment, based on rational criteria. On the strategic level and the grand strategy level it consists of a greater number of factors, and *vox populi* will decide on the winners and losers. The victory must also be acknowledged by the

35 Bartholomees gives the detailed scaling of the victory measurement, i.e. the assessment of: the results... See: *Theory of Victory /.../*, pp. 82–83.

defeated side and be a constant in time. That is why a strategic win is equal to the positive evaluation of the post-war situation, when the political sources of the war are fully resolved. Contemporary understanding of victory emphasizes reconstruction, reconciliation, modernization of the losing countries and societies as instruments of long-term stability. That approach does not obviously secure better protection of human life (crime and wrongdoing of Saddam Hussein' era confronted with "human" cost of the occupation of Iraq). However, it does create the acceptable frames in which the researchers try to place *just* wars (according to modern terminology: *the responsibility to protect*) and include them into modern political instruments.

THE INTERNATIONAL BALANCE OF POWER IN THE YEAR 2050 (SECURITY IMPLICATIONS)

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Abstract

The project aims at applying qualitative and quantitative methods to create a model of the international balance of power in 2050. This allows to create more accurate forecasts of future security environment development and its implications. For the purpose, the authors use a computational model developed by Professor Miroslaw Sulek, the Polish pioneer of powermetrics research. Fundamentals of the interdisciplinary model can be found in international relations theories, security studies methods, cybernetics and physics. The authors are directly involved in developing this field of research and their intention is to share initial results of their work.

Key words: Powermetrics, International Balance of Power, Power, Sulek's Model

“Ultimately, only with power can the objectives internal and foreign policy be achieve

Nicholas Spykman

“When a country is growing in strength, the temptation to increase control over the environment rises. It will try to make the expansion in political, economic and territorial domains, and change the international system in accordance with its particular interests “

Robert Gilpin

Introduction

Recently, the end or collapse of western civilization became a popular slogan in the analyses of international relations. Also many statements putting a question mark on the position of the United States nowadays and in the future can be heard. China is widely claimed to be the one to replace the weakening US as a leader. In 2008 Fareed Zakaria published *The end of US hegemony*. In the same year Kegan's *The Return of History and the End of Dreams* and Andrew Bacewicz's *The Limits of Power: The End of American Exceptionalism* were also published to stress those claims. A year earlier R. Meredith wrote *The Elephant and the Dragon: The Rise of India and China and What it Means for All of Us*. Also, our distinguished scientist B. Góralczyk published the widely discussed in Polish Academic circles *The Awakened Dragon: China's Position on the World Stage*. Of course, there are more books dedicated to this phenomenon, with thousands of scientific articles and journalists using the above rhetoric every day.

Indeed, we do deal with profound changes in current international system. These changes didn't appear suddenly, symptoms had been apparent before. In a book published in the nineties, *The Rise and Fall of the Great Powers* by P. Keneddy, we can also find a chapter called "The United States: The Problem of Number One in Relative Decline". The conclusion is simple: changes which we are currently observing and which are crucial to the future of the international order, have only recently intensified and accelerated. And this is due not only to the financial crisis started in 2008, but also the weakening demographics of the countries of the Old Continent, as well as the absence of effective policies of the West towards the rising powers. And as correctly observed by Zakaria "global changes taking place are not caused by the decline of America, but are the result of the growth of "the rest of the world"¹. The changes in the international system contribute mainly to the balance of power. As R. Aron rightly put it, "the balance of power is the most important feature of any international system"².

Having all the above in consideration, the authors undertook the effort to explore the international balance of power in 2050 via not only qualitative, but also

1 F. Zakaria, *Koniec hegemonii Ameryki*, Nadir Media Lazar, Warsaw 2009, p. 11.

2 R. Aron, *Pokój i wojna między narodami (teoria)*, CAS, Warsaw 1995, p. 127.

quantitative methods. In this way, by using a specific, innovative methodology and tools, it was possible to answer the question about how the future world order will look like, what will the distribution of power in that international system be, and what are the security implications of such alignment.

What is the International Balance Of Power?

The balance of power is differently called arrangement of powers, or the relationship of powers. It is an important part of the international system and at the same time a very important object in international relations. "The main reason is that after taking into account the nature of the interest manifested in the international arena in terms of compliance/ conflict, the balance of power determines the strategy (policy) of countries aimed at security and development"³. The balance of power is constantly changing, is associated with increasing or decreasing the power of the individual entities, which then results in the policy of this entity and influence the international order.

The category of power is essential in the study of international relations. The term 'power' has many equivalents in other languages. In English, 'power' means the power in many ways or ability. Similar here is the term "might". Latin "potestas" means strength, power, ability. In German we say about the power of the "Macht" or in French "puissance"⁴.

International policy – like any policy – is a battle for power⁵. "Each political entity, each participant of international relations strives for the survival and development. This applies in the same degree, not only to each state, regardless of its size, but also to all sorts of alliances, regional organizations, international and even terrorist organizations like Al-Qaeda. Therefore, despite the fact that the various aims that the international participants want to achieve, this direct (not

3 D. Michalik, *Modelowanie i symulacje międzynarodowego układu sił*, Dom Wydawniczy Duet, Toruń 2012, p. 49.

4 M. Sułek, *Podstawy potęgonomii i potęgotetrii*, Wyższa Szkoła Ekonomii i Innowacji w Kielcach, Kielce 2001, p. 17.

5 H.J. Morgenthau, *Polityka między narodami. Walka o potęgę i pokój*, Difin, Warsaw 2010, p. 47.

to say the most important) is power⁶. More specifically growth of power, which always takes place at the expense of other actors of the international system.

What exactly does the word power mean? In the Polish language dictionary we found, among others, the following definitions: "The strength and effectiveness of the operation or impact on something", "advantage in some area, usually political, economic or military"⁷. The first example is in line with the thinking of the eminent social thinker of the second half of the twentieth century - R. Aron, who defines power as follows: "power is the ability to deal with, the creation or destruction. (...) Power in the international arena gives a political entity the ability to impose its will on another political entities. In short, political power is nothing absolute, but the relationship between human beings"⁸. G. Stoessinger cites the following definition of power as "the ability of the state to use its tangible and intangible resources in a way that will affect the behavior of other states"⁹. B. Russell states that "power can be defined as achieving the desired effects. It is therefore a quantitative approach: if the two people pursuing similar purpose, only one of them achieves this goal means that it has greater power than the second"¹⁰. In one of the recent work published on the National Defense University on the understanding of power and how it is calculated, the authors propose the following definition: "power is the ability to conduct a deliberate action in the international system, with the potential to obtain funding, the result of which is the realization of the objectives"¹¹.

The power of the state indicates the place of the political entity in the hierarchy of participants in the international relations¹². For this reason, countries are trying to increase their potential geopolitical, because "international policy is necessarily

6 Ibidem, p. 47.

7 Internetowy słownik języka polskiego Wydawnictwa Naukowego PWN, <http://sjp.pwn.pl/>, (13.04.2013).

8 Powernomics, Economics and Strategy After the Cold War, Econmic Strategy Institute, Washington D.C. 1991, [in:] M. Sulek, Podstawy potęgonomii i potęgometrii, op.cit., p.33.

9 J.G. Stoessinger, The Might of Nations: World politics in our times, Random House, New York 1969, p. 27.

10 B. Russel, The Forms of Power, (w:) Power (ed.by S. Lukes), New York 1992, s. 19, cyt. w: M. Sulek, Podstawy potęgonomii i potęgometrii, op.cit., p. 34.

11 Z. Lach, J. Skrzyp, A. Łaszczuk, *Potęga państw współczesnego świata w ujęciu geopolitycznym II.1.5.1.0*, Akademia Obrony Narodowej, Warsaw 2011, p. 35.

12 Ibidem, p. 37.

international power policy"¹³. History has shown that the struggle for power was an integral part of the development of humanity and its organizational entities, such as states, and despite the fact that countries often stated the end of this policy¹⁴, the approach of 'realpolitik' will continue.

"Political units are competing for political power - synthetically in the world, it is always 100% true - rivalry boils down to seek an appropriate share of that total"¹⁵. The concept of power, generally associated with international relations, is relative. This means that the size of the power can be measured by comparing it with other powers¹⁶. There are for instance cases, that the political entity has so much power in comparison with others, that we can then talk about their absolute power. Similar observations can be found in R. Gilpin's works, which state that "if the essence of international relations is power, power is the essence of relativity"¹⁷. Therefore, a power entity in the international arena is growing only by reducing the power of the other. This means that the scope of the available global power is constant, and the state in order to survive, will be always acting towards increasing or maintaining their own power. So repeating the thought of H. Morgenthau - the states are always struggling for power¹⁸.

The power balance is the result of many factors, to begin with historical processes that shaped the status quo through long periods of time and in a short time cannot be changed. It is not a constant condition however, but one under slow changes. This is related to the change in the number of participants in international relations, the change of the relationship between the units and the shifts of power of political units¹⁹. The biggest impact on changing the balance of power are the shifts of "centers of power"²⁰. As rightly pointed by R. Kagan "engender it throughout

13 H.J. Morgenthau, op.cit., p. 53.

14 H.J. Morgenthau, *Polityka między narodami. Walka o potęgę i pokój*, Difin, Warsaw 2010, p. 54.

15 M. Sulek, *Metodyka analizy geopolitycznej (na przykładzie potęgometrii)*, www.geopolityka.net (04.03.2013 r.).

16 M. Sulek, *O potęgonomii i potęgometrii*, www.geopolityka.net (05.03.2013).

17 R. Gilpin, *War and Change In World Politics*, Cambridge University Press, 1981, p. 14.

18 P. Mikulski, M. Sulek, *Międzynarodowy układ sił w perspektywie 2050 roku*, [w:] *Stosunki międzynarodowe – International relations 2009*, nr 1-2 (t.39) pp. 73-93.

19 M. Sulek, *Stan obecny i prognoza potencjalów mocarstw w świetle kryzysu 2008*, s. 294, [w:] red. nauk. R. Kuźniar, *Kryzys 2008 a pozycja międzynarodowa Zachodu*, Wydawnictwo Naukowe SCHOLAR, Warsaw 2011.

20 Autor is considering big players disponating of important power.

history so much tension, and even caused a great war"²¹. This view is confirmed by a political scientist R. Gilipin, who states that a significant increase in power means that there is a temptation to increase control over the environment. "The state will try to make the expansion in political, economic and territorial domains, and change the international system in accordance with its particular interests"²². Variability is a fundamental feature of the international order. "No stillness, no stability, no status quo, but change is a fundamental feature of social life. Each order, protecting the status quo is based on it, contains a dynamic, tendency to variation, and this tendency wins"²³.

The balance of power can be considered at three levels: globally, regionally and locally. The international balance of power (IBP) allows to determine the state of international relations. The system may have structural or behavioral characteristics. The first is that the centers of power have a specific distribution in time and space, the second means that the participants in the system behave according to their interests and their place in the balance of power.

Methods of Measuring and Estimating IBP

"[...] If we understand what the real balance of forces in the world, it will be a great achievement, because we avoid in this way the necessity of making pointless activities

E. Todd,

The decline of the empire. Considerations about the disintegration of the U.S. system.

General characteristic

Estimating the international balance of power, understood as a "relationship of forces" is performed by measuring the power of the entities forming the specific

21 R. Kagan, *Powrót historii i koniec marzeń*, Dom Wydawniczy REBIS, Poznań 2009, p. 31.

22 R. Gilipin, *op.cit.*, pp. 94-95.

23 B. Balcerowicz, *Pokój i nie-pokój na progu XXI wieku*, Dom Wydawniczy Bellona, Warsaw 2002, p. 123.

alignment of forces. Science dealing with the study of the power of political units is powernomics²⁴. It explores, among others, the essence of power, its manifestations, profiles, classify political units regarding power. This is an auxiliary science of international relations and geopolitics. Modeling and measuring power is called powermetrics. In this paper, the authors present the international balance of power in a synthetic way. Such an approach allows mainly to extract the most important features of power as:

- polarization (the number of polar powers),
- concentration (the share of the division of powers, the power of the state),
- stability,
- escalation²⁵.

It should also be noted that the forecast is not intended to accurately reflect future events. Forecast is merely auxiliary, which only determines the future changes that may be made in the international balance of power.

Used methods

In forecasting the international balance of power in 2050 authors use a computational model developed by M. Sulek, Polish professor at the University of Warsaw. His original model to calculate the power of political units was presented by him in several publications²⁶. Fundamentals of the model can be found in cybernetics and physics, but it also integrates newest IR and security studies theories. According to the author, the assessments of the political power should affect only "that which is inextricably linked to the existence and functioning, i.e. people working in a given area during a specified period, representing the specific skills of organizational and production"²⁷.

24 M. Sulek, *O potęgonomii i potęgometrii*, www.geopolityka.net, (02.03.2013 r.).

25 M. Sulek, P. Mikulski, *Międzynarodowy układ sił w perspektywie 2050 r.*, w: r. „Stosunki Międzynarodowe – International Relations” 2009, nr 1-2 (t. 39) p. 73-93.

26 There are: *Podstawy potęgonomii i potęgomterii*, Kielce 2001; *Prognozowanie i symulacje międzynarodowe*, Warsaw 2011.

27 M. Sulek, *Prognozowanie i symulacje międzynarodowe*, op.cit., p. 143.

Political unit as any energy in a processing system, has several types of power: total, idle, availability, operating, assurance (as the sum of idle capacity and operating power) and coordination power that are explained beneath²⁸.

TOTAL POWER		
IDLE POWER	AVAILABILITY POWER	
	OPERATING POWER	COORDINATION POWER
ASSURANCE POWER		

Source: M. Sułek, *Metody i techniki badań stosunków międzynarodowych*, op. cit., p. 106.

Graphic 1. Kinds of power

The maximum permissible power, which each system is able to process is called total power. Idle power, which is part of the total power is used to cover any loss of energy. We are saying about the operating power when are dealing with the collection of energy from the environment and the associated difficulties. The cumulative idle power and operating power give the assurance power - it is a power that the system must collect in order to exist. The difference between the total power and the idle power is the operating power. „With the total power, after deduction of assurance power to cover the idle power and operating power remains some excess of power, which is the coordination power”²⁹.

In the model of Sulek, availability power is called the total power, and the coordinating power is the military power. Availability power for a political entity is as follows:

$$P_d = D^{0.652} \cdot L^{0.217} \cdot p^{0.109}$$

The formula for the coordination power is presented as follows:

$$P_m = W^{0.652} \cdot S^{0.217} \cdot p^{0.109}$$

where:

Pd - total power;

Pm - military power using the number of soldiers on active duty;

D - gross domestic product;

28 Ibidem, p. 143.

29 M. Sułek, *Metody i techniki badań stosunków międzynarodowych*, op.cit., p. 106.

L - population;
p – surface (the area of the territory);
S - number of soldiers;
W - military spending³⁰.

Each of the components of power represents an important power-creative factor:

- gross domestic product represents the economic factor;
- population represents a demographic factor;
- the surface represents the geographical factor;
- the number of soldiers and military spending represent the military factor³¹.

Presentation of Results

The international balance of power is created by all states. However, as shown by the realities of international politics in the contemporary geopolitical situation affects only narrow group of entities³². This is due to the fact that most countries in the world have insufficient power to be able to have an active influence on the global balance of power, they are objects rather than actors in the scene. For the purpose of the article, the authors took into account the 10 greatest powers in 2012³³ (2013 data was not yet available). Group of countries studied was formed by: the United States, China, Japan, India, Brazil, Russia, Germany, France, Canada and the United Kingdom.

In the mentioned analysis results are available from the power of all the countries in the world for the years 2000 to 2012. The program also uses the Sulek's model. The international balance of power for each year are presented in Table no. 1.

30 M. Sulek, *Prognozowanie i symulacje międzynarodowe*, op. cit., p. 144.

31 Ibidem, p. 144.

32 D. Michalik, *Modelowanie i symulacje międzynarodowego układu sił [w:]* red. M. Sulek, *Potęgotmetria* tom I, Europejskie Centrum Analiz Geopolitycznych, Warsaw 2013, p. 49.

33 Downloading from „Powers of States” programme which is available: <http://www.geopolityka.org/potegi-panstw>.

Country	GDP at constant prices of 2000	Population in millions	Surface in thousand s km2	partial results			Country's Pd	World's Pd	Total Pd	mM
WORLD	71830	7095.218	59932.15	1466.6	6.65	3.32	33353.4172	36367.2802	1	1000
USA	15680	316.669	9826.67	543.71	3.45	2.72	5161.330288	36367.2802	0.1419	141,92
China	8227	1349.586	9598.09	357.06	4.76	2.72	4642.351296	36367.2802	0.1277	127,65
Japan	5964	127.253	377.91	289.5	2.86	1.91	1581.4227	36367.2802	0.0435	43,485
India	1825	1220.8	3287.26	133.77	4.68	2.42	1515.025512	36367.2802	0.0417	41,659
Brazil	2396	201.01	8514.88	159.74	3.16	2.66	1352.806112	36367.2802	0.0372	37,198
Russia	2022	142.5	17098.24	143.01	2.93	2.89	1210.965777	36367.2802	0.0333	33,298
Germany	3401	81.147	357.02	200.73	2.6	1.9	991.6062	36367.2802	0.0273	27,266
France	2609	65.952	643.8	166.67	2.46	2.02	845.971152	36367.2802	0.0233	23,262
Canada	1819	34.568	9984.67	133.48	2.16	2.73	787.104864	36367.2802	0.0216	21,643
United Kingdom	2441	63.396	243.61	161.69	2.46	1.62	723.918468	36367.2802	0.0199	19,906

Source: „Potęgi państw” programme in: <http://www.geopolityka.org/potegi-panstw>.

Table 1. The international balance of power in 2012

The most important column in the table is the last (mM). It presents the distribution of power in the system between the main players. The power of the world is equal to 1000 miliMir units. As you can see the United States has the largest share in the power of the world - 14.1%. The second power proved to be China with 12.7% share in the power of the world. Could be stated that we are dealing with a bipolar system, but not quite. Well, the power structure of the U.S. and China is different. In the United States we can talk about the demographic, economic and spatial dimension of power. In the case of China's large population contributes to the creation of a large GDP. This does not change the fact that in the case of GDP per capita, the state is still far in the rankings. Also in the case of the U.S., in the military dimension they remain the undisputed leader. Military expenditure levels translate into high spending per soldier. This is reflected in the quality of equipment and weaponry that create the US the major military power in the world nowadays, with grave security implications.

M. Sulek adopted the following criteria for the classification of powers:

- Superpower - more than 18% of world power
- A world power - 12-18%
- Great power - 7-12%
- Regional power - 3-7%
- Local power - 1-3%³⁴.

34 M. Sulek, *Potęga państw. Modele i zastosowania*, Wydawnictwo Rambler, Warsaw 2013, p. 245.

When the classification of powers according to the above adopted criteria can be seen that we can find that in 2012 there was no superpower. U.S. and China can be classified as world powers. Japan, India, Brazil and Russia can be classified as regional powers, while Germany, France, Canada and the UK to local powers.

Output data

To create reliable models, the data quality must be assured. Therefore, GDP data were taken from the HSBC report. The experts of the institution presented the 100 largest economies in the world for the year 2050. According to the report, China's economy will be larger than the U.S. by more than \$ 3 trillion dollars. The sum of the two economies will constitute about 36% of global GDP. The third-largest economy will be India, three times smaller than China's. The Japanese economy will be accounted for only 25% of the Chinese economy. The most pessimistic forecast is for Russia, whose economy is reaching the minimum size of more than 1.8 trillion dollars. It is worth noting a large gap between China and the United States and other countries. Well, the size of the economies of the positions 3-10 will be only 66% of the size of China's economy and the U.S. 60% of global GDP will be produced by the 10 analyzed countries.

No.	Country	GDP
	World	132163
1.	USA	22700
2.	China	25334
3.	Japan	6429
4.	India	8165
5.	Brazil	2960
6.	Russia	1878
7.	Germany	3714
8.	France	2750
9.	Canada	2287
10.	United Kingdom	3576

Source: The World in 2050. From the Top 30 to the Top 100. HSBC Global Research., Department of Economic and Social Affairs of the United Nations, < esa.un.org/unpd/wpp/index.htm>, CIA World Factbook <https://www.cia.gov/library/publications/the-world-factbook/> (10.04.2014)

Table 2. Forecasted GDP for the year 2050 at constant prices of year 2000

Data on the population of the studied countries have been drawn from the development of the Department of Economic and Social Affairs of the United Nations. The data presented are based on the medium variant.

No.	Country	Population
	World	9550,945
1.	USA	400,853
2.	China	1384,977
3.	Japan	108,329
4.	India	1620,051
5.	Brazil	231,120
6.	Russia	120,896
7.	Germany	72,566
8.	France	73,212
9.	Canada	45,228
10.	United Kingdom	73,131

Source: The World in 2050. From the Top 30 to the Top 100. HSBC Global Research., Department of Economic and Social Affairs of the United Nations, < esa.un.org/unpd/wpp/index.htm>, CIA World Factbook <https://www.cia.gov/library/publications/the-world-factbook/> (10.04.2014).

Table 3. Population in 2050

In most countries, an increase in population will be recorded. Only in the case of Japan, Russia and Germany, a decrease is assumed. The largest population growth will be recorded in India, where, according to forecasts, the country will have almost 420 million new citizens. This is an increase of almost 33%. Therefore, this country will become the most populous country in the world. Disputes population growth will be recorded in the United States, where it will arrive about 84 million new citizens. This is an increase of almost 27%. The biggest population losses will be noted in Japan and Russia. In the first case will leave about 19 million people, the second about 21 million.

Data concerning the area were obtained from the study the CIA World Factbook. It was assumed that the surface studied political entities will not change.

No.	Country	Surface
	World	135266,15
1.	USA	9826,67
2.	China	9598,09
3.	Japan	377,91
4.	India	3287,26

No.	Country	Surface
5.	Brazil	8514,88
6.	Russia	17098,24
7.	Germany	357,02
8.	France	643,8
9.	Canada	9984,67
10.	United Kingdom	243,61

Source: The World in 2050. From the Top 30 to the Top 100. HSBC Global Research., Department of Economic and Social Affairs of the United Nations, < esa.un.org/unpd/wpp/index.htm>, CIA World Factbook <https://www.cia.gov/library/publications/the-world-factbook/> (10.04.2014).

Table 4: Area of the analyzed countries

Only land area was taken into consideration, and it was assumed that the land size of the analyzed countries will not change.

Result

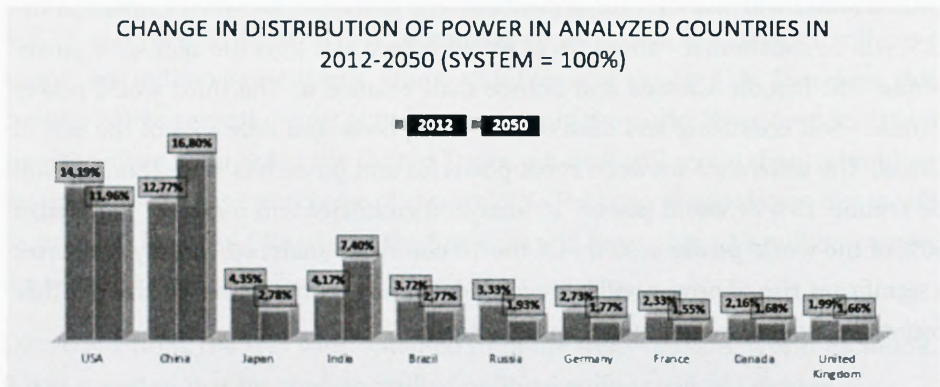
Table 5 presents the forecast of the potential for the year 2050. As can be seen the United States will lose its leading position. The difference between China and the U.S. will be substantial - about 5% of world power, and thus the aggregate power of the UK, Britain, Canada and France shall balance it. The third world power - India - will constitute less than 62% of U.S. power and only 44% of the one of China. The difference between most powerful and powerless state (France) will be around 15% of world power. 10 analyzed countries will focus on more than 50% of the world power system. Of the 10 countries analyzed, in only two cases a significant rise of power will be recorded: China and India. In the case of other countries, a decrease in power can be noticed.

No.	Country	GDP at constant prices of 2000	Population in millions	Surface in thousands km ²	partial results			Country's Pd	World's Pd	Total Pd	mM
	WORLD	112163	9550,945	135266,15	2'622.55	7.31	3.62	57755.07461	57755.07461	1	1000
1	China	25334	1384.977	9598.09	743.29	4.8	2.72	9705.69984	57755.07461	0.168	168,05
2	USA	22700	400.853	9826.67	592.04	3.67	2.72	6908.220096	57755.07461	0.1196	119,61
3	India	8165	1.620.051	3287.26	355.3	4.97	2.42	4273.33522	57755.07461	0.074	73,991
4	Japan	6429	108.329	377.91	304.03	2.76	1.91	1602.724548	57755.07461	0.0278	27,76
5	Brazil	2960	231.12	8514.88	163.35	3.26	2.68	1601.89228	57755.07461	0.0277	27,736
6	Russia	1878	120.896	17098.24	136.29	2.83	2.89	1114.675023	57755.07461	0.0193	19,3
7	Germany	3714	72.566	357.02	212.59	2.53	1.9	1021.92013	57755.07461	0.0177	17,694
8	Canada	2287	45.228	9984.67	154.97	2.29	2.73	968.825949	57755.07461	0.0168	16,776
9	United Kingdom	3576	73.131	243.61	207.4	2.54	1.82	958.76872	57755.07461	0.0166	16,601
10	France	2750	73.212	643.8	174.76	2.54	2.02	896.658608	57755.07461	0.0155	15,526

Source: Based on own calculation of tables 1, 2 and 3

Table 5. Forecast of the states' potential for the year 2050

Figure 2 shows the percentage increases and decreases of states' power in the power of a world. The largest percentage increase will be recorded in China - about 4%. Another Asian colossus - India - will also face a significant increase. Much worse are the forecasts for the other two BRIC countries, Brazil and Russia. The first of the country will lose about 1%, and the second about 1.4% of its power. European countries also will lose significant power. Germany will lose about 1%, France 0.8% and the United Kingdom about 0.3%. World leader - the United States - will lose more than 2% of world power, and the Canada about 0.4%.



Source: Based on own calculation of tables 1 and 3.

Figure 2. Increases and decreases in the world's power of the analyzed countries in the power of system, 2012-2050

Presented forecast certainly does not reflect future international balance of power in an exact, sure to be manner. It is intended primarily to indicate the direction of change in the future balance of power and thus realize that the creation of the international system today will be largely vulnerable to players from Asia. Will it be the centenary of the continent? The center of gravity moves to Asia, and is the responsibility of the Western states will lay to develop an effective strategy against the future powers. Asian centers of power certainly in the near future will play a key role in the international arena. Consequently, it seems worth considering British rule: "The state has no eternal enemies and eternal friends. Eternal are only their own interests."

Conclusion

Power as a central category of international relations deserves special attention. In considering the relationship between the countries in terms of the criterion of strength we are talking about the balance of power or powers relations. And as rightly pointed out previously mentioned R. Aron, balance of power is the most important feature of any international system. Currently ongoing transformation in the international balance of power entail consequences for the entire globe. "The rest of the world is taking the floor" - in the words of F. Zakaria - not only causes weakening of American hard power, but also soft power. The result is that the analysis aimed at forecasting the international balance of power should gain popularity and be the part of an aid to political decision-making and security studies. It is also worth take a closer look at issue of the possibility of creation and use of resources of soft power by political entities and international organizations. Despite the ultimate argument behind hard power represented by military domains as a main tool of providing security, soft power plays an increasingly clearer role in international relations.

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PARATROOPERS IN FUTURE OPERATIONS

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Abstract

Between the two World Wars paratroopers or airborne units were set up in preparation for the coming conflicts as the means of the vertical envelopment. During World War II several airborne operations were conducted. The strength of paratroopers deployed ranged from the individual troopers to tens of thousands. During the Cold War era militaries in different conflicts also used parachutes as a delivery system, airborne and special forces units for combat behind enemy lines many times. The development of helicopter technology modernized airborne operations and gave a possibility to combine it with air assault capabilities.

Today's operations require rapid deployment of forces to stop the escalation of any conflict and handle the situation, finally to restore peace, normalize the situation and life conditions.

To fulfil such requirements paratrooper units are one of the most appropriate ones. Thank to their high readiness, medical and mental conditions, moral and fighting spirit, airborne or air-transportable weaponry and equipment they can operate successfully in an extreme, unknown environment till the arrival of the main stabilisation forces.

Key words: 21 century's operational environment, Paratroopers, Airborne, Deployable forces, Quick reaction.

With the end of the Cold War the global confrontation dominated by the Soviet Union and the U.S. ceased to exist. However, the long-awaited world peace did not arrive. Previously unknown, repressed tensions came to surface and escalated into a conflict or war. The states, and international communities have to be able to manage such conflicts. In World War II and the Cold War military powers with large numbers of troops dominated. In the management of today's conflicts well-trained, well-equipped and well-led, smaller but more efficient units have the leading role. Of course, there are examples of deployments of large numbers, tens, even hundreds of thousands of troops but this is not typical.

With the evolution of technology in World War II and the subsequent Cold War airborne forces had also significant tasks in waging war. The vertical envelopment, occupation or destruction of the key enemy objects were paramount to achieve strategic goals.

The use of airborne forces should also be reconsidered within the system of military procedures developed for the treatment of post-Cold War conflicts.

The complex nature of today's conflicts has essentially political, military and economic components. Managing these conflicts requires a complex response, which requires the cooperation of many organizations and actors.

In the post-Cold War period the defence of the country, that of NATO interests and values have not been conducted only along state borders. Conflicts can be effectively managed and resolved where they are generated. These conflict zones are usually in remote areas far from Europe. In these areas the task of transporting troops there and back and their supply comprises a difficult task for the sending nations and alliances.

After the Cold War Europe's two large alliance systems, NATO and the European Union (earlier: Western European Union), were looking for their new responsibilities in the new security situation. The NATO intervention in Bosnia and Herzegovina proved a good solution. Since 1992 NATO had basically used its air and naval forces for monitoring and intervening in the civil war on the Balkans. In 1995, however, first time outside NATO area, the ground forces started IFOR operations for the establishment of security, for restoring and protecting peace.

The European Union as a political and economic union and the Western European Union as a defense-military alliance were identifying their new roles. The announcement of the Petersburg Tasks and the the merger of the two organizations allowed the development of a European defense system. The EU's Common Security and Defence Policy (CSDP) provides an appropriate basis for the development of EU-led military operations all over the world.

The forecast and early warning of the emergence and escalation of tensions are essential for today's security. It is similarly important to have the capability of rapid deployment of large numbers of troops in the conflict area in order to provide security and normalize the situation. The rapid deployment, usually by air, requires personnel and equipment with the appropriate training and composition that can begin the intervention almost immediately after receiving the call. The airborne combat forces have a high value, high combat preparedness and morale, and air-droppable or air-transportable assets. The airborne units are able act as stand-alone forces, conduct the complex and dangerous tasks until the arrival of main foirces. These are the skills that are essential today for rapid and efficient crisis management.

Changes and characteristics of the operational environment

Throughout history the operational environment of the engagement of military forces has been constantly changing. Such changes are permanent as the characteristics of the conflict also continuously change, similarly to the differing security environment, differing terrain (physical and human), expectations, the availability of resources and the identified political and military objectives.¹

¹ Dr. BOLDIZSÁR Gábor: A magyar PRT, mint a legkomplexebb külföldi válságkezelés műveleti környezete In Társadalom és Honvédelem 2013/1-2. (NKE, Budapest, 2013)

The changing of conflicts²

The tasks of the armed forces are substantially influenced or even defined by the conflicts. In the recent period conflicts have undergone significant changes. But in addition to the new models and features the traditional (Cold War-type) conflicts also remain.

The differences between Cold War and the present conflicts can be summarized as follows:

- Intra-state conflicts replaced inter-state type conflicts.
- Regular security forces involved in the armed conflict have been replaced by armed groups and militias.
- Previously, most of the casualties were military in nature while the proportion of civilian casualties has increased in the present conflicts.
- In the past the main objectives in a conflict were to gain and control territories while today it is the violent spread of identities and the conservation of the values of small and large groups.
- In conventional conflict management regular forces carried out their tasks in combined arms, and at levels of joint operations, using sophisticated weapons systems. Civil wars are waged basically with the use of simple weapons and in many cases only with small arms.

The characteristics of a changed operational environment³

- A growing number of international organizations get involved in the management of conflicts and in the strengthening of peace and security. Each

2 Dr. BOLDIZSÁR, Gábor: Kultúrantropológia és a jövő tisztképzés In: Hadtudományi Szemle, Volume 2013/1, Budapest, (http://uni-nke.hu/downloads/kutatas/folyoiratok/hadtudomanyi_szemle/szamok/2013/2013_1/2013_1_alt_boldizsar_gabor_101_107.pdf)

Dr. BOLDIZSÁR Gábor: A magyar PRT, mint a legkomplexebb külföldi válságkezelés műveleti környezete In Társadalom és Honvédelem, 2013/1-2. (NKE, Budapest, 2013)

3 Dr. BOLDIZSÁR Gábor: A magyar PRT, mint a legkomplexebb külföldi válságkezelés műveleti környezete In Társadalom és Honvédelem, 2013/1-2. (NKE, Budapest, 2013)

organization strives to conduct a legitimate activity; it should be based on a UN Security Council resolution.

- The identified political and military objectives are achieved by the military forces in complex legal (domestic, international, and host-nation) environment and with limited resources.
- Military operations are executed with a high degree of political and media attention. Because of the political impacts and the public attention the missions and behaviour of little units and individuals are highly appreciated.
- The complexity of conflicts necessitates a complex and coordinated response in the execution of international security operations in all security dimensions (political / administrative, military / internal security, economic, humanitarian, environmental, etc.) and with all actors.
- Military forces resolve complex missions basically in military / internal security, political / administrative and economic security dimensions. These three elements of the Copenhagen Approach to security significantly help the international community with providing support to the state-building efforts.
- Every security dimension has its peculiarities, so the involved active organizations, participants and players also show diversity. The management of complex conflicts has many players with whom continuous cooperation and coordination of efforts is to be designed and maintained.
- The theater of operations is essentially a large geographical area, however, the strength of available military forces is limited. Thus, in a large territory small sized units are to execute their tasks.
- An international military intervention has always been planned, organized and carried out by several nations therefore its multinational nature is also determining.
- This makes it necessary to bring up smaller units to the level of arms and services (land, air and maritime) for joint, that is combined-arms, execution of joint tasks.
- The capability of executing a task far from home territories is to be permanently maintained. The tasks are to be implemented with a high degree of autonomy, a restrictive legal environment and scarce resources, on the basis of the superior command's instructions. The supplies, replacements and supplements for the operation should be provided from home bases.
- Military forces are frequently deployed in asymmetric warfare.

- In many cases not only traditional military tasks are to be executed in a fundamentally different culture, in addition to destroyed, degraded infrastructure, under extreme physical (geographical and man-made) and climatic conditions.
- From the aspect of a “third party” the active forces in the area of operations, the attitude and willingness of local authorities, the general public, formal and informal opinion-makers to accept military force and the international efforts in relation to the aims and ultimate objectives are essential. This behaviour may be supportive, neutral or negative.
- The local people’s behaviour, the spatial relations of human terrain and those that fundamentally affect the execution of the task (acceptance) and pose a threat to military forces (different values and reaction). The individual, the traditional large and small communities can influence our troops because the actions and reactions of different historical, cultural, religious and empirical reasons vary. Different standards and unknown cultural background pose a serious threat to military force and to international intervention participants.

For managing changes in operational environment NATO has developed the NATO Response Forces⁴ (NRF) concept and military force. The NRF comprises the NATO countries’ military units previously with 6-, today 12-month rotation. Its objective is to protect the values and interests of the alliance not only within the borders (collective defense, CDO), but also in remote conflict zones. Basic requirements are: high readiness, deployability, immediate response capacity and the capability to maintain continuous operation. If necessary, the deployed NRF units will be followed by the main forces that expand the success, restore peace and achieve the identified political and military objectives.

NATO and the EU strive to use the capabilities of member countries effectively within the alliance and between the two alliances. The Pooling and Sharing and the Smart Defence ideas serve this purpose. For conflict management strategic transport is also essential besides the executive forces and their equipment. The number of countries who have such strategic transport capabilities is limited. Parallel with the commitment of the necessary forces for operations such transport

4 The NATO Response Force (<http://www.aco.nato.int/page349011837.aspx>, downloaded: 20 January 2014).

capacity has to be provided as well. But in this case the nation or community providing strategic transport aircraft becomes a party to the operation, this is a legal category.

In addition to the NRF there is another important military task system where time and speed are of great importance. The Non-Combatant Evacuation Operation (NEO) also requires fast, accurate, highly independent and adequate power in a military unit. During the evacuation of national, NATO or EU citizens from crisis areas intelligence, forecast, speed, surprise, strategic transport capacity are also essential factors.

The airborne forces

The post-Cold War crises, conflicts and wars, NATO and EU responses to these challenges require a new type of military forces and capabilities. These requirements show a lot of similarities with the airborne forces' existing capabilities. In other areas the parachute capabilities are additionally, indirectly related to the expectations.

Characteristics

The existence, composition, training level, battle procedures, deployability and mental state of airborne forces fundamentally determine their useability. The airborne forces' application has the following characteristics:

- Training / execution: the paratroopers are always trained in the expected operational environment and conditions of their deployment: "Train as you fight, fight as you trained."
- A long distance from their own forces;
- Small unit in large geographical area;
- Limited supply;
- Confusing security environment;
- Improvised protective equipment;

- After attack building up defence and holding positions;
- After clarifying the situation (in case of resupply) attack if needed;
- Difficulties with command and control of the site and higher headquarters;
- Assets, equipment are air-droppable or air-transportable so their size, firepower and armour protection are limited.

2.2, Paratrooper:

Because of the characteristics of the branch a paratrooper has good health, excellent physical and mental conditions. The parachute jumps require continuous medical supervision and periodical medical examination. The mental health check is part of the examinations as well. A parachute jump involves heavy physical load so it is necessary to maintain the appropriate physical condition.

During the jumps immediate life-threatening situation can happen after leaving the aircraft. During the optimum opening process high-stress situation also develops. The management of any opening disorder or emergencies evolving during descent requires quick, decisive decision-making ability.

The paratroopers' morale is always high. This comes from their elite-consciousness, they do what no one in the army: parachute jumps arrive in unknown enemy territory, where they can count only on themselves and their comrades. Among the paratroopers confidence is even stronger. Confidence in themselves and their mates, equipment and their commander.

Assets

The airborne forces' equipment is strongly influenced by the size and capacity of means of transport, the unloading method (dropping, landing). All materiel, tools and weapons should be air-droppable, so their size, weight, fragility is defined.

But the number of transport and dropping equipment (aerial vehicles), including their availability, also determines the deployment of troops.

Airplanes, helicopters, parachutes, dropping container, ramps are all preconditions of deploying paratroopers.

An airborne unit must be fully equipped, air-droppable, and quickly deployable. The individual and collective equipment, combat vehicles and motor vehicles, weapons, ammunition, food, water, protection and housing materials, medical materials, signal and computer tools, and their resupply also have to be provided by air.

Procedures

Procedures used by the airborne forces are determined primarily by enemy forces, assets and procedures but their own existing forces and equipment affect them too. The strength of parachute forces is speed and surprise. The high value fighting forces can be rapidly deployed by aircraft anywhere in the world⁵. The unexpectedness and speed result in a competitive advantage which multiplies the effectiveness of deployed forces. The airborne forces generally belong to high-readiness forces, their personnel, equipment and materials are stationed together and fully charged. Thanks to their high strength, morale and level of training they are rapidly deployable to execute unknown and unexpected tasks.

Throughout the history of airborne forces paratroopers were deployed in a wide variety of missions:

- Large, massive air assault operations;
- Limited tasks, operations to take possession of areas or objects, to destroy them;
- Insertion of small reconnaissance forces;
- Insertion of special operations forces for special tasks;
- Air transport, reception of landing forces;
- Delivery or dropping of supplies;
- (Combat) Search and Rescue jumps;
- The common use of combined procedures, essentially the use of ground and parachute forces and air forces in Counter Insurgency Operations (COIN)

⁵ The Future of Airborne Forces in NATO, NDC Conference Report (Research Division, NATO Defense College, Rome-Italy, 11-12 April 2013) p 2.

(such as Rhodesian Light Infantry - Fire Force concept⁶). In a remote and large geographical area finding and eliminating a relatively small enemy force is very hard;

- According to the method of insertion parachute jumps can fall into different categories:
 - mass jump;
 - high altitude - low opening (HALO);
 - high altitude - high opening (HAHO) so called gliding team;
 - low altitude - low opening, quick touchdown, almost immediate combat readiness.

Wherever parachute forces were used in history, the operations had the following features:

- Extreme conditions, destroyed infrastructure, hostile environment, long-distance, large area and small unit;
- Unexpected situations: unknown location, unknown human terrain and combat situation;
- Unexpected challenges: a rapidly changing situation and new tasks for the forces;
- Isolation: own forces in large distance;
- Self-sufficiency: the supply and supplements can be delivered only by air;
- Ability to maintain continuity of operations;
- Erratic command and control systems.

Operations carried out by the airborne forces often have characteristics similar to the present and the future conflicts and military operations.

Command and control

A command using parachute troops has to keep maintaining the connection with the units and higher headquarters. The command and control is not easily feasible

⁶ Dr J.R.T. Wood: Fire Force, Helicopter Warfare in Rhodesia: 1962-1980 (http://www.jrtwood.com/article_fireforce.asp, downloaded: 21 January 2014).

but it is required for knowing the changes of the operational environment. The command and control system ensures waging the battle by the units. Appropriate combat support (air, artillery) can be provided by friendly troops in the distance. The airborne forces perform their duties independently which makes arranging their supply difficult. Therefore, sufficient time is necessary to claim it. For this a solid, reliable and constantly maintained command and control system is needed.

Conclusion

Defence is a fundamental role of a state. The armed forces must be prepared for high intensity, collective national defense tasks as well. Including vertical envelopment, closing the flanks, means of speed and surprise and the parachute forces.

Airborne capability is a special capability. Its strength is not only the vertical envelopment by air transportation, landing in the enemy's back to occupy or destroy objects or eliminate enemy. The circumstances of the deployment of airborne forces and the operational environment has many similarities to those of present and future wars and conflicts.

- Given the importance of the objectives (strategic interests) increased political and media attention;
- As the first force in the conflict area it has to solve complex tasks immediately, together with other players already there in force, with local or allied military forces, law enforcement forces, and in possible cooperation with international organizations;
- The deployment of the airborne forces solves tasks with a relatively small unit in a large geographical area, far away from friendly forces;
- During airborne operations their mission is executed in close cooperation with the air force, artillery and with the follow-on incoming ground forces in combined arms way;
- During deployment continuous operational capability should be sustained (independently if there is no in-house air resupply);

- First arriving in the conflict zone, in a civil war, asymmetric warfare procedures apply (Haiti, Iraq or Afghanistan) in many times;
- The types of the conflict zone differ from home conditions in many cases: extreme physical and climatic conditions, destroyed infrastructure, human environment different from the typical.

Paratroopers are at high physical, medical, mental and moral levels. The airborne traditions and policies require them to maintain high readiness, speed and flexibility. During parachute training life-threatening situations repeatedly need to be resolved, fear must be overcome and rapid decisions are to be made. Paratroopers, both as soldiers and as a team are well trained, well equipped, with high combat value. Their medical, physical and psychological conditions are good and periodically inspected.

Special Operations Forces' soldiers are often recruited from among paratroopers⁷.

The level of training, the fighting spirit, resources (material, human) and medical fitness make the airborne troopers and units immediately deployable.

During the use of airborne forces the means of transport is a difficult question, which can take up a relatively large number of troops and equipment and deliver them into strategic distances.

The means and equipment of airborne forces can be transported by any aircraft or other means of transportation. The command post formation can be installed and used quickly. The strength of airborne units, their equipment and supplies are filled up even in peace time, in the normal situation. Thus, airborne forces comprise rapidly deployable teams with high combat-value and readiness.

A typical feature of the process of airborne combat is that missions are to be executed in large geographical areas, far away from friendly forces and often without resupply. Commanders have a high level of decision-making autonomy, they see the situation better and are able to determine the execution of a particular task.

7 The Future of Airborne Forces (<http://www.thinkdefence.co.uk/2013/04/the-future-of-airborne-forces/>, downloaded: 20 January 2014).

Parachute troops can be deployed not only by jump and drop. But the specialty and characteristics of such units make them well suited for executing rapid response (NRF) operations.

The success of operations executed in extreme conditions and in troubled military and security situations depends largely on the speed of actions, on surprise and on the soldiers fighting spirit. This fighting spirit is at very high level in the airborne units.

Suggestion

The development of airborne forces, their keeping in military structure and deepening their integration is important.

- Their high-level readiness and deployability ensure that paratroopers are to be used as a first force military at the beginning of operations. With their deployable assets their mission- task can be carried out in extreme circumstances, unexpected situations and unfamiliar environment. Penetration into enemy territory from a friendly country is not always possible. But there may not be enough time available for ground penetration. In such a case rapidly deployable airborne troops should be used (such as January 2013, Timbuktu mission).
- Because of their characteristics parachute forces can comprise an effective component of NRF standby forces.
- One of the features of present and future operational environments is the small units operating in a large geographical area. But even more important features are the destroyed infrastructure, road system, bridges and airports. So the only way of fast long-distance delivery is strategic airlift and parachute jump. Where there are no airports, airfields or airstrips applied forces can not be deployed and helicopters without proper bases are suitable only for short-haul tasks and are extremely vulnerable to simple small arms during take-off and landing.
- The limited transport assets, and low number of trained flying, jump-master personnel require the collaboration of the allied nations in order to develop such capacities.

- It is sensible to establish a Center of Excellence in order to develop the procedures and training of airborne forces. There scientific results and the lessons learned of the operations would be processed and offered for members of the alliance.

Beside the airborne forces' direct military advantages "collateral benefits" are also to be taken into consideration:

- The capabilities of demobilized paratroopers can be used by civil societies and governments. They are able to make decision and act in extreme situations. Thus, in case of emergency they can be useful to help society.
- Civil parachutist training provides appropriate preliminary training for recruits of airborne units. Potential recruits learn discipline, test themselves in extreme situations.
- Paratroopers take regular medical and psychological check-ups, which helps with protecting health.

Today, more and more high-tech tools, GPSs, drones, robots help people's lives, support troops in combat. But the human being, the soldier keeps to be still the most important factor. Civil wars are one of the most important features of today's conflicts. In such situations hard-to-identify people (in civilian clothes) fight with the use of small arms. The elimination of such groups, the weapons collection and the normalization of the situation on the ground require military presence. Airborne units and individual paratroopers comprise a useful part of the present and future management of conflicts. On the basis of their capabilities and arms specialties airborne units, paratroopers, are best suited for fast and effective intervention in unknown situations and extreme environments.

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SPECIAL LOGISTICS CENTRES IN THE EUROPEAN UNION

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Abstract

The paper discusses the role of Special Logistics Centres (SLCs) in the European Union (EU) and the implications of the EU's Single Market for the development of SLCs. It also discusses the implications of the EU's Single Market for the development of SLCs in the UK.

Keywords: Logistics, Special Logistics Centres, EU

Definition of Logistics Centre

The term 'logistics centre' is defined in the UK as 'a place where goods are stored, sorted, packed, repacked, reloaded, or otherwise handled, and from which they are transported to other parts of the country or abroad' (CILT, 1998). The term 'logistics centre' is also defined in the EU as 'a place where goods are stored, sorted, packed, repacked, reloaded, or otherwise handled, and from which they are transported to other parts of the country or abroad' (EU, 1998). The term 'logistics centre' is also defined in the EU as 'a place where goods are stored, sorted, packed, repacked, reloaded, or otherwise handled, and from which they are transported to other parts of the country or abroad' (EU, 1998).

Similar definition is provided by EUROSTAT (1995) in the European Association of Freight Villages which states that a logistics centre is 'a hub of

1. The first part of the paper discusses the importance of the research and the objectives of the study.

2. The second part of the paper describes the methodology used in the study, including the data sources and the statistical methods.

3. The third part of the paper presents the results of the study, including the descriptive statistics and the regression analysis.

4. The fourth part of the paper discusses the implications of the findings and the limitations of the study.

5. The fifth part of the paper concludes the study and provides some suggestions for future research.

6. The sixth part of the paper provides a summary of the main findings and the conclusions.

7. The seventh part of the paper provides a list of references and a list of figures and tables.

8. The eighth part of the paper provides a list of appendices and a list of footnotes.

9. The ninth part of the paper provides a list of acknowledgments and a list of contact information.

10. The tenth part of the paper provides a list of the authors and their affiliations.

SELECTED LOGISTICS CENTRES IN THE EUROPEAN UNION

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Abstract

The paper deals with logistics centres. Author presents some various definitions, identifies main functions and classifies logistics centres. The main purpose of the article is to characterize selected logistics centres located in member countries of the European Union and to show their comparison.

Key words: Logistics centre, Nodal infrastructure

Definition of Logistics Centre

Contemporary literature offers many different definitions of logistics centre, which in some countries is also known as freight village (Great Britain), interporto (Italy) and Güterverkehrszentrum / GVZ (Germany). One of them prepared I. Fechner, who says that logistics centre is "a spatially functional object with infrastructure and organization, in which there are realized logistics services connected with reception, storage, distribution and delivery of goods, as well as complementary services provided by economic entities dependent neither on the sender nor on the receiver" [1].

Similar definition is presented by EUROPLATFORMS, i.e. the European Association of Freight Villages, which states that a logistics centre is "a hub of

a specific area where all the activities relating to transport, logistics and goods distribution – both for national and international transit – are carried out, on a commercial basis, by various operators”. Referring to the definition mentioned above it is worth to add, that the operators may be either owners or tenants of the buildings or facilities (distribution centres, offices, storage areas, truck services, warehouses etc.) built there. In order to comply with free market rules, a logistics centre must be accessible to all companies involved in the activities of this kind [2].

D. A. Tsamboulas offers definition strictly related to the idea of intermodalism. Following his proposition, a logistics centre should be perceived as “an ‘integrator’ of various transport modes, able to promote intermodal transport”. Accordingly, an essential element of the logistics centre is mainly an intermodal terminal, which is the fundamental component of the intermodal transport chain, constituting the node where the transshipment of goods from one mode to the other takes place [3].

Although the presented definitions are not the same, all of them have a similar nature. Generally, they present logistics centre as part of the nodal infrastructure and emphasize the role of it for realizing different logistics processes (e.g. transport, warehousing). This is a one main way of defining logistics centre that can be found commonly in a literature. For the second responsible are those authors who tend to think that a logistics centre is a generator of business. This approach appears mostly in China, Japan, Singapore, United States of America and some countries in Europe. One of those representatives is R. Palsaitis, who refers to a logistics centre as a place of logistics services provision or logistics activities concentration place, through which large companies realize business service tasks of their customers [4].

General Features and Classification of Logistics Centres

Logistics centre is one of the most advanced types of logistics facilities, comparing the range of the offered services, scale of functionality and complexity. Figure 1 shows the hierarchy of them according to the each facility’s size, functions and value added activities [5].

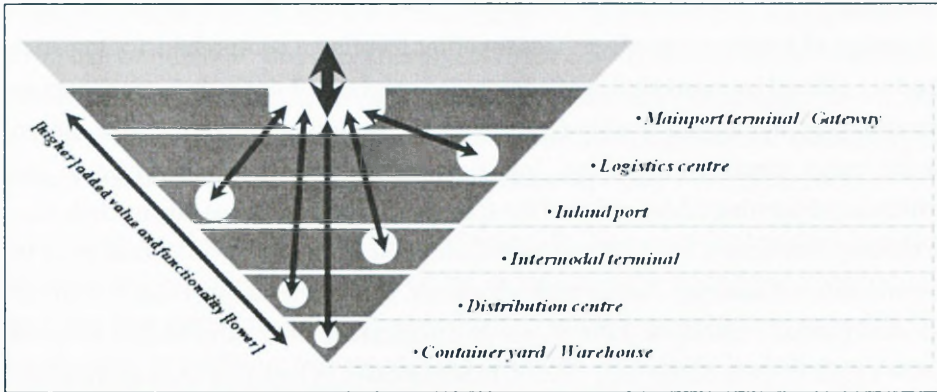


Figure 1. Hierarchy of logistics facilities

Logistics centres are the largest inland facilities being commonly important elements of many national and international supply chains connected with almost every kind of goods. Among the many different tasks carried out by this type of objects are: transport (carriage), shipping, transshipment, warehousing, order picking, packaging, labelling, palletizing, customs clearance, insurance, containers rental, technical services for vehicles and many more. Figure 2 shows the tasks divided into three main groups, in accordance with the approach proposed by I. Fechner [6].

Logistics functions	Support functions	Additional functions
<ul style="list-style-type: none"> • transport • warehousing • transshipment • stock management • packaging • order picking • order management 	<ul style="list-style-type: none"> • shipping • customs clearance • insurance • loading units circulation • containers, pallets rental • IT services • marketing 	<ul style="list-style-type: none"> • technical services for vehicles • sale of fuels and oils • loading units repairs • hotel services • parking services • catering services • banking services • accounting services • telecommunications services

Figure 2. Tasks carried out by logistics centre

Customers (e.g. manufacturers, retailers, distributors) in one place can take advantage of a wide range of services together forming a comprehensive logistics product offered by many different companies specialized not only in transport or warehousing, but also in labelling, sampling, packaging or marketing. In addition to the cargo streams integration, logistics centres are actively involved in the processes of creating added value of the transported goods. Loads during their stay in the logistics centre not only can be transhipped from one mean of transport to the another, but also can change their character. Due to the support and additional services partially mentioned above, goods can increase their value and be adapted to the requirements of the final clients. In some cases in logistics centres are made even simple production processes. All in order to meet the growing needs and expectations of the market. However, following B. Skowron-Grabowska tasks of fundamental importance are those, which reinforce synchronised flow of goods and information necessary to control it. In her view, logistics centre should affect the increase in efficiency of logistics processes and create the value of acting within the supply chain. Naturally, the tasks listed in the last two groups are also important, but their character seems to indicate supplement functions to the logistics ones which are strictly connected with the movement of goods from the points of origin to the points of destination [7].

Logistics centres, like many other logistics facilities, are not homogeneous and their classification can be made on at least a couple of ways. Centres can be classified, among other things, by operational range, spatial integrity, their functions, the type of served goods, transport accessibility, as well as ownership.

In the case of the first criterion, there are international, regional and local logistics centres. First of them are global. They are engaged in many business processes realized beyond national borders and they have the greatest radius of the operation. Some of the experts states that regional centres are dedicated to the companies located no more than ca 50-80 km from the facility. Local ones work on a small area. They are engaged mainly in distribution processes [8, 9, 10].

With regard to the spatial integrity, logistics centres can be divided into concentrated, modular and dispersed. In the case of concentrated facility, the whole infrastructure belonging to a logistics centre or its individual users is located in one area and subjects to the rules set by the board of management. Modular centre is characterized by the fact that is divided into functionally

distinct modules. The structure of ownership, organisation and management of them can be different. But they are subject to the common rules set by the mission of the logistics centre. Dispersed facilities are unified in term of organisation, but divided into parts spatially separated due to the following reasons: availability of properties, infrastructure, economic conditions etc. [11].

According to the third criterion, following B. Skowron-Grabowska logistics centres can be divided into dedicated for supply, manufacturing and distribution. In these first performs a lot of consolidation operations of goods intended for production. In addition, centres of this kind often participate in delivering cargo to the industrial enterprises. Assembly processes (e.g. welding car body sheets in the centres serving the automotive companies) are characteristic for the logistics centres of the second type. Logistics distribution centres are specialized in the packaging and delivery of the goods to the final recipients [12].

Another criterion classifies logistics centres according to the type of served goods. Universal ones support all kind of cargo without restrictions to their nature and physical form. Industrial logistics centres are limiting the collected goods to the certain ranges due to the concentration of a given type of production in its surroundings, while specialized ones provide support for selected types of loads. Specialization may result from the nature of products or required additional authorisations for standard operating activities [11].

In addition to the mentioned above and summarily characterized criteria in a literature can be found at least two others, which classify logistics centres. One of them is an ownership. On the basis of this criterion there are private, public and public-private logistics centres. Public are owned by the public sector while private are built from own funds of the investors and oriented primarily towards market targets. Public-private logistics centres differ a little bit. Their formation involves both the public and the private sector. These centres are usually initiated by the public side, whose investment contribution are mainly real estate and development of local infrastructure. In addition, the public sector takes administrative and legal actions to facilitate the realization of the investment. The private sector participates in investment capital, carries out and finances infrastructure and objects for personal use, and usually performs management functions in logistics centre after completion of its construction [12].

The last criterion applies to the transport availability and divides logistics centres into the two main groups. Intermodal logistics centres are those which thanks to the terminals give the ability to create an integrated transport chains involving several different modes of transport in the process of the movement of goods, in accordance with the idea of intermodalism. A second group is formed by the non-intermodal logistics centres. These facilities to a limited extent allow the use of several different modes of transport and intermodal loading units (e.g. containers, swap bodies). In many cases this type of the logistics centre is dominated by road transport [9].

Returning to the D. A. Tsamboulas' definition, nowadays in member countries of the European Union operates at least tens of logistics centres that fulfil the requirements connected with offering two or more different modes of transport and enabling the movement of goods in one and the same loading unit from the point of origin to the point of destination – as it is specified in a “Terminology on combined transport”, document published in 2001 by a team composed by the United Nations' (UN), the European Commission's (EC) and the former European's Conference of Ministers of Transport (ECMT) representatives [13].

Due to the certain historical circumstances, most of them are located in the western member countries of the European Union. Examples of good practices in the aspect of intermodal logistics centres come from Austria, Germany, Italy and other.

Cargo center graz

One of the best European logistics centres according to the report published in 2010 by the Deutsche GVZ-Gesellschaft mbH, a German organisation that supports operation and development of logistics facilities of this kind, is a Cargo Center Graz. It is located in the South-Western part of Austria, in Styria region, in the close vicinity of the Graz city. Operated since 2003 object with a wide variety of reasons is often given in the literature as a model example of a logistics centre. This is, among other things, due to the fact that Cargo Center Graz is very advanced in terms of functionality and infrastructure, which has. In addition, organisational, technological and technical solutions applied to contribute to build a strong and

stable position of the centre. The presence of contractors not only from Austria, but also from Italy, Slovenia and Hungary, confirms the attractiveness of the centre and its adaptation to the requirements of the European logistics market. Moreover, Cargo Center Graz calls the attention due to the formula of realization. Facility was created as a result of the successful cooperation between the public and private sectors within the Public-Private Partnership (PPP) [14].

Presented in Figure 3 centre takes a total of about 500.000 square metres, of which, among other things, more than 130.000 sqm is the area of the halls, ca 33.000 sqm is intended for the storage of containers, swap bodies and trailers and ca 15.000 sqm is an office space. Uncovered space is another approximately 150.000 sqm.

Intermodal terminal, which is one of the most important parts of the centre, is equipped with:

- 4 craneable tracks with a length of 700 m each (dedicated for the service of the containers);
- 2 free loading tracks with a length of the 750 m each;
- 1 main track with a length of the 780 m;
- 1 track with a length of the 610 m dedicated for the Ro-La service (rolling road).

Transshipment of the loading units is made with the use of 2 gantry cranes and other mobile handling equipment with front spreader (e.g. reach stackers).

Infrastructure of the centre also gives ability to handle specialized loading units in the form of refrigerated containers or cooling and heating tanks. There is also an interim place for the storage of containers with dangerous goods [14, 15].

Logistics centre offers a very wide range of services. Besides the basic, associated with transport (carriage), shipping, transshipment and warehousing of cargo, Cargo Center Graz provides the opportunity to take advantage e.g. of the vehicle service and gas station for cars and trucks. For employees and many truck drivers arriving a restaurant also was opened. Centre states that service facility and house service allow partners a complete outsourcing of all cleaning and repair work in offices, halls, gates etc. With the customs office all the necessary official and bureaucratic steps can be dealt with. Cargo Center Graz also cares about the security in its area. Special service prevent burglary, theft and criminal damage. All in accordance with the idea to create a centre that offers to the logistics

companies in one place everything that is needed and enables to focus on their core business. Figure 4 shows the general plan of the Cargo Center Graz with marked functional zones [14].



Figure 3. Cargo Center Graz

Logistics centre is located in one of the largest and strongest economic regions in Austria, near the Hungarian and Slovenian border. According to the latest concept of TEN-T (Trans-European Transport Network) object is an important element of the core net corridor Baltic-Adriatic and is involved in the service of goods moved in a North-South direction in Europe, among others from Sweden and Poland to Slovenia and Italy [14, 16].

Austrian logistics centre operates per day about 300 trucks and several trains. The maximum storage capacity is ca 2000 of 40' containers, that come with other types of intermodal loading units from Antwerp, Hamburg, Rotterdam and other main economic areas in the whole Europe. Some of them come to the Center via the railway shuttle connections.

Among dozens of logistics entities that carry out their activities within the centre are located those of native and international nature. The first group is made by Hödlmayr Logistics GmbH, Rail Cargo Austria and Wenzel Logistics GmbH, while DB Schenker, DHL, Panalpina and others create the second [14].

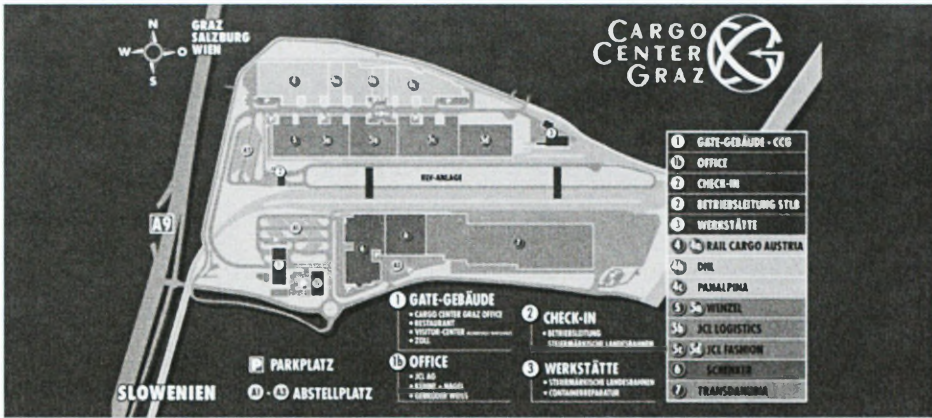


Figure 4. Plan of Cargo Center Graz

With regard to the organisational structure, the centre is divided into three divisions. The first one is the intermodal terminal, the second is real estate, while the third is connected with regional development [14].

Interporto Bologna

Another important European logistics centre based on the information provided by Deutsche GVZ-Gesellschaft mbH is Interporto Bologna. History of the object dates back to 1971, when was founded the company Autoporto Bologna SpA, two years later renamed into Interporto Bologna SpA in order to highlight the intermodal nature of it. The first years have passed under the sign of site selection, land acquisition and negotiations with the Italian railway infrastructure company. In the 1980s there has been a development of the first area of the centre and the rail terminals. In that time, the first warehouses and other storage facilities has appeared and first logistics companies have begun to carry out their different activities within the Interporto Bologna. The last decade of the twentieth century was connected with enlargement of the centre by the development of its second area and obtaining financial support from the Italian government, which at that time promoted actions aimed at changing the modal structure of the transport system and shifting cargoes e.g. from road to rail [17, 18].

The ownership structure of Interporto Bologna is mixed. Public side has a majority of the shares. Combined share of Municipality of Bologna and the Province of Bologna is over 52%. Among the other participants with smaller shares are Generali Italia (Italian branch of global insurance company), Trenitalia S.p.A. (Italian railways), UniCredit S.p.A. (Italian international bank) and more than a dozen others [17].

Presented in Figure 5 Interporto Bologna is one of the largest logistics centres in Europe. Object covers a total fenced zone of ca 4.200.000 square metres, of which ca 3.500.000 sqm creates the logistics area. Covered warehouses are located at about 415.000 sqm, while the yards at about 260.000 sqm. The surface of the car parks is ca 60.000 sqm, while the office space is about 55.000 sqm. Field for future development is ca 1.200.000 sqm.

Three intermodal terminals create the rail area which is a total of approximately 700.000 sqm. They are: container terminal, swap bodies terminal and bulk terminal. Their characteristics are as follows:

- total area: ca 130.000 sqm / ca 140.000 sqm / ca 50.000 sqm;
- storage area: ca 38.000 sqm / ca 42.000 sqm / ca 10.000 sqm;
- number of tracks: 6 / 15 / 2;
- average track length: 600 m / 550 m / 460 m;
- maximum train length receivable: 750 m / 550 m / 550 m [17, 18].

In total, at terminals work 7 front stacker cranes for handling operations. In 2011 on all terminals served a total of 5500 trains and ca 75.000 wagons. The mass of cargo amounted to about 2.000.000 tonnes (containers: ca 750.000 tonnes and swap bodies: ca 780.000 tonnes). Handled almost 90.000 different intermodal loading units, which correspond to almost 160.000 TEU. In the case of road transport, in 2011 was more than 580.000 trucks served in the logistics centre, and the mass of the conveyed cargo amounted to almost 4.500.000 tonnes.

Object has more than a dozen railway connections. Some of them are between Interporto Bologna and sea ports in Rotterdam and Zeebrugge, as well as river port in Duisburg. In the timetable appear many domestic connections, either with other cities with logistics centres. All of those connections are managed by several Multimodal Transport Operators (e.g. Cemat, GTS and Hupac), while the railway carriage is performed only by a few entities. Among them an important position has Trenitalia Cargo, a member of the Italian national railway group [17, 18].



Figure 5. Interporto Bologna

The core business of Interporto Bologna is mainly represented by the offer of warehouses for logistics and rail and intermodal services. Road transport, handling and other different value added activities complete a wide range of available services. In total, more than 100 companies from the logistics industry conduct their businesses in the Interporto Bologna. In addition to the aforementioned entities are e.g. Ceva Logistics, DB Schenker, DHL, Gefco, Geodis Logisitcs, Kuehne + Nagel, Panalpina, Röhligh and Arco Spedizioni, Gruppo CDS, Logista Italia, Taroni, Terminali Italia, TIE Trasporti Intermodali Europei. They represent logistics operators, rail operators, terminal managers, customs brokers, shipping agents, road carriers and others [17].

In the logistics centre is also truck wash, gas station, and even workshop for rail wagons. In connection with paying much attention to the issues of the environmental protection and ecology, there are also special services set up to maintain green areas. Figure 6 shows the overall plan of the Interporto Bologna [18].

Interporto Bologna is well connected with the rest of the country and the whole European continent. It has railway and road connections. Three national motorways lead to the city of Bologna. Moreover, logistics centre is located along three core net corridors of the TEN-T – Baltic-Adriatic, Scandinavian-Mediterranean and Mediterranean. They are both in a North-South direction in Europe, as well as from West to East [16]. High transport accessibility significantly affects the competitiveness of the logistics centre, which in many publications is located in the forefront the best facilities of this kind in Europe.

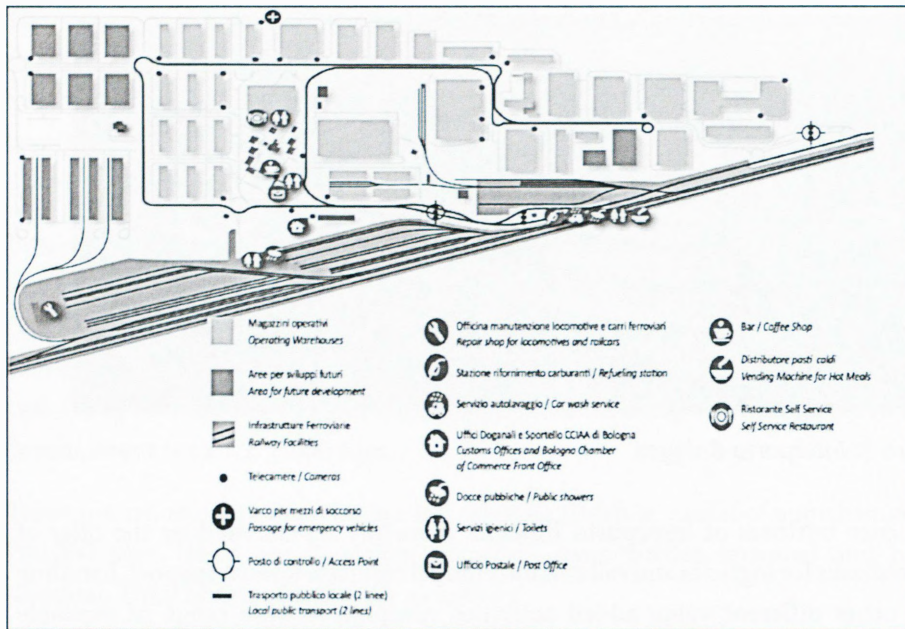


Figure 6. Plan of Interporto Bologna

Similarly, as the Cargo Center Graz, logistics centre in Bologna is divided into a three specialized companies, which deal with the management of the whole object and the services provided by it, real estate planning, building and management, as well as research and development [17, 18].

GVZ Bayernhafen Nürnberg

In the list of the best European logistics centres, according to the survey conducted by the Deutsche GVZ-Gesellschaft mbH, are also some objects located in Germany. One of them is the GVZ bayernhafen Nürnberg. This logistics centre is placed in the South-Eastern part of the country, in the region of Bavaria and it functions on the basis of a river port on the Main-Danube canal, dating back to 1972. With the access to a waterway with a length of close to 3500 km, connecting the North Sea with the Black Sea, the centre has a direct connection with almost

10 European countries like the Netherlands, Austria, Slovakia, Hungary, Romania and a few more [19].

GVZ shown in Figure 7 takes into area of ca 3.370.000 square metres, of which about 2.450.000 sqm occupy sites to conduct business, and more than 230.000 sqm is the area of water reservoirs. For warehouses and other storage areas is approximately 760.000 sqm.

Four docks allow the service of the vessels and the length of quays is about 5500 m. Transhipment of the goods transported by water can be made using 9 full gantry cranes (lifting ability up to 40 tonnes each). Moreover, logistics centre has own train station and railroad tracks with a total length of about 50 km (11 km of them are electrified). The available infrastructure provides the ability to handle full trains of up to 700 m length [20].



Figure 7. GVZ bayernhafen Nürnberg

Access to three different modes of transport (road, rail and inland waterway) gives a large flexibility in constructing the optimal transport chains for more than 260 companies settled in the GVZ, while modern handling equipment enables transhipments of intermodal loading units in the form of containers and other. In the close vicinity of the centre are located 4 motorways (A3, A6, A9, A73), as well as the railway to Munich.

Among the group of companies that operate in the GVZ are those with a business profile associated with transport (carriage), shipping, transhipment, warehousing,

production, recycling and other complementary services. In addition to the above processes are carried out activities connected with order picking, packaging and even with production finalizing.

Both are branches of international corporates such as DB Schenker, DHL, DPD, UPS and national companies with family traditions such as Winkler Fahrzeugteile GmbH and Hassold - Logistik GmbH & Co. KG. The overall plan of the object presents a Figure 8 [20].

Intermodal terminal, which occupies a land area of about 17.000 sqm operates since the first decade of the 21st century. Its characteristics are:

- 4 gantry cranes (max. capacity 41 tonnes each);
- 10 loading tracks (700 m length each);
- 2 storage tracks (700 m length each);
- 1 reach stacker (max. capacity 40 tonnes);
- 1 port basin (116 m length and 25 m broad).

According to the data by 2013, in the GVZ served close to 270.000 TEU and the total weight of all types of cargo amounted to more than 14.800.000 tonnes. Rail and river shipping in the structure of goods transport was close to 30%, which corresponded to about 4.300.000 tonnes (rail – ca 3.800.000 tonnes, inland waterway – ca 500.000 tonnes). These loads came to the centre via more than 500 ships and approximately 8.500 railway wagons [19, 20].

The object has a number of intermodal connections with the largest container ports in Europe (Bremerhaven, Hamburg and Rotterdam), as well as economic centres such as Bremen, Hannover, Munich and Verona. Some of these connections coincides with TEN-T core network corridors, two of which run through the city of Nuremberg. There are corridors: Rhine-Danube and Scandinavian-Mediterranean. The first links the South of Germany with Romanian ports situated on the Black Sea coasts (Constanta and Sulina). While the second integrates markets of Finland, Sweden and Denmark with the Central and Southern Europe (Germany, Austria, Italy and Malta) [16, 19].

Similarly, as in the case of two previously characterized logistics centres in the GVZ bayernhafen Nürnberg is a customs office. With regard to the organisational structure, the company that manages this GVZ is part of a German group

bayernhafen Gruppe, which operates logistics facilities located in six different places along the Main-Danube waterway [19].

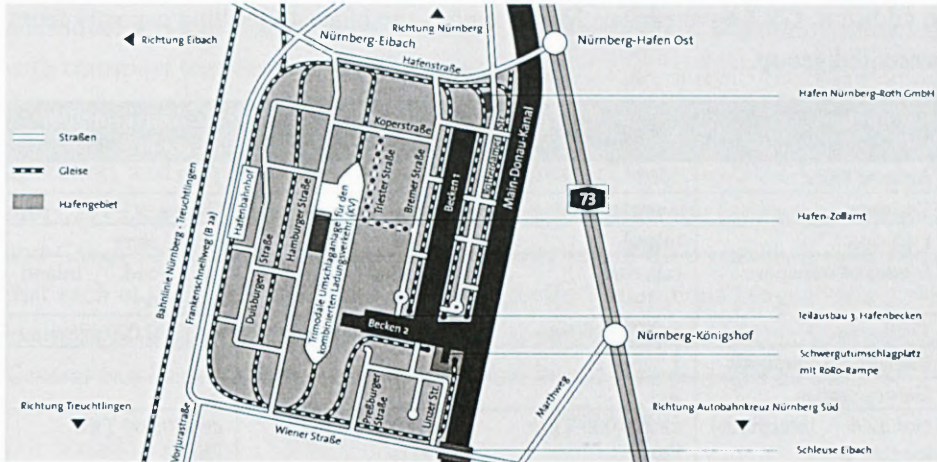


Figure 8. Plan of GVZ bayernhafen Nürnberg

Comparison of Characterised Logistics Centres

Logistics facilities that were characterised above have both common, as well as diverse features. Figure 9 presents synthetic comparison based on several parameters that allow to show the most important similarities and differences between the characterised objects with respect to their size, location, number of settled entities and others.

The object of the greatest traditions is the GVZ, while the Austrian Cargo Center Graz operates the shortest among the analyzed group. Each of three logistics centres has access to rail besides road transport. In addition, German one is the only that is located on the banks of river and offers the ability to construct tri-modal transport chains (rail-road-inland waterway). Taking into account the size, object located in Bologna is the largest and has three intermodal terminals, while everyone else has only one terminal, but with gantry crane, as opposed to the Italian one.

Over year the biggest amount of intermodal loading units according to the criterion of TEU service object located in Germany. It is estimated that this number corresponds to the results of the other two logistics centres combined. In addition, GVZ bayernhafen Nürnberg has the biggest handling capacity from presented group.

Parameters	Cargo Center Graz	Interporto Bologna	GVZ bayernhafen Nürnberg
Activity since	2003	1986	1972
Country	Austria	Italy	Germany
Location	inland	inland	on the river
Modes of transport	rail, road	rail, road	rail, road, inland waterway
Total area	ca 500.000 sqm	ca 4.200.000 sqm	ca 3.370.000 sqm
Intermodal terminals	1	3	1
Gantry cranes	2	---	4
Handled intermodal loading units	ca 100.000 TEU [2012]	ca 160.000 TEU [2011]	ca 270.000 TEU [2013]
Capacity [TEU/year]	ca 260.000 TEU	ca 300.000 TEU	ca 530.000 TEU
TEN-T Core Network Corridors	1. Baltic-Adriatic	1. Baltic-Adriatic 2. Mediterranean 3. Scandinavian-Mediterranean	1. Rhine-Danube 2. Scandinavian-Mediterranean
Number of settled entities	ca 25	ca 100	ca 250
International / national companies	+ / +	+ / +	+ / +
Support and additional services	+	+	+
Place in the Ranking 2010 [Deutsche GVZ-Gesellschaft mbH]	13th	4th	3rd

Figure 9. Comparison of characterised logistics centres

Comparing objects in the context of their locations in the structure of TEN-T (Trans-European Transport Network), the most attractive is the Interporto Bologna. This is an important component of three core net corridors, while German GVZ has two connections of this kind and Austrian Cargo Center Graz only one.

With regard to the number of entities which operate within logistics centres clearly excels object located in Nuremberg. A common feature of all presented

objects is that each of them has own representatives in the form of the world's largest logistics corporations, as well as domestic companies. This is due to the conditions offered by the objects. Each of them offers a wide range of support and additional services that are complementary to the standard activities connected with transport (carriage) or warehousing.

In the report published in 2010 by the German organisation that supports operation and development of logistics centres – Deutsche GVZ-Gesellschaft mbH, GVZ bayernhafen Nürnberg was best ranked, then the Interporto Bologna and Cargo Center Graz. Without advanced analysis of their results, it is obvious that each of them belongs to the specific logistics “Champions League” and gives example of best practices in this field for new investments of this kind in the Central and Eastern Europe, where is a special need for new logistics centres.

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THE ARAB SPRING AND ITS INFLUENCE ON EUROPEAN UNION POLICY

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Abstract

The scale of incidents related to Arab Awakening and the consequences of movement in MENA region surprised the European Union and international community. However, the report of the Arab Human Development Report predicted in 2009¹ that the Arab world will face security challenges associated with growing population, which can lead to internal tensions between different communities. The Arab Spring has contributed to the creation of new political, economic and social realities which forced EU to take necessary action to adapt to this situation. Significant efforts were taken according to financial support which was delivered in increased budgets of European Neighborhood Policy projects, The European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD). Due to the fact of immigration from region increases anxiety on the South of EU. In order to prevent illegal border crossing EU established Joint Operation Hermes 2011² to resolve problem. However the Tunisami consequences are still considered as a threat to European Union security.

Key words: Arab Spring, European Union, European Neighborhood Policy, Migration

1 The Report in Brief, Arab Human Development Report, Challenges to Human Security in the Arab Countries Nations Development Programme Regional Bureau for Arab States, <http://www.arab-hdr.org/publications/contents/2009/execsummary-e.pdf>.

2 General Report 2011, FRONTEX, Warsaw, 2011.

Introduction

In order to understand of the situation in the Middle East and North Africa (MENA) better, it is important to recollect that this region bears the burden of colonialism and the post-colonial system. Natural for this region paternal system of power was replaced by colonial system of governing. Metropolis created in region the artificial nation system with borders which divide ethnic groups and its territory in factitious way. Ties of connection between metropolis and its colonies stay up to now³.

The term Arab Spring defined uprising against dictatorships in MENA region. The term was a reference to the uprisings in Eastern Europe in 1989. According to Samuel P. Huntington, The Arab Spring gain by some observers the name of the new forth wave of democracy. However Henry Kissinger is sceptical -"I don't think that the Arab Spring is necessarily a democratic manifestation, I think it is a populist manifestation," H. Kissinger told for the Wall Street Journal⁴. The background of protests in the region had complex nature.

Arab world reached turning point on December 17, 2010. Then Mohamed Bouazizi burned himself in the Tunisian town of Sidi Bouzid. This self-immolation occurred to be the beginning of future changes in MENA region. Attallah Kuttab described that the Jasmine Revolution started Tunisami⁵ phenomenon. The argument for entitlement to a similar determination by the author is spilling wave of protests from Tunisia by the Arab world like a tsunami. The European Union did not expect the change on the position of power in the region⁶. Foreign relations were maintained with the regimes of MENA countries, despite

3 DODGE T., From the 'Arab Awakening' to the Arab Spring; the Post-colonial State in the Middle East, http://www.lse.ac.uk/IDEAS/publications/reports/pdf/SR011/FINAL_LSE_IDEAS_fromTheArabAwakeningToTheArabSpring_Dodge.pdf, Viewed May, 2014.

4 The Fourth Wave of Democratization, <http://iris-bg.org/files/stID-25-07-13.pdf>, Viewed May, 2014.

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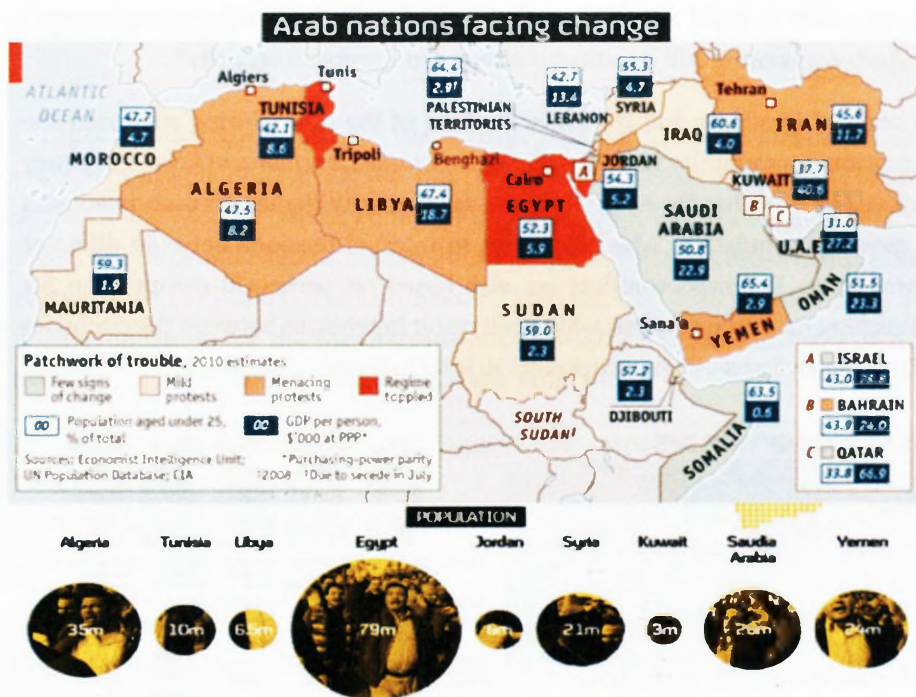


Figure 1. Trends shaping higher education in the middle east and north Africa, 30 January 2013, <http://monitor.icef.com/2013/01/trends-shaping-higher-education-in-the-middle-east-and-north-africa/>, Viewed May, 2014

undemocratic attitude of power, nepotism, corruption and low standards of living societies⁷. There was a belief that the reform of the political system will inevitably be associated with the Islamist groups coming to power and often associated with terrorist organizations. The Arab Spring was connected inseparably with the need of taking action in order to create a new line of policy towards the region as well as the adoption of a new approach to the political changing terrain. Actions aimed

7 Read more: LAREMONT R.R., *Revolution, Revolt and Reform in North Africa: The Arab Spring and Beyond*, Routledge, 2014r, Álvaro de Vasconcelos, *Listening to Unfamiliar Voices - The Arab Democratic Wave*, Paris: European Union Institute for Security Studies, 2012r., p. 83- 90, THE WORLD BANK Annual Report 2013, Middle East and North Africa, p.40; K. Kozłowski, *Kolory rewolucji*, Wydawnictwo Poltext, Warszawa, 2012r; Middle East and North Africa, Growth and Poverty Reduction, <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:23112547~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>.

new approach to build a healthier relationship⁸ with the Southern neighbours⁹. The Arab Awakening still constitutes a threat to European security¹⁰.

The scale of incidents and the consequences of the Arab Spring surprised the international community. However, the *Arab Human Development Report*¹¹ already predicted in 2009 that the Arab world will face security challenges associated with the growing population, which can lead to internal tensions between different communities. Potential conflicts are also based on perceived competition for diminishing natural resources, which will result in tensions between the countries of the Arab and non-Arab participants in international relations.

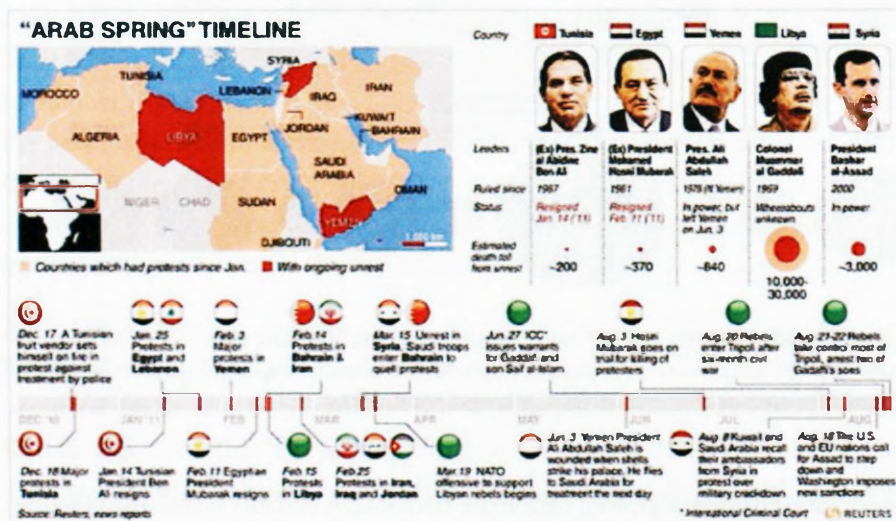


Figure 2. Three down, two to go: Obama gives veiled threat to violent Syrian regime as residents inspired by Gaddafi death pour into streets, <http://www.dailymail.co.uk/news/article-2051683/Gaddafi-dead-Obama-warns-Syrian-President-Bashar-al-Assad.html#ixzz2y17GUff>, Viewed May, 2014

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Political issues

European policy toward MENA region have pursued the same objectives for 65 years: security, energy and market. This main goal of interests has been the purpose of the Global Mediterranean Policy (1972-1992), the Euro-Arab Dialogue (1974-1989), the Renewed Mediterranean Policy (1990-1996), the Euro-Mediterranean Partnership (1995-2008), the European Neighbourhood Policy (2004-2012) and, finally, the Union for the Mediterranean (2008-2012). Sometimes, two or three overlapping policies were conducted at the same time¹².

The European Union concentrated on three main aspects in the neighbourhood policy:

- the political and security basket,
- economic basket,
- cultural and social basket.

Conviction that democratic states do not conduct wars strongly revealed after the attacks of September 11, 2001. "War on terror" was by seen undemocratic states as a roots of evil. The principle role in solving the problem of terrorism was cooperation with authoritarian pro – Western regimes. According to Hannu Juusola the lack of democracy in the region is a challenge not only for European¹³. Union but also negative influence on international standards¹⁴. The Middle East and North Africa countries are perceived as "long lasting region with the lowest level of democracy in the world." In MENA region governing change had violent course. This caused instability in the region. According to the researches of Moataz Abdel Fattah¹⁵ from 2006 and Richarda Auxiera¹⁶ from 2011, public opinion in the

12 KHADER B., *The European Union and the Arab World: from the Rome Treaty to the Arab Spring*, European Institute of the Mediterranean, 2013.

13 JUUSOLA H. Juusola, EL FELGIERY M., BEHR T., "The Arab Spring," in Timo Behr (Ed.), *Hard Choices. The EU's Options in a Changing Middle East*, The Finnish Institute of International Affairs, FIIA Report 28, 2011.

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region imagine democracy in the way different from the West standards. In both researches the role of Islam and its influence was seen in a positive way in most of the countries.

In Europe, democratic structures evolved over the centuries¹⁷. Values such as democracy, the role of law and human rights underpin the functioning of the EU. However, European countries showed ambiguity in relations with the region MENA, by supporting dictatorships in the Southern Mediterranean region. Demonstrated ambivalence in its approach to the Arab region has undermined the credibility of the EU. Islamic movements were suppressed under the dictatorship, but they remained active in the social life of the Arab world. No link to the "degenerate" West contributed to the liking of certain groups of citizens.

Policy of the EU's toward the Southern Mediterranean has a longstanding tradition. In the 1970s, relations began with a patchwork of measures which were targeting at trade and development. The end of the Cold War caused security concerns in relations between EU and MENA region. The policy approach was visible in Barcelona Processes established in 1995 and known also as the Euro-Mediterranean Partnership (EMP). Cooperation in this program included 12 Mediterranean states. Association agreements were limited mainly to trade. Bilateral relation also take important role as promotion of the democracy standards. The EMP was conceived also as a regional forum of economic stability and better understanding among people through cultural and social initiatives¹⁸. In 2005 the European Neighbourhood Policy (ENP) was launched. The project was set for the Southern and Eastern neighbours. The Union's security clearly played the main role in the ENP agenda. In case of reflecting more on relationships between the EU and the Southern Mediterranean Union for the Mediterranean (UfM) in 2008 was established¹⁹.

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19 INGEBORG T. The EU's New Neighbourhood Policy: An Appropriate Response to the Arab Spring?, <http://www.e-ir.info/2013/05/29/the-new-neighbourhood-policy-of-the-eu-an-appropriate-response-to-the-arab-spring/>, Viewed May, 2014.

The current Western economic crisis from 2008 caused the division of Southern European members with fragile economics and Northern European members with dynamic economics. In EU significant increase of support is not observed. However southern region of EU seems to ask for the shift in the allocation pattern of resources or providing them. Crises in North Africa, apart from the case of Libya, demand, above all, economic and civilian resources²⁰. Economic problems in southern part of Europe cause intensification of nationalism²¹. The risk that weakens Southern Europe may undermine the policy of the EU towards the Arab world is nonetheless real. Southern region of Europe has always strongly advocated the policy of balancing EU aid between Southern and Eastern neighbours.

After Arab Awakening European Union revised policy according to this region. In February 2011 and in next months of 2011 the European Commission's Directorate General for Humanitarian Aid and Civil Protection reacted on the situation donating the region with the amount of EUR 80.5 million. Help was divided on baskets which covered a 'EUR 40 million emergency decision; EUR 20 million Humanitarian Implementation Plan (i.e. programmed funding), EUR 10 million for the reintegration of Chadians from Libya, EUR 10.5 million from the Civil Protection budget line for evacuation of third country nationals'²². New approaches were visible in the Joint Communication *A partnership for democracy and shared prosperity with the Southern Mediterranean*. It announced that the region of North Africa got extra €1.2 billion funds. In budget for the period 2011–13 region gain the €5.7 billion. Some aspects of the European Neighbourhood Policy (ENP) changed²³. In May 2011²⁴, the European Commission and the European External Action Service launched partly in response to the 'Arab Spring' confirm reinforced engagement and strategy of strengthening individual and regional relations between

20 ALIBONI R., *Southern Europe and the Mediterranean from Cold War to the Arab Spring*, Ed. *Southern Europe and the Mediterranean: national approaches and transatlantic perspective*. Mediterranean Paper Series, Istituto Affari Internazionali, 2011.

21 According to Maslow's Hierarchy of Needs society was afraid about their safety.

22 EU response to the Arab Spring, http://ec.europa.eu/europeaid/where/neighbourhood/regional-cooperation/enpi-south/documents/eu_response_to_the_arab_spring_en.pdf, Viewed May, 2014.

23 European Commission and the High Representative of the European Union for Foreign Affairs and Security Policy, "A Partnership For Democracy And Shared Prosperity With The Southern Mediterranean", Brussels, 8 March 2011, http://eeas.europa.eu/euromed/docs/com2011_200_en.pdf, Viewed May, 2014.

24 Joint Communication "A new response to a changing Neighbourhood" 25 May 2011.

the EU and MENA region²⁵. Revised policy made up the two slogans “more for more” and the “3Ms” – money, mobility and markets²⁶. *A new response to a changing Neighbourhood* program was based on three elements. First was ‘deep democracy’ transformation which included the rules of democratic institution-building. This point particular focused on fundamental rules of European Union as human rights and freedoms. The reforms included fight against corruption of the Judiciary. The second rule was a stronger partnership with the people, with specific emphasis on civil society support and on enhanced opportunities for exchanges and people-to-people contacts with a particular focus on the young. Third point emphasised sustainable and inclusive economic growth. Development should include especially small and medium enterprises. This point was also according to improving health and education systems, educational training, and development of the poorer regions²⁷.

The European Investment Bank (EIB) increased its help for the countries of Mediterranean to €1 billion in the same period of time. The European Bank for Reconstruction and Development (EBRD) set up a new found of investments of €1 billion for emerging Arab democracies. The scale of investments was estimated to increase to rate of €2.5 billion in the future. The EU is also providing around €700 million in grants for the Southern neighbourhood in SPRING programme. The founding provided the Support for Partnership Reform and Inclusive Growth. The support was given to southern region as a commitment to progress in democratic reform²⁸.

One of main challenges for EU politics is the creation of mutual trust. The principal role for the countries of MENA region in the post-colonial policy was sovereignty. However it was visible that relations with metropolis was far more tighten. The more democratic the new governments are, the more assertive they are likely to

25 Euro-Mediterranean statistics, Eurostat, Luxemburg, 2013.

26 DWORKIN A. WITNEY N., A Power Audit of EU-North Africa relations, European council on foreign relations(ECFR), 2012, p. 27.

27 Joint Communication to the European Council, the European Parliament, The Council, The Economic and Social Committee and the regions a partnership for democracy and shared prosperity with the Southern Mediterranean, Brussels, 8.3.2011 COM(2011).

28 EU’s response to the “Arab Spring”: The State-of-Play after Two Years, http://europa.eu/rapid/press-release_MEMO-13-81_en.htm, Viewed May, 2014.

be about their identity. New position of power and their relations with Europe might not be to the liking of European countries.²⁹

Muslims in Europe. Perception of citizens from MENA region

John Feffer in publication *Crusade 2.0: The West's Resurgent War on Islam* stand on the point of view that anti-Islamic sentiment in the West intensified after 9/11. *Crusade 2* underlines that the situation which can be observed now is not a simply "clash of civilization". The situation is associated with geopolitical factors such as power, demography, territory and economic aspects. One of main coefficient which caused the increased fear of Islam is demographic structure³⁰. According to Nathalia Tocci and Jean -Pierre Cassarino the "fear of terrorism, political Islam, smuggling and organized crime, an authorized migration and the wider spill over effects of instability, has induced most Europeans, leaders and publics alike, to deepen a policy of containment in recent years."³¹

There are approximately 20 million Muslims out of 500 milion³² residents in the EU. Total number of Arabs living in Europe is estimated between 7 to 8 million. About 80% of them are Maghreb origin. It is important to take into account that Arab migrants are Arab expatriates regular and irregular migrants, naturalised and non-naturalised³³.

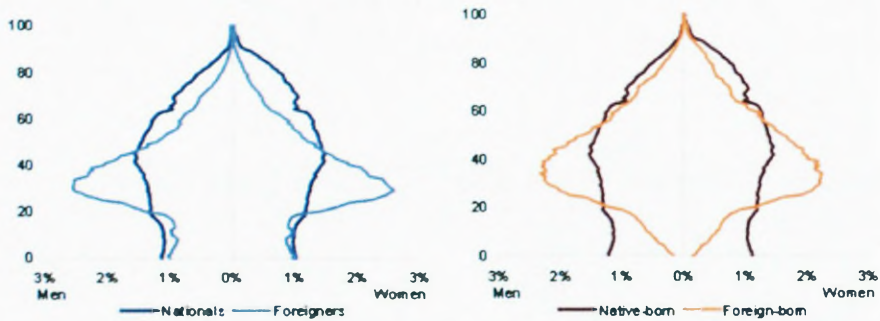
29 BALFOUR R., *EU Conditionality after the Arab Spring*, European Institute of the Mediterranean, 2012, p. 26.

30 FETTER J., *Crusade 2.0: The West's Resurgent War on Islam*, City Lights Open Media, 2012.

31 SEEBERG P., *The Arab Uprisings and the EU. EU migration policies towards the Mediterranean: learning to cope with "a Changing Neighbourhood"* Center for Mellemøststudier, Odense, 2011.

32 VASILEVA K., *Nearly two-thirds of the foreigners living in EU Member States are citizens of countries outside the EU-27*, Eurostat, Luxemburg, 2012.

33 KHADER B., *The European Union and the Arab World: from the Rome Treaty to the Arab Spring*, European Institute of the Mediterranean, 2013.



Source: K. Vasileva, Population and social conditions, Eurostat, Statics in focus 34/2011, Viewed May, 2014.

Figure 3. Population age structure by citizenship and country of birth, EU-27, 2010

After Arab Awakening islamophobia has intensified in some states of Europe. Increasing number of Muslims immigrants from northern Africa causes fear in societies on the south and west Europe. It is estimated that in 2011 two million Arabs leave homes and migrate to the West. According to the statistics of Eurostat, the number of refugees from Tunisia increased to about 92,5 percent, from Libya 76 percent and from Syria 50 percent³⁴.

The problem of the influx of immigrants from North Africa mostly touched Malta, Greece, Italy - especially strongly the island of Lampedusa and Spain³⁵. Some estimates indicate the number of over 20 thousand irregular immigrants to Europe³⁶. In the first quarter of 2011. 33 thousand of irregular migrants arrived to the EU. Comparing this figure with the 15 thousand from the first quarter of 2010 it is observed a twofold increase. The European Commission assumed in 2011 that in the future the influx of migration will be more visible in the region

34 BARRY A., Europe's Dilemma: Immigration and th e Arab Spring, http://fpif.org/europes_dilemma_immigration_and_the_arab_spring/.

35 V. Novotny, Opening the door? Immigration and Integration in the European Union, Centre for European Studies, 2012 r., s. 17.

36 European Commision, Communication on Migration, COM(2011) 248 final, 4 May 2011.

of North Africa. It is also assumed that many of them will need international protection³⁷.

Countries in which migrants cross borders with European Union had to manage with the responsibility of Dublin II treaty. Dublin Regulation establishes criteria identifying the Member State responsible for the examination of an asylum application claim and family links in Europe. European States are determined to ensure effective access to an asylum procedure.³⁸

Schengen Zone led to travel easily migrants between member states. Refugees without the necessary documents were sent to the country of the first border crossing with European Union. Some countries especially Italy and Greece were frustrated about such policy. These states are entry points for immigrants because of their location³⁹

Some important action was to try to manage with the wave of migrants through observation and reconnaissance operation "Hermes 2011" launched on February 20, 2011. by Frontex. Operation started on formal request for assistance in strengthening EU's external borders in the form of a Joint Operation. On February 15th the Italian Ministry of Interior requested FRONTEX in cause of regarding the extraordinary migratory situation in the Pelagic Islands. The request also concerned the analysis of future migratory pressure on region. Approximately, 6,000 irregular migrants who arrived at the Italian coast. Half of irregular migrants were Tunisian nationality who arrived in one month time, after February 11th according to the Italian Ministry of Interior. The situation was seen as a risk because before February 11th, the number of Tunisian origin immigrants were 14 people⁴⁰.

Movements in Africa and the Middle East caused the challenge of immigration and its perception in European Zone countries. The immigration problem has

37 European Commission, A Dialogue for Migration, Mobility, Security with the Southern Mediterranean Countries, COM (2011) 292 final, 24 May 2011 r.

38 Dublin Regulation, <http://www.ecre.org/topics/areas-of-work/protection-in-europe/10-dublin-regulation.html>, Viewed May, 2014.

39 A. Barry, Europe's Dilemma: Immigration and the Arab Spring, http://fpif.org/europes_dilemma_immigration_and_the_arab_spring/, Viewed May, 2014.

40 Hermes 2011 Starts Tomorrow in Lampedusa, <http://frontex.europa.eu/news/hermes-2011-starts-tomorrow-in-lampedusa-X4XZcr>, Viewed May, 2014.

not affected all EU countries to the same extent. In 2011, approximately 54% of all European citizens thought that most immigrants stay legally in their countries while 35% had opposite point of view. The society of the states exposed to a large influx of immigrants expressed concern about situation in Maghreb and Arab revolution.

One of example is Italy where government focused on boat arrivals and possibility of an 'invasion'. Public's stance was divided in terms of the view of immigrants. 48% saw it mainly as a problem, 28% perceived immigration as an opportunity and 18% recognized the positive and negative aspects in situation. Researches indicated 64% Italians perceived that immigrants are present illegally, in Spain the number of respondents who shared that view was about 49%. The lowest concern presents Germany with 13% where immigrants were seen by nearly half respondents as a opportunity for the country.

Below, the bar graph presents concerns about immigration in perception of some nations. Respondents were asked whether they were worried about illegal immigration. The majority of the respondents bothered about that problem. The highest rates of concern were in Italy (80%), followed by Spain (74%), and the United Kingdom (71%)⁴¹.

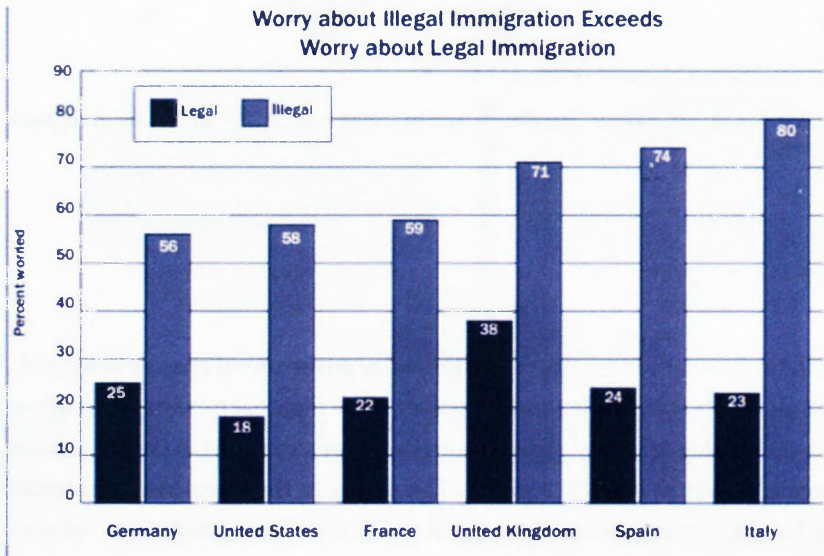
According to Migration Policy Center report from August 2012, in four countries of European Union Italy, Spain United Kingdom and Germany the number of immigrants was increasing. This statement provides annual statistics of legal immigration and situation after the Arab revolution was comparable to trend which is visible from more than five years. The increase of migration about 90,839 from Middle East and South Africa in 2011 was similar to the increase in previous years 67,214 in 2010 and 111,738 in 2009⁴².

In the third quarter of 2013, FRONTEX observed that there had been a massive influx of illegal immigrants in the middle of the Mediterranean Sea. Reported cases of illegal border crossings at the maritime borders of the EU. There were more than in any phase of the Arab Spring in 2011. At the same time, the number

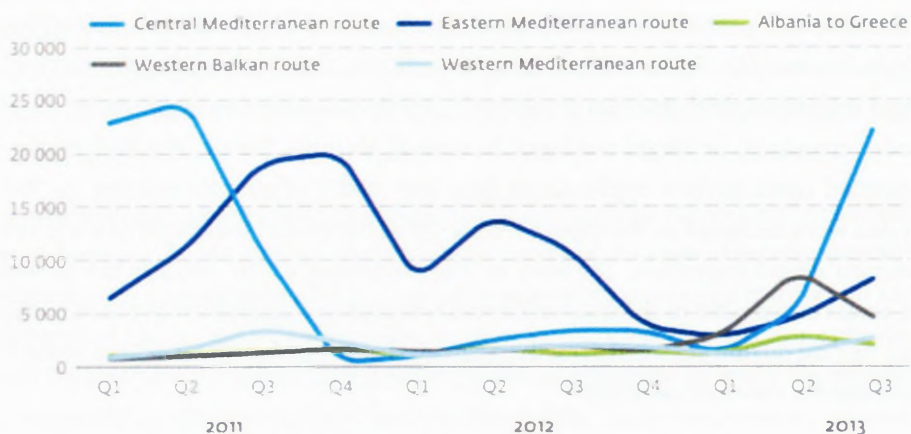
⁴¹ Transatlantic Trends: Immigration 2011, TRANSATLANTIC TRENDS, p 6-7.

⁴² P. Fargues, C. Fandrich, Migration after the Arab Spring, Migration Policy Centre, Research Report 2012/09.

of applications for international protection in the EU increased, comparing with any other period since 2008 the year when data began to be collected for this indicator. The Syrians were the nationality at the forefront in the rates of illegal migration, such as even crossing the border (in different locations types of border crossings) or illegal residence in several Member States. The Syrians also presented more asylum applications than any of the other nationalities. So the Syrians were included in the report FRAN Q3 as the nation that permits the most common illegal migration. The level of illegal crossing of the borders has grown to a level comparable to the one which was last seen during the initial phase of the Arab Spring during seasonal growth in the maritime border routes where so far it performed a much smaller scale.



Bar graph 1 Worry about Illegal Immigration Exceeds Worry about Legal Immigration (Transatlantic Trends: Immigration, 2011 Partners, TRANSATLANTIC TRENDS, 2011)



Source: FRAN Quarterly, Quarter 3, 2013, p. 15.

Figure 4. Detections of illegal border-crossing between BCPs by main irregular migration route

Summary

European Union face many security challenges after government change in MENA. Emerging societies demand independent policy. New regional powers won't allow to intervene into inside affairs of these countries⁴³. Reforms in EU's policy reacted on transition of power in MENA region⁴⁴. The policy to the Euro-Mediterranean region may have some scenarios. Rym Ayadi and Carlo Sessa predict the ways of evolution at the situation after the post-Arab Spring.

⁴³ J. Fingerland, What the revolutions mean for us, 30 May 2011 Mladá Fronta DNES <http://www.presseurop.eu/en/content/article/683071-what-revolutions-mean-us>, Viewed May, 2014.

⁴⁴ INGEBORG T. The EU's New Neighbourhood Policy: An Appropriate Response to the Arab Spring?, <http://www.e-ir.info/2013/05/29/the-new-neighbourhood-policy-of-the-eu-an-appropriate-response-to-the-arab-spring/>, Viewed May, 2014.

Alternative scenarios of Euro-Mediterranean policy in 2030

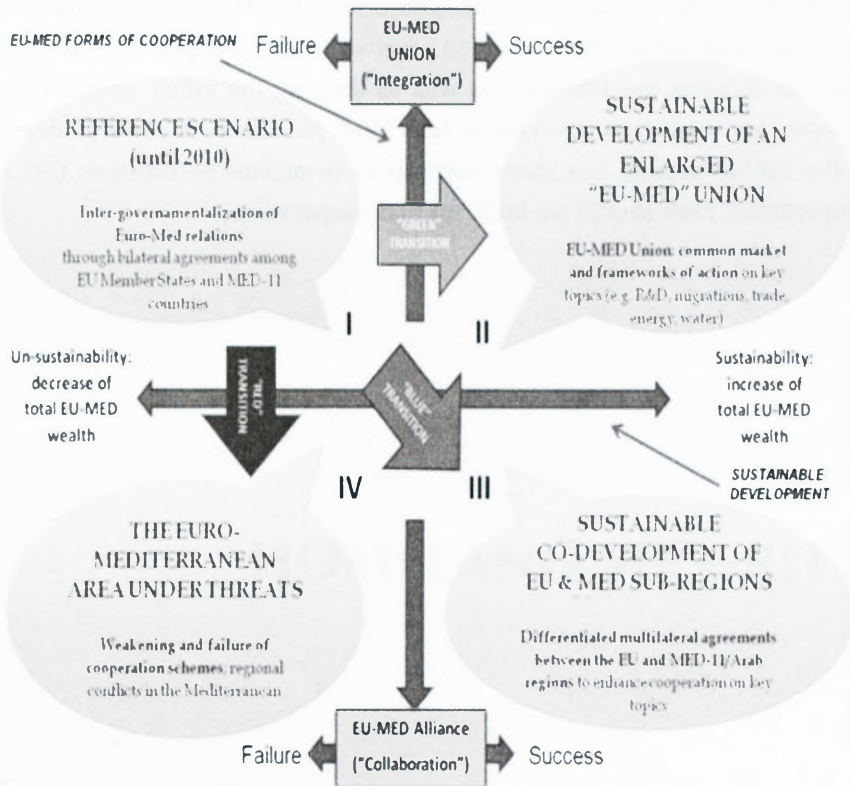


Figure 5. What scenarios for the Euro-Mediterranean in 2030 in the wake of the post-Arab spring? Rym Ayadi and Carlo Sessa, MEDPRO Policy Paper No. 2/October 2011

The Arab Spring is regarded as an opportunity and a challenge by both the EU and the countries of the MENA region. The events of the Arab Awakening contributed to the need for a redefinition of policy towards the region. The new important direction in its activities occupy economic, political and social aspects. Moreover, an important part of creating safety is also a cultural, historical and ideological factor. Mutual improvement of cultural awareness can help to improve relations. The economic crisis has strongly raised European society's awareness of the phenomenon of immigration. This social phenomenon is particularly evident in countries that have a high percentage of immigrants in society. Society still feels uncertainty about the economic situation caused by the economic crisis, which

may potentiate the anti-immigration views. The events of 9/11 also contribute to a number of concerns related to immigrants from the MENA region and potential phenomena of terrorism. The region receives financial support from the EU, in order to stabilize the situation, as well as limiting the influx of immigrants to Europe. An important question is how they perceive the state of democracy in the MENA region. Are there stereotypes in mutual perceptions that hinder cooperation? How should we build mutual cooperation?

CHALLENGES FOR THE LATEINIAN ENERGY INDUSTRY

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Abstract

The article discusses the challenges facing the Latinian energy industry in the context of the global energy market. It highlights the need for investment in infrastructure, the impact of global energy security, and the role of international organizations in addressing these challenges. The article also discusses the need for a more integrated and efficient energy market in Latin America.

Introduction

The energy sector is a key component of the Latinian economy and provides a source of revenue for governments and the private sector. The global energy market has seen significant changes in recent years, with a focus on energy security and environmental sustainability. These changes have created challenges for the Latinian energy industry, which must adapt to a more competitive and integrated global market. This article discusses the challenges facing the Latinian energy industry and the role of international organizations in addressing these challenges.

CHALLENGES FOR THE UKRAINIAN ENERGY INDUSTRY

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Abstract

Reform of the energy sector is very important, both for the Ukrainian economy and for the reputation of Ukraine in Europe. Since independence, the energy sector, and especially the gas sector, has been totally in transparency and a major area of corruption. Energy is the most important component of Ukraine's economy and energy security is one of the weakest links in the state's national security strategy.

Key words: Energy sector, solution, Ukraine, economy, corruption.

Introduction

Ukraine is one of the largest countries in Europe, whose area and population (over 47 million in size) measure somewhere between those of France and Spain. Vast fossil fuel resources and the unwise policies of the past historical period, when energy intensity had been considered a sign of economic growth, are among the main reasons that have led to a situation which has not always seen effective development of the Ukrainian energy sector. Obviously, the situation, as described above, is incompatible with the promising economic opportunities provided by

the present stage of modern development of the energy sector of the Ukrainian economy¹.

Ukraine's energy sector faces unprecedented challenges, from a heavy reliance on expensive fossil-fuel imports to inefficient infrastructure and markets. Yet, there is also potential for Ukraine to experience an energy revolution, one that could boost employment, lift economic growth and enhance energy security. Modernisation of Ukraine's energy-supply sectors has only just begun and will require investment on a huge scale, complemented by a fundamental reform of the business environment. A strong dependency on oil and gas imports and often-inefficient energy production, transportation and supply sectors means that reducing energy demand must be a greater priority. The potential for energy efficiency gains in the residential, district heating and industrial sectors is large. Endowed with large conventional energy reserves, alongside sizeable renewable potential, Ukraine can build the capacity to significantly increase its resource production².

The main purpose of this research: *to show that Ukraine is searching for alternative energy sector sources and that the energy economy is open for challenges.*

The tasks of this research will be connected with:

- Identification of the Ukrainian energy sector;
- Showing the energy sector's influence on economic development;
- Solution for energy problems.

In my research I am going to use two methods of research:

- Analysis - used for collecting materials and making conclusions;
- Synthesis - used for building opinion.

1 Igor G. Chervanyov, V.N. Karazin, *Step by Step Modernization of Ukrainian Energetic Sector: Reality and Tendencies*, Government Gazette, 2013 available from [w:] <http://governmentgazette.eu/?p=5610>.

2 See International Energy Agency (2012), *Ukraine 2012 Energy Policies Beyond IEA Countries* series, available from: [w:] www.iea.org/book, p.2.

Brief Overview of the Ukrainian Energy System

Coal Industry - in the energy sector of Ukraine it is the only source of own energy capable of providing thermal energy in solid fuel. However, it needs to annually produce at least 100 million tons of coal, and not 80 as produced today. I must add that today, the world stock prices for steam coal (quality comparable to that extracted in our country) is 110-120\$ per ton (spring-summer 2010 - 60-70\$), coking - 225\$ (2010 - 110\$).

Oil and Gas Industry - oil and natural gas has been used for fuel and for highly valuable raw material for the chemical industry. Oil extraction, in the structure of consumption in terms of standard fuel, accounts for 7.2% of natural gas - 26.1%. Since 1970 oil and gas production has decreased. While Ukraine has been a major area of production of natural gas in the former Soviet Union and for many years Ukrainian gas was used for gasification of towns and villages. A strong pipeline was laid from Ukraine to Moscow and Leningrad. Ukrainian gas also supplied Moldova, Belarus and the Baltic republics, but Ukraine was gasified less with its own gas. Although oil and gas production in Ukraine has reduced, it has favourable factors: large capacity oil refining about 70 million tons, which are absent in Russia and large storage facilities. Gas can not be stored in the pipes and Russia has been forced to pump large amounts of it into Ukrainian storage facilities. This gas is sold to Western and Central Europe. With a reasonable foreign policy it could give Ukraine huge foreign exchange earnings.

Power Industry - in the Ukrainian economic sector, electricity plays a very important role. About half of all primary fuels (coal, oil, gas, uranium) that it has received from other states and some river energy are used to produce electricity and heat. Electricity is one of the oldest industries of Ukraine. It provides comprehensive scientific and technological progress for industries, improving working and living conditions. The developments of the electricity power industry have strengthened support for the creation of new industrial units. Some industries are geographically close to sources of cheap electricity, such as non-ferrous metallurgy and so on.

Ukraine's electricity is generated for heat (thermal), hydraulic (HPS), hydro-accumulation (PSP) and nuclear (AES) stations. In the future, it will be put into

widespread use for green energy solar and wind. Power plants in Ukraine produce 52.8 million kW. In 2004, Ukraine's power plants produced 182.2 billion kilowatt-hours of electricity. Thermal power plants accounted for about 47 % of electricity per year, nuclear power - more than 43%, hydroelectric - 9.2%. In recent years, an increased proportion of electricity has been generated by nuclear power plants.

Major thermal power plants are based in the Donbass. The most powerful are Vuglegirska (3.6 million kW), Luhansk, and Myronivska Starobyshevsk (by 2.4 million kW each). Basis Energy Dnieper makes powerful thermal power plants. Energodar is also the most powerful in AES. In addition, on the Dnieper, are several hydroelectrics with a total capacity of 2.5 million kilowatts. Powerful plants of various types were constructed near Kyiv (Trypilska GRES -1, 8 million kW and Kiev HPP and PSP). A new powerful emerging area is situated in the west and consists of thermal and nuclear power plants and includes the Power Plant in Dobrotvori and Burshtyn, and a second - Rivne and Khmelnytsky NPP. Dniester HPP also exists with a capacity of 702 MW. Southern parts of the country are least equipped with self-produced electricity. Among the great power electricity plants are the South Ukrainian nuclear power plant in the Mykolaiv region (4 million kW) and Ladyzhynska Power Plant in the Vinnytsia Oblast (1.8 million kW).

Developments in the energy complex provide the community with energy resources and this is one of the most important tasks of any country. Electricity power mostly affects development and also territorial organisation of the economy, especially industry. The fuel energy complex forms the basis of the territorial organization of the economy. Strong industrial units and centres (Kyiv) are to be found near energy power plants around which clusters and industrial districts form. The value of the energy sector in Ukraine is growing. Fixed problems with energy supply in all spheres of life have been turned into an important factor in national security. Therefore, the fuel and energy sector in the country actually represents the fundamentals of the national economy. Problems and crises within it immediately impact on all spheres of public life³.

3 П.Г Шищенко, Я.Б.Олійник, А.В. Степаненко, П.О. Масляк. *Географія*. Навч. посіб. для старшокласників та абітурієнтів. – К.: Знання, 2001, р. 434.

Ukraine's Energy Dilemmas

Ukraine has oil and coal reserves but it is only able to cover 47-49% of its energy demands. Russia has continued to be the biggest supplier of energy to Ukraine covering 85-90% of oil and 75-80% of natural gas imports⁴. Around half of Ukraine's total energy consumption comes from natural gas. Although Ukraine has larger conventional and unconventional gas resources, without deeper and comprehensive reforms and foreign investments it will be unable to increase its domestic production of gas. Similar problems can be found in the coal sector. While Ukraine has coal reserves for another 100 years, the productivity of coal extraction is very low and its production costs are high.

Without efforts at restructuring and modernisation and liberalised market reforms, Ukraine will be unable to cope with its energy supply challenges, including reducing its extremely high energy consumption⁵. For Ukraine's energy security, raising energy efficiency is one of the most important tasks and challenges and it needs to recognise that the cleanest and most reliable and cheapest energy is the energy it doesn't use. Energy efficiency is about delivering sustainable economic growth that minimises economic, environmental and social costs, and thereby reduces import demands and dependency on foreign suppliers. The lack of strong reforms is linked to widespread corruption and politically connected business groups who have taken control of controlling stakes in state – owned enterprises through non – transparent insider privatisation deals and other opaque economic activities. These groups and their vested short – term interests are not interested in market reforms and transparent privatisation. As a critical Ukrainian study concluded: *the key players in energy security in Ukraine are those who form or influence the formation of energy policy and who include the government, international partners, business and consumers. None of these players defends the country's national interests nor have any of them guaranteed its energy security*⁶.

4 I. Patronym, I. Zhovkva, *Energy Security Challenges in Ukraine: A Snapshot -2010*, Policy Paper, Kiev: International Center for Policy Studies 2010, p. 21.

5 T. Kistnyuk, *Energy Efficient Ukraine: Is There a Light at the End of the Tunnel?* Ukrainian Energy, 2011, p. 12.

6 Patronym, Zhovkva, *op.cit.*, p. 7.

As a result, Ukraine will also face an increasing environmental challenge as the share of coal in energy consumption is planned to grow from 22% in its energy mix 2005 to 33% in 2030, which may double Greenhouse Gas Emissions (GHGE) according to its 2006 Energy Strategy⁷. In this regard, independent energy experts and NGOs in Ukraine have expressed their concerns about the closed and non-transparent update of Ukraine's Energy Strategy until 2030 and are appealing for a public discussion of proposals and the inclusion of independent experts. The mechanism for adopting appropriate legislation and signing international agreements in the energy sector is ineffective and another factor that has contributed to an inadequate investment climate and the absence of structural reforms in the energy sector. One reason for the failure to attract investments is Ukraine's power grid system; this is essential for both raising energy efficiency and conservation as well as modernising Ukraine's energy sector, industry and households as well as diversifying its national energy mix by expanding renewable energy sources.

The only sector that has received substantial investments is the nuclear power industry which currently is opening 15 nuclear power blocks in the country. Ukraine is the seventh largest nuclear power producer in the world and the fourth largest in Europe. But its electricity grid is also ageing rapidly and, at present, electricity is being exported only to Poland, Hungary, Romania, and Slovakia. To increase its electricity exports from 11.35 billion (bn) kWh in 2010 to 25 bn kWh by 2030 and integrate power grids with European UCTE standards can only be realistic through massive modernisation and investments. In 2010, Ukraine signed agreements with Russia to build two nuclear reactors giving Russia a monopoly on the supply of fuel to Ukrainian reactors until they cease operation and plants producing nuclear fuel will be constructed on the basis of Russian technology. Taking this path, the Ukrainian government gave up the option of receiving alternative deliveries of American or other foreign fuels and technologies and ignored its own energy strategy that calls for the diversification of deliveries of nuclear fuel as well as technologies. The result is Russia's complete domination of Ukraine's nuclear energy sector as the energy agreements will not only make Ukraine more

7 See Patronymk and Zhovkva, *op. cit.*, p.24.

dependent on Russia but also threaten its declared and urgent reform policies in the energy sector⁸.

Energy Security

Ukrainian energy security means the ability of the state to ensure an efficient to use fuel and power base, make optimal diversification of sources and routes of energy supply in Ukraine for the livelihood and normal functioning of the national economy, emergency and martial law, to prevent sharp price fluctuations in fuel energy resources and to create the conditions for seamless adaptation of the national economy to the new prices for these resources. For Ukraine, the issue of energy security is now the main condition of its existence as an independent state. Measures of state regulation to ensure energy security can be divided into preventive and disposal. Preventive measures and their implementation should make Ukraine less vulnerable to energy shocks from the economy and most important of all: energy efficiency, diversification of sources of energy, stimulating the production of basic fuels and electricity, and the use of alternative and renewable energy.

These activities will include, in particular, the creation of Ukraine's strategic gas and oil reserves being controlled by state authorities, and the distribution of oil and gas in the event of serious breaches of customer supply infrastructure. Also, it must explore and drill oil fields for strategic purposes, which can be introduced into service in case of war.

Achieving energy security will not be possible without identifying the factors which may have a negative impact on the development of the energy sector. One of the main goals of the State Energy Policy which can be found embodied in the National Energy Programme of Ukraine for 2010, is to meet Ukraine's fuel and

⁸ T. Kuzio, D. Hamilton, *Open Ukraine changing Course towards a European future*, Washington 2011, p.100.

energy resources by increasing the share of domestic production and a reduction of foreign energy dependence by reducing the volume of imports⁹.

Currently, attention is being paid to the financing of exploration, which is essential to ensure an increase in Ukraine's own oil and gas. It should be noted that the amount of deep exploratory drilling for oil and gas in recent years has declined 5 times since 1990 and hydrocarbon raw material has increased 3 times. Experience shows that to ensure stable oil and gas, reserves need to be increased at least two times higher than annual production. Insufficient exploration work could lead to a decrease in oil and gas in the future. It has even been proven that reserves of energy make it possible to increase this production at least twice, which would allow savings of more than two billion dollars annually. The accelerated development of the Ukrainian coal industry has been a guarantor of its energy and economic independence and that requires financial support from the state. Some allegations have been made about the inappropriate development of the coal industry because of the low quality character of domestic coal and because great material and financial costs are not sufficiently justified in the context of national security. Given the significant reserves of coal in Ukraine, they can contribute to raising the level of ensuring its energy security. Implementation of measures for energy increasing the volume of gas production, using alternative energy sources provide by the National Energy Programme, will help reduce the consumption of natural gas in the economy by 2010 by 32.3% compared to 1990 and reduce its imports by 49%.

Measures should be taken to diversify the sources of Ukraine's energy; in particular to complete the construction of an oil terminal near Odessa, to expand economic ties with Turkmenistan and Middle Eastern countries, with Turkey for oil and gas, and to develop domestic sources of energy, including the coal industry and the oil and gas industries. Creating a diversified model of oil security in Ukraine will not only help to join the economy to alternative sources of supply, but will also play a part in it recognising its national interests and its role as a transit corridor for existing and prospective energy supply. Otherwise, its transit role can be intercepted by other countries. Furthermore, with the improvement of

⁹ *Національна енергетична програма України* : Схвалена постановою Верховної Ради України № 191, від 15 травня 1996 року.- К., 1996. - 120 с. – Машинопис.

oil processing in refineries, Ukraine should increase production in new fields. However, it cannot be doubted that despite proven reserves of oil, geologists produce only about 10%, while foreign oil companies extract 50% or more. Ukraine has great potential for natural gas transit. However, over 35% of operating gas pipelines are over 20 years old. Each year it must perform an overhaul of 250-300 km of gas pipelines. The poor technical condition of pipelines allows transport to European countries of not more than 100 billion cubic meters out of a capacity of more than 120 billion cubic meters of gas, currently without substantial economic risks. This may undermine Ukraine's geo-strategic position as a major transit link pipeline system "East-West".

It is important to improve the reliability of the fuel for electricity, reduce dependence on import fuel oil, natural gas and coal, which need to be replaced in the future. By the way, electricity generation uses a range of advance technologies in developed countries. This is done for two reasons:

- 1) to equal certain economic technologies;
- 2) the need to diversify the types and sources of fuel for reliability of thermal and energy independence.

This approach would be applied in other countries. To improve the reliability and safety of nuclear power plants it is necessary to conduct reconstruction and modernisation of existing VVER units and improve scientific and technical support for the nuclear power complex.

Decommissioning Chernobyl should be linked to the financing of the programme by Western countries and international financial organisations. Otherwise, the problem lays a huge burden on the budget and will have a negative impact on the implementation of the energy security reform. Particularly important to note is that the Ukrainian energy security establishment needs to own its nuclear fuel cycle. This would guarantee the independence of providing nuclear fuel and saving foreign currency.

Russia provides a policy of parallel strategies, one of which is to accelerate the development of oil and gas infrastructure and second - to establish control over oil and gas infrastructure in the former Soviet Republics. In particular, the second strategy focuses on acquisition of ownership rights in important oil and

gas facilities in the privatisation process or to receive them as compensation for public debt resulting from import of Russian energy.

Energy conservation is the most promising direction that provides Ukraine with energy. Only through low-cost measures can Ukraine save at least 10% of energy.

Priority measures that will ensure energy conservation include:

- development of comprehensive efficiency state energy programmes;
- technical re-equipment of production;
- establishment of extra-budgetary energy efficiency fund;
- strict accounting and control over energy consumption in all sectors of production;
- stimulation of energy efficiency technologies;
- implementation of the restructuring of the economy by decreasing the energy-intensive industries;
- use of alternative and renewable energy sources.

Without changing the structure of domestic production with energy-saving technologies, Ukraine will continue to depend on import of oil and gas and lose heavily. It is an important public task to improve the management of the fuel and energy complex and energy-saving process¹⁰.

Solutions to Energy's Problems

One solution would be to pin legislative parity changes in the price for the transit of oil and gas, oil obtained in Ukraine's gas transportation system and the prices received for oil and gas from the country. Ukraine should withdraw from the price set forth in the intergovernmental agreement with Russia, which was valid until 2013. Price transit must be tied to the price of oil and gas on world markets. Price transit can be not less than the price for oil and gas transit through Ukraine to other relevant countries or entities controlled by oil pipeline system countries. It should be understood that the price of energy in Europe is made up not only of

10 В.Т.Шлемко, І.Ф.Бінько, *Економічна безпека України: сутність і напрямки забезпечення*, Монографія. – К.: НІСД, 1997. – р.144.

Russian or Turkmen gas and oil but also for transit. Thus, it should have the right to increase the price according to the market conjuncture derivable from not only energy, but also its transportation.

Legislation is needed to prohibit contracts for oil and gas supplies of Ukraine's structures that do not have appropriate gas and oil deposits, the deposits of which are able to cover the supply; to prohibit by law the implementation of oil and gas in Ukraine across borders or those that are created with the participation of other countries, unless such sale is made through the relevant commodity exchanges; to prohibit legislation on the alienation of state oil and gas transportation systems and their parts, making them collateral or to share the statutory fund or any structures.

An inventory of the energy system in all sectors of energy consumption and energy generation should be taken and roundtables organized to discuss the topic. A contest should be held for the most effective investing in energy efficient technologies or alternative energy. According to the results of the competition government programmes could be devised.

A national programme of measures is needed to implement energy-saving technologies for the elimination and prevention of loss of wider implementation of advanced technologies in the field of wind energy and solar energy, to create electric vehicles, electric blocks at gas stations, switching to electric heating in independent apartments and houses to use of methane gas from coal seams, gas and more compost. This development must attract scientists and investors.

Business entities should be obliged to engage in the energy sector and energy losses and those who invest in the implementation of these programmes given tax relief. In case of excess amounts of tax payments, free credit from NBU could be provided. NBU reserves have to work on the economy of Ukraine. Tender loans could be provided for energy saving programmes from foreign banks. Experience shows that it is possible to obtain loans at 2-3% per annum¹¹.

11 M. Voronin, Ways of solving energy problems, [w:] http://www.experts.in.ua/baza/analitic/index.php?ELEMENT_ID=11010.

Conclusion

Energy security is one of the most important components of the national security. Its level is determined by the fuel and energy complex's ability to provide the country with energy resources in stable, emergency and even extraordinary conditions. Basic indicators that determine the state of, and trends in, Ukraine's fuel and energy sector have been analysed. Now is the time to clean up Ukraine's corruption. Ukraine has been hooked on cheap Russian gas for too long, says CSIS's Chow. This has stifled incentives to modernise the economy and look for energy alternatives, all the while lining the pockets of the rich and powerful to the tune of billions of dollars every year. Chow says graft is endemic in Ukraine's oil and gas industry. Transparency International ranks Ukraine 144 out of 177 countries for perceptions of corruption.

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TRAINING AND EDUCATION

The first part of the paper discusses the importance of training and education in the context of the current economic environment. It highlights the need for a skilled workforce to drive economic growth and innovation. The second part of the paper examines the challenges facing the education system, particularly in terms of funding and access. The third part of the paper discusses the role of government in providing training and education, and the need for a more flexible and responsive system. The fourth part of the paper discusses the role of industry in providing training and education, and the need for a more integrated approach. The fifth part of the paper discusses the role of higher education in providing training and education, and the need for a more research-oriented system. The sixth part of the paper discusses the role of vocational training in providing training and education, and the need for a more practical system. The seventh part of the paper discusses the role of lifelong learning in providing training and education, and the need for a more continuous system. The eighth part of the paper discusses the role of technology in providing training and education, and the need for a more digital system. The ninth part of the paper discusses the role of international cooperation in providing training and education, and the need for a more global system. The tenth part of the paper discusses the role of policy in providing training and education, and the need for a more coordinated system.

TRAINING AND EDUCATION

The current economic environment has created a pressing need for a skilled workforce. The rapid pace of technological change and the increasing demand for high-quality services have led to a significant skills gap. This gap is particularly acute in the areas of advanced manufacturing, information technology, and professional services. The education system, however, has not been able to keep pace with these changes. This is due to a number of factors, including inadequate funding, a rigid curriculum, and a lack of industry involvement. The government has a key role to play in addressing these challenges. It should ensure that the education system is adequately funded and that the curriculum is updated to reflect the needs of the economy. It should also encourage industry involvement in the education system, for example through the establishment of industry-led training centres. Higher education should also play a role in providing training and education, but it should focus more on research and less on teaching. Vocational training should be given a higher priority, as it provides a more practical and relevant education. Lifelong learning should be encouraged, as it allows individuals to keep their skills up to date. Technology should be used to enhance the education system, for example through the use of online learning and virtual reality. International cooperation should be encouraged, as it allows countries to learn from each other's experiences. Finally, a coordinated approach to training and education is needed, involving the government, industry, and higher education.

REPORT FROM THE WORKSHOP ON BEST PRACTICES WITHIN THE FRAMES OF THE DEEP GEORGIA

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From 15 to 17 April 2014, the Workshop on 1Best Practices took place at the Georgian National Defence Academy (GNDA) in Gori. More than fifty persons representing the GNDA participated in all activities within the official programme. The workshop was conducted by the NATO team, consisting of three experts: (1) Capt. (Navy) ret. Piotr Gawliczek, Assoc. Prof. (Team Lead – National Defence University, Warsaw. (2) COL prof. dr. ing. Cezar Vasilescu – DRESMARA, Brasov, Romania, Dr. Lubomir Kubinyi – University of Defence, Brno, Czech Republic. Apart from the academic part, there were two other matters of importance: an official office call with the Rector of the GNDA and a courtesy talk with the Minister of the National Defence of Georgia – Mr. Irakli Alasania.

The main goal of the workshop was to share experiences in the context of the best practices issues. On the first day (Tuesday 15 April), the first activity of the programme was the office call with the Rector of the GNDA. During the first session of the workshop, the NATO Team was delivered presentations on the chosen aspects of the higher military education system of Georgia and also the GNDA (i.e. the vision, mission, tasks, and management issues). The team was also briefed on the key programmes related to the education and training of the Georgian Armed Forces. After that, there was a trip to visit the educational and training facilities/installations of the GNDA.

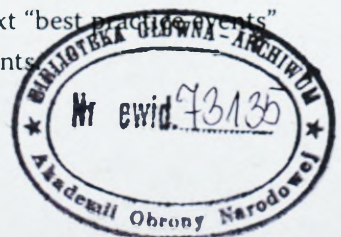
During the afternoon session, members of the team delivered presentations on the national solutions as far as best practices are concerned. COL Cezar Vasilescu focused on the Romanian experiences regarding the PME institutional framework

for the education and training of officers and NCOs, while Dr. Lubomir Kubinyi focused on the Czech ones (i.e. HR and institutional framework of the PME system in the Czech Republic and the changes in the education policy with regard to preparation of a new 5-year study programme). After each presentation, a question and answer session took place.

The agenda of the second day (Wednesday 16 April) was focused on the presentations delivered by Capt. (Navy) ret. Piotr Gawliczek on the PL solutions as far as best practices within the National Defence University, Warsaw are concerned. Also, the organisation, functioning and status of the military-educational process in the Republic of Poland and the Polish Armed Forces was described. After the presentations, a question and answer session took place. During the afternoon session the team was divided into three subgroups to discuss different issues. Dr. Lubomir Kubinyi focused on the HR and leadership topics from the perspective of the practical preparations of students for service at active military units. COL Cezar Vasilescu shared his experiences on the ICT topics (ADL solutions and experiences), and Capt. (N) ret. Piotr Gawliczek delivered a presentation on management and budgeting topics from the NDU Warsaw perspective.

On the third day (Thursday 17 April) a live demo session was arranged. Firstly, Capt. (Navy) ret. Piotr Gawliczek focused on the ICT systems, platforms and applications used at the NDU Warsaw, and secondly COL Cezar Vasilescu focused on the LMS ILIAS as the platform being used within the DRESMARA training activities. As on the previous day, a question and answer session took place. The final activity was a wrap-up session during which future possible developments for the GNDA within the DEEP Georgia Programme was also discussed, as far as best practices are concerned. As possible future points of discussion, the ADL and Bologna Process were identified and Building Integrity issues also, to some extent.

There was clear openness represented, as far as needs related to best practices were concerned. The very positive, interested and friendly behaviour in the auditorium during plenary sessions and small group discussions needs to be stressed. Many detailed questions were asked, especially focusing on the various aspects of the backward issues. Also, ADL and the Bologna Process questions resonated in many aspects. The objectives of the workshop were fully achieved and the team was able to lay the groundwork for the next "best practices events" within the approved DEEP Georgia frames/matrix of events.





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Oferujemy następujące usługi:

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Nasze atuty:

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