

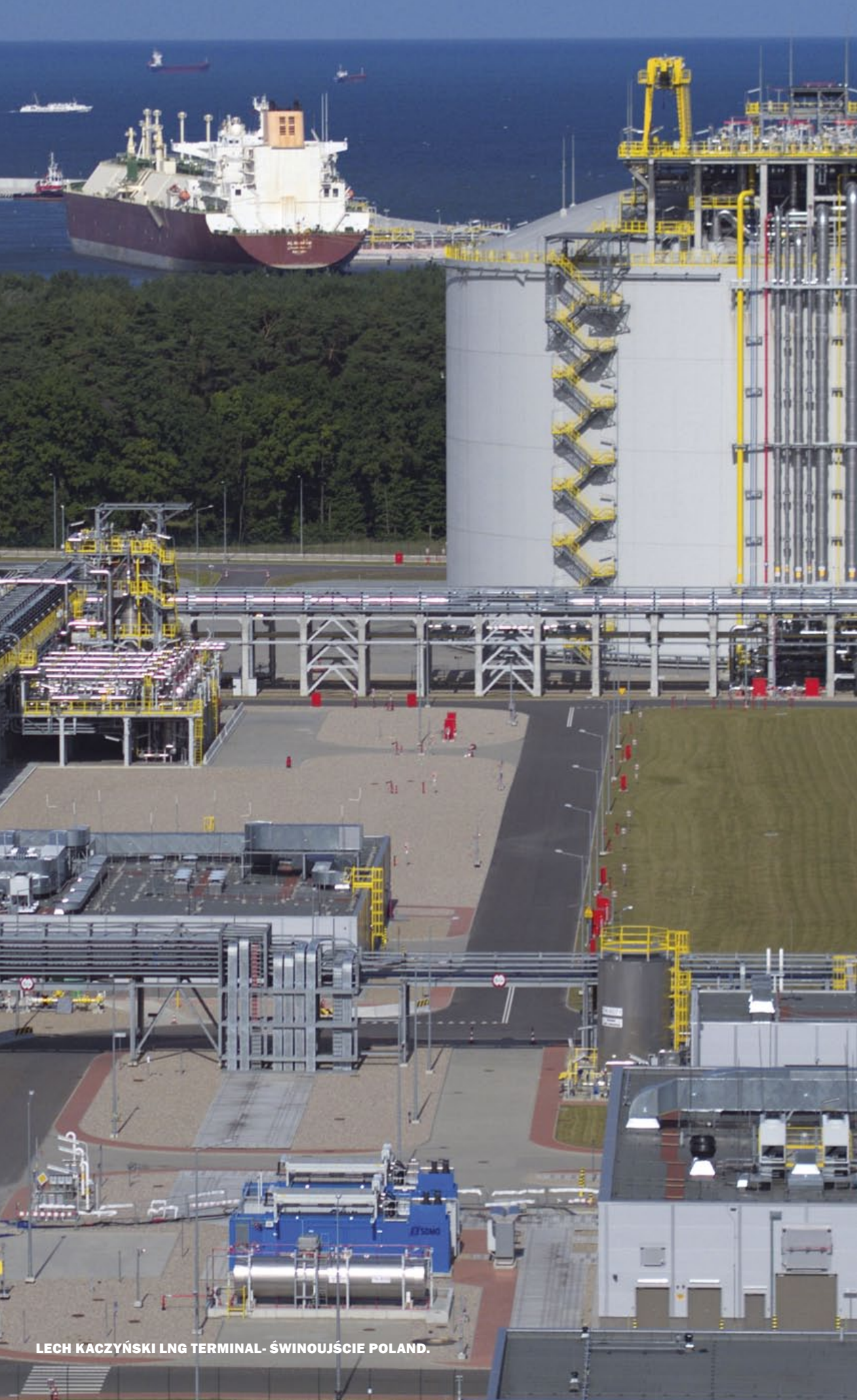
THE WARSAW INSTITUTE REVIEW

no. 1. 2017

qr. 1

ISSN 2543-9839





LECH KACZYŃSKI LNG TERMINAL - ŚWINOUJŚCIE POLAND.

Dear Readers



It is a great pleasure to present to you the first issue of The Warsaw Institute Review, a free Polish magazine by The Warsaw Institute Foundation, prepared especially for English-speaking readers around the world.

The goal of The Warsaw Institute Review team is to present a broad spectrum of topics concerning Poland, a leading East-Central European country in the form of analytical articles on political, legal, economic, social, historical and institutional issues. The authors of the articles in The Warsaw Institute Review include analysts and experts on the one hand, and, on the other, people who have an active and practical influence on Poland's political, economic and cultural life.

In the first issue, we draw attention to matters of energy security in Poland and East-Central Europe, presented in articles by Piotr Naimski, PhD, Secretary of State in the Chancellery of the Prime Minister and founder of the Polish energy security school, and Janusz Kowalski, former vice president of the Polish Oil and Gas Company. In this issue, we also present the current geopolitical situation in East-Central Europe with a particular focus on two of Poland's neighbors - Russia and Germany.

As a historian and co-author of a biography on former President of Poland Lech Kaczyński (*Lech Kaczyński 1949-2010: A Political Biography*, Poznań 2013), a man considered

THE WARSAW INSTITUTE REVIEW

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THE WARSAW INSTITUTE
FOUNDATION WARSAW, POLAND

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PUBLISHER

THE WARSAW INSTITUTE FOUNDATION
WILCZA 9, 00-538 WARSAW

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OFFICE@WARSAWINSTITUTE.ORG

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INSTITUTE REVIEW WILCZA 9
00-538 WARSAW

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The opinions given and the positions
held in the materials published in the
Warsaw Institute Review solely reflect
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The publication is funded exclusively
by private means.

ISSN 2543-9839

to be the initiator of the national politics of memory, I encourage you to familiarize yourself with articles on the recent history of Poland, and on topics little-known in the international historical discourse. These include the history of the anti-communist underground in the State behind the Iron Curtain chronicled by Filip Musiał, PhD and the history of the creation of the Warsaw Uprising Museum in Warsaw described by Tymoteusz Pruchnik.

I also encourage you to ensure that you continue to receive your free copy of The Warsaw Institute Review quarterly by filling out the registration form at www.WarsawInstitute.Review.

ANNA KAROLINA PIEKARSKA

EDITOR-IN-CHIEF OF THE WARSAW INSTITUTE REVIEW

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**PIOTR NAIMSKI - SECRETARY OF STATE
AT THE CHANCELLERY OF THE PRIME MINISTER,
GOVERNMENT PLENIPOTENTIARY FOR STRATEGIC
ENERGY INFRASTRUCTURE. FOUNDER OF THE
POLISH SCHOOL OF ENERGY SECURITY.**

STARTING POINTS FOR DEVELOPING A NEW ENERGY POLICY FOR POLAND

PIOTR NAIMSKI, PHD

- › Poland is to remain sovereign in the field of energy supplies. Energy production based on domestic energy resources must provide consumers with uninterrupted and competitive energy supplies. The importation of raw materials and energy can only be a supplement.
- › It is safe to assume that the demand for energy in Poland will not decrease before 2050.
- › Energy efficiency, understood as saving energy, will be an important factor contributing to energy security and the competitiveness of Polish industry.
- › Black and brown coal will remain the basic energy sources in Poland until 2050.
- › The use of coal as a raw material must be based on the latest, high-performance, clean technologies, both directly in power units and in the field of chemical coal processing.
- › We will maintain coal-based electricity generation of around 30 GW until 2050.
- › High-emission power plants, non-compliant with European standards and at the end of their lifecycle, will be replaced by new ones. This will mean a huge investment effort in the coming years.
- › We will achieve current climate policy commitments adopted by Poland in the Paris Agreement and those resulting from EU regulations. At the same time, we are determined to defend Poland's right to choose its own path to achieve CO2 emission reduction targets.
- › The European emissions trading system should be applied in Poland by taking into account its exceptionally high (by European standards) dependence on coal as an energy source.
- › Further attempts to increase CO2 reduction commitments conflict with Poland's economic strategy, they will be harmful to the energy sector and will reduce the competitiveness of Poland's economy.
- › Renewable energy technologies will develop in Poland based on market principles of competition. The support models used in some EU countries cannot be duplicated in Poland, primarily due to the fact that end consumers of energy cannot bear the burden of the costs.
- › The strategic direction of research and investment will be energy storage

and modern coal technologies. New, innovative solutions in this area will be supported by the government and energy companies, with participation from the state treasury.

- › Natural gas will remain an important raw material for the Polish economy. We will maintain our existing level of production and will complete the plan to diversify the types and sources of energy supply from abroad. We anticipate that in 2022 Poland will be connected by pipeline to the Norwegian continental shelf through the Danish transmission system.
- › Deliveries through the northern gas pipeline and from the Świnoujście gas terminal, as well as the anticipated linking of Poland with Lithuania, Ukraine, Slovakia and the Czech Republic through interconnectors, will enable the creation of a gas hub in Poland important for Central Europe.
- › The transmission of energy, natural gas, petroleum and fuels, as well as the availability of sufficient quantities of storage for raw materials and fuels, must remain an essential element for the security of supplies.
- › Poland's energy security requires coordinated action in the international arena between those leading on this issue in the Ministry of Energy and other ministries, foremost in the Ministry of Foreign Affairs and the Ministry of the Environment, and strategic companies in the electricity, oil and gas sectors, with the state treasury playing a dominant role.
- › Poland must guarantee its participation in the creation of energy and gas markets at the European level to a degree safeguarding the interests of the Polish economy and the country's energy security requirements.
- › Actions and investments undertaken on the basis of the strategy adopted for energy policy will determine the so-called "energy mix", the share of different primary sources in meeting the country's energy needs. Power generation technologies need to be tailored to the needs of the country, their capabilities and profitability, and not to the a priori energy mix of 2050.
- › Maintenance of strategic reserves of fuels and extraction potential, including protection of national strategic fuel deposits from construction that would prevent their future use, especially brown coal deposits.
- › Poland must methodically develop systemic heating as the primary means of supplying heat to consumers in high population density areas. In addition, in the mid and long term, the combustion of fuels in individual home installations should be abandoned, in favor of electric heating (including heat pumps), solar thermal connectors or other emission-free forms of supplying heat.





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ŚWINOUJŚCIE, JUNE 26, 2016. ON JUNE 25, THE ARCTIC PRINCESS LNG TANKER ARRIVED AT THE PRESIDENT LECH KACZYŃSKI TERMINAL IN ŚWINOUJŚCIE. THE NORWEGIAN VESSEL DELIVERED APPROXIMATELY 140,000 CUBIC METERS OF LIQUEFIED NATURAL GAS. NORWAY IS ANOTHER SOURCE OF LNG SUPPLIES TO POLAND, APART FROM QATAR. THE NORWEGIAN TANKER WAS THE FIRST ONE WITH SPHERICAL TANKS SEEN IN ŚWINOUJŚCIE. THESE ARE INDEPENDENT, SELF-SUPPORTING STRUCTURES OF THE "MOSS" TYPE. "THE NORWEGIAN VESSEL DELIVERED CA. 84 MILLION CUBIC METERS OF GAS FUEL IN TOTAL, IN NORMAL CONDITIONS. THIS WAS THE FIRST LNG SPOT DELIVERY ACCEPTED BY THE TERMINAL. THE UNLOADING OF ARCTIC PRINCESS WAS PLANNED TO TAKE AROUND 24 HOURS. THE PROCESS INVOLVED PUMPING OF LIQUEFIED GAS WITH THE USE OF UNLOADING ARMS. GAS MAINTAINED AT THE TEMPERATURE OF CA. - 162°C WAS TRANSPORTED FROM THE VESSEL TO TWO TANKS (EACH OF CA. 160 THOUSAND M3 CAPACITY). SIMULTANEOUSLY, THE LNG RE-GASIFICATION PROCESS (I.E. CONVERSION FROM LIQUID TO GASEOUS FORM) WAS TAKING PLACE. THE NATURAL GAS THUS OBTAINED WAS PUMPED TO THE NATIONAL TRANSMISSION NETWORK.

The energy sector should rely on the country's own raw materials and technological resources and at the same time support the country's overall economic and industrial policy. This especially means that these processes should be as cost-effective as possible to stimulate necessary investments and lead to the transformation of the government-established sector. It should

be emphasized that decisions undertaken in the field of energy will both directly and indirectly influence other segments of the domestic economy. In this context, it is crucial to ask about the vision for change in the structure of the creation of added value to GDP. At present, with the multiplier effect, the energy sector generates nearly 8% of added value and creates nearly 600,000 jobs both directly and indirectly in related sectors.



ŚWINOUJŚCIE, JUNE 18, 2016. LECH KACZYŃSKI LNG TERMINAL.

The assumed transformation in the direction of a strong economy will require taking into account the challenges facing this sector. The most important ones include:

- the need to implement highly capital-intensive investment plans related to the construction of new generation capacity and the modernization of existing network and manufacturing assets,
- the decline in the profitability of the electricity sector and the deteriorating financial situation of domestic energy companies,
- unstable investment conditions caused by EU climate policy and the expected price increases for CO₂ emission allowances,
- serious disturbances in the functioning of energy markets in Poland and other EU countries (caused in part by massive subsidies for renewable energy sources, often not covering full production costs, resulting in a lack of profitability for new investments),
- practices observed in other countries based on protecting low energy prices for industry by shifting costs to individual consumers,
- regulatory changes imposed by the EU not taking into account the specificities of the Polish energy sector.

It is worth pointing out that the investment direction indicated in the energy policy will have a significant impact on the future structure of energy



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production in our country. In turn, it will affect energy-related fuel production (black and brown coal mining, gas extraction, biomass production), production of equipment and machinery for the mining and power industries, and the condition of companies serving the energy sector. The conventional energy generation segment will be especially important, where the investment time is long, lasting 5-10 years and the life of the asset is nearly 40 years.

At the same time, when deciding on the construction of new power plants, account should be taken of their impact on the functioning of the National Electric Energy System and on the economic effectiveness of different change scenarios in the market environment,

in particular on fuel costs and CO₂ emissions.

The basic conditions for the successful transformation of the energy sector include:

- **stabilization of regulations covering the energy sector,**
- **formulation and development of modern coal technologies (among others, the optimal selection of technologies for the Polish power industry using domestic and foreign solutions, including duoBLOCK technology, coal gasification, oxidation and CCU technology development),**
- **coordinating mechanisms with the European Union to reduce the costs and risks of the development of modern, conventional energy and to obtain financing for new investments in conventional generators.**

Without neglecting work on the development of a comprehensive strategy for the Polish power industry for the next 30-35 years, we must solve the immediate problems of coal mining transformation, which will ensure the supply of this raw material during this period. We need to provide financing for new investments in the power sector, including by introducing the power market and by the establishment of reasonable rules for the cooperation of energy and gas system operators with neighbors in the region, which does not undermine the sovereignty of the Polish state in this regard. Without the successful resolution of these issues, the implementation of the best long-term strategy will be impossible.

Piotr Naimski ■
March 20, 2017



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**SOPOT, POLAND. SEPTEMBER 1, 2009. RUSSIAN
PRIME MINISTER VLADIMIR PUTIN AND POLAND'S
PRIME MINISTER DONALD TUSK.**

WILL POLAND LIBERATE EAST- -CENTRAL EUROPE FROM GAZPROM'S DICTATES?

JANUSZ KOWALSKI

The victory of the conservatives of Jarosław Kaczyński's party in 2015 in Poland signaled Warsaw's retreat from the pro-Russian energy policy of 2007-2015, carried out by the liberals of Donald Tusk's party.

On November 16, 2015, Beata Szydło became Prime Minister of Poland. In October 2015, the center-right Law and Justice Party (PiS) defeated the liberal Civic Platform (PO) of Donald Tusk, the current President of the European Council, after eight years in power. The PiS electoral victory in 2015 was crucial for energy security, not only in Poland, but also in East-Central Europe. Conservatives under the leadership of the PiS President (former Prime Minister of Poland in 2006-2007) Jarosław Kaczyński supported by the President of Poland Andrzej Duda (also of PiS) from the beginning sought dynamically to make Poland and this part of Europe energy independent from Russian oil and gas. PiS politicians see a strategic, geopolitical partner in the energy sector for Poland in

Washington D.C., and not in Berlin or Moscow, the latter of which are carrying out a project regarded by some as dangerous to the energy security of East-Central Europe, by building a northern corridor for the transport of Baltic Sea natural gas from the Russian Federation (Nord Stream), bypassing Poland and Ukraine.

LECH KACZYŃSKI'S TESTAMENT

More than 25 years after the fall of communism, East-Central Europe is still heavily dependent on hydrocarbon supplies from Russia. Poland consumes about 15 billion cubic meters of gas per year, while domestic gas production is only four billion cubic meters. Approximately ten billion cubic meters of the "blue fuel" are imported by the government-controlled Polish Oil and Gas Company (PGNiG) as part of

a long-term gas contract with Gazprom, valid until December 31, 2022 (the Yamal Contract). PGNiG also has a 20-year contract with Qatargas in its portfolio, to receive about 1.5 billion cubic meters of gas after regasification. Meanwhile, there is a similar dependence on Russian crude oil. Two Polish oil companies: Orlen in Płock and Grupa Lotos in Gdańsk, import nearly 90 percent of crude oil processed in Polish refineries from the Russian Federation. Immediately after taking office in autumn 2015, Prime Minister Beata Szydło returned to the program of diversification pushed by the PiS governments in 2005-2007 under the auspices of the then Polish President Lech Kaczyński. Lech Kaczyński's program of independence from Russian hydrocarbon supplies, coordinated by Dr. Piotr Naimski, Secretary of State at the Ministry of the Economy of Poland, counted on the realization of three infrastructure projects, strategic for Europe as a whole, only one of which has been thus far completed.

Poland's program to become energy independent from natural gas deliveries

rested on two pillars. The first of these was the construction of the only Baltic Sea LNG terminal on the Polish coast (Świnoujście) and the second one - the construction of a gas connection from Poland through Denmark, to natural gas deposits in Norway. The energy security of Poland and Europe in the oil sector was to be strengthened by the construction of a corridor to transport oil from the Caspian Sea via Azerbaijan, Georgia and Ukraine, all the way to the Polish oil terminal in Gdańsk. From Gdańsk, the oil was to be exported further to customers in Europe and worldwide, including PKN Orlen's Mažeikiai refinery (Republic of Lithuania). At an energy summit in Kraków in May 2007 and at another in Vilnius in October 2007, President Kaczyński effectively united the leaders of Azerbaijan, Georgia, Ukraine and Lithuania around the project to build a transport corridor for Caspian oil along the Odessa-Brody-Płock-Gdańsk route. The personal involvement of the President of Poland as the leader of East-Central European countries defending Georgia's independence during the Russian Federation's invasion of the country in August 2008 resulted in part from the conviction of the need to defend the strategic interests of Poland, by aiming to build channels for the import of hydrocarbons into Europe, independent of Russia.

The implementation of these three key infrastructure investments: the construction of the LNG terminal in Świnoujście, the Odessa-Brody-Płock-Gdańsk oil corridor and the gas connection of Poland-Denmark-Norway, was to end in 2012-2014. Unfortunately, the plan to make East-Central Europe independent of Russian natural gas and crude oil was thwarted by the electoral victory of the Civic Platform in the accelerated parliamentary elections of autumn 2007.

President Kaczyński effectively united the leaders of Azerbaijan, Georgia, Ukraine and Lithuania around the project to build a transport corridor for Caspian oil along the Odessa-Brody-Płock-Gdańsk route.

TUSK'S RUSSIAN TURN

Civic Platform leader Donald Tusk, who became prime minister of Poland in autumn 2007, immediately announced a political reset in bilateral relations with Moscow. Just a few weeks after the Civic Platform came to power, the project to build a gas connection with Norway, which according to the PiS government schedule was to be ready by the end of 2010, was halted. The news of Poland's withdrawal from the construction of a north-south gas connection independent of Russia was most pleasing to the Kremlin and Gazprom, the former of which controls the latter. Another gift to the Russian Federation from the new Polish government was the limitation of Warsaw's activity within the EU in blocking the construction of the first section of the Nord Stream gas pipeline. In the international arena in 2006-2007, Jarosław Kaczyński's government effectively blocked the construction of the first part of the German-Russian Nord Stream pipeline, the construction of which is tied to a strategic plan to exclude the transmission of Russian natural gas to the European Union through Poland, Belarus, Ukraine and Slovakia. Not only did the PO Government not take advantage of the opportunity to block Nord Stream, but it also agreed to the shallow placement of the first section of the pipeline at the bottom of the Baltic Sea, thus limiting the prospects for expansion of the Polish port in Świnoujście, which may have problems with accepting some of the largest ships in the world. In 2011, one of the leaders of the Law and Justice opposition, Joachim Brudziński, spoke candidly about the "quiet consent" of the PO government to Nord Stream.

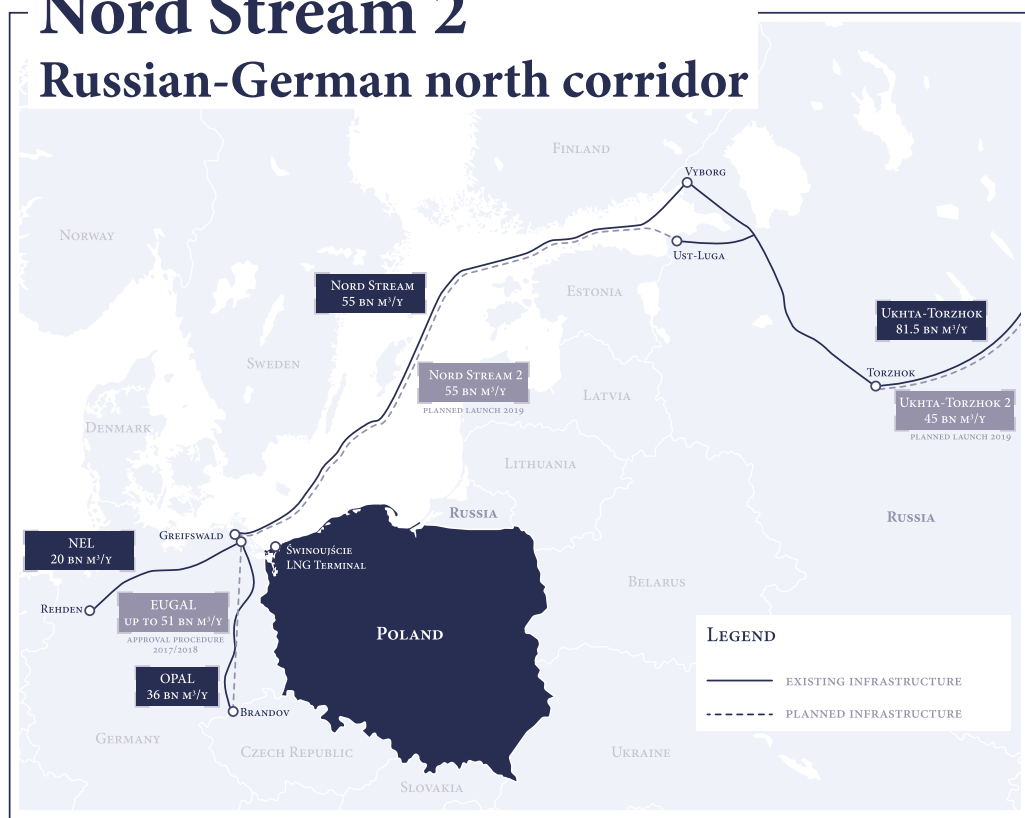
Donald Tusk's government also blocked the construction of a corridor for the transport of oil along the Odessa-Brody-Płock-Gdańsk route. Thus, the efforts

In the international arena in 2006-2007, Jarosław Kaczyński's government effectively blocked the construction of the first part of the German-Russian Nord Stream pipeline, the construction of which is tied to a strategic plan to exclude the transmission of Russian natural gas to the European Union through Poland, Belarus, Ukraine and Slovakia.

of President Lech Kaczyński, who was backed by the U.S. government, and who gathered the leaders of the post-Soviet republics around this project, were wasted. In the years preceding the Russian invasion of Ukraine, Azerbaijani oil reached Ukrainian and even Belarusian refineries, but never to the Polish refineries in Płock (PKN Orlen) and Gdańsk (Lotos Group). Another blow to Polish plans to make its economy independent from Russian gas was the signing in October 2010 of a governmental annex to the long-term gas contract, called the Yamal Contract, between Warsaw and Moscow. Under the agreement, Poland increased its dependence on Gazprom by more than two billion cubic meters of natural gas annually, all the way until 2022. The government in Warsaw actually gave Gazprom control over the strategic

Nord Stream 2

Russian-German north corridor



company Europol Gaz, which owns a 660-kilometer section of the Yamal gas pipeline, and sends nearly 28 billion cubic meters of natural gas to Germany, France and other Western European countries, through Poland. Only thanks to the determination of President Kaczyński, who in the course of the Polish-Russian gas negotiations from early 2009 to the fall of 2010, died in as-yet unexplained circumstances in the Smoleńsk catastrophe on April 10, 2010, and the president of the opposition PiS party, Jarosław Kaczyński, was a long-term gas contract between Poland and the Russian Federation not extended for another 15 years from 2022 to 2037. The extension of the Yamal agreement, which as a relic of the Soviet era was concluded at the governmental rather than a business level, was the initiative of the PO government. If in 2010 the long-term gas contract with Russia had been extended until

2037, Poland would not have been able to liberate itself from the monopolistic dictates of Gazprom for several decades. Fortunately, in late 2008, the PO government decided to continue building the LNG terminal in Świnoujście. According to the PiS government's plans, the LNG terminal was meant to be finished by the end of 2012. The construction of the terminal was delayed from one year to the next, while increasing dependence on Gazprom at the start by the PO government in the autumn of 2010 limited the possibilities of importing LNG after its planned start-up. The Russian turn in Poland's energy policy by Donald Tusk's government was even visible in the electric energy sector. In 2012, the government suspended the construction of a coal-fired power plant in Ostrołęka, which was supposed to guarantee the security of the electricity supply to the north-eastern part of Poland

bordering Lithuania, Belarus and the Russian Federation (Kaliningrad Oblast). An alternative to the Polish power plant was electricity delivered from a planned nuclear power plant in Kaliningrad.

RETURN TO AN ACTIVE ENERGY SECURITY POLICY

After the victory of the center-right in autumn 2015 in Poland, an immediate return to an active energy policy took place in Warsaw. Prime Minister Beata Szydło's government, in its first weeks of work, confirmed that the aim of Polish policy is to return to, after eight years, the construction of a gas connection with Norway (Norwegian Corridor). Greatly delayed in relation to the plans of 2005-2007, the LNG terminal in Świnoujście began operations in June 2016, the namesake of which became the initiator of its construction, President of Poland Lech Kaczyński. In 2016, construction was resumed on the power plant in Ostrołęka, crucial for the security of electricity supply in north-eastern Poland.

Unfortunately, due to the ongoing occupation of part of the territory of Ukraine by Russia, resuming the construction of the Odessa-Brody-Płock-Gdańsk oil corridor does not seem possible in the foreseeable future.

NORTH GATE VS. NORD STREAM

To make Poland completely independent of Gazprom's potential blackmail, the construction of the Norwegian Corridor must be finished by the end of 2022, when the Yamal Contract expires. When the Norwegian Corridor is finished, ten billion cubic meters of natural gas will be transported into Poland annually, which will reach the receptive markets of East-Central European countries, including Ukraine. The Norwegian Corridor is defined as the connection of the Norwegian continental shelf, through Denmark, with the Polish coast.

Prime Minister Beata Szydło's government, in its first weeks of work, confirmed that the aim of Polish policy is to return to, after eight years, the construction of a gas connection with Norway (Norwegian Corridor).

It consists of five elements. The first is the construction of a tie-in on the Dutch side to the Norwegian delivery system in the North Sea, which will connect Denmark with Norway, and will enable the transmission of raw materials, including PGNiG's natural gas. Another necessary precondition for the creation of the Norwegian Corridor is the extension of the existing transmission capacity in Denmark from the west to the east and the construction of an underwater gas pipeline at the bottom of the Baltic Sea between Poland and Denmark (the 200 km Baltic Pipe interconnector). The project is to be finalized by an expansion program for the Polish transmission system and the construction of a new gas depot.

The Norwegian Corridor is part, along with the LNG terminal launched in 2016, of a government project to build the North Gate, thanks to which this part of Europe will be effectively independent from gas supplies from Russia for the first time in its history. The North Gate is Poland's effective response to the Russian-German plan for making part of Europe dependent on expensive Russian raw materials. At present, the LNG terminal in Świnoujście allows imports of up to five billion cubic meters

The Norwegian Corridor is defined as the connection of the Norwegian continental shelf, through Denmark, with the Polish coast.

of gas, and its expansion will increase Poland's import capacity to 7.5 billion cubic meters. Although the construction of the Norwegian Corridor has been met with the official approval of the European Commission, the plans for making East-Central Europe independent from Gazprom's monopoly are threatened by the construction of the second section of the Nord Stream pipeline, which is practically and effectively supported by bureaucrats in Brussels sympathetic to Gazprom. There is little doubt in Poland that if Nord Stream doubles its capacity from the current 55 billion to 110 billion cubic meters, gas shipments to Europe through Ukraine and Belarus will immediately be shut off. Through Nord Stream 2, Gazprom wants to consolidate its market share in Europe in the face of increasing competition from LNG and shrinking demand in the European Union, and above all, continue to dictate high prices to East-Central European buyers.

The tactical aim of Germany and Russia in the coming months is to guarantee a monopoly on the land transport of Nord Stream on German territory for the entire volume of gas sent from the Russian Federation by the northern pipeline. This may actually block the ability of other companies to freely use existing gas pipelines connected to Nord Stream. This is the context in which to interpret the European Commission's

decision of October 28, 2016 on the monopolization by Gazprom of the Nord Stream, onshore, OPAL gas pipeline running along the Polish-German border, with a capacity of around 36 billion cubic meters. Prime Minister Beata Szydło's government has strongly expressed its concern to the European Commission, demanding respect for EU antitrust law against the German gas pipeline. In the event of a break in gas supplies from the east and the maintenance of Gazprom's monopoly on the German gas pipeline, Polish energy security would be severely endangered. Similar action monopolizing gas transmission by Gazprom and its German partners is planned for the EUGAL gas pipeline, another inland, Nord Stream pipeline in Germany with a capacity of 55 billion cubic meters annually. Critics of the Nord Stream 2 project, led by the Polish European Commission, are convinced that further expansion of Russian Gazprom's domination in East-Central Europe should be prevented. Among the countries insisting that the Nord Stream 2 project be inconsistent with EU law, besides Poland, are Slovakia, Lithuania, Estonia, Latvia, Romania, Denmark and Sweden.

PIVOTAL 2017

The center-right victory in Poland in 2015 reopened the possibility of breaking with Gazprom's monopoly in East-Central Europe. In order to implement the plan for Poland's independence from Russian gas and, based on the Norwegian Corridor and the expanded LNG terminal, building a gas hub for East-Central Europe, political decisions made at the end of 2017 in Poland will be key. This year, the final shape of the Norwegian Corridor should be decided upon with partners from Denmark and Norway.

Already looking ahead to 2022, an important element of the diversification

The North Gate



of gas supplies to Poland will be the construction of an import network for LNG by PGNiG. The LNG sector is the only serious alternative in the event of the failure of the Norwegian Corridor project. That is why the Polish Oil and Gas Company is developing competencies in international LNG trade by opening offices in London for example. In addition, in March 2017, PGNiG signed another contract with Qatargas, the world's leading LNG producer, under which Qatargas will increase the volume of LNG supplied to PGNiG to approximately 2.7 billion cubic meters, after regasification annually, until June 2034.

The greatest challenge, however, for the diplomats of East-Central European countries is to persuade the European Commission to refrain from further supporting Gazprom's monopoly in this

part of Europe, something Germany is keenly interested in along with Russia in their realization of the geopolitical project to build Nord Stream 2. Brussels poses a real and serious threat to plans for the energy independence of Europe, thanks to the North Gate built by Poland, based on the planned new gas connection with Norway and the expanded gas port in Świnoujście. The outcome of geopolitical clashes in the next few months between Warsaw, Moscow and Berlin, over the new and interconnected gas architecture in East-Central Europe, will determine whether or not this part of Europe will eventually become permanently energy independent from the Kremlin.

Janusz Kowalski ■
March 13, 2017

RUSSIA 2018

JAN GAJEWSKI

What's it going to be like? Almost certainly with Vladimir Putin. And there is no better confirmation of this than the president's mass replacement of his highest officials and collaborators. A new generation of "Putinocrats" is entering the political scene and their characteristics unambiguously indicate that in the coming years, the Kremlin court will serve one, concrete ruler.

These aren't changes that suggest Putin's departure, as could be seen in 2007. The regime is becoming ever more personalized; it won't be dominated by a caste of former KGB officers, but by a czar and his courtiers, ready to fulfill his every wish without question. This kind of absolutism strengthens Putin on the one hand, but threatens the state on the other, since it is dependent on the life and death of a single person.

When asked delicately by the moderator, during the annual meeting of the Valdai Discussion Club in October, whether

he would consider retirement from politics, Putin decisively rejected such a possibility. He assured the audience that he had no plans to leave. The actions of the president are even more convincing than his words. Changes within the regime are determined by two external phenomena: a shrinking pool of resources exploited by the elites (the economic crisis in Russia) and international instability, along with the crisis of relations with the West. The regime's "face lift" is characterized by a decrease in the political importance of the members of the ruling elite. It can be seen not only in the dismissal of the "old guard", but also



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PRESIDENT-ELECT VLADIMIR PUTIN WALKS DURING HIS INAUGURATION IN THE GRAND KREMLIN PALACE IN MOSCOW, RUSSIA - MAY 7, 2012.

the replacement of the majority of the lower house of the Russian parliament, the State Duma, in the September election. A pretext for making changes isn't hard to find; it's not an accident that law enforcement's anti-corruption operations have clearly intensified in recent months, with the Federal Security Service (FSB) playing a key role.

I.

Ever since he took power, Vladimir Putin has relied on a trusted group of people, including former KGB agents. The first to be removed from power was Viktor Cherkesov. The head of the influential FSKN (Federal Drug Control Service) lost Putin's trust after airing dirty laundry to the press during the so-called "siloviki" war in Putin's second term.

In 2008, Cherkesov lost his position and was transferred to the Federal Agency for Armament Procurement, Military and Special Equipment and Logistical Resources (Rosoboronpostavka), and went into retirement several years later. Next in line was Vladimir Yakunin, also a former KGB officer, and someone particularly influential in politics as the

Changes within the regime are determined by two external phenomena: a shrinking pool of resources exploited by the elites (the economic crisis in Russia) and international instability, along with the crisis of relations with the West.

head of Russian Railways, the largest employer in Russia, who was also the leader of the so-called "order of Russian Orthodox Chekists." He fell into Putin's disfavor and lost his positions in 2015.

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In April, as a result of the liquidation of the FSKN and the Federal Migration Service, their long-serving leaders: Viktor Ivanov and Konstantin Romodanovski, linked to Putin from the beginning, were forced to resign. In May 2016, Evgeny Murov, head of the Federal Protection Service (FSO) was forced to retire.

Putin also fired Evgeny Dod, head of RusHydro and Vladimir Dmitriev, head of Vnesheconombank (VEB). Last July, the FSB found a large sum of undeclared foreign currency in the apartment of the head of the Federal Customs Service (FTS). Andrey Belyaninov, who served in the KGB with Putin in the GDR, had to go. Finally, in August 2016, out of the blue, Putin dismissed Sergei Ivanov, Chief of Staff of the Presidential Executive Office, retired intelligence general, long-time Minister of Defense and a major candidate to succeed Putin. Only two Chekists remain from the “old guard”, operating in the business and political sphere: Sergei Chemezov (CEO of Rostec Corporation) and Igor Sechin (Executive Chairman of Rosneft). But they too, especially the latter, have to struggle to keep their heads above water. Those removed by Putin are usually assigned comfortable but minor positions. Vladimir Kozhin and Viktor Zubkov became presidential advisors, whereas Sergei Ivanov was appointed Special Presidential Representative for Environmental Protection, Ecology and Transport.

Many of them are now on supervisory boards of state companies: Zubkov in Gazprom, Murov in Zarubezhneft, the former head of intelligence, Mikhail Fradkov, in Russian Railways and Almaz-Antey. Some of them have retired such as Vladimir Yakunin, Viktor Ivanov, Andrey Belyaninov and Konstantin Romodanovski. “Putin is forcing out his old comrades and replacing them with younger subordinates. Those people reminded him of times when he wasn’t the boss yet... Now he needs executives, not advisors,” said political analyst Stanislav Belkovsky. Some political scientists make comparisons to 2003–2004 (after Putin had taken office), during which time the last influential members of Boris Yeltsin’s team were resigning.

Putin is surrounded by two types of people: bureaucrats and businessmen. The former still want something from the president, they engage in political intrigues and battle with opponents. The latter stay in the shadows, focused on draining the Russian economy thanks to the Kremlin’s favorable attitude. Putin’s oligarchs, such as Kovalchuk, Timchenko or the Rotenbergs, are resistant to purges, because they will be needed in the coming years as Putin’s business associates. In the meantime, the second generation of Putin’s elites is entering into key positions in the administration. Those tied to the KGB, born in the 1940s and 1950s, are being replaced by younger people whose careers started to develop after the fall of the Soviet Union. Yakunin (born in 1948) was replaced by Oleg Belozеров (born in 1969), Viktor Ivanov (b. 1950) was replaced by Andrei Chrapov (b. 1970), Sergei Ivanov (b. 1953) was replaced by Anton Vaino (b. 1972), Evgeny Murov (b. 1945) by Dimitri Kochnev (b. 1964). The ministers of the energy sector (Alexandr Novak, b. 1971), communications (Nikolai Nikiforov, b. 1982) or industry

and trade (Denis Manturov, b. 1969) can also be included in this new wave. From Putin's point of view, these are the best people for hard times. They owe their entire careers to the system that he created, if not to him personally, and they do not know any president from the times before he took office, which is very important psychologically.

II.

Putin had been planning the purge at the pinnacle of power for a long time; it was just a matter of finding a suitable pretext. The pebble that started the avalanche was the move against the head of customs, Andrey Belyaninov. The blow was spectacular, since never before in Putin's Russia had the security services acted in such a harsh and demonstrative manner against one of the president's very own comrades, and one in such a high position to boot. On June 26, 2016, officers of the FSB entered Belyaninov's home

and office. They found cash in different currencies worth 58 million rubles or about \$900,000 (the annual income of the head of the FTS is 13 million rubles). Searches were also conducted in the offices of Belyaninov's deputies. The actions of the FSB and investigators were connected with the case of Dmitry Mikhilchenko, a businessman from Saint Petersburg, who had been apprehended a few months earlier on charges of smuggling alcohol (expensive cognac imported as construction sealant). Belyaninov was only called as a witness in the investigation, but two days later he was dismissed. He had headed the FTS since 2006, while before that he was the director of federal agencies for defense industry procurement and weapons export. Between 1978 and 1991 he was an intelligence officer at the KGB; he made a career in Moscow thanks to Putin, whom he knew from his days of service in the GDR.



MOSCOW, RUSSIA - FEBRUARY 3, 2017. A VIEW OF THE MOSKVA RIVER, THE KREMLIN AND KREMLIN EMBANKMENT.

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Putin had been planning the purge at the pinnacle of power for a long time; it was just a matter of finding a suitable pretext.

Vladimir Bulavin became the new head of the FTS; for three years, he had been the Presidential Plenipotentiary Envoy to the Northwestern Federal District, but he is primarily known as a Lubyanka (KGB) man. He was in the KGB from the late 1970s; in post-Soviet Russia he continued his service: from 2001 he headed the FSB in the Volga Federal District, and in 2006 he became the deputy head of the FSB at the rank of general. When Nikolai Patrushev moved to the Security Council of the Russian Federation in 2008, Bulavin followed him as his deputy. In 2013 he became the Presidential Plenipotentiary Envoy to the Northwestern Federal District. It is difficult to include Bulavin in the new generation of Putinocrats (as in the case of the Head of the National Guard, Viktor Zolotov, or the Head of the Foreign Intelligence, Sergey Naryshkin) which proves that Putin still values loyalty above all. However, vacating the office by Bulavin started a wave of personnel shifts. On July 28, 2016, the Kremlin website published multiple presidential decrees. In one blow, Putin replaced three of the nine presidential plenipotentiary envoys in federal districts, abolished one federal district and appointed four governors.

The chain starts with the position of the Presidential Plenipotentiary Envoy to the Northwestern Federal District, which had just been vacated by Bulavin. The office

was taken by Nikolai Tsukanov, who had been the governor of the Kaliningrad Oblast since 2010. This position then went to the head of the FSB in Kaliningrad, Yevgeny Zinichev, Putin's former bodyguard. Another former bodyguard, Dmitri Mironov, became the governor of the Yaroslavl Oblast. Both the Yaroslavl and Kaliningrad oblasts are considered to be regions strong with the opposition. In 2009–2011 mass-scale protests erupted. At the time, the Kremlin reacted by promoting governors from the local elite. Now, in expectation of another wave of social discontent, "siloviki" were posted to Yaroslavl and Kaliningrad (although Zinichev was eventually moved to Moscow to become the deputy director of the FSB in October 2016). The third change took place in the Kirov Oblast, where Nikita Belykh, arrested on corruption charges, was replaced as governor by Igor Vasilyev, a former KGB officer and Head of Rosreestr (Federal Service for State Registration, Cadastre and Cartography) since 2014.

Along with the elimination of the Crimean Federal District, Oleg Belaventsev, who is believed to be a protégé of the Minister of Defense, Sergey Shoygu, lost his post as presidential envoy. He was moved to the same position in the North Caucasian Federal District, which had been vacated by Sergei Melikov, who had been trying to pacify the unruly region since 2014. A veteran of the Internal Troops, former commander of the elite Dzerzhinsky division, he returned to his roots: Putin named him the deputy head of Viktor Zolotov's National Guard. Zolotov's predecessor as commander of the Internal Troops of the Ministry of Internal Affairs, Nikolai Rogozhkin, who had been the Presidential Plenipotentiary Envoy to the Siberian Federal District since 2013, had to step down to be replaced by Sergei Menyailo. The latter, also a protégé

of Shoygu, had been the governor of Sevastopol since 2014; he lost the fight with Sergei Chemezov's (CEO of Rostec Corporation) man, Dmitry Ovsyannikov, Deputy Minister of Industry. The new governor of Sevastopol is the only person from the group of the "July 28 nominees", who has no connections with the security services.

III.

While the shuffling of personnel in July applied primarily to regions, the purge at the central level was symbolically topped off by the dismissal of Sergei Ivanov. For years he was part of Putin's inner circle. The two met in the Leningrad KGB before departing for their respective duty stations. Putin went to Dresden, and Ivanov, educated as an English philologist, to Scandinavia. After the dissolution of the KGB, Putin left the service, whereas Ivanov remained in intelligence, where he attained the position of deputy head of the Europe Department of the Foreign Intelligence Service. When Putin became the Director of the FSB in 1998, he made Ivanov his deputy. When Putin became president, Ivanov left the Lubyanka to become the Minister of Defense in 2001. At the end of his second term, Putin was choosing between Ivanov and Dmitry Medvedev as his successor. He bet on the latter; Ivanov did not even try to conceal his resentment. Despite this, he followed Putin again and became the Deputy Prime Minister in his government, later returning to the Kremlin as the Chief of Staff of the Presidential Executive Office.

He took over one of the most important positions in the country and started political intrigues against his rivals. He was supposedly behind the attacks on Prime Minister Medvedev and the campaign against Ramzan Kadyrov. The issue of the National Guard Act surely didn't help him either. Ivanov's

officials prepared the project in such a way that the text, which had already been approved by the Duma, had to be quietly corrected before it was handed over for the president's signature. This dismissal has a significant meaning for the functioning of the system, because, as noted by a former US intelligence analyst, John Schindler, "Ivanov was at the heart of Putin's chekist, mafia government for two decades." Moreover, in the area of foreign affairs, "regardless of the positions held, Ivanov was a failsafe communication channel to Putin, even in the most delicate situations. In contacts between the White House and the Kremlin this channel was the best and most important", said the former Secretary of the State Condoleezza Rice in her memoirs about the former Chief of Staff of the Presidential Executive Office. Currently, Ivanov is

While the shuffling of personnel in July applied primarily to regions, the purge at the central level was symbolically topped off by the dismissal of Sergei Ivanov.

the Special Presidential Representative for Environmental Protection, Ecology and Transport. This position was created especially for him. Meanwhile, it appears intriguing that someone like that still sits on the Security Council of the Russian Federation. Either Putin did not want to completely humiliate Ivanov, or he still may have plans for him in the future.

The new head of the president's administration is a classic representative of the new wave in Putin's regime;



A MAN WALKS ON A BRIDGE NEXT TO THE KREMLIN IN MOSCOW, RUSSIA - MARCH 7, 2017.

© YURI KOCHETKOV/EPA (PAP/EPA)

relatively young and trusted by Putin. Anton Vaino (b. 1972) comes from a distinguished family of Estonian communists. His grandfather, Karl, was the First Secretary of the Communist Party of Estonia from 1978–1988. After Estonia regained independence, the Vainos chose Russia. Anton started his career as a diplomat (specializing in Japan), but Putin quickly took him to the Kremlin. Since 2002, Vaino has been close to the president; he even became the Chief of Protocol, which is as close to Putin as one can be, just like

his personal bodyguards. Naturally, the most influential person with an FSO background is the current head of the National Guard, Viktor Zolotov, who was the chief of Putin's bodyguards, and later served in the Ministry of Internal Affairs to lay the groundwork for the creation of the new formation that would be exclusively loyal to the president. Three former subordinates of Zolotov have become governors, although this is not the end of their careers as envisioned by Putin. The above-mentioned Zinichev would travel with Putin around the country as a bodyguard. In June 2015, he became the Head of the FSB in Kaliningrad, and was promoted to the position of governor last year. After that short episode, he became the Deputy Head of the FSB. Dmitri Mironov also used to be a bodyguard and an aide-de-camp of Putin. In 2014 he was relegated to the Ministry of Internal Affairs, where he even became the Deputy Minister. Currently, he is the Governor of Yaroslavl. Tula Oblast, on the other hand, is governed by Alexey Dyumin, the deputy head of Putin's

The new head of the president's administration is a classic representative of the new wave in Putin's regime; relatively young and trusted by Putin.

security, who was later relegated to the Ministry of Defense, and to the GRU more specifically. He was one of the key people running the Russian “special operation” in Crimea. After the death of General Igor Sergun (the Director of the GRU) in January 2016, Putin wanted Dyumin to head military intelligence. The plan failed and now Dyumin – also known for playing the position of goaltender in hockey matches among Putin’s closest friends – is waiting for a new opportunity. Another of Zolotov’s men has become Head of the Presidential Administrative Directorate, i.e. the Kremlin’s major-domo. Vladimir Kozhin was replaced by Alexander Kolpakov, who previously had been the head of Department “B” of the FSO.

IV.

When Stalin was unable to deal with the internal problems of collectivization and industrialization, he got rid of his more experienced political collaborators at the famous “Congress of the Victors”, who understood what was going on and could question his decisions. Then, after the assassination of Sergey Kirov, the Great Terror started. There were successive phases of “cleansing” in the regime, the last one taking place in the final period of Stalin’s life. The mechanism was always the same. New comrades replaced the old ones that had been eliminated, such as Nikita Khrushchev, Georgy Malenkov, Andrei Zhdanov or Lavrentiy Beria. They were technocrats who placed power and their careers over any ideological misgivings, ready to obey every command. Times have changed, but Putin is taking advantage of the same mechanism. Of course today, officials who are pushed aside are no longer murdered.

What characterizes Putin’s current, transforming model of government? It is the end of the old system based on the consensus of the elite and a

balancing of interests between clans (the most prominent example of that model was the so-called tandemocracy of 2008–2012). Instead of protecting the interests of the group standing at the apex of the regime pyramid, the goal of the system now seems to be to protect Putin himself. Instead of rule by a type of Politburo, one person will have all the power. It won’t be enough to assign loyalists to a majority of positions to ensure success.

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This is why Putin is creating a checks-and-balances system within individual institutions. As Sergei Ivanov was counterbalanced in the presidential administration by his mighty deputy Vyacheslav Volodin, now Anton Vaino is counterbalanced by Sergei Kiriyenko. Kiriyenko himself is “controlled” by Andrei Yarin, Head of the Presidential Domestic Policy Directorate. In turn, Alexander Bortnikov has competition at his side in the FSB in the form of Sergei Korolev as well as Zinichev. This system, where the head of an institution feels their deputy (and candidate for his successor) breathing down his neck, compensates for the lack of authentic political competition.

Most of the personnel changes in recent months have been made with the aftermath of the 2018 election in mind, and not what comes before it. In the case of some of the new nominees, it can be assumed that they have some particular, time-limited mission to

The personnel revolution of 2016 shows, that Putin is unable to solve the regime problems by changing the system.

carry out. It is all about ensuring that Vladimir Putin has full control over the most important regions and corporations in the period of major political changes and reconfiguration of the government around the time of the election. It's still unclear when the election will actually take place; however, the recent purges might signal that it will happen sooner rather than later. According to the Ministry of Finance of the Russian Federation, funds will run out in 2017, whereas the presidential election is scheduled for March 2018. If Putin's government is to introduce unpopular reforms, which seems unavoidable at the moment, it will not do so before the election. In early November, an interview was published with Valery Soloviev on the website of a popular tabloid. He is an analyst known for exceptionally accurate forecasts and predictions about the Kremlin's decision-making. On this occasion, he suggested that Putin has some serious health issues and might step down in 2017. Interestingly, the interview disappeared after only a few hours, and Soloviev himself went silent. "There are no such discussions at the Kremlin," commented Putin's spokesperson about an early election.

The personnel revolution of 2016 shows, that Putin is unable to solve the regime problems by changing the system. He limits himself to personnel changes, although they may signal preparation

for fundamental reforms in the future. Mass-scale changes are not an end unto themselves, but rather a means to achieve an overriding goal: reshaping the system. Putin is neutralizing potential resistance against changes that might turn out to be revolutionary. He is also forming a group of "*oprichniks*", who will carry out the tasks given to them.

A lot depends on how much longer Putin will rule and what form the succession process will take. There are two possibilities: either the Yeltsin scenario, a behind-the-scenes consensus of major political forces, or a brutal war for power. In the face of recent events, the latter seems more likely. Earlier, Putin was the arbiter and center of balance for the interests of competing groups of elites. The conflict in Ukraine, the assassination of Boris Nemtsov and the war between the federal "*siloviki*" and Kadyrov, ruined this tacit agreement. Hence the current personnel changes. In effect the system has become even more personalized, which means that the weakening or the departure of the president poses a great risk to the Russian Federation. In October 2014, at the meeting of the Valdai Discussion Club, the deputy head of the presidential administration declared: "Today, there is no Russia without Putin!"

This dependence of the country on its leader is a threat. Even in Soviet times, the general secretary of the Communist Party did not have such great power, as the death of Brezhnev, Andropov, or even Stalin, did not threaten the collapse of the entire system of government and an undermining of the foundations of the state. This time it might be different.

Jan Gajewski ■
November 18, 2016

GERMANY'S INGLORIOUS ISOLATION

KRZYSZTOF RAK

The delicate position of Germany in the post–Cold War global order rested upon the art of diplomacy. Abiding by the warnings of Otto von Bismarck, German politicians sought for their country to have better relations with foreign powers than among themselves.

This skilled, multi-instrument game maintained Berlin's international position. Yet, the financial crisis destroyed the existing system of balance and, as Bismarck foretold, weakened Berlin's position. This is proven by Germany's growing isolation and the worsening of relations with its most important partners.

BISMARCK'S BALANCE OF POWER

During a visit to Washington, D.C. in March 2015, Minister of Foreign Affairs of the Federal Republic of Germany, Frank-Walter Steinmeier, said that Berlin wanted to play the role of a “responsible agent” (verantwortlicher Makler). Speaking several weeks later to the leadership of his party, the SPD, he left

no doubt as to his intentions, arguing that “Bismarck's legacy shapes German foreign policy to the present day.” He explained the policy's essence to be one of *realpolitik*, which relies on “the analysis of reality and the subtle intuition of the interests and behaviors of other actors on the international stage.” Put simply, it is “the art of the possible.” This is also why “the central task of German foreign policy in the coming years is rebuilding broken trust, and a basis for cooperation in the area of security between Russia and the West.”

During the Congress of Berlin in 1878, the great powers were meant to come to an understanding about the new European order after the Russo-Turkish War. They did not want the peace

**GERMAN CHANCELLOR
ANGELA MERKEL SPEAKS
DURING A NEWS CONFERENCE
AFTER A MEETING IN MUNICH,
GERMANY - FEBRUARY 6, 2017.**



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to disturb the balance of power, which had been shifted by Russia's military successes in the Balkans. Therefore, at the negotiating table, an "alignment" of relations was reached.

As the host of the Congress, Chancellor of Germany, Otto von Bismarck, sought to use the occasion to convince his partners that Germany was a power that was "saturated". It had no desire for territorial gains and instead endeavored to keep the status quo. Germany, he claimed, had reached its optimal size. This is why Germany could afford to play the role of a "responsible agent", an impartial intermediary who would facilitate agreement between the great powers, considering each of their interests fairly.

Bismarck believed that Berlin's aspirations of hegemony would end in defeat, for other powers would easily be able to create a successful anti-German coalition. A year before the Congress, he explained his desire for "an overall political situation in which we are needed by all of the powers, and relations between them would prevent the creation of a coalition opposed to us."

Germany's strategic dilemma, called the "German Question", was that they are too strong to serve as an equal component in the continental balance of power, but also too weak to destroy this balance and dominate. The only effective strategy in such a system is to contain its hegemonic aspirations and take responsibility for the balance of power in Europe.

Chancellor Merkel has applied the lessons of the "Iron Chancellor" (as Bismarck was commonly known). She was not lured by the temptation of continental hegemony. She patiently built strategic relations with the most important powers so that Germany could become an indispensable component of the global system. Merkel took advantage of the

She patiently built strategic relations with the most important powers so that Germany could become an indispensable component of the global system.

most favorable international situation in Germany's history, in which Germany did not have a mortal, geopolitical enemy, nor did it have to fear the rise of a hostile coalition (as Bismarck described it, the coalitions nightmares - "les cauchemar des coalitions").

Yet, the multifaceted crisis in Europe destroyed this system. This change in the status quo threatens Berlin with isolation in the international arena. One of the most important causes of this state of affairs was Germany's inability to play the leading role in Europe. This became apparent during the attempt to tackle the financial, debt, migration and Brexit crises. Germany proved too weak to cope with them. This fell short of the expectations of its main partners, who had called for Germany to take on the role of continental hegemon and shoulder the weight of recovery actions. As a result, today Germany must cope with the challenge of isolation.

THE CRISIS OF "PARTNERSHIP IN LEADERSHIP"

The biggest problem affecting Berlin's global position is the crisis in transatlantic relations. This has been triggered by the undiplomatic reaction of the German political class to the election of Donald Trump as President of the United States. Minister of Defense, Ursula von der Leyen (CDU), set the tone: "It was a serious shock for me when I saw

The biggest problem affecting Berlin's global position is the crisis in transatlantic relations.

how things are.” She continued, refusing to recognize any of Trump’s successes: “I think Trump realizes that votes weren’t cast for him, but against Washington.” This lack of courtesy can be explained by surprise at the result, yet those who made subsequent declarations intentionally sought to insult the president-elect. Minister of Foreign Affairs, Frank-Walter Steinmeier, proclaimed: “The result of the election is different than that which most Germans would have wished.” Moreover, he lamented the lack of specifics in Trump’s program and demanded explanations. Vice-Chancellor Sigmar Gabriel (SPD) outdid his colleagues by describing the president-elect as “a pioneer of a chauvinist and authoritarian International.”

Against this backdrop, Chancellor Merkel’s comments could seem subdued. She stated that the Federal Republic of Germany and the United States were “joined by a deep attachment to the values of democracy, freedom, respect for human dignity, regardless of origin, skin color, religion, gender, sexual orientation or political views” and to the newly elected president she proposed “close cooperation on the basis of these values.” Most commentators saw this choice of words as the setting of terms to Trump.

German politicians seem to forget that German-American relations were fundamental to the post-Cold War order. They were shaped by the doctrine of “partnership in leadership” which was worked out in Washington, D.C. in 1989.

The Americans recognized that they were not in a position to independently impose their principles on the world, so allies would be needed to promote them. Wanting to maintain its position as global leader, the United States had to find appropriate partners. In northern Eurasia this was Germany, which, in the following two decades, took upon itself the burden of extending Euro-Atlantic institutions, NATO and the EU, to the east.

Following such harsh criticism from German politicians, it is difficult to imagine that the new President of the United States would perceive Germany as a strategic partner. On this occasion, the diplomatic breakdown could not be blamed on Trump. As noted by a commentator in the *Frankfurter Allgemeine Zeitung*, German politicians insulted the President of the United States, not Donald Trump. It could scarcely be believed that they did so unwittingly, since they know full well the distinction between the institution (office) and the person holding it.

The cooling of relations with Berlin might work to Trump’s advantage. He will certainly continue the policy of limiting the political and military presence of the United States on the Old Continent. The reluctance to cooperate on the part of the main European power could be a good pretext for further withdrawals of American forces and resources from Europe. This freed up potential would surely then be engaged in other parts of the globe.

The German authorities obviously did not see the asymmetry of interests. Clearly, the difference in potential between the Federal Republic of Germany and the United States shows that the partnership between the two countries was not equal. Militarily, the Germans are simply

a client of the United States. This imbalance led to Merkel's close consultation on her eastern policy with Trump's predecessor Barack Obama. She was aware that European countries are militarily weak, and therefore lacked strength in peace talks with Russia. A condition of effective diplomacy in the conflict between Ukraine and Russia was the support of the United States, the most powerful military in the world.

Germany's new problems were of its own making. Partnership in leadership was one of the most important factors in Germany's special position in global politics. Berlin, having the potential to assume the role of a regional power, played in a higher league of global powers.

FRENCH-GERMAN DELUSIONS

The Paris-Berlin axis was the foundation of European integration. In the 1990s, both powers made the decision to accept central and southern European countries into their integrating structures. This envisaged the eventual membership of nearly 30 nations. This required a fundamental consideration of its current cooperation mechanisms, starting with decision-making processes.

European elites recognized that it was impossible to maintain the principle of homogenous integration, or the same level of integration advancement across all member states. Differentiation was obvious, thus there was a division of countries in terms of the extent to which they would cooperate. The EU was meant to become a structure resembling concentric circles, created by states similarly advanced in integration. The narrowest circle was to be created jointly by France and Germany. Since the decision to expand the Union was made in parallel with the introduction of a common currency, the first fundamental

division between the Eurozone and the rest of the member states inevitably arose.

Today it is safe to say that the French–German attempts to build a European federal state have ended in defeat. A disastrous mistake had already been committed by Chancellor Helmut Kohl, one of the greatest advocates of federalism, as by agreeing to accept the Euro, he abandoned the possibility of creating a political union in Europe. According to his original plan, the new union was to stand firmly on two pillars: a common currency and a political federation. The French President François Mitterrand did not want to deepen political cooperation. First of all, he wanted to weaken a united Germany, and thus take away their most important geo-economic weapon, the Deutsche Mark. The French authorities wanted the Euro to ensure that Paris maintained its position of power in Europe.

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Therefore, it should not be surprising that the Eurozone crisis is leading to some unrest between Berlin and Paris. The common currency did not realize the hopes invested in it and it was not a catalyst for integration. It led to the lowest ever credit rates being offered to the poorest, southern countries. Italian, Greek and Spanish leaderships began to irresponsibly put their countries in debt; in order to maintain their power they catered to every whim of their electorates. A new intangible wall arose in Europe dividing creditors and debtors.

The anti-crisis measures, still ongoing after six years, have only deepened this division. Essentially, the Euro became a ticking time bomb placed under the foundations of European integration. Worse still, the political leaders not only have no idea how to bridge this divide, but they seem to not even recognize that one exists. New recovery programs depend on new loans which continue to drive debtors further into debt. These so-called anti-crisis measures do not help the southern economies, which are in dire condition, but instead merely delay the approaching catastrophe.

The biggest surprise for political leaders may be the ascertainment that the so-called “transfer union” has been implemented in practice.

A segment of the German elite, most of all a group of respected economists, has long warned about the fatal consequences of introducing the Euro. However, politicians responsible for its introduction did not listen. And here they made a serious mistake, with direct political repercussions. Above all, the Eurozone crisis will prevent stability in Europe.

Such a conclusion can be drawn from the book published a year ago authored by Hans-Werner Sinn titled *The Euro: From Peace Project to Bone of Contention* (*Der Euro. Von der Friedensidee zum Zankapfel*). In 500 pages, the most influential German economist has made a diagnosis of what he describes as the disease plaguing the Eurozone.

The biggest surprise for political leaders may be the ascertainment that the

so-called “transfer union” has been implemented in practice. This is a requirement of France and southern countries tied to it, that creditor-nations transfer huge sums to debtor-nations with the goal of evening out differences in development in the Eurozone. The mechanisms for evening out the levels of wealth and prosperity have long existed within the Union. This is the goal of the well-known structural and cohesion funds. Yet, these expenditures are a fraction of the GDP of the entire EU. Meanwhile, in the case of the transfer union the sums are much greater, perhaps over 10% of GDP. This is why the wealthiest countries oppose the idea and Berlin has repeatedly distanced itself from the proposal.

The problem is that despite the opposition of creditors, hundreds of billions of Euros are flowing from the north to the south of the continent. This is happening thanks to the policies of the European Central Bank, which are neither transparent nor in accordance with EU law. Ever since the financial crisis struck there has been a huge and ongoing loan operation directed toward the countries of southern Europe. At the same time, the EU is liable for the debts of member nations. Therefore, it breaks its own treaty, which clearly prohibits it (the “no bail-out” clause from article 125 of the Treaty on the Functioning of the European Union).

In March 2015, Sinn calculated that the debts of the six countries presenting the biggest problem in the Eurozone (Greece, Italy, Spain, Portugal, Cyprus and Ireland) had soared to almost 11 trillion Euro, or 335% of GDP of these countries. This means that the debt cannot be paid off and the creditors will have to accept losses.

The German economist is of the opinion that continuing the policy of transfers

would end in catastrophe. Loans totaling hundreds of billions of Euros have not had positive effects. The economies of southern European countries are still in crisis. The only indicator that is growing is debt. Transfers are thus a play for time, only delaying the crash.

The best antidote to the debt crisis is discontinuing the transfer union, in other words, the EU giving loans to member states in debt. Sinn points to the examples of the United States and Switzerland, where the central government does not take responsibility for the debts of individual states or cantons. If the EU is to survive it should respect its own laws and allow member states with an irresponsible monetary policy to go bankrupt.

Sinn argues that Germany is not the victor in the Eurozone crisis. Indeed, it ultimately sowed the seeds for the breaking down of their European policy, which was conceived in the 1990s.

The Euro cannot be the main basis for integration, as instead of connecting, it divides, creating a fundamental conflict between debtors and creditors. This conflict threatens the very existence of the EU. France and Germany, the countries which were meant to be the “engine” of the EU, are arguing over the strategic direction to pursue next. Paris does not agree with having an actual political union, because it would mean, for example, the joint administration of their nuclear arsenals, when it only wants the wealthiest EU countries to take greater responsibility for Eurozone debts.

In the German political discourse, proposals are increasingly appearing to abandon the federalist concept and its main requirement of deep European integration. The former President of the Federal Industrial Association of



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GERMAN FOREIGN MINISTER SIGMAR GABRIEL ADDRESSES THE MEDIA AFTER A FOUR-LATERAL MEETING ('MUNICH UKRAINIAN LUNCH') DURING THE 53RD MUNICH SECURITY CONFERENCE (MSC) IN MUNICH, GERMANY - FEBRUARY 18, 2017.

The Euro cannot be the main basis for integration, as instead of connecting, it divides, creating a fundamental conflict between debtors and creditors.

Germany, Hans-Olaf Henkel, has been calling for the division of the Eurozone into two currency areas for years. One area would include Germany and the rich countries of northern Europe, and the other would accommodate France and southern European states, signifying a final break between Berlin and Paris. He argues that the current profits that Germany gains from exports thanks to the current shape of the Eurozone does not cover the huge expenditures required to prop up near-bankrupt states. His sensible economic argumentation, which converges with Sinn's arguments, is still considered outlandish today. German elites and society cannot imagine Berlin divorcing itself from Paris. Their political habits would of course be changed. However, when the next stage of the debt crisis is revealed, when the average German realizes that he had to pay with his pension for the alliance with France, or when he has to choose between this alliance or a prosperous and comfortable old-age.

The absence of a uniform German position and a strategic compromise between the powers, means that, in the short-term, genuine reform of the EU should not be expected. France will not give up on the idea of forcing Germany to continue with the transfer union, given its strong support from Italy and other countries of southern Europe. This means that until the next wave of the crisis hits, Europe will remain in a clinch.

THE EASTERN POLICY WILDERNESS

The most surprising element of the impasse in transatlantic and European relations, is the worsening of relations with the most important players in Eurasia. In the normal course of things, the weakening of the western vector of German policy should bring with it the strengthening of the eastern vector. But there has been nothing of the sort.

The weakness of Berlin's position was revealed by the war in Ukraine, during which Putin undermined the foundation of the entire post-Cold War order in Europe. The annexation of Crimea constituted the unprecedented violation of two fundamental principles: the inviolability of borders and the prohibition of the use of force in international relations. The Kremlin proved that "the end of history" is a baseless myth.

In this case, the would-be hegemon of Europe failed to deliver. As usual, Merkel was biding her time. She could have ended the crisis but she would have had to exhibit character and courage, choosing one of two methods. Either demonstrate the cynicism of state power and, in concert with others, "sell-out" Ukraine to Putin, or defend high values and decide on real sanctions against Moscow, which would have hit Russian energy exports. In reality, she chose the strategy of maneuvering, advocating simultaneously for supposed sanctions and cooperating with Russia in building the Nord Stream energy pipeline. Such a policy only encouraged Putin to make further attempts to destabilize the West. Only now are German elites becoming aware that the Kremlin is leading a brutal information war against them. But even this has not pushed them to undertake more decisive action against Moscow. Having American blessing for this type of irrational appeasement is only a partial explanation.

She could have ended the crisis but she would have had to exhibit character and courage, choosing one of two methods.

Following the weakening of relations with Moscow came the worsening of relations with China – the second most important power in Eurasia after Russia. The latest visit of the Vice-Chancellor of the Federal Republic of Germany, Sigmar Gabriel, to China in November 2016 brought a noticeable cooling between the two powers.

The foreshadowing of the visit was not promising from the start. Even before the departure of the vice-chancellor, the Chinese Ministry of Foreign Affairs summoned the German deputy ambassador and delivered a protest. The Chinese were dissatisfied with the German debate on Chinese investments, specifically the alleged American pressure to prevent the sale of one of Germany's high-tech companies to the Chinese.

Matters soon worsened. In Beijing, Gabriel was to jointly appear with the Chinese Minister of Commerce, Gao Hucheng, before members of the Sino-German Economic Committee. Unexpectedly, the meeting was called off. According to the *Frankfurter Allgemeine Zeitung*, the cause of the cancellation was a statement by one of the Chinese trade ministers who made the accusation that in Germany a "hostile mood towards investment" prevailed. The same newspaper recalled the statement of the Chinese ambassador in Berlin who complained about the "growing protectionist tendencies" in Germany. In turn, Gabriel, as the newspaper reports, "didn't leave the slightest doubt in Beijing that Chinese investments in Germany and Europe will be strictly controlled and if need be, thwarted." He announced a harder line towards Beijing and a firm defense of German investors, who have complained of being discriminated against in China.

The growing crisis in relations between Berlin and Beijing should come as no surprise. The visit of Chancellor Merkel

The growing crisis in relations between Berlin and Beijing should come as no surprise.

in June was already full of discord. The weekly *Die Zeit* referred to the situation in an article with the symptomatic title: "Sharp Conflicts with a Difficult Partner". Both countries are geared towards exports and conflict between them was unavoidable, especially when the balance of trade increasingly favored the Chinese. In addition, one must consider the unparalleled scale of Chinese investments in Germany. Germany is wary that in this way the Chinese will obtain their own technology and innovations, thereby becoming more competitive in the global marketplace.

An even more glaring symptom of the crisis of Germany's eastern policy is the cooling of relations with the countries of Eastern and Central Europe. Until recently, this region was regarded as Berlin's exclusive zone of influence. For a quarter-century, Germany has blocked the emergence of any kind of coalition that could oppose it without difficulty. Germany grew accustomed to imposing its will on weaker clients. The hubris of power usually triggers a response. When Germany tried to force the Czech Republic, Slovakia and Hungary to accept a quota of immigrants last year, they rebelled, refusing to obey and for the first time organized a common coalition. Germany had lost control of its closest region.

Germany has found itself in a dire diplomatic situation. And the future does not seem promising either. In 2017, the

The German dilemma rests in the choice between two strategies, pursuing hegemony or a balance of power.

German political class will be focused on the election campaign. The Social Democrats, who are losing ground, are grasping at anything to slow their downfall. With an absence of ideas for domestic policy, they will be fighting with the Christian Democrats on the field of foreign policy under the banner of building a European superstate and anti-Americanism. The biggest current asset of German diplomacy – a cross-party consensus in strategic matters – will be sacrificed for the sake of continuing the careers of uncharismatic politicians like Sigmar Gabriel. This will only deepen the isolation felt by Germany in the international arena.

The weakening of Europe's dominant power brings with it many challenges. Great powers assume the role of regional stabilizers. When they lose strength, a power vacuum is created that must be filled. This is how a new equilibrium is created. This signals that a period of disorder and uncertainty awaits us in Europe. Vladimir Putin will certainly try to take advantage of this situation, knowing that a weaker Germany means a stronger Russia; this is why power is relative. He will not miss the opportunity to once again expand his sphere of influence. The most straightforward way to achieve this goal would be to agree upon a new arrangement between Moscow and Berlin. Germany, abating in strength, may not be able to resist such a temptation.

However, another outcome is also possible. Specifically, where the central European countries create a coalition which starts to compete on the European scene. However, even if such a coalition was to succeed, it would be too weak to play the role of a third power (the Visegrad Four countries account for less than 10% of the EU population, and only a few percent of its economy).

That is why these countries could instead try to make a new agreement (taking into account their subjective role) with Germany and create a new system that would stabilize the situation in Central Europe. This, on the one hand, will require the changing of Berlin's paternalistic attitude towards its former satellites, and on the other hand, greater effort and responsibility from Poland and her regional partners.

The German dilemma rests in the choice between two strategies, pursuing hegemony or a balance of power. The biggest paradox is the fact that the federalization projects serving to deepen European integration, have created the conditions for the dominance of Germany on the continent. The practice was inconsistent with theory, which suggested that the handing over of the scope of authority from nation-states to supranational institutions weakened the influence of state powers. With that in mind, the best way out from the current crisis seems to be a reform of the European Union which would bring balance between the main powers and small and medium countries. Essentially, this would mean a return to the principles which were in effect prior to the signing of the Treaty of Lisbon.

Krzysztof Rak ■
December 20, 2016



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CENTRAL EASTERN EUROPE INNOVATORS SUMMIT

PAWEŁ SZEFERNAKER

The Polish economy, destroyed by communism, for years did not have suitable conditions to function on the basis of its own technology. Today, thanks to the fourth industrial revolution, Poland has a historical opportunity to build its own new brand in the world markets.

After the ages of steam, electricity and automation, we are now living in the age of the fourth industrial revolution. Universal computerisation, digitisation and Internet access are changing our lives completely and are an opportunity for those who think innovatively. Central and Eastern Europe is a huge reservoir of people who are in their element in this reality. For years, Poland was dependent on technologies brought in from other countries and in many cases it will be difficult for us to compete with highly-developed economies in this field today. However, we can successfully compete in the sphere of digital and information technologies, by putting excellent engineers and programmers on the market.

German occupation and then Soviet domination both left a deep mark on the economy of the largest country in Central and Eastern Europe. Poland's unwieldy industry failed to compete in terms of quality on world markets, which led to the collapse of its centrally-steered economy. Problems then deepened in the 1990s. The economic transformation conducted at the liberals' bidding, with the participation of communist notables who took part in the process of changes, led to the selling-off of those national assets which could be of any value. As a consequence, Polish brands did not develop their own know-how, and our country specialised in assembling devices invented in foreign research centres.

**At the same time,
the free market released
huge potential and
energy of millions
of ordinary Poles.**

At the same time, the free market released huge potential and energy of millions of ordinary Poles. Trade, services and then industries which did not require complicated engineering continued to develop faster. Poles became more and more aware of the free market economy; they had lots of ideas and a great desire for personal development, but our country did not offer such opportunities. Many outstanding professionals, after completing their education, and sometimes even before they undertook studies, went abroad, thus contributing to the prosperity of Western economies. It was only the digital age – which reduced distances and equalised opportunities in nearly all parts of the globe – that enabled Poles to use their creativity also in Poland. This is how corporate powers such as CD Projekt, the publisher of the cult game “The Witcher”, were built. Today, every discovery made by a Polish engineer can gain publicity; while they can find business partners, or acquire financing thanks to the Internet.

CENTRAL AND EASTERN EUROPEAN INNOVATORS SUMMIT

From the beginning of the 1990s, the late Lech Kaczyński – President of Poland in 2005-2010 and his brother Jarosław Kaczyński – Prime Minister in 2006-2007, and the current leader of the Law and Justice political party which has a majority in the Parliament and has formed the government, talked about the need to rebuild a strong and modern state. As a result of the implementation of the policy of a state which is stable, self-confident and invests in modern technologies, the Law and Justice's conservative government has a plan today to act even faster and more efficiently in the sphere of innovations. At the end of March, the CEE Innovators Summit was held in Warsaw, attended by the Prime Ministers of the Visegrad Group (V4). This is Prime Minister Beata Szydło's

idea for Polish presidency in V4. Poland, Hungary, Slovakia and the Czech Republic jointly have the potential which would enable them to compete with highly developed countries.

As a region, we truly have unique human capital. This is illustrated by statistics showing for instance the number of engineering studies graduates who can help us compete with the most innovative economies worldwide. Based on the OECD data (2012), V4 countries have nearly 150,000 graduates from these types of studies in total, whereas South Korea, today's leader in world innovativeness rankings – around 160,000. More importantly, as part of the Visegrad Group we are in the lead in terms of the number of IT specialists. In 2012, there were around 26,500 graduates of such studies in our region, and only half that number in South Korea. The Warsaw Summit created scope for cooperation and exchange of experiences among start-

Poland, Hungary, Slovakia and the Czech Republic jointly have the potential which would enable them to compete with highly developed countries.

-ups, entrepreneurs, scientists, innovators and national administrations of our region of Europe.

The largest economies of the European continent channel their activities towards competitiveness built on technological innovations. Central and Eastern European states which – for historic and geopolitical reasons – could not participate in the implementation of previous industrial revolutions, and



**CENTRAL EASTERN EUROPE INNOVATORS SUMMIT
IN WARSAW, POLAND - MARCH 28, 2017.**

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Increasing the innovativeness of the Polish economy is one of the most important priorities of the current Polish government.

only benefited from their effects, have a historic opportunity of actively coming to the fore of countries which are leading the fourth industrial revolution. We realise that it all depends on whether – thanks to this increasing innovativeness – we seize the opportunity to achieve fast economic development.

Increasing the innovativeness of the Polish economy is one of the most important priorities of the current Polish government. An innovative knowledge-based economy should be a foundation for the growth of the national income and for raising the level of prosperity in Poland. Therefore, all actions undertaken by the Law and Justice's government in the area of entrepreneurship are on the one hand intended to build good conditions for conducting business activity, and on the other hand to encourage businesses to boldly invest in the latest technologies. It is an important task for the Polish administration to ensure an appropriate framework for innovators through friendly regulations, among other things with regard to supporting innovativeness and the constant removal of any barriers that might appear. The Polish government's goal is to create an effective ecosystem for developing innovations. Already during the first year of its activity, a cohesive system of various instruments awarding benefits and encouraging innovative activity was introduced, including a more business-friendly tax system

(tax reliefs), a stable method of financing the commercialisation of scientific research and development work results, as well as a package of procedural facilitations. The new regulations address the most urgent needs of Polish innovators and scientists. Meanwhile, further initiatives in this area will be presented before the end of this year.

The manifestation of these priorities is the Strategy for Sustainable Development adopted by the Polish government.

Appreciating the importance of innovations, the Polish government appointed the Innovation Council whose tasks include the coordination of activities connected with increasing the innovativeness of Polish science and economics. The systemic proposals developed by the Council will be evaluated in consultations with representatives of non-governmental organisations and organisations of employers.

Admittedly, innovativeness is not a phenomenon reserved for the digital area; nevertheless it is in the digital world that it emerges the most. During the Innovators Summit, heads of the Visegrad Group states expressed their support for the establishment of a fully functional European single digital market. The purpose is the removal of barriers to the digital development of the EU and creating possibilities for European companies to get benefits of scale resulting from the existence of a large European market. Only through this way can we quickly build a competitive industry based on modern technologies. There is a large and unused potential for cooperation in the Visegrad Group countries in the area of digital economy. It is in our countries' interests to present a uniform position which will constitute a counterweight to protectionist threats often appearing



CENTRAL EASTERN EUROPE INNOVATORS SUMMIT
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in the European discussion, or concepts aimed at deepening developmental differences between the EU regions. We should unambiguously support the elimination of all barriers for which there is no justification in the Treaty provisions. Only equal and non-discriminatory conditions for conducting activity on the EU market will enable our companies to compete with entrepreneurs from Western states, who are much stronger in terms of capital.

As a result of globalisation, competition in world markets has increased significantly in recent decades. Our region, if it wishes to be competitive, must invest in such capital which will give us an opportunity to compete against other – very often larger – players. Poland, although it does not top the innovativeness rankings as yet, has the greatest asset which should be strengthened and nurtured – high competences of Poles, their enterprising spirit, and a growing social awareness that innovativeness is a path to further development. This is the very capital - human capital - composed of creative, enterprising people, that breaks through all barriers, and that determines our strength. For years, this capital was often invested abroad, which increased the prosperity of other countries. Many

of those who went abroad have succeeded in the largest innovative companies of the world. The CEE Innovators Summit is a strong accent of Poland's presidency in the Visegrad Group. This is a signal not just for Hungarians, Czechs, Slovaks and Poles, but also for the rest of the world that governments appreciate this huge potential, which is dormant in the residents of our region.

BASIS OF COOPERATION AMONG THE VISEGRAD GROUP STATES

Thus, the basis for effective cooperation is the intellectual potential of the Visegrad Group countries' citizens, their cultural similarities and common historic links. We are facing similar challenges and problems related to the implementation of an effective innovativeness policy. Common problems concern the establishment of a cohesive environment for start-ups, supporting research and development activity, as well as the jump from the absorption of ready-made technologies to the stimulation of innovations based on results of our own domestic research. Research and development cooperation with the "old EU" countries and building the society of "early users" and "early adapters", willing to test and purchase innovative products, constitute a challenge.

It should be noted, that the V4 countries are implementing intelligent specialisation strategies on similar topics.

An important statement of this declaration is the separation of a dedicated budgetary line within the International Visegrad Fund, focused on the implementation of joint research and development projects.

This refers in particular to the automotive, telecommunications, electronic, and transport industries, as well as to the environment, and health foods. There is a large potential for the implementation of joint projects in the area of research and development, which could constitute the basis for competing with the “old EU” countries and allow the creation of realistic regional specialisations within the V4.

There are symptoms showing that other regions of the world see not only political but also economic potential in the Group. One of the examples is Japan, which together with the International Visegrad Fund is financing the V4-Japan Joint Research Programme that may be used by private or public research organisations or small- and medium-size businesses.

Often, particularly at European Union forums, arguments are used that the Visegrad Group is not cohesive, and that it presents different opinions and views. However, our strength is determined by the ability to cooperate despite differing outlooks. We are strengthened by the fact that we tighten our cooperation

in those areas which we believe to be of key importance for the economic future of our region and of the EU. Crises affecting the European Union recently show that it is the duty of the Visegrad Group's states to build institutions resistant both to political and economic unrest. For this purpose, the Prime Ministers of the V4 states signed the so-called Warsaw Declaration during the Innovators Summit. The main assumption of the Declaration is the reinforcement of cooperation with regard to research, innovations and digitalisation. Special objectives include the strengthened and extended regional cooperation of clusters and start-ups. Moreover, we would like to promote states from the Visegrad Group as research and innovation centres.

An important statement of this declaration is the separation of a dedicated budgetary line within the International Visegrad Fund, focused on the implementation of joint research and development projects.

First and foremost, we want the Warsaw Declaration to be the starting point for tighter cooperation among the countries of the region, which will increase the number of supranational research and development projects implemented by science and research institutions and enterprises from Central and Eastern Europe.

It is important to establish good conditions for cooperation between entrepreneurs and scientists: only this way can our local businesses stand up to global competition in Western European and Asian markets.

The cooperation initiated thanks to the Innovators Summit constitutes a clear signal that both Poland and other states from our region are prepared to become fully involved in the challenges which our economies face in the 21st century, the age of innovations.

Paweł Szefernaker ■

March 31, 2017



Joint declaration of intent of Prime Ministers of the Visegrad Group on mutual co-operation in innovation and digital affairs “Warsaw Declaration”

CEE Innovators Summit, Warsaw, 28 March 2017

We, the Prime Ministers of the Visegrad Group (V4) countries, convening in Warsaw on 28 March 2017, adopt hereby the following Joint Declaration.

RECOGNIZING the solid ties of cooperation and friendship between the Czech Republic, Hungary, the Republic of Poland and the Slovak Republic, and the remarkable progress in our relations in various areas reached, among others, thanks to the V4 cooperation;

REITERATING the commitment of the V4 countries to provide added value for the reflexion process on the future of the EU in specific areas;

RECALLING the Kroměříž Declaration of 12 May 2004 on cooperation of the Visegrad Group countries after their accession to the European Union¹, as well as the recent meetings held within the framework of the Polish Presidency of the Visegrad Group: the meeting of ministers responsible for cohesion policy

and the economy of the V4 countries of 14 July 2016 and the meeting of ministers responsible for telecommunications and heads of the National Regulatory Authorities of V4 countries on 6 February 2017, who adopted the common paper on the European Electronic Communications Code;

REITERATING the commitments made in the Memorandum of Understanding on a “Regional Start-up Platform” between start-up organizations of the start-up communities and in the Memorandum of Understanding on enterprises in Eastern Central Europe for digitalization and connected and automated driving, signed at the Regional Digital Summit held in Budapest on 17-18 November 2016;

EMPHASIZING the necessity of seeking sustainable development through advancing cooperation in the field of modernisation of the V4 national economies with respect to entrepreneurship, research and innovation, digital affairs, implementation of the Europe 2020 strategy, establishing institutions resistant to political and economic crisis, securing safety and adequate standards of living;

¹ <http://www.visegradgroup.eu/2004/declaration-of-prime>

NOTING that the world economy is rapidly becoming digital and data driven; that growing use of and investment in digital technologies and knowledge-based human capital is profoundly transforming our societies and that innovation is easier when data can flow safely, freely, preserving the credibility and integrity of data across borders; and that the opportunities beyond own borders of the EU should be explored. Adequate protection of personal data shall be secured and the existing and future EU legal framework for the protection of personal data shall not, however, be subject of negotiations of the trade agreements, but rather dealt with separately through other available instruments (e.g. adequacy findings);

NOTING that we should include and reflect on national security related exceptions in

the current discussions on data localisation while guaranteeing free flow of data;

STRESSING that efforts should be made to establish a full-fledged and connected European Digital Single Market in which the free movement of goods, persons, services, personal data and capital is ensured and where individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition, and a high level of consumer and personal data protection, irrespective of their nationality or place of residence;

UNDERLINING that advancing our vision relies on the participation of all countries and on joint action to seize the opportunities and tackle the evolving challenges of innovation economies becoming digital and that of reducing market fragmentation.

The Visegrad Group agrees to further strengthen its ties by adopting the following Warsaw Declaration on mutual co-operation in research, innovation and digital affairs as follows:

- to promote internationally the Visegrad region as a research and innovation hub, cooperating in areas where mutual interests can be identified;
- to deepen the existing cooperation in research, technology, innovation and digital affairs, particularly with the use of EU funds;
- to share the best practices and expertise to generate successful innovation and business models;
- to promote and publicly present the most successful innovative projects which were supported by R&D&I programmes;
- to cooperate in the process of frequency allocation in order to gain competitive advantage for the V4 region in the preparation for the next generation mobile services (5G);
- to reinvigorate the cooperation within the V4 Innovation Task Force through continued regular meetings on different focus themes, rendering it an effective institutional tool aimed at creating a solid basis for enhanced joint endeavours in the field of research and innovation;
- to emphasize activities of the V4-Plus “Regional Start-up Platform”, and to focus on innovation management and knowledge sharing in the field of IP services provided by National IP Offices, and by the Visegrad Patent Institute;
- to provide opportunities to strengthen and expand regional innovation clusters and foster the innovation and/or digital

ecosystems within the framework of existing national and EU funding mechanisms and for joint research, development and innovation projects to access to capital and more rapid and effective commercialization of technology;

- to facilitate joint V4 research, development and innovation projects inter alia by dedicating a special budget line in the International Visegrad Fund for R&D&I-related grants available to the scientific and business community;
- to secure transformation of innovative start-ups into successful businesses by leveraging capital, knowledge and networks and make joint efforts to promote V4 innovative start-ups at international level;
- to support SMEs in adoption of innovation, digital technologies and taking part in Industry 4.0 projects;
- to support programmes at regional and national levels aimed at increasing ICT and digital skills in all groups of people at all educational level;
- to secure the adoption of digital technologies and services in order to support the data economy at national and regional levels;
- to improve the quality and affordability of ICT infrastructure, products and services through investment and fair and transparent policy and legal frameworks that encourage competition;
- to work towards sustainable, efficient, resilient and secure cyber space based, inter alia, on timely and proper implementation of the NIS Directive, allowing the joint internal market for the high level cyber security and protection of critical information infrastructures and resources;

- to address unjustified barriers to free flow of data such as data localisation that throttle economies of scale and thwart the growth of V4-based companies that should compete globally;
- to cooperate closely on reviewing the rules regulating the electronic communications market and confirm that main interest of our countries is to create clear unambiguous and future proof rules which will give legal certainty to all providers and users of electronic communication networks and digital services;
- to develop policy frameworks that further promote effective privacy and data protection;
- to emphasize the need to coordinate actions aimed at boosting competitiveness, innovativeness and digital transformation of V4 countries and to coordinate positions at EU level with respect to research and innovation and agree to meet regularly to advance progress in this field.

Signed in Warsaw, on 28th March 2017

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Prime Minister of the Czech Republic

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Prime Minister of Hungary

.....

Prime Minister of the Republic of Poland

.....

Prime Minister of the Slovak Republic

PUTIN'S CHEKISTS

JAN GAJEWSKI

When it was leaked that Vladimir Putin wanted to unify the Russian secret services into a single, powerful Ministry of State Security, there was a genuine sensation. A wave of warnings swept in against the return of the KGB and true terror akin to that of Stalin's era.

However, there is little reason to treat the prospect of such an eventual scenario seriously. First, there is no evidence of it from the latest personnel and organizational decisions in the security apparatus. Second, creating a single, unrivaled center of power in such a sensitive area as state security would be absolutely opposite to the checks-and-balances rule, highly characteristic of Putin. Security sector reform is a foregone conclusion, there is no doubt about that. However, the direction it follows will certainly differ from the backward step depicted above.

On the post-election morning of September 19, the daily edition of "Kommersant" published an article

which, according to its authors, revealed a plan of revolutionary reform of the state security apparatus in Russia, prepared by the authorities. The leak was arranged to test the reactions to ideas for change, and the authorities were to wait to introduce them until the results of the elections were known. The decisive victory of Putin's party, United Russia, was supposed to pave the way for revolutionary changes in the secret services. What were the most important points of the leaked "plan"?

I.

The Federal Security Service (FSB), the Foreign Intelligence Service (SWR) and the Federal Protection Service (FSO) were apparently to be combined into a single, powerful institution, nicknamed

RUSSIAN PRESIDENT VLADIMIR PUTIN SPEAKS AT A GALA NIGHT MARKING THE SECURITY SERVICES DAY IN MOSCOW, RUSSIA - DECEMBER 19, 2015. MEDIA REPORTS CITED PUTIN AS SAYING THAT THE RUSSIAN FEDERATION'S SECURITY SERVICE FSB HAD HELPED TO PREVENT MORE THAN 30 ATTEMPTED TERRORIST ATTACKS IN 2015.



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The rule of “checks-and-balances”, which is well-known in Western democracies as well, (Russian *система сдержек и противовесов*) is one of the foundations of the government model created by Putin.

by some detractors the new KGB, with the official title of the Ministry of State Security (MGB). This super-ministry would be given new, greater powers and obligations, including the duty to “protect internal order and security in all law enforcement authorities and security forces”, which presents the possibility to control all such institutions in the country. The following changes would also apply to other services and institutions:

- liquidation of the Investigative Committee (SKR) including its structures in the Prosecutor General’s Office,
- merger of the Prosecutor General’s Office and the Ministry of Justice,
- liquidation of the Ministry of Emergency Situations (MCzS),
- resources of MCzS to be divided between the Ministry of Defense and the Ministry of Foreign Affairs,
- exclusion of the Presidential Security Service (SBP) from the structures of the FSO.

This idea of a return to a single, almighty security service is not a new one in post-Soviet Russia. During his first presidential term, Boris Yeltsin went even further and attempted to combine the majority of the former KGB with

the Ministry of Internal Affairs, but the resistance of the opposition and the judicial branch was too strong. The idea to merge former parts of the KGB into one force has been raised a few times during Putin’s presidency as well. However, Putin, despite being a former KGB employee himself, having opened all institutions and sectors of the state to people from the security services, blocked the creation of “KGB 2.0”. This was not because he has anything against the people from the Lubyanka¹ as such, but rather that he has a strong instinct for self-preservation. For every czar it is always better to have a few competing coteries at the court rather than a single, dominating party that can eventually become a threat to the throne. The rule of “checks-and-balances”, which is well-known in Western democracies as well, (Russian *система сдержек и противовесов*) is one of the foundations of the government model created by Putin. It applies to all aspects of state functions, from the energy sector (Gazprom vs. Rosneft) to law enforcement structures. Putin prefers to divide and rule the security apparatus, keeping the balance of power in the secret services in check being the highest arbiter. The previous rulers of the Kremlin also realized that one of the conditions for them to remain in power was to ensure the loyalty of the security services. In the Soviet era, the Communist Party exerted control over the KGB. However, Putin lacks such a control apparatus, which means that such a super-ministry could become a threat to him, or, in the best-case scenario, an unruly institution. Putin’s growing fear of a palace coup also diminishes the idea of the MGB. In the current model of the security services, preparing and executing a coup requires the cooperation of at least a few services and interest groups. By merging the most powerful services into a single organism,

¹ The popular name for the headquarters of the KGB.

Putin would be slitting his own throat. The second worst nightmare for Putin is a social revolution and a “Russian Maidan”. Among the comments responding to the alleged plan to establish the MGB, there were some claims that it was a reaction caused by a fear of revolution. This explanation is very simple, but also completely wrong. Firstly, the recently established National Guard Troops Service of the Russian Federation is the praetorian guard of Putin in the event of internal turmoil. Secondly, creating organizational chaos in the security services during the highly sensitive period before the elections would only weaken the law enforcement structures.

There have also been personnel decisions made by Putin regarding the highest positions in the security services, that contradict the thesis of “KGB 2.0”. Assigning loyal and efficient people to lead the SWR and the FSO (Sergey Naryshkin, the former Chairman of the State Duma, and Dmitri Kochnev, the former bodyguard of the president, respectively) suggests that both services are going to be important in Putin’s state security system. It can hardly be assumed that the president entrusted the position of the head of intelligence to the previous chairmen of the lower house of the parliament and an experienced colleague from Soviet services for a maximum of one year. It is unlikely that Naryshkin was the best candidate to liquidate the SWR. Therefore, a denial by the former Chief of Staff of the Presidential Executive Office and a former high-ranking intelligence officer, Sergei Ivanov, was not a surprise. In a press interview from October 18, he denied the “Kommersant” news report a month earlier. He stressed that intelligence and the counterintelligence cannot operate under unified leadership. It is unlikely that he came up with this kind of revelation on his own, especially as the

The confusion surrounding the publication of the article on “the plan to establish the MGB” confirms the very high level of tension within state security structures in Russia.

Kremlin was previously reluctant to deny the reports on the MGB with certainty. Why did it take a month to reject rumors about the return of the KGB? One of the theories for this is that Putin and his people behind that leak which served to compromise the idea of the MGB. Later it seemed that it was the objective of the FSB, and not Putin himself. There is also another possibility: it was the FSB that wanted to exert pressure on the Kremlin by publishing the article; this hypothesis is supported by the fact that “Kommersant” has been considered to be the FSB’s mouthpiece for a long time.

The confusion surrounding the publication of the article on “the plan to establish the MGB” confirms the very high level of tension within state security structures in Russia. The article and the related commotion are just another stage of the fight for the future form of the state security apparatus that, according to Putin’s idea, is supposed to be based on two strong pillars in the form of two competing centers, which is in line with the “checks-and-balances” rule, utilizing a consolidated and economic formula.

II.

Putin’s vision for the functioning of the state security apparatus in the coming years of his presidency is based on the assumption that there are two types of



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AN OPPOSITION ACTIVIST STAGES A ONE-PERSON PICKET DURING AN ANTI-PUTIN PROTEST ACTION, DEMANDING FREEDOM FOR POLITICAL PRISONERS IN MOSCOW, RUSSIA - OCTOBER 27, 2012.

secret services operating in Russia. This does not mean military and civilian services. Putin is successfully creating law enforcement institutions that are primarily loyal, not to the State but to him personally. This means that we are facing the creation of an apparatus where the FSB will look after the interests of the regime, its members and the State they believe to be their property, while the safety of Putin himself and his position will be taken care of by other institutions: the National Guard and the FSO.

The most important event of the year for the security forces was the creation of the Russian National Guard, also known as Russian Guards (Russian: Rosgvardiya). As expected, Putin excluded internal troops from the structures of the Ministry of Internal Affairs and created the National Guard on their basis. Other military formations were also excluded from the Ministry of Foreign Affairs: OMON and SOBR. They too are now part of the Russian Guards, which is headed by Viktor Zolotov, who spent nearly three

years as the Commander-in-Chief of internal troops. Zolotov is a former officer of the Ninth Chief Directorate of the KGB. In the 1990s in Saint Petersburg, he was responsible for protecting Putin; after that he headed the Presidential Security Service for 13 years. In 2013, Putin sent the trusted officer to the Ministry of Internal Affairs to prepare the ground for the creation of the Russian National Guard on the basis of internal troops. The new formation has already been nicknamed 'Putin's praetorians', as they answer directly to him, while their commander is the most trusted *silovik*² of the president; some even say that he is for Putin what Nikolai Vlasik, Stalin's head of security, was for the Soviet dictator. On 4 October 2016, Putin issued a decree specifying the powers of the Russian Guards. The list contains about a hundred powers, including the right to conduct "information actions", collect

² A Russian word for politicians from the security or military services, often the officers of the former KGB, GRU, FSB, SVR, or other security services who came into power.

fingerprints, issue permits to sell guns and give concessions to private security agencies. The tasks of the formation totalling even half a million trained and armed men (with its own armored and air forces) also include securing the state borders, fighting terrorism and organized crime, ensuring public order and protecting key facilities and state infrastructure. It is difficult not to notice that the Russian Guards' competencies overlap with those of the FSB and the FSO. This is not a coincidence, as the Russian Guards are supposed to compete with the FSB and to complement the FSO.

The Federal Protection Service and its component, the Presidential Security Service, are to serve as Putin's personal security service together with the National Guard. This is why in May 2016 Putin thanked Evgeny Murov, Head of the FSO, for his several years of service. The 71-year-old security services veteran (in the KGB since 1971, and later in the FSB) was one of the longest-serving heads of security services in post-Soviet Russia (2000-2016), which clearly reflects Putin's trust in him. However, new times call for even more loyal, and younger soldiers. This is why Putin appointed his own candidates to the positions of the heads of FSO and SBP instead of those chosen by the outgoing Murov. The new Director of the FSO, Dmitri Kochnev, was previously the head of SBP, where he was replaced by Alexei Rubezhnoi, Putin's former aide-de-camp. Changes in these positions are just as important as those in the FSB, GRU or SWR. The Federal Protection Service is the most elite, and best equipped and manned security service in Russia. Moreover, it has as many as 20,000 officers. Not only does the FSO protect important facilities and state officials (in the case of the president, this is the role of the SBP), but it also serves a function similar to the NSA in the United States (electronic intelligence).

Putin has already attempted to build his private security service before. In autumn 2007, after the famous "*siloviki* war", he decided that he could no longer be sure of the loyalty of the FSB; therefore, he established the Investigative Committee of the Russian Federation (SKR). It eventually transpired that this "Russian FBI" was not sufficient for his aims, especially as it became very closely tied to the Lubyanka. It was at this point that Putin decided to base his reign on internal troops; in 2013 he entrusted Zolotov with this mission and sent him to the Ministry of Internal Affairs. However, building the might of the Russian Guards is no easy task. Preparations took nearly three years, and when the formation was ready, other *siloviki*, feeling threatened by the new service, showed Putin that he would still have to take their opinions into consideration. He suffered an embarrassing setback regarding. On 6 April 2016, Putin issued a decree assigning the newly appointed head of the National Guard to be a permanent member of the Security Council of the Russian Federation. However, the decree was corrected after only five days: it turned out that Zolotov would have actually been given the lower status of an ordinary member of the Security Council. This means, for example, that the director of the FSB would be his superior.

III.

The FSB is to be the second pillar of the security system. This is apparent first from its activity in recent months and second from personnel decisions. Staff changes at the Lubyanka strengthened the position of the Secretary of the Security Council, Nikolai Patrushev (former Director of FSB), and Zolotov. At the same time, this does not undermine the position of the current Director of the Federal Security Service, Alexander Bortnikov. There have been claims that these two figures, who in recent

The FSB is to be the second pillar of the security system. This is apparent first from its activity in recent months and second from personnel decisions.

months have clearly moved up in the FSB structures, are considered as potential successors of Bortnikov. By the end of 2016, Yevgeny Zinichev unexpectedly became FSB Deputy Director. He is a former officer of the SBP; in the past he had been a member of Putin's personal security team. In June 2015, the president assigned him to the FSB as head of the FSB's regional directorate for Kaliningrad. In July of the same year, Zinichev became acting governor of the Kaliningrad region, and was later appointed to a new, specially-created sixth deputy director position at the FSB. At the Lubyanka, he would become the eyes and ears of Zolotov and, through him, of Putin himself. He may also be groomed to be the successor of Bortnikov.

The second possible candidate for head of the FSB, apart from Zinichev, is Sergei Korolev, the new head of the Economic Security Service division at the FSB (SEB FSB). His position and role in the recent actions of the FSB indicates that the Kremlin chose him to be the "main Oprichnik". A series of FSB actions aimed at governors, members of the government and officers of other security services as part of the fight against corruption means that the Lubyanka is expanding its influence and using powers which until now had been unused. All major arrests and revisions in 2016 can be attributed to

an elite cell with less than 40 employees, the 6th Main Directorate of Internal Safety (GUSB FSB). The service, created in 2007, remains a mystery, although there have been rumors that it is under the influence of Zolotov. Until recently, the 6th Directorate, was headed by Ivan Tkaczhev, while GUSB was headed by Sergei Korolev, who had previously been connected to the Minister of Defense, Anatoliy Serdyukov.

This list of special operations of the Korolev-Tkaczhev combination is impressive. It all started in 2014 with the arrest of the head and deputy head of the General Administration of Economic Security and Combating the Corruption at the Ministry of Internal Affairs. Both were charged with graft and lost their positions. Denis Sugrobov, heading the anti-corruption structure of the Ministry of Internal Affairs, was replaced by Dmitriy Mironov from the FSO, Zolotov's man. Boris Kolesnikov fell from a balcony after the interrogation and died on the spot. In September 2015, GUSB FSB detained the Governor of Komi Republic, Vyacheslav Gaizer, for corruption. Alexander Khoroshavin, the Governor of Sakhalin, who had connections with Rosneft President Igor Sechin, was detained in March 2016. A few days later, Deputy Minister of Culture Grigoriy Pirumov was arrested and, at the end of March 2016, the same fate befell Dmitry Mikhaltchenko, the most powerful businessman in Saint Petersburg, charged with smuggling and corruption. The latter was actually a blow against Murov, as Mikhaltchenko had some connections with the FSO and the son of its director. However, it was the arrest of Nikita Belykh, Governor of Kirov Oblast, by GUSB FSB that generated the greatest media attention, whereas the attack of the FSB on the Investigative Committee of the Russian Federation (SKR) had the greatest political importance. In July

2016, GUSB detained a number of high-ranking officers, including those closely connected to the Head of SKR Alexander Bastrykin: Deputy Head of SKR in Moscow, General Denis Nikandrov, and the Head of the Main Directorate of Interdepartmental Interaction and Inherent Security of the Moscow SKR, Colonel Mikhail Maksimenko. Those arrests were connected to notorious gangster “Young Shakro”, who enjoyed the protection of the Moscow branch of the SKR in return for millions of rubles in bribes. Bastrykin was not informed about the action. This was the first time that the FSB had decided to strike against the Investigative Committee with which it had always cooperated before, which may confirm that the days of the SKR are numbered.

The Korolev-Tkaczhev alliance was also deployed in a purge within the FSB. First, the Economic Security Service division at the FSB (SEB FSB), which covers economic counter intelligence, accused the GUSB of an abuse of power in the Belykh case. In response, the GUSB started to send inspection teams to the SEB and accused their heads of connections with the apprehended businessman Mikhalechenko. In June and July 2016, the head of SEB and heads of departments subordinated to him: Department “K” (credit-financial sphere), Department “P” (industry enterprises) and Department “T” (transport enterprises) were forced to resign. Korolev has become the new head of SEB, and Tkaczhev has become the head of the crucial Department “K”. In this way the group considered to be connected to Zolotov achieved a monopoly on fighting corruption, destroying counterpart structures of the Ministry of Internal Affairs, the SKR and the FSB in the process. It is not difficult to detect the hand of Putin in these development, as he knows that the key to discipline the elites,

It is not difficult to detect the hand of Putin in these development, as he knows that the key to discipline the elites, especially during an economic crisis, is to wage an anti-corruption crusade.

especially during an economic crisis, is to wage an anti-corruption crusade. The power of this tool could be seen by the elites in mid-November, when a blow was struck against the Minister of Economic Development, Alexey Ulyukayev.

IV.

The year 2016 was one of the most turbulent in post-Soviet history of state security structures in Russia, as the greatest shifts since the beginning of Putin's reign took place. Spectacular arrests and revisions, surprising resignations and nominations, resulted not only from the plans of the Kremlin, but also from an increasing nervousness in the sector and officers' attempts to secure their positions, without consultations with their superiors. First, through his decrees Putin liquidated the Federal Migration Service (FMS) and the Federal Drug Control Service (FSKN). Their assets were taken over by the Ministry of Internal Affairs, as a form of compensation for taking away the internal troops as well as the OMON and the police Spetsnaz (SOBR) units. Calling up the National Guard closed this first stage of reforms. The campaign led by the FSB against the Ministry of Internal Affairs and the SKR has been aimed at the ultimate marginalization of the former's role in the state security sector

The dissolution of the KGB only formally broke the unity of the security apparatus.

and the probable liquidation of the latter. Interestingly, scandal avoided only the FSB and Russian Guards/FSO, which are the two pillars of the newly constructed security system. Standing aside, there are two other important stand-alone secret services: the civil intelligence (SWR) and the military intelligence (GRU). The latter was severely weakened by the Kremlin during Serdyukov's reforms and now has no independent political role (i.e. is no longer a potential threat to Putin), as it concentrates the majority of its activities on military conflicts in which Russia participates (Ukraine, Syria). However, in early 2016 the military intelligence was strong enough to oppose Putin: instead of the former bodyguard of the president, Alexei Dumin, it was Igor Korobov, a man from within the "Aquarium"³ who became the new head of the GRU. It was a tough battle, as confirmed by the fact that the new head of the GRU was announced a month after the death of his predecessor. As far as the SWR is concerned, it cannot be perceived by Putin as a potential collaborator in the conspiracy against him, because of its specificity (intelligence operations outside the country, mostly analytical functions).

The dissolution of the KGB only formally broke the unity of the security apparatus. The area of internal safety, external safety, and foreign intelligence have been tied together and been the subject of cooperation for a long time, and

³ The nickname given to the GRU headquarters in Moscow.



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separating them was merely a façade. To a large extent, this was caused by personal reasons: the common KGB origins of medium and high-level personnel in each service. It took a generation for things to start changing. Resignations of subsequent old-time heads of services and their replacement with officers whose careers practically started in Putin's Russia strengthened the breakdown of the Russian intelligence community more than structural divisions and changes of names. Importantly, the shifts in executive positions were accompanied by the lowering of the political importance of new heads of services and departments. Viktor Ivanov, Konstantin Romodanovski, Pawel Fradkov or Evgeny Murov were all much stronger and independent players. Their successors are not only younger, but also devoid of political ambitions, and ready to follow Putin's orders to a greater extent than the old comrades.



PEOPLE PASS BY FEDERAL SECURITY SERVICE (FSB) BUILDING ENTRANCE HIDDEN BEHIND METAL PANELS IN LUBYANKA SQUARE IN MOSCOW, RUSSIA - NOVEMBER 9, 2015.

The third presidential term of Putin has stimulated an increase in the ambitions of people in the security services. First, it has been encouraged by the general global trends of anti-US rhetoric, growing isolationism in Russia and the crisis of the liberal project. Second, the role of the secret services has expanded as a result of conflicts in Ukraine and Syria. Militarization of state policy has made the Security Council, where *siloviki* are strongly represented (with the former head of FSB, Patrushev, as its Secretary), the real center of authority instead of the government. Faced with these new conditions, Putin has to reconstruct the entire security system of the regime. Objective factors, including the aging of the old guard, help him in this respect. After a few years of his reign, Putin was less dependent on his former friends from the Lubyanka, who took positions in nearly all areas of public life: business, policy, law enforcement institutions, central administrations and regions. On the brink

Contrary to the veterans of the Soviet KGB, practically their entire careers are connected to Putinocracy, and it is Putin himself they owe the most to.

of another presidential term, a new type of chekist is emerging. Contrary to the veterans of the Soviet KGB, practically their entire careers are connected to Putinocracy, and it is Putin himself they owe the most to. It is they who are eager to secure the continuous reign of the current incumbent of the Kremlin.

Jan Gajewski ■

November 20, 2016

MODERNIZING POLAND'S ARMED FORCES

MACIEJ KUCHARCZYK

Poland is in the midst of a wide-ranging process of modernizing its armed forces, on which it will spend around \$15 billion by 2022. In particular, much of these funds will be allocated to the purchase of equipment and technology from abroad.

Above all, this process was caused by two decades of neglect. After the fall of communism and the end of the Cold War, defense spending was significantly curtailed. In effect, the process of systematically replacing aging equipment was interrupted, which led to the collapse of the contract-starved, domestic defense industry. This modernization is also being forced by the worsening security situation in Europe, especially after the Russian aggression in Ukraine in 2014 and the increase in Russian defense spending.

FINANCIAL CHALLENGE

For many years, weaponry for the Polish Armed Forces was purchased according to itemized lists, detached from any coherent, multi-year strategy. This is how

the first major arms contract since the fall of communism was signed in 2003 for an order of Rosomak armored transports, licensed from Finland, but produced and developed in Poland. Similarly, in 2004, an agreement was made for the delivery of 48 multi-role F-16 fighters, which was the largest arms deal in modern Polish history.

It was not until after 2010 that a comprehensive strategy began to be formulated, which was meant to encompass the entire process of equipment modernization of the Polish Armed Forces over the course of a decade. The “Technical Modernization Plan” (Plan Modernizacji Technicznej, or PMT) was first presented in 2012 and covered the period 2013-2022. It formally remains in effect to the present day, but with a change in the ruling party in 2015, it was audited and modified.



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ŻAGAŃ, POLAND - JANUARY 30, 2017. ANDRZEJ DUDA, PRESIDENT OF POLAND (SECOND FROM RIGHT); ANTONI MACIEREWICZ, MINISTER OF DEFENSE (RIGHT); PAUL W. JONES, UNITED STATES AMBASSADOR TO POLAND (THIRD FROM RIGHT); LIEUTENANT GENERAL TIMOTHY RAY, DEPUTY COMMANDER, UNITED STATES EUROPEAN COMMAND (THIRD FROM LEFT); LIEUTENANT GENERAL BEN HODGES, COMMANDER UNITED STATES ARMY EUROPE (SECOND FROM LEFT). TAKEN DURING THE INAUGURATION OF POLISH-AMERICAN MILITARY TRAINING EXERCISES WITH THE 3RD BRIGADE ARMORED COMBAT TEAM AT THE FIRING RANGE IN ŻAGAŃ. SOLDIERS FROM POLAND AND THE UNITED STATES WILL BE TRAINING TOGETHER DAILY AND PARTICIPATING IN MILITARY EXERCISES.

The initial plan was determined to have underestimated procurement costs by half, which has led to the reduction of new purchases and their partial delay to a future date. Many experts were already calling for such a solution in 2013, since the PMT in its original form was unrealistic.

Based on current assumptions, \$15 billion will be spent by 2022 on weaponry alone, wherein contracts for around \$4 billion have already been signed since 2013. A number of armaments programs are set to start in 2022, but part of their financing falls into later years, so their costs are not counted in the aforementioned \$15 billion. On the whole, this is the largest defense spending plan among the new NATO members, and exceeds the planned arms purchases of many countries in Western Europe.

The PMT may yet to be subject to further changes. The modernization plans are very ambitious and will constitute a heavy burden on the national budget. Defense spending in Poland accounts for 2% of GDP, a rarity among NATO members, the vast majority of which do

not maintain this level as recommended by the alliance. The Ministry of Defense of Poland (Ministerstwo Obrony Narodowej, MON) is optimistic and assures that there is no threat to the realization of the modified PMT. Yet, it is highly likely that a number of lower-priority arms programs will be delayed into the future. On the whole, however, there is little risk of an overall freeze to the modernization plan.

HIGH PRIORITY, BUT NOT THE HIGHEST

All of the major parties on the Polish political scene are convinced of the necessity to maintain a high level of defense spending. Poland finds itself in an adverse geopolitical position, as a frontline NATO country positioned on the edge between the alliance's area of influence

The preferred situation is the production of armaments inside the country, in cooperation with foreign partners who supply the technology and key components, whose production in Poland would otherwise be cost inefficient.

and Russia's imperial ambitions. Therefore, in the event of escalating tensions and a possible armed conflict, battles will be fought on her territory in the first place.

The feeling of danger is amplified in Polish society by the deeply rooted skepticism towards the willingness of Western allies to come to their aid in the event of a crisis. This view originated from the experience of World War II when France and Great Britain did not provide any support to Poland during the first month of the conflict, the so-called "September Campaign", which ended in the ignominious defeat of the Polish army. This skepticism is strengthened by the low outlays on defense by nearly all of the Western NATO member states and statements made by their politicians, some of whom have pro-Russian views (especially François Fillon and Marine Le Pen, both serious candidates for the President of France).

Moreover, the current state of equipment of the Polish Armed Forces does not allow for modernization to be delayed any further. Despite a number of completed and ongoing arms programs, over half of

the equipment still comes from the Cold War era. Equipment purchased in the 1970s and 1980s, when large purchases were made during times of tension with the West, has reached the end of its lifespan, while refurbishment and maintenance to keep it serviceable is no longer cost-effective.

Lessening the possibility of meaningful cuts is underlined with the fact that the government has officially declared the PMT as an opportunity to inject serious funds into the Polish defense industry. Most of the expenditures on new equipment will stay in Poland and help in the development of the economy. The preferred situation is the production of armaments inside the country, in cooperation with foreign partners who supply the technology and key components, whose production in Poland would otherwise be cost inefficient.

Based on the preceding, cuts in Polish defense spending should not be expected in the foreseeable future; however, the aforementioned delay of certain programs may come to pass, especially if the economic situation deteriorates. The substantial increase in social welfare spending by the ruling Law and Justice (PiS) party has led to a record budget deficit. If the country's financial situation worsens, it will put pressure on defense expenditures. In Poland defense is not as critical as in Russia, for example, and will be curtailed if there is a risk to funds for social service spending.

PROCUREMENT PLANS FOR LAND FORCES

The largest and most important component of the Polish military is its Land Forces, which are considered indispensable in a country bereft of large natural barriers on the plain between Western Europe and Russia. Currently, they include 13 armored, mechanized and

airmobile brigades, along with numerous smaller support units, while around 49,000 soldiers serve in them. According to the newest version of the PMT, the modernization of the armored and mechanized brigades, forming most of the Land Forces, is one of five priorities.

Several large arms programs are currently in effect. First of all, 142 Leopard 2A4 tanks, which were purchased from Germany, are being modernized into the 2PL variant. Also, 105 newer Leopard 2A5 tanks will serve until the 2030s as the foundation of Poland's armored forces after bringing them to a decent level that will allow for an equal playing field in battle with most Russian tanks. However, problems remain with the 232 PT-91 Twardy (Resilient) tanks and the 150 or so T-72M tanks (with several hundred more sitting in warehouses).

The first are T-72s modernized in the 1990s. They represent technology that is now 25-year-old and are increasingly irrelevant to the modern battlefield. Officially however, there is no plan to modernize or replace them. Unofficially, the possibility of buying used Leopard 2s or M1 Abrams tanks is being considered, but the problem here is the potential cost or the availability of tanks in an appropriate condition.

Meanwhile, the T-72Ms are completely outdated and have very limited utility on the battlefield. According to the Ministry of Defense, they are to be replaced by the PL-01 armored fighting vehicle, which can be considered a light tank. They are significantly under-armored compared to traditional tanks, but equipped with the same armament, in the form of a 120mm cannon. Similar vehicles, based on a tank tread chassis, are rare elsewhere in the world. The CV90120-T light tank is one example, but it never left the prototype stage. Polish defense manufacturers, in

The largest and most important component of the Polish military is its Land Forces, which are considered indispensable in a country bereft of large natural barriers on the plain between Western Europe and Russia.

cooperation with foreign partners, have already submitted proposals of such a light tank named Anders; however, the program is still in its infancy and the first deliveries are not expected to be until after 2022.

The Borsuk armored transporter will be based on the same chassis as the PL-01, which is meant to replace over 1000 archaic BWP-1s from the 1970s that are still being used by the Polish military, but were never modernized. So the Borsuk is a higher priority than the PL-01 and is extremely important for the armed forces. Based on current plans, the beginning of mass production is set to start in 2019 and the first prototype is to be finished this year. Meanwhile, the main contractor is Huta Stalowa Wola in Poland.

Work to improve the modern, wheeled Rosomak armored transporter is ongoing, some of which will include Israeli, anti-armor, Spike rocket launcher integration. Preparations for the production of an unmanned, ZSSW-30 tower are also ongoing, which will substantially raise the combat capabilities of the Rosomak. The production of much-needed reconnaissance and technical assistance vehicles has already begun.

Within the Land Forces, a wide-ranging modernization of its artillery continues. At the end of 2016, the largest arms contract in years (over \$1 billion) was signed for the production of almost one hundred 155mm Krab gun-howitzers. This modern armament, a combination of British, Korean, French and Polish technology, is produced by Huta Stalowa Wola. The self-propelled, 120mm caliber mortar, Rak, based on the Rosomak transporter chassis, is also produced there. For about \$250 million, 64 of them will be produced.

Currently, within the bounds of artillery modernization, one big purchase is left to be realized — long-range rocket launchers. The Homar program is meant to provide Poland with equipment capable of precise attacks on targets 300km away. Polish industry does not have the appropriate technology so it will only supply the chassis; the rest has to be purchased abroad. The biggest possibilities lie with companies in the US (HIMARS system) or Israel (LYNX system).

ANTI-AIRCRAFT AND MISSILE DEFENSE PROGRAMS

Though the Land Forces are the most numerous, their modernization will consume less money than the replacement of practically all of the anti-aircraft systems of the Polish military. The current systems are old, some of which have their roots in the 1960s while most are decidedly insufficient to the demands of modern warfare. Taking into consideration that Russia wields a relatively strong air force, while Poland, next to the Baltics, finds itself in close proximity to Russian air bases, possessing suitably strong anti-aircraft defenses has become a priority matter. Additionally, in the Kaliningrad Oblast on the Polish border, the Russians possess a rocket brigade, which over the course of several years will surely

Taking into consideration that Russia wields a relatively strong air force, while Poland, next to the Baltics, finds itself in close proximity to Russian air bases, possessing suitably strong anti-aircraft defenses has become a priority matter.

be rearmed with short-range, Iskander ballistic missiles. Though it is not official, these can almost certainly be armed with nuclear warheads. These weapons are a serious threat, especially as Poland's military has no anti-missile defenses.

Considering these challenges, Poland plans to purchase mid-range Wisła anti-aircraft and anti-missile systems, and short-range Narew systems, through two programs. Both weapons programs are thought to total around \$15 billion (\$10 billion for the first and \$5 billion for the second), while their financing stretches beyond 2022, so it is not entirely covered in the current PMT. The company with the biggest chance at landing the first contract, which will also be the biggest in the history of the Polish Armed Forces, is the US consortium Raytheon, which offers the Patriot system. The competition is the US-German-Italian system MEADS, as well as the French-Italian SAMP/T. Discussions are well-advanced, but they were delayed by nearly three years. The government has declared that an agreement will be signed this year and that deliveries will start in 2019, although



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OSTRÓDA, POLAND - JUNE 2, 2016. ANTONI MACIEREWICZ, MINISTER OF DEFENSE OF POLAND, HANDLES A SIX-BARREL M134 MINIGUN MACHINEGUN AT A TRADE EXHIBITION. THE FIRST "PRO DEFENSE 2016" DEFENSE INDUSTRY TRADE FAIR WAS HELD AT THE EXHIBITION AND CONFERENCE CENTER OF WARMIA AND MASURIA IN OSTRÓDA, DEDICATED ABOVE ALL TO THE TERRITORIAL DEFENSE FORCE CREATED BY THE MINISTRY OF DEFENSE (MON).

the same was promised last year. The negotiations regarding the purchase of the Narew system are far less advanced. For now, the offers of numerous companies are undergoing an initial review. Based on the latest plans, the first deliveries will be in 2021. Both programs assume a high degree of Polonization, in other words a transfer of technology and production to Poland. Officially this is to amount to 50%.

Beyond the Wisła and Narew programs, the Polish military is purchasing numerous short-range, anti-air systems. For about \$1 billion, several types of anti-air cannons and hand-held, anti-air rockets have been ordered from Polish companies, the deliveries of which are in progress. Since this is less advanced equipment than short- and medium-range systems, the needs are met almost entirely by the Polish defense industry.

MODERNIZING THE AIR FORCE

In the past year, emotions in Poland were stirred by the purchase of new helicopters. Most of those in the

possession of the Polish military are outdated and will require replacing in the next few years. Purchases were to be conducted through two large procurement auctions, one for multi-purpose helicopters and the other for assault helicopters. The first was formally settled in 2015 and won by Airbus Helicopters for the H225M, yet after the change in government, talks were called off, motivated by insufficiently attractive offset agreements. The episode was steeped in scandal.

A new procedure is underway. Everything indicates that for now, a smaller number of helicopters will be purchased and not just one type, but rather several (the previous plan was to use one type for multiple jobs — anti-submarine warfare, marine rescue and combat and transport). The company with the biggest chance of winning the contract is the Italian firm Leonardo, which owns the Polish PZL Świdnik works and Lockheed Martin, which controls the Polish PZL Mieliec works. The production and service of the new helicopters is supposed to be, at least



ZIELONKA, NEAR WARSAW, POLAND - DECEMBER 7, 2016. A UNIT OF COMMANDOS FROM LUBLINIEC TAKING PART IN A DEMONSTRATION DURING A MEETING OF THE MINISTER OF DEFENSE, DEFENSE MINISTRY AND ARMED FORCES MANAGERIAL STAFF, AS WELL AS EXPERTS AND MEDIA, REGARDING THE CREATION OF THE TERRITORIAL DEFENSE FORCE.

in part, based in Poland. In parallel, there are plans for the serious modernization of part of the post-Soviet helicopters from the Mi-8/17 family, in cooperation with the Ukrainian Motor-Sicz company, which has produced their engines since the Soviet era. Perhaps, in the coming several years, attempts will be made to purchase new helicopters. The cost of the entire undertaking is hard to estimate; however, the initial auction was to cost around \$3 billion.

At the same time, the Kruk program is ongoing, with the aim of purchasing assault helicopters which will replace the worn-out, post-Soviet Mi-24 whose fighting potential is very limited because many have been used up as a result of age and their intensive use in Afghanistan and Iraq. Most importantly, their basic

armament - the Szturm anti-tank rockets - have also been withdrawn from service due to their age. In their place, the defense ministry plans to buy 32 new assault helicopters, 16 of which before 2022, whose main mission is to destroy enemy armored vehicles. Potential candidates include the American Boeing AH-64E Guardian and Bell AH-1Z, French Airbus Helicopters Tiger and the Italian Leonardo A129 Mangusta or its Turkish variant, the T129 ATAK. The price of the purchase is unknown; the defense ministry has presented divergent figures, but it can be estimated to be at around \$2 billion.

Besides helicopters, the Polish military must replace part of its aircraft fleet. The Polish Air Force has 48 relatively modern, F-16 Block 52 fighters, bought in the first decade of the 21st century. Yet the rest of

the Air Force includes 32 post-Soviet MiG-29 fighters and 18 Su-22 bombers. Half of these fighters were modernized and can serve for about another decade. Yet the rest of the MiG-29s and all of the Su-22s are of little value on the battlefield and, realistically, should be withdrawn from service by 2025. The problem is that the PMT does not account for the purchase of new planes before 2022 and there are no funds for it. For now, the defense ministry is conducting analyses about what should be purchased. The most likely solution is the purchase of used and modernized or new F-16s. Buying more planes of this type would mean the limitation of expenditures tied to logistics and training. In the long-term perspective, closer to 2030, is the purchase of fifth-generation F-35 Lightning II fighters.

Smaller purchases of precision armaments for the F-16s already in service are ongoing, while the biggest contracts are for long-range, JASSM and JASSM-ER rockets. The first have already been delivered to Poland and an agreement for the second was signed at the end of 2016.

SERIOUS FLEET PROBLEMS

Poland was never a seafaring country and did not have a strong navy until the 20th century. This change was largely due to the country's geopolitical position which forces Poland to concentrate on defending its eastern and western land borders. The Polish Navy continues to be treated as a kind of inferior category of the armed forces. Since the end of communism, no major investments have been made in this area while no significant modernization program has taken effect. As a result, the navy is in a state of decay: its most valuable forces are three small Orkan rocket ships (armed with RBS15 Mk-3 anti-ship rockets) and the Coastal Rocket Division (Nabrzeżny Dywizjon Rakietowy, NDR), with a second division currently being equipped with NSM rockets.

The modernization of the navy is one of the priorities of the PMT, which includes an adequate number of marine defense programs. The key is the purchase of new ships.

Formally, the modernization of the navy is one of the priorities of the PMT, which includes an adequate number of marine defense programs. The key is the purchase of new ships. First, under the Orka program, the military wants to obtain three new submarines (relatively small, conventionally powered subs, adapted to Baltic Sea conditions), additionally armed with maneuverable, long-range rockets, like the Tomahawk or MdCN. Over a period of two years, however, work has not moved forward substantially and a procurement process has not yet officially started. Once this happens, there will be three bidders: France's DCNS (Scorpene ships), Germany's ThyssenKrupp (U-214) and Sweden's Saab (A26). Deliveries are planned after 2024 and if it comes to pass, it will be the most expensive marine program, estimated at \$2.5–3 billion.

The next big programs are Miecznik and Czapla. With regard to the first, there are to be three relatively strong armed corvettes and under the second, three patrol ships capable of clearing mines. They will all be based on the same hull design. Construction is to take place in Polish shipyards but in cooperation with foreign industry. For now, both programs are in their infancy. In 2016, an ongoing procurement process was terminated and prepared anew. The delivery of ships is set for after 2021, while the estimated costs have not yet been released.



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ŻAGAŃ, POLAND - JANUARY 30, 2017. DEFENSE MINISTER ANTONI MACIEREWICZ (LEFT) AND UNITED STATES ARMY EUROPE COMMANDER GENERAL FREDERICK HODGES (RIGHT), AT A PRESS CONFERENCE AFTER A MEETING AT THE 11TH LUBUSKIE CAVALRY DIVISION IN ŻAGAŃ. THE TALKS CONCERNED THE DEPLOYMENT OF AMERICAN TROOPS IN POLAND.

Against the backdrop of these weakly advanced programs, work on the new Kormoran II mine destroyers stands out, with nearly \$200 million already having been spent on them. The first of three ships is to be turned over to the navy in the first quarter of 2017. Its construction in the Gdynia shipyard, Remontowa Shipbuilding, is one of the few Polish arms programs that have not run into any major problems or delays. Additionally, the majority of the equipment for this program has also been supplied exclusively supplied by Polish industry. Equipment for combatting sea mines has been its specialty and strength since the times of the communist Polish People's Republic.

The PMT also contains a slew of smaller programs meant to give the navy various auxiliary ships (including tankers, tugs, rescue ships) as well as different systems, such as port defenses against sabotage. Most programs, however, are not far advanced and have distant realization dates.

NOT ONLY REGULAR FORCES

Besides the aforementioned main arms programs, lots of smaller ones are also planned. The list is long but it is worth mentioning for example the work done

in the Łucznik Weapons Factory on the MSBS, which entails an entire modern family of rifles. In the future, it will be the basic weapon of the Polish military, which will supplant the Kalashnikov-based AK system and its deeply modified variant, the Beryl. Currently, the basic rifle is undergoing testing in select divisions; however, when they will be accepted into service and begin to be purchased is not yet clear. On a positive note, regular deliveries of Jelcz trucks are in progress. By the end of 2018, an order for nearly 1000 vehicles will be filled, worth \$150 million. Analyses, in advance of procurement auctions for digital communications systems, are ongoing, which will bring command and control over the Polish military into the 21st century.

Next to these standard modernization processes, dependent on buying new equipment, the leadership of the defense ministry is pushing a new solution which will significantly change the situation of the Polish military. A Territorial Defense (Obrona Terytorialna) is being built, which in brief is meant to act similarly to the National Guard, but with much less ambitious tasks, lighter armaments and subordinated to the defense ministry,

and not to regional leaders. The soldiers of the Territorial Defense will be mainly tasked with assisting the military and playing a supporting role in the rear. Eventually, the formation will include 50,000 volunteers. For now, structures are being built in Eastern European eastern countries bordering with Belarus and Russia. The Territorial Defense has many opponents who argue that poorly equipped and trained "weekend warriors" will siphon urgently needed money away from the modernization of the professional, frontline army.

The defense ministry has declared a desire to invest significantly in cyber-defense. Under the PMT, \$250 million has been allocated for this purpose, which is significant, given the years of neglect of cyberspace by the military. But what exactly is meant to be done with this money is not yet clear due largely to a dearth of specific information and deadlines.

PLANS ARE ONE THING, BUT REALITY IS ANOTHER...

Based on the juxtaposition above, it is clear that Poland has a very ambitious modernization plan for its armed forces. If it were actually realized in the established timeframe, the Polish military would unquestionably become one of the key players in Europe. The problem can be seen with the current experience in realizing the PMT, in that politicians treat it elastically. Established deadlines, in most cases, have turned out to be extremely optimistic and nearly all of the programs have already been delayed by several years. Due to overambitious goals, and given the available funds, certain programs have to be substantially curtailed, for example the purchase of multi-role helicopters.

A serious problem is the weakness of Poland's defense industry. Already in

A Territorial Defense (Obrona Terytorialna) is being built, which in brief is meant to act similarly to the National Guard, but with much less ambitious tasks, lighter armaments and subordinated to the defense ministry, and not to regional leaders.

the communist era, it lacked modern technology and the black hole of the 1990s only worsened the situation. For nearly a decade now, one can see the clear rebuilding of production potential, yet it is still insufficient for the timely deliveries of large amounts of modern equipment to be the standard. Apart from delays, there is a problem with production quality and an inability to master the newest technologies. The solution is primarily to buy foreign licenses and cooperate with international defense contractors. Nevertheless, the current government is seeking the maximum Polonization of purchased equipment, which aims to strengthen Polish industry and return the largest possible amount of defense expenditures back into the economy.

There is little doubt however that Poland will long be one of the most attractive markets in Europe for Western defense contractors. Especially since competition from Russia's strong defense industry, for political reasons, is not a factor.

Maciej Kucharczyk ■
March 1, 2017

ECONOMY

POZNAŃ, POLAND - OCTOBER 11, 2014. JAROSŁAW KACZYŃSKI, LAW AND JUSTICE PARTY (PIS) PRESIDENT, DURING THE PIS WIELKOPOLSKA PROVINCE ELECTORAL CONVENTION IN POZNAŃ: "POLAND NEEDS ECONOMIC PATRIOTISM".



MODERN PATRIOTISM

RAFAŁ ZGORZELSKI, PhD

What characterizes the most dynamic and often the richest economies in the world? What is the common denominator that links diverse countries such as the U.S., Japan, South Korea and Germany - countries with their own traditions, history, culture and differing social and political systems and geography, playing the role of the economic hegemons of the modern world?

Regardless of their differences, the wealthiest and simultaneously most economically powerful countries share one common trait - economic patriotism, which consists of two elements: trade patriotism and consumer patriotism.

I.

The notion of trade patriotism means actions whose main objective is to support the economy of the country through the public and private sectors. Good public administration has a positive impact on the development of native entrepreneurship in domestic and international markets. Creating conditions

for the development of domestic enterprises and their promotion abroad should be the primary aim of the trade strategy of the state. This does not mean a lack of openness to foreign cooperation and capital investment, which can and should positively affect the development of the economy of the country. Besides, in the entire process of creating national wealth, good international agreements and conventions play a positive role, and build business relationships through which each party can and should achieve numerous benefits.

The essence of economic patriotism is not to thoughtlessly create barriers to the

The notion of trade patriotism means actions whose main objective is to support the economy of the country through the public and private sectors.

development of honest competition or to support the unequal treatment of suppliers, contractors or entrepreneurs in general through subjective criteria. For instance, in countries such as Germany, France, Japan and the U.S., state support is obvious, as is the establishment of cooperation between native entities wherever rational.

Even entrepreneurs paying taxes in their own country is an expression of economic nationalism, which may also lead to the development of a certain image in the market. Of course, entrepreneurs must have confidence that their decisions will be supported by the institutions of the state, which in turn will loyally support their interests. The existence of international competition and capital investments are therefore a good thing, but even the states cited above understand perfectly that their duty and the fundamental objective of their economic policies is to develop a strong class of entrepreneurs and build the wealth of their own societies. These interests will also be served by creating lasting relationships, ties and common interests, including economic ones, for the benefit of all participants of the market, while keeping in mind the primacy of the

national interest, which is essential to the civilizational development of societies and states.

II.

No less important for the development of national economies remains the element of consumer patriotism, present in consumer buying habits. Acquiring domestic products, such as fruits, vegetables, domestic beer and cheese, translates into an increase in tax revenues to the state budget and the development of domestic companies, thus raising funds for investment and job creation. This is how consumers perceive the reality in the United States or Germany, where through conscious choices of products and services that support their own economies, they contribute through individual buying decisions to increase the wealth of their own societies.

Economic patriotism, a term which is by no means to be confused with protectionism or interventionism, is now a trend that is clearly making a mark on the world. This is especially so in Western societies, where consumers, conscious of their purchasing decisions, are guided by both economic conditions as well as the values underpinning the acquired service or product, while the administration of the state strives to create favorable conditions for the development of domestic business, which in turn loyally supports the state. It is a far more developed phenomenon in Western countries and actively promoted by politicians, especially noticeable in the U.S., primarily from the time of the 2008 crisis, which was caused by the collapse of the credit market.

The turmoil caused in the markets and global stock exchanges had a sobering impact on the approach of both the United States as well as other societies in the world to economic problems. These events led U.S. companies to start reducing



WARSAW, POLAND - MAY 11, 2016. PRIME MINISTER BEATA SZYDŁO (RIGHT) DURING THE OPENING OF THE "TIME FOR ECONOMIC PATRIOTISM" DEBATE, STAGED AT THE PGE NATIONAL STADIUM IN WARSAW.

© MARCIN OBARA (PAP)

production and employment, to withdraw from foreign investments and, with the support of the state, to return production, services and capital to the nation.

Economic patriotism flew on Barack Obama's election banners when seeking re-election to the presidency in 2012. As leader of the Democratic Party, his platform ("A New Economic Patriotism: A Plan for Jobs and Middle-Class Security") encouraged the support of small and mid-sized domestic enterprises, the use of indigenous sources of energy and the improvement of tax collection in order to reduce the budget deficit.

Trade and consumer patriotism is even more strongly emphasized by Republicans in the U.S. For instance, the issue was clearly raised by Republican presidential candidate Donald Trump, during the 2016 election campaign. Indeed, Trump even demanded patriotism from companies, promising less regulation in return and the facilitation of business, including through tax cuts. However, he bluntly and openly announced that he will not hesitate to impose high tariffs on American

No less important for the development of national economies remains the element of consumer patriotism, present in consumer buying habits.

companies, which seek to lower operating costs, including labor costs, by moving their operations or significant elements thereof (as was the case with Ford, who withdrew from plans to build a new \$700 million plant in Mexico, instead opting for investment in Flat Rock, Michigan) outside the U.S., and then wanting to sell their goods in the country. U.S. President Trump was direct and stated that his administration will be guided by two simple rules: buy American and employ Americans. Trump thus wants American

patriotism to have a very practical dimension, which is what modern economic patriotism is based on. It is not a matter of declarations, but taking action. It is worth noting that in the U.S., UK, Japan and South Korea, betting on economic patriotism is obvious, while one's own worldview and political persuasion make little difference.

III.

Today, economic patriotism is one of the most important development trends in mature economies and societies. Patriotism is understood as the cooperation of many entities and institutions that have their own, often divergent interests, yet through cooperation achieve great benefits that reach the rest of the country at the same time. The role of protecting and strengthening the interests of the state grows by shaping trade and consumer policy conducive to cooperation and expansion, creating good law, and supporting local companies. It is precisely economic patriotism that is one of the key elements in the success of the largest economies in the world.

Caring for Poland means taking care of Polish interests and having high standards, as supporting your own producers cannot mean promoting mediocrity, nor closing off cooperation with other economies of the world. Rather, it takes indispensable

action to promote a properly defined idea of economic patriotism by identifying what function individual consumers, state authorities and entrepreneurs play in the economic circulatory system and showing why such an approach is meaningful.

Economic patriotism consists of the individual choices of entrepreneurs, consumers, and policy makers, including the shape of legislation which should support the development of the economy, as well as government spending. Economic patriotism also means supporting the investment of foreign capital in such a way that does not harm the interests and security of the functioning of the state, for example in the energy, railway and telecommunications markets.

In Poland awareness is increasing of the need to support the development of an independent economy based on partnership with the countries of the European Union and other economies around the world. At the core of the institutional transformation that initiated the political changes of 1989 was the conviction that the solutions offered by multinational corporations were definitely better - and synonymous with luxury -, which for Poles, weighed down by decades of communism, meant a can of Coca-Cola or jeans. An inferiority complex, alien to Western societies, was formed in relation to most things foreign.

Today, economic patriotism is one of the most important development trends in mature economies and societies.

In the meantime, Polish brands, including DRUTEX (the largest producer of PVC joints in Europe), FAKRO (a global market leader in roof windows), CCC (leader of the Polish retail footwear market and its largest producer), CD Projekt (producer of popular video games, including those based on the series of novels by Andrzej Sapkowski, *The Witcher*), GINO ROSSI (one of the most respected Polish brands in the market of production and sale of footwear and footwear accessories),

INGLOT (one of the world's largest manufacturers of cosmetics), PESA (manufacturer of both conventional and electric trains and trams) and SOLARIS (one of the leading manufacturers of local and intercity buses, trams and trolleybuses in Europe) did not just cross Polish borders, but are taking the world by storm.

IV.

In recent years, throughout East-Central Europe, the importance of regional and local businesses, domestic entrepreneurs, as well as the steadily falling percentage of companies controlled by foreign investors, has gradually been increasing. Companies controlled by the state continue to play a big role, among which the dominant position is held by Polish companies such as PKN Orlen, PGNiG, KGHM, Lotos and PGE; enterprises strategically important to the functioning of the country. It is no accident that these companies draw the most attention; more than 65% of state-owned companies are situated in the energy sector. These companies play an important role in the efforts to build a strong and independent position for the Polish energy sector, as well as strengthening the position of East-Central Europe on the global energy map. Besides, it is the largest enterprises, in addition to the public administration, which are the flagships of the domestic economy.

In the opinion of this author, they should be the ones to create specific standards and best practices in business, and well as in the life of the entire state. This creates patterns and provides incentives and prospects for the development of small businesses, which through cooperation with major national players strengthens their market position, economic stability and potential growth. One can assume that in the long term, the creation of conditions for fair competition will

Today, Poland is a stable and reliable partner.

positively affect the relationship between domestic and foreign enterprises.

An example of the powerful position of foreign capital in Poland is the trade dominated by grocery store chains such as the Portuguese Biedronka, German Kaufland, Lidl and Real, the Danish Netto, British Tesco and the French Carrefour, Auchan, E.Leclerc and Intermarche. The food industry however stands out positively, in that Poles are increasingly willing to opt for native products, while the country's dynamic domestic market is developing in organic foods, whose estimated value exceeds 700 million PLN (\$175 million).

Today, Poland is a stable and reliable partner. In economic policy, a positive trend can be seen that strengthens the autonomy of the state and builds a strong and independent economic position in the world. The Polish government is turning away from the path chosen after 1989, which rested on a thoughtless approach that assumed that international capital had no nationality, and instead is emphasizing the need to nurture and support native entrepreneurship. The country is interested in foreign investments and good international cooperation, but it is also beginning to understand, based on the models of Western countries, the need to protect national economic interests. Poles, however, still have to develop a form of habitual economic patriotism economic.

Rafał Zgorzelski ■

March 8, 2017

POLISH EAGLES IN CANADA: OPPORTUNITIES IN DOING BUSINESS WITH POLAND

TOMASZ KIJEWSKI

Did you know that almost every passenger aircraft in the world is equipped with at least one part manufactured in Poland? Did you know that this 1000-year-old country on the Vistula River is a full member of NATO, the European Union and has been strengthening its economic position position, even during the global financial crisis?

Poland is one of the most dynamic economies in Central and Eastern Europe with almost 4% annual GDP growth and is the top trade partner with Canada in the region. It supplies high-tech, innovative, and high quality products to Canada and other demanding markets – to Germany, Great Britain, France and the United States. The success of Poland in this regard is becoming acknowledged more and more, but a lot needs to be done in this respect. Meanwhile, it seems that it can be profitable to do business with Poland – especially in the context of the planned Comprehensive Economic and Trade Agreement (CETA) free trade agreement.

POLISH INVESTMENTS CONTRIBUTE TO REGIONAL DEVELOPMENT IN CANADA

Poland not only trades with, but invests in job creation in Canada. Just in the past five years, Polish companies (oil giant Orlen and the main producer of copper and silver KGHM, among others) have invested over \$3.6 billion in Canada. Canadian companies operating in Poland include giants such as Pratt & Whitney Canada (United Technologies), Bombardier Transportation, and the construction potentate SNC-Lavalin. Other companies – often small and mid-sized founded by entrepreneurs with Polish roots (like the leader in the



CANADIAN PRIME MINISTER JUSTIN TRUDEAU AND HIS SON XAVIER DISEMBARK A GOVERNMENT PLANE AS THEY ARRIVE IN WARSAW, POLAND - JULY 8, 2016.

© ADRIAN WYLD/ABACA (PAP)

gas nitriding and gas nitrocarburizing solutions NITREX METAL) – join the majors. The planned implementation of the EU-Canada CETA may additionally boost bilateral investments and trade.

WHY DO BUSINESS WITH POLAND?

Canada and Poland are tied by NATO and Canada's economic involvement with the European Union which opens up many fresh economic opportunities (i.e. free trade agreement CETA). Companies from both countries are active supporters of international space exploration efforts (Canada is a partner country in the European Space Agency). Poland's Space Research Centre, for instance, participated in the construction of astrophysical instruments for the HERSCHEL mission – the largest infrared telescope ever launched with the support of NASA.

Poland is currently one of the most stable nations and fastest-growing economies in the European Union. It is a leading producer of silver in the world and

Poland is currently one of the most stable nations and fastest-growing economies in the European Union.

a top-10 producer of copper globally. It also possesses a recently built, high-tech liquefied natural gas (LNG) terminal. Over 2000 Polish companies sell to Canada and not just traditional export products such as natural food, chocolate, cosmetics, alcohol, appliances, windows, doors and furniture, but also advanced components for leading global aircraft manufacturers, gas turbines, luxury boats, yachts and ferries propelled by low-carbon natural gas (LNG).

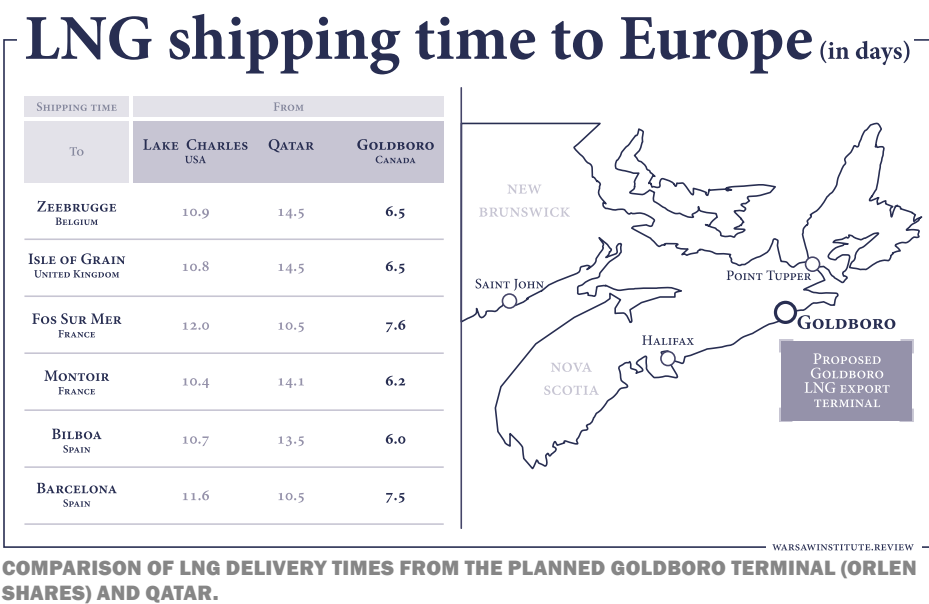
DIGITAL-AGE CHAMPIONS

The success of Poland's IT and e-entertainment industry proves the innovative potential of the country. Comarch, a Polish global powerhouse

specializing in ERP (enterprise resource planning) business management systems and information security, has supplied advanced IT services and software to Rogers, British Petroleum, Coca-Cola, Unilever and many other top-notch clients.

Meanwhile, CD Projekt RED, Poland’s number one computer and console game producer (total worth exceeds one billion

the Canadian market for over 50 years, Cyclone produces metal parts for aircraft manufacturing giants all over the world such as Lockheed Martin, Saab, Embraer, Bombardier, Airbus and Boeing. It is a private company employing close to 600 highly skilled and trained workers in five modern factories in Canada and Poland. In 2016, Cyclone opened its first factory in Poland. Thanks to the factory in Kraśnik,



dollars), sold over 25 million copies worldwide of the role-playing series “The Witcher”. The product, considered a resounding success both commercially and critically, was even presented to the U.S. President. Another Polish video game developer, Techland has invested in Canada and has a team of programmers near Vancouver. One of their products (Dying Light) debuted at number one in the U.S. software sales chart (outselling famous competitors such as Grand Theft Auto V and Call of Duty: Advanced Warfare).

PARTS “MADE IN POLAND” IN ALMOST EVERY PASSENGER AIRCRAFT IN THE WORLD? YES!

Cyclone Manufacturing is another good example demonstrating successful Polish-Canadian cooperation. Present on

over the next four years the region will gain investments worth nearly 15 million CAD and at least 100 new jobs in the innovative aircraft sector.

POLISH APPLES IN CANADA

Another interesting example of a Polish success story in North America was the opening of the Canadian market for Polish apples in 2014. A Russian embargo left Poland, the leading EU producer of apples, with the enormous challenge of finding new markets for exporting its apples. Among them was The Land of the Maple Leaf. In 2016, a single company, Ewa Bis exported 400 tons of apples to Canada – a 10-fold increase in comparison to 2015. Ewa-Bis Group was founded in 1987 in Warsaw and sells fresh and frozen vegetables and fruits to the EU, Africa and

Asia (including organic products). The planned introduction of CETA, according to the founder and chairman Marek Marzec, will almost certainly increase its presence in Canada.

GEMS OF THE POLISH SHIPBUILDING INDUSTRY

One of Poland's calling cards in Canada is the shipyard Remontowa Shipbuilding (Remontowa Holding S.A.). The company is one of the largest producers of ships propelled by LNG in the world, and a pioneer in producing such ships in Europe. It specializes in the construction of multi-purpose ships designed to support the offshore industry. In 2014 the shipyard won the bid for the construction of three new ferries for British Columbia, and last year it got a contract for installing LNG propulsion systems worth nearly of 150 million CAD. Meanwhile, in 2016 the company delivered to Canada the "Avalon Sea" – a ship supporting ExxonMobil offshore drilling platforms "Hibernia" and "Hebron" in Newfoundland and Labrador.

HOW CETA CAN BENEFIT CANADIAN AND EUROPEAN COMPANIES

Removing 99% of the duties (taxes) will be the most visible effect of the CETA which is planned to be implemented this year (provisionally). CETA – the first EU trade agreement with a G7 country – will benefit Canadian and European companies, allow for the mutual recognition of some qualifications and create predictable conditions for both EU and Canadian investors. By boosting trade, CETA will create jobs and enhance economic growth.

AN ENERGETIC PARTNERSHIP BETWEEN ALLIES – LNG?

Canada and the U.S. are the only members of the NATO Alliance possessing significant deposits of natural gas and crude oil (thanks to unconventional deposits). Canada's oil deposits are estimated to be over 170 billion barrels. Natural gas

The import of LNG from the eastern coast of Canada may turn out to be beneficial for the strengthening of energy security, not only for Poland, but for Central and Eastern Europe.

production amounts to 160 billion cubic meters annually. In the long term, this can be of strategic importance for the energy security of Europe and Poland.

Canada has the potential of becoming one of the main global suppliers of LNG. Several LNG export terminals projects are underway on Canada's eastern coast, including Goldboro LNG (the Pieridae Energy – a contract with the German E.ON), LNG Saguenay, Bear Head and Saint John/Canaport LNG. It is worth noting that nearly 11% of shares in Pieridae is owned by Polish oil giant Orlen Upstream Canada (as a result of the acquisition of the Canadian company Kicking Horse in 2015).

The import of LNG from the eastern coast of Canada may turn out to be beneficial for the strengthening of energy security, not only for Poland, but for Central and Eastern Europe. In the context of plans to form a North-South energy corridor in Europe, it is not hard to imagine that Poland would not only receive LNG for its own needs, but also distribute Canadian (or American) natural gas to some countries in the region, acting as an energy hub.

Taking into consideration that "Warsaw" is determined to improve its energy security, and "Ottawa" strives to diversify its export of hydrocarbons (which now

Poland, being one of the world's pioneers of crude oil production (third place behind the United States and Russia in 1909), and a significant oil and gas player in Central and Eastern Europe, can contribute to the success of ICORE.

end up almost entirely in the United States) there is a huge potential for mutually beneficial cooperation. Both countries have similar-sized populations (30+ m), as well as extremely strong, not to say sometimes "difficult" neighbors (economically and/or militarily). These similarities can draw the two countries closer together also in the field of energy.

POLAND AND CANADA, LEADERS IN RESPONSIBLE HYDROCARBON EXTRACTION

The International Centre of Regulatory Excellence (ICORE) appears another excellent chance for cooperation between the two countries. The initiative, which is supported by the Prime Minister of Canada Justin Trudeau, has been initiated by the top oil and gas producing Canadian province – Alberta. The Centre focuses on regulatory cooperation in the responsible management of hydrocarbon resources. On February 2, 2017, the Mexican Secretary of Energy, Pedro Joaquín Coldwell, hosted the Minister of Natural Resources of Canada, Jim Carr and the Chairman of Alberta Energy Regulator, Jim Ellis. During the meeting, Mexico officially announced its decision to join ICORE.

Poland, being one of the world's pioneers of crude oil production (third place behind the United States and Russia in 1909), and a significant oil and gas player in Central and Eastern Europe, can contribute to the success of ICORE. Among other advantages of Poland include qualified specialists, an excellent educational and academic base in technical subjects and many thriving companies.

ATOM FROM CANADA, WHY NOT?

Another promising area of energy cooperation between Poland and Canada may be the technology of building nuclear power plants and partnership in its worldwide distribution. CANDU (Canada Deuterium Uranium) is a recognized brand of nuclear technology worldwide and an important Canadian export product (including new projects in China and Argentina). The greater spread of CANDU technology across the world might be supported by the change in the energy policy of the current government of Canada. Ottawa wants to use its success in reducing greenhouse gas emissions (one of the benefits of generating electricity from nuclear sources) as an instrument of strengthening its position in the international arena.

If Poland chooses the Canadian solution, it would be the second country in Europe, after Romania that uses this technology. In the long term, the Polish-Canadian nuclear cooperation, providing its economic viability, could enable Poland to reap the benefits from the construction and maintenance of such plants in other countries.

SHALE GAS – A STRATEGIC UNCONVENTIONAL RESOURCE

Finally, despite the slowdown in the development of shale and unconventional deposits in Poland and Europe, in the long term, the region can benefit from

the Canadian experience in the use of modern techniques of hydraulic fracking, horizontal drilling and reducing the environmental impact in the exploration of unconventional deposits: shale, tight gas and coalbed methane (CBM). There is significant potential for collaboration especially with the Alberta Energy Regulator. It regulates over 174,000 operating wells and nearly half a million kilometers of pipelines (and 7 producing coal mines).

Furthermore, progress in mining technology, as has been the case many times in history, can reduce costs and improve conditions for the extraction of unconventional gas, and lead to the return of Canadian companies for exploration in Poland in the future, and perhaps in other countries of the region.

TOWARDS A GOLDEN AGE OF A EURO-ATLANTIC PARTNERSHIP

Let us not forget that the current Canadian “G7 class” economy has been built – among others – by generations of Polish immigrants. Today, trade and mutual investments are flourishing. The value of Polish-Canadian bilateral trade rose nearly 15% last year reaching a historic high: 2.5 billion CAD. The development of this economic cooperation between both countries would not be possible without the support of many of the 1 million or so Canadians of Polish origin.

However, the potential for Canadian-Polish trade and economic cooperation is much larger. The planned entry into force of the CETA agreement, an increased awareness of the importance of energy security in the Euro-Atlantic area and the unstable situation in Europe today (for instance, the smoldering conflict between Russia and Ukraine) all favour doing business together.

During the ceremony commemorating the 1050th anniversary of Polish statehood in

Ottawa last year, Poland’s President Andrzej Duda remarked that, “trade between Poland and Canada over the last decade increased 2.5-fold, bilateral investments are growing, but it can be even better!” It is to be hoped that the expectations mentioned above will materialize; however will both sides of the Atlantic be able to take this chance of a lifetime?

Tomasz Kijewski ■

March 31, 2017



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VANCOUVER, CANADA - OCTOBER 13, 2016. A RESIDENT WALKS UNDER RED LEAVES ON A STREET IN VANCOUVER, CANADA. STREETS IN VANCOUVER WERE BLANKETED WITH COLOURFUL LEAVES THAT TURNED THE CITY INTO A GORGEOUS SIGHT AS THE FALL SEASON BEGAN.

THE ARMED INDEPENDENCE UNDERGROUND IN POLAND 1944-1956/1963 - GENESIS, AIMS, OPERATIONS

FILIP MUSIAŁ, PhD

In 1939, as a result of the invasions of Nazi Germany on September 1 and the Soviet Union on September 17, Poland lost control of all of its territory.

Poland was initially divided between four occupiers: Nazi Germany, its supporter fascist Slovakia, the Soviet Union and Lithuania (which soon lost its independence and became another Soviet republic).

Despite Poland's defeat in the Defensive War of 1939 and the occupation of Polish territory by neighboring powers, Polish national spirit survived. A legal, government-in-exile was formed in France, in accordance with the provisions of the Constitution of the Republic of Poland. After France also fell to Nazi Germany, the Polish government moved to Great Britain. It consisted of executive authorities: the president and the government, supported by a legislative surrogate, the National Council of Poland (Rada Narodowa

Rzeczypospolitej Polskiej). Even in September 1939, the month in which the two aforementioned invasions took place, underground structures began to form in Poland. The most important of these was the Service for Poland's Victory (Służba Zwycięstwu Polski, SZP), which served as the basis for the formation of the Union of Armed Struggle (Związek Walki Zbrojnej, ZWZ) at the turn of the year 1939 to 1940. Numerous independent military organizations formed in different regions of Poland; political parties that went forced underground also created their own military formations. In time, this initially spontaneous process grew organized within the framework of the conspiratorial Polish Underground State (Polskie Państwo Podziemne), also known as the Polish Secret State. It encompassed the entire underground administration: the Government Delegation for Poland



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WARSAW, POLAND - SEPTEMBER 27, 2015. FUNERAL CEREMONY FOR HEROES OF THE STRUGGLE FOR A FREE POLAND, VICTIMS OF COMMUNIST TERROR WHOSE REMAINS WERE DISCOVERED IN 2012-2014 IN THE MEADOW OF THE POWĄZKI MILITARY CEMETERY. CEREMONY UNVEILING THE PANTHEON-MAUSOLEUM ON THE MEADOW OF THE POWĄZKI MILITARY CEMETERY IN WARSAW AND THE BURIAL OF THE REMAINS OF COMMUNIST TERROR VICTIMS. THE FAMILIES OF THE VICTIMS PARTICIPATED IN THE CEREMONY.



© LESZEK SZYMAŃSKI (PAP)

WARSAW, POLAND - OCTOBER 4, 2016. CAPTAIN WITOLD PILECKI'S CELL IN MOKOTÓW PRISON. THE MUSEUM OF THE CURSED SOLDIERS AND POLITICAL PRISONERS OF THE POLISH PEOPLE'S REPUBLIC (PRL) WILL BE BUILT ON THE TERRITORY OF THE MOKOTÓW PRISON BY RAKOWIECKA STREET IN WARSAW. IT WILL BE ONE OF THE MOST IMPORTANT PLACES COMMEMORATING THE HEROES OF THE ANTI-COMMUNIST MOVEMENT.

(Delegatura Rządu na Kraj) with regional structures down to the municipal level, a surrogate, underground parliament, which was named the Council of National Unity (Rada Jedności Narodowej, RJN) in 1944, as well as education, science and culture. An alternative state and society existed beyond the official reality of occupation. One of the pillars of the Polish Underground State was its armed branch, the Polish Underground Army (Wojsko Polskie w konspiracji). In 1942, this became the Home Army (Armia Krajowa, AK), which combined the Union of Armed Struggle and practically all military organizations answering to the Polish authorities in exile. The only major formation remaining outside the Home Army was part of the armed structures of the nationalist right, which formed as the National Armed Forces (Narodowe Siły Zbrojne, NSZ).

UNDER GERMAN AND SOVIET OCCUPATION

From 1939 to 1941, the Germans and Soviets sought to liquidate the Polish elite

Polish political and intellectual elite, became one of the symbols of the physical extermination taking place under German occupation.

and crush the national spirit. Palmiry village in the Kampinos Forest, where German forces murdered 2000 people between 1939 and 1941 as part of the *AB-Aktion* aimed at the Polish political and intellectual elite, became one of the symbols of the physical extermination taking place under German occupation. Meanwhile, under Soviet occupation, Katyń, where the Soviets murdered 22,000 Polish POWs and prisoners on Stalin's order, including officers of the Polish Army, policemen, lawyers, doctors

and teachers, took on a similar symbolic meaning.

Despite these repressions, which over the course of World War II resulted in the death of 6 million Polish citizens (including around 3 million Jews), the phenomenon of the Polish Underground State endured.

Its situation changed in June 1941 at the time of Nazi Germany's attack on the USSR. The Soviets, hoping for support from the Allies, recognized the Government of the Republic of Poland in exile (Rząd Rzeczypospolitej Polskiej na Uchodźstwie) and established diplomatic ties with it. One after-consequence of this was the formation of General Władysław Anders' Army in the USSR, recruited from thousands of Poles sent away after September 1939, deep into the Soviet Union and sentenced to heavy labor in prison camps. Stalin's inclination to recognize the Polish authorities vanished after the Soviet victory at Stalingrad, which swung the situation on the eastern front in his favor. Having destroyed significant German forces in the Stalingrad "cauldron", the Soviets went on a counteroffensive which the Germans were unable to stop. The nearing of the Red Army to Poland's pre-war border rendered contact with the Polish Government a distraction for Stalin. He had returned to the idea of annexing part of pre-war Poland and making the rest dependent on the Soviet Union. Therefore, he began to search for a reason to sever diplomatic relations with Poland. This reason eventually turned out to be the discovery of the Katyń graves by the Germans. The request by the government-in-exile to investigate the massacre of Polish officers served as Stalin's pretext to accuse the Polish Government of collaboration with the Nazis and to cut off diplomatic relations. In spring 1943, Poland became a pawn on the chessboard

of the major powers and the Polish authorities systematically lost influence over decisions made by the Western Allies concerning Poland.

In 1942, at the end of November and the start of December, the first wartime meeting between the leaders of the United States, Great Britain and the USSR took place. In Tehran, Iran, Franklin Delano Roosevelt, Winston Churchill and Joseph Stalin, made the first decisions about, among other matters, the fate of post-war Poland, without informing the Polish government-in-exile. The Soviet dictator sought to gain the agreement of Roosevelt and Churchill to incorporate the Polish territory taken over by the Red Army in September 1939 into the USSR (which represented nearly half of Poland's pre-war territory). He succeeded. The combined plan for Poland outlined "that the focus of the Polish state and nation ought to be located between the so-called Curzon Line and the line of the Odra River, with inclusion into Poland of East Prussia and the province of Opole. However, the final determination of the borders shall require detailed studies and, in some points, possible resettlement of the population."

The combined plan for Poland outlined "that the focus of the Polish state and nation ought to be located between the so-called Curzon Line and the line of the Odra River, with inclusion into Poland of East Prussia and the province of Opole.

By 1941, Stalin had already selected a group of Polish communists in the USSR, whose task was to recreate the Communist Party in Poland, this time under the name of the Polish Workers' Party (Polska Partia Robotnicza, PPR).

These decisions were important insofar as a month after the end of the Tehran Conference, the Red Army crossed Poland's pre-war border. The Polish Government, unaware of the decisions made in Tehran, treated these lands as part of the Republic of Poland, but the Soviets treated them as their own. The consequences of this tense situation were exceptionally serious for the representatives of the civil and military branches of the Polish Underground State.

This intensified as Stalin had already begun his plan of subjugating Polish territory as 1942 dawned. One of the tools to realize that aim were the pre-war communists who found refuge in territories occupied by the Soviets after the war had broken out. They came from different backgrounds, but those chosen by Stalin had proven themselves in servility to the Kremlin. Some of them, such as Bolesław Bierut or Michał Rola-Żymierski, had even cooperated with Soviet intelligence before the war. Others, such as Władysław Gomułka, were alumni of the International Lenin School, run in Moscow by the Communist International, which in the interwar period sought to end Poland's hard-won independence.

By 1941, Stalin had already selected a group of Polish communists in the USSR, whose task was to recreate the Communist Party in Poland, this time under the name of the Polish Workers' Party (Polska Partia Robotnicza, PPR). They were transported into occupied Poland to build the party as a tool of Soviet policy. In Moscow in early 1943, the Union of Polish Patriots (Związek Patriotów Polskich, ZPP) was created on Stalin's initiative, intended to be Poland's political representation. In the spring, he started building a new army commanded by Zygmunt Berling, a deserter from the Polish Army.

SOVIET OPERATIONS IN THE EASTERN BORDERLANDS AND WEST OF THE BUG RIVER

Given the situation on the eastern front from 1943 onward, the Home Army leadership prepared itself for the eventual takeover of Poland by the Red Army, and not the Western Allies. The idea of a general, national uprising was abandoned in favor of Operation Tempest (Akcja "Burza"), a region-based uprising. Home Army units, often fighting arm-in-arm with Red Army soldiers, were to attack the retreating Germans and welcome the Soviets in liberated cities as hosts. Military cooperation thus led underground Polish forces to reveal their identities, whereas pro-Polish manifestations in cities and towns led the Soviets to the civilian government delegates. The most important operations included the liberation of Lviv (Lwów) and Vilnius (Wilno) in concert with the Soviets. However, after the military operations ended, the Polish military leadership and civilian authorities were arrested by the Soviets and soldiers were imprisoned. They were often given a choice: prison, exile deep in the USSR, or join the so-called "Berling Army" alongside the Soviets. Anti-Polish operations returned to the territories occupied by the Red Army, similar to those of the first occupation (1939–1941) -



WARSAW, POLAND - OCTOBER 4, 2016. CORRIDOR LEADING TO THE FORMER "DEATH CELL" IN BLOCK D OF THE MOKOTÓW PRISON.

with a Soviet administration replacing the German one.

In summer 1944, the Commander-in-Chief of the Home Army, General Tadeusz "Bór" Komorowski concluded: *The attitude of the Soviets towards the Home Army on the territories captured so far [...] is negative. The NKVD treacherously arrests all commanders and officers. Units are disarmed and required to join Berling's army [...].*

The policy carried out by the Soviets in the Eastern Borderlands, which were incorporated into the USSR, was to a large extent continued in other areas of occupied Poland.

When Red Army soldiers crossed the Bug River in July 1944, they continued operations aimed at destroying the military and civilian structures of the legal Polish authorities. In Moscow, on July 21, 1944, Stalin established the Polish Committee of National Liberation (Polski Komitet Wyzwolenia Narodowego, PKWN), which would become the communist government. The Committee was transported into liberated Poland on July 27. A day earlier, its representatives

had signed a secret protocol allowing the Red Army and the Soviet secret police, the NKVD, to decide the fate of Poles in the areas near the front. The Committee also relinquished Poland's claim to the Eastern Borderlands (Kresy), recognizing the Curzon Line as Poland's eastern border. The creation and development of a communist administration dependent on the Kremlin could only be successful after eliminating the Polish Underground State.

An important element of this plan was to halt the Red Army offensive at the Vistula River, at the beginning of the uprising in Warsaw on August 1, 1944. This allowed the Germans to concentrate their forces on crushing the Warsaw Uprising, which finally succeeded in October, after 63 days of heavy fighting. At the same time, during the Uprising, the Soviets were ruthlessly liquidating underground units en route to the capital city; only the fall of the Uprising, in which nearly 40,000 Home Army soldiers were fighting, guaranteed the realization of the political plan aimed at turning Poland into a Soviet satellite state.

Until the autumn of 1945, Soviet troops played an important role in the

fight against the Polish independence underground. Without Soviet involvement, which broke the back of the Polish Underground State, Polish communists would not have been able to assume power in Poland.

The end of Operation Tempest, for which the final and dramatic stage was the Warsaw Uprising, plunged

final order, he addressed his soldiers and relieved them of their oath: “Home Army Soldiers! I am giving you the final order. Conduct your further work in the spirit of regaining Poland’s independence and safeguarding the Polish people from annihilation. Try to act as guides for the nation and producers of Poland’s independence. In this activity, each of you must be his own leader.”



the Home Army into chaos. General Leopold Okulicki “Niedzwiedek”, the last Commander-in-Chief of the Home Army, sought to gain control over the organization, which had been shattered by the defeat of the Uprising and whose units were torn between territory occupied by the Germans and the Soviets. However, due to increasing Soviet repressions and recognizing that Operation Tempest had blown the cover of the underground army, he disbanded the Home Army in January 1945. In his

After the dissolution of the Home Army, the task of continuing the struggle was taken over by the organization “NIE” (“No”), also short for “independence” (“niepodległość”). It was a cadre organization created in the autumn of 1943, which was meant to be capable of long-term, underground operations in case of Soviet occupation. It failed to develop however and was disbanded when, in March 1945, both its leader, General August Emil Fieldorf “Nil”, and the head of the armed forces in the country, General

Leopold Okulicki “Niedźwiadek”, were arrested by the Soviets, independent of one another. The remaining members concluded that the organization had been compromised and it was dissolved by the Commander-in-Chief of the Polish Armed Forces, General Władysław Anders, at their request. It was replaced by the Armed Forces Delegation for Poland (Delegatura Sił Zbrojnych na Kraj, DSZ), which was the last variant of the military branch of the Polish Underground State. Its objective was to sustain the spirit of resistance, but there was an internal conflict between its activities and founding idea. The commander of the Delegation, Colonel Jan Rzepecki “Ożóg” believed that armed resistance had lost its purpose. He saw no chance to defeat the communists, and their protectors, the Soviets, through open combat. He sought instead to “empty the forests”, by withdrawing soldiers from conspiratorial activities and helping them to legalize their existence. This was practically impossible, however, as repressions aimed at underground soldiers and functionaries who revealed themselves led more and more people to return to the forest. The DSZ lasted merely a few months, as the creation of the Provisional Government of National Unity (Tymczasowy Rząd Jedności Narodowej, TRJN), led the underground in the country to end the phase of active resistance and in the summer of 1945, the Polish Secret State, namely the Government Delegation for Poland (and its territorial agencies), the surrogate underground parliament Council of National Unity, as well as the DSZ, were dissolved. This, however, did not mean the end of the resistance.

Leaders of the Home Army, continuing the fight in the ranks of “NIE” and the DSZ, formed the Freedom and Independence Association (Zrzeszenie Wolność i Niezawisłość, WiN) in early September 1945. The fundamental idea of this

It was replaced by the Armed Forces Delegation for Poland (Delegatura Sił Zbrojnych na Kraj, DSZ), which was the last variant of the military branch of the Polish Underground State.

organization was different from that of its predecessors. Although it recruited from the Home Army, its founders believed that armed struggle was not the best way to fight for independence. The declaration of the world powers made during the Yalta Conference, which provided for free elections in Poland, became their reference point. It was assumed that the communists had no chance of winning. WiN’s goal was to keep up the spirit of social resistance until the election, to make them truly fair and free, and to support the Polish People’s Party (Polskie Stronnictwo Ludowe, PSL) in the voting, as it was the only credible opposition party. WiN was supposed to be a civic organization of a political character. However, the reality of the totalitarian system that was being created in Poland verified these assumptions. The theoretical concept was only implemented in practice in the Lesser Poland and Silesia regions, where the number of partisan units, which followed the orders of WiN, was kept at a minimum. The remaining regions of Poland, especially along the eastern border, were full of resistance units, which often caused severe difficulties for the communist authorities.

WiN was the largest underground organization in post-war Poland, it is estimated that at its peak in 1946 it had about 30,000 sworn members, of which 2,000 fought in forest units. The organization was finally eliminated at the

The second pillar of nationwide resistance, alongside WiN, was the nationalist underground.

end of 1947, though a wave of arrests earlier that year had already limited its area of operations to secluded “islands” in southern Poland. The dramatic epilogue of WiN’s activities was a counterintelligence and counter-espionage operation codenamed “Cezary”, organized by the Ministry of Public Security of Poland, the communist state police. The operation involved the creation of a “5th WiN Military Command” managed by functionaries of the secret police and their agents. Parts of the operation focused on domestic issues, but its main goal was to thwart the activities of WiN’s Foreign Delegation (*Delegatura Zagraniczna WiN*), and through it the British and US intelligence services. It was conducted from 1948 to 1952.

The second pillar of nationwide resistance, alongside WiN, was the nationalist underground. Originally, it existed as two separate organizations: the National Armed Forces, (*Narodowe Siły Zbrojne*, NSZ) and National Military Union (*Narodowe Zjednoczenie Wojskowe*, NZW). The NSZ mostly included armed formations that did not unify with the Home Army during the war. The NZW, on the other hand, included mostly units of the *Narodowa Organizacja Wojskowa* (National Military Organization, NOW), which had merged with the Home Army. Hence, the organization established at the turn of 1944 and 1945 flourished only after the Polish underground army had been disbanded and it was possible to remove the NOW units from its ranks. Both branches of the nationalist armed underground joined forces toward the end of 1946 and into 1947 when the NSZ

subordinated itself to the NZW. Some territorial structures of the organization survived until the early 1950s, but the NZW ceased to exist as a nationwide organization in early 1947.

Apart from nationwide organizations, there were different regional and local organizations created all over the country, which were not included in post-Home Army or national structures. There was a great variety of resistance initiatives, among which it is possible to differentiate two trends: the post-Home Army underground and the so-called unaffiliated organizations. The former, based on regional or local organizational structures of the Home Army and Polish Peasants’ Battalions (*Bataliony Chłopskie*, BCh), were usually those who had lost organizational contact with central command after the dissolution of the Home Army in 1945. They continued the fight on a regional scale. Among them were organizations such as the Independent Volunteer Group (*Wielkopolska Samodzielna Grupa Ochotnicza “Warta”*), operating in the Greater Poland region. The Extraterritorial Vilnius Home Army Military District (*Eksterytorialny Okręg Wileński AK*), operating in Pomerania, whose Home Army 5th Wilno Brigade fought in the Tuchola Forest. In addition, the Extraterritorial Lviv Home Army Military District (*Eksterytorialny Okręg Lwowski AK*), which was recreated in Lower Silesia after the Poles forced from the Eastern Borderlands, which had been incorporated into the USSR, were resettled there. The Citizens’ Home Army (*Armia Krajowa Obywatelska*, AKO), operating in the area of Białystok, also came from this mold, and was later subordinated to WiN. In many locations in Poland, independently of one another, organizations which were often called the Home Army Resistance Movement (*Ruch Oporu Armii Krajowej*) were created,

along with other units who drew in former Home Army personnel. The other current of regional, conspiratorial activity, came from formations created from scratch, without any structural connections to the wartime underground. The largest of such organizations were the Conspiratorial Polish Army (Konspiracyjne Wojsko Polskie, KWP), operating in Łódź and the Świętokrzyskie Mountains area, a partisan unit, “Błyskawica” (Lighting bolt), operating mostly in the Podhale region, and the Independent Operational Battalion (Samodzielny Batalion Operacyjny “Zuch”), operating in the Bieszczady Mountains.

The post-war underground did not envision an active, armed resistance. Faced with Soviet operations, including a mass-scale pacification operation in the Augustów Forest region in the summer of 1945, it was obvious that the continuation of armed resistance would lead to enormous casualties without any real success. If any skirmishes and partisan battles took place, they were the result of roundups organized by the communist authorities or of self-defense actions of the underground. Among the latter, there are examples of liberating jails, prisons and camps in order to release anticommunist fighters as well as eliminating and disarming the Civic Militia (Milicja Obywatelska, MO) and secret police stations. Apart from the obvious goal of providing the underground with weapons, this was meant to limit the activity of the communist repression apparatus in the field and to increase the safety of the conspiratorial networks. Disciplinary actions served the purpose of paralyzing the activities of the communist authorities; they were aimed at particularly active members of the Communist Party or administration, as well as officers of the repressive apparatus and persons considered to be their collaborators. Apart from warnings or floggings, there were also operations aimed at the physical elimination of targets. The underground

In the summer of 1945, it was obvious that the continuation of armed resistance would lead to enormous casualties without any real success.

was also involved in extensive intelligence activities; on the one hand it infiltrated the administration and repressive apparatus in order to ensure its own survival, while on the other it was trying to identify the mechanisms governing the new system, its tactics and courses of action. Many of those findings were then handed over to intelligence services in the free world. After the Yalta Conference, the election became the reference point for all resistance organizations fighting for independence. Therefore, propaganda actions were organized in order to sustain the social conviction that the communist government was weak and temporary. Finally, in order to provide funds for military and political activities, expropriation actions were conducted. As in the case of activities carried out during the war, it was assumed that actions against the occupier, in this case the communist administration, institutions and their representatives, were acceptable. Hence, state banks or state-owned cooperatives were raided and robbed, and sometimes individual representatives of the regime would be forced to make a “contribution”. Looking at the phenomenon of the underground from a different perspective, it is possible to point out two characteristic trends. The first involves formations and soldiers who fought, without any break, since they were recruited to the ranks of the Home Army, until they died or were arrested by the security services. The other involved a response to repressions by the

The first involves formations and soldiers who fought, without any break, since they were recruited to the ranks of the Home Army, until they died or were arrested by the security services.

Soviet, and later Polish, security forces. It included soldiers of the underground who attempted to leave during amnesties announced by the communist authorities, but were forced to return to the underground because of the arrests of their friends, who had also come out of hiding, and who did not believe they could live a “legal life”. At the same time, it is worth noting the dynamically changing situation of the armed resistance. It is estimated that after the disbanding of the Home Army, there were still more than 17,000 soldiers fighting in the forests. Combined with a network of civilians, agents and informants, the number of people involved in, or assisting, the underground may have totalled several hundred thousand. Looking at the support for the legally operating opposition parties, such as the PSL of Stanisław Mikołajczyk or Labor Party (Stronnictwo Pracy) of Karol Popiel, and the scale of unorganized social resistance, it is fair to say that the communist regime was rejected overall in the first years of the People’s Republic of Poland. As a result of this attitude in society between 1945 and 1946, the communists’ domain was limited to major urban centers. Rural Poland, especially in the eastern and southern parts of the country, were controlled by the underground.

Only ongoing repressions and the breakdown of the social mood following

the falsification of the results of the referendum of June 1946 and the election of January 1947, changed the situation. One must not forget about the importance of pacification operations conducted in the winter of 1946/1947, aimed at partisan headquarters. As usual in the case of partisan actions, soldiers were demobilized for the winter, as it was not possible to feed and hide them; only staff officers and small guarding detachments remained in the forests and mountains. The manhunts and raids resulted in the deaths or arrests of many commanders of single units and battle groups. The rigged election results, which were tacitly accepted by the free world, and the announcement of the second amnesty, caused many demobilized anticommunist fighters to come out of hiding, as they had nowhere left to go. It is estimated that by the time the Amnesty of 1947 came to an end, there were slightly more than 1,800 partisans continuing the armed struggle. However, there were no longer any nationwide structures, and the ranks of units, which were hunted, ambushed and infiltrated by the regime, were constantly thinning. With time, they would transform into groups focused on survival, determined to last as long as possible, rather than engage in an ideological fight. In the 1950s, single fighters managed to remain in hiding. It is estimated that in the early 1950s, there were no more than 400 active underground soldiers remaining in post-Yalta Poland. Only a minority of them fought in a few organized units, as the majority was trying to hide from being arrested, unable to commit to any anti-regime actions. The last partisan in hiding, Józef Franczak “Laluś”, died fighting the communist repressive apparatus on October 21, 1963.

Filip Musiał ■
December 1, 2016

THE WARSAW UPRISING MUSEUM

TYMOTEUZ PRUCHNIK

Patriotism, courage, honor, freedom, fidelity, integrity, friendship...

In its 12 years of operation, the Warsaw Uprising Museum has organized hundreds of concerts, lectures and workshops. It also organizes annual events accompanying the anniversary of the Warsaw Uprising. These activities serve as tribute to the insurgents - the people to whom it owes its existence.

FORBIDDEN UPRISING 1944

The Warsaw Uprising erupted on August 1, 1944 - the fifth year of the lengthy German occupation. Not only was it a fight for independence, but an express rejection of the violence of the occupation and the outcry of thousands of Varsovians wanting to put an end to the drawn-out war. Most of all, the insurgents joining the battle wanted to defend against the destruction of the values dearest to human life: patriotism, courage, honor, freedom, fidelity, integrity and friendship. The Warsaw Uprising ended after 63 days of heroic battle. Its idea has survived

for over half a century, awaiting worthy commemoration in independent Poland.

After the war, for close to 50 years, the communist authorities tried to erase the memory of the Warsaw Uprising as the subject was taboo and forbidden in the public discourse. The one version of events accepted by the communist authorities was a premeditated falsification served to citizens. Soldiers and officers of the Home Army (AK), particularly in the first years after the war, were the victims of heavy repressions, which for many ended in death. The thaw of 1956 brought a certain reprieve, but the official line of the Polish United Worker's Party (PZPR) maintained an unambiguously negative appraisal of the Uprising and its leaders. The first changes appeared during the "Solidarity" period. In 1981 the Social Committee for the Construction of the Warsaw Uprising Museum was formed. At the same time, artifacts from the Uprising began to be



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WARSAW, POLAND - JULY 29, 2007. COMMEMORATION OF THE 63RD ANNIVERSARY OF THE OUTBREAK OF THE WARSAW UPRISING IN FREEDOM PARK AT THE WARSAW UPRISING MUSEUM. PRESIDENT LECH KACZYŃSKI (RIGHT) AFTER THE CEREMONY.

collected and an effort to find a building to house the museum got underway.

CREATING THE WARSAW UPRISING MUSEUM

Only the fall of the regime in 1989 allowed for the full “rehabilitation” of the insurgents. The fiftieth anniversary commemoration of the Warsaw Uprising – the first in independent Poland – was especially important. The cornerstone to the construction of the museum was laid in 1994 in the building that once housed the insurgent redoubt by Bielańska Street (the former headquarters of the National Bank of Poland); however, the Warsaw Uprising Museum project did not really gain momentum until 2002. The newly-elected Mayor of Warsaw, Professor Lech Kaczyński, decided on the construction of the museum for the sixtieth anniversary of the outbreak of the Uprising. The site chosen would be the old trolley power station in Warsaw’s Wola district. The operation was managed by the Legal Representative for the Construction of the Warsaw Uprising Museum, and later its director, Jan Ołdakowski. The architectural design contest for the newly-forming museum was won by Kraków architect Wojciech Obtulowicz, while the exposition design contest was won by a team of architects including Mirosław Nizio, Jarosław Kłaput and Dariusz Kunowski.

The museum was opened in August 2004 - on the sixtieth anniversary of the outbreak of the Warsaw Uprising. It served as a visible tribute from the residents of Warsaw to everyone who fought and died in battle for the capital and for a free Poland.

At the opening of the museum on July 31, 2004, the Mayor of Warsaw, Lech Kaczyński said: “The Warsaw Uprising was the crowning effort of Polish independence actions in the first half of

The newly-elected Mayor of Warsaw, Professor Lech Kaczyński, decided on the construction of the museum for the sixtieth anniversary of the outbreak of the Uprising.

the Twentieth Century, and it was also the beginning. It was the beginning of a battle which through the second half of the 1940s, 1956, 1966, 1968, 1970, 1976, led to Solidarity.” Later in the speech, he said that the Warsaw Uprising Museum is a “tribute paid to all of the insurgents, leaders, soldiers and civilians, who supported the Uprising. It’s a tribute to the very decision to fight and is a tribute to how they fought, that they were probably the best soldiers in the thousand-year history of our nation, for their unparalleled heroism in battle as well as their military craft, their resistance, their toughness... It’s a tribute to all of those who died in battle in 1944 and in later years, for all of those who passed away in the sixty years since and for those who are with us today.”

Over the course of more than 12 years, the museum has become a dynamic cultural institution, active both culturally and socially, shaping the politics of memory and marking trends in education. By the end of 2016, over six million visitors had visited the museum’s exhibition, which contains close to 30,000 items in its collection.

INSURGENT WARSAW

The guiding idea of the exhibition was to depict the realities of insurgent Warsaw on many levels, with the aid of diverse media: photographs, films, information panels and modern multimedia solutions.

POLAND, WORTH VISITING

The viewer is guided along the entire path of the exhibition by a skillfully constructed narrative, which aims to recreate the atmosphere in Warsaw during the Uprising. Interactivity with visitors is essential, so that they become active participants in the tour. This way, even after leaving the museum, the images left in their memory lead them to reflect on what they saw.

In the museum's exhibition, the way that history is presented to youth is communicated in a particularly appealing way, through the application of a modern narrative with an emphasis on interactivity through sound effects, lights and scenographic elements.

The permanent exhibition is located on three floors totaling 3,000 square meters. It includes around 800 exhibit items, 1,500 photographs, and five hours of film material and sound recordings. Visitors are led through successive stages of the Uprising until the moment the insurgents abandon Warsaw and then their later fate.

The guiding idea of the exhibition was to depict the realities of insurgent Warsaw on many levels

The second part of the permanent exhibition is in Hall B, home to a full-scale reproduction of an American B-24 Liberator bomber. A sizable part of the exhibition is dedicated to Germany and its allies, where their operations in Warsaw are depicted based on official documents from the period as well as private reminiscences.

In Hall B you can also watch recordings of witness accounts of the Uprising, which



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come from the Oral History Archive of the Museum. The museum building includes an observation tower from which you can admire a panorama view of Warsaw, and the basement which includes a replica of the sewers used by insurgents during the Uprising.

An exceptional atmosphere dominates the museum, which is created by around 800 original artifacts from the Uprising; photographs, films and other multimedia. Short, catchy stories sharing the authentic, personal experiences of Insurgents are considered the best way to pass on the spirit of those events.

MULTIMEDIA MUSEUM

From its inception, the Warsaw Uprising Museum emphasized innovative museum solutions. The first large-scale project was the creation of the *Virtual Warsaw Uprising Museum* - an online platform which made a virtual visit around the museum possible.



WARSAW, POLAND - JULY 31, 2007. PRESIDENT LECH KACZYŃSKI DURING THE SOLEMN APPEAL OF THE FALLEN, DURING THE COMMEMORATION OF THE 63RD ANNIVERSARY OF THE WARSAW UPRISING.

After the Virtual Museum, successive multimedia projects came into being. In 2010 the film *City of Ruins* (*Miasto Ruin*) premiered - a digital 3-D reconstruction of the flight of a Liberator over Warsaw in the spring of 1945. For the seventieth anniversary of the Uprising, the museum made the film *Warsaw Uprising* - the first non-fiction war drama in the world assembled entirely from original insurgent newsreels. The film was nominated for an Oscar.

Besides the aforementioned projects, the museum created several mobile applications, such as *City's Memory* (*Pamięć Miasta*) and *Architekturki* - guidebooks to Warsaw's memorials and architecture as well as a multimedia e-book for children titled *Asiunia*.

WE REMEMBER '44

The museum is the main organizer of the anniversary events commemorating

The museum is the main organizer of the anniversary events commemorating the Warsaw Uprising, which take place every year, from the end of July until October 2.

the Warsaw Uprising, which take place every year, from the end of July until October 2. Many events take place in this time frame: concerts as part of the series "We Remember '44" (so far performers have included Lao Che, Apocalyptica, Voo Voo and Luxtorpeda), location-based games like "Your Photo from the Uprising", Insurgent Critical



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WARSAW - AUGUST 8, 2016. ON AUGUST 6, THE TENTH UPRISING CRITICAL MASS CYCLED THROUGH THE STREETS OF SOUTHERN DOWNTOWN OF WARSAW, FOLLOWING THE JAN NOWAK-JEZIORAŃSKI TRAIL. THE BIKERS SET OFF FROM THE WARSAW RISING MUSEUM AND CYCLED ALONG A 17 KM ROUTE, VISITING PLACES CONNECTED WITH THE PATRON OF THE EVENT. IN THIS WAY, WARSAW CRITICAL MASS COMMEMORATED JAN NOWAK-JEZIORAŃSKI, THE LEGENDARY COURIER FROM WARSAW.

Furthermore, the museum organizes outdoor exhibits in Poland and abroad.

Mass (bike ride) or popular sing-along concerts like “Not-Forbidden Songs” at Piłsudski Square. Besides this, the annual commemorations are accompanied by various patriotic events, of which one of the more important is the meeting between insurgents and the President of the Republic of Poland and the Mayor of Warsaw, which takes place in Freedom Park on the museum grounds.

The Warsaw Uprising Museum is full of life year-round as an active cultural

institution. Several interesting events have been initiated, such as the Jan Rodowicz “Anoda” Award, presented to the “Insurgent in peacetime” for exceptional acts and heroic attitudes. Every year since 2006, the “Innocent Sorcerers” festival also takes place, which helps rediscover the atmosphere of pre-war Warsaw through concerts, exhibits, lectures and workshops.

Furthermore, the museum organizes outdoor exhibits in Poland and abroad. In 2014, along with the Topography of Terror Foundation, an exhibit was opened in Berlin, presenting the history of the Warsaw Uprising. In 2015, the museum honored the memory of the civilian victims, creating an exhibit in Warsaw Insurgent’s Park in the Wola district, presenting nearly 60,000

names of those murdered or who went missing during the Uprising. The exhibit continued in 2016 and was augmented with an online application, thanks to which anyone can update the personal data of their family members who were lost, killed or murdered during the Uprising.

One of the main pillars of the museum is its academic and educational activity. The Education Department offers a rich list of museum classes, in which over 300,000 students have thus far taken part. The History Department develops research programs for the museum, which include research projects in Poland and abroad tied to the history of World War II.

The Archives Department processes and catalogues the library and archival collections, stores and makes them accessible and conducts research related to the Warsaw Uprising in other institutions. The Oral History Department is a separate entity which conducts and stores interviews with witnesses, most of whom were insurgents and civilians. So far close to 4,000 interviews have been recorded and preserved.

The most important goal of the museum is to preserve the memory of the Warsaw Uprising. The Insurgent's Room and the Volunteer Department, which takes care of contacts with former insurgents, have existed from the beginning. Every year hundreds of invitations for the museum's anniversary events are sent to insurgents around the world.

On the occasion of the seventieth anniversary of the outbreak of the Warsaw Uprising, the insurgents passed on the so-called "Generational Baton" to representatives of the younger generation, which symbolizes the

The names of over 11,000 soldiers, liaison officers and nurses killed in the Warsaw Uprising are visible on the Wall of Memory on the grounds of the museum.

ideas and values which were being defended and fought for by the Warsaw insurgents. The youth representatives declared that they would build a world in which freedom, loyalty, courage, honor, integrity, friendship, tolerance, help to the weak and conscientiousness, would have a permanent presence.

We also remember the fallen heroes of the Warsaw Uprising. The names of over 11,000 soldiers, liaison officers and nurses killed in the Warsaw Uprising are visible on the Wall of Memory on the grounds of the museum. The museum tries to regularly revitalize places of memory and refurbish forgotten insurgents' graves.

The Warsaw Uprising Museum came into existence at the initiative of President Lech Kaczyński and initiated the process which allowed for the construction of the Museum of the History of Polish Jews, Museum of the Cursed Soldiers in Ostrołęka, and many more. Thanks to the initiatives started by the President and the museum, Polish youth have taken a greater interest in history, tradition and patriotism. Moreover, rightful respect has been restored to the insurgents, civilians, cursed soldiers and other national heroes.

Tymoteusz Pruchnik ■
January 31, 2017

MISSING THE FUTURE

ROCH BARANOWSKI

Europe risks falling behind in developing the disruptive technologies of the future - not only behind the United States, but increasingly behind China and other Asian countries.

Among the top-20 largest internet companies in the world, there are already more Asian than European companies. And it is increasingly these companies which – fueled by the cash collected by first generation, e-commerce applications – drive the development of next generation technologies. If Europeans do not want to wake up left behind in a decade or two, with their technologies and business models obsolete and their societies fighting for ever-smaller scraps of wealth accumulated by previous generations, they need to find a way to catch up in next generation technologies.

Recent years have been hard for Europe – the Eurozone’s common currency is in permanent crisis, mass immigration has spiraled out of control, the European

Union’s integrity has been shaken by Brexit and on a broader level, the cultural authority of Brussel’s liberal elites is increasingly being challenged by a “populist”s counterculture. All of this has forced European leaders to rush breathlessly from fighting one fire to the next.

As if all these short-term challenges were not enough, Europe now risks not noticing its biggest challenge yet, which could render it structurally incapable of competing on equal terms with North America and Asia on the economic battlefields of the future.

Over the last two decades of the internet revolution, for a variety of reasons, Europe has failed to produce relevant, domestic, internet-based business champions, instead becoming a target

Creating a MISSING THE FUTURE #DigitalSingleMarket



EUROPEAN COMMISSIONER FOR A DIGITAL SINGLE MARKET, ANDRUS ANSIP (L) AND EUROPEAN COMMISSIONER FOR ECONOMIC AND FINANCIAL AFFAIRS, PIERRE MOSCOVICI (R) HOLD A PRESS CONFERENCE ON NEW VAT RULES FOR E-COMMERCE AT THE EU COMMISSION HEADQUARTERS IN BRUSSELS, BELGIUM - DECEMBER 1, 2016.

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market for American technology and e-commerce companies.

Among the key success factors for internet companies, in particular e-commerce and social networks, is being able to quickly build up a critical mass of users in a target group and then being able to scale the model to additional target groups.

I.

While the majority of social networking, e-commerce and digital marketing concepts were developed in the U.S., local European players were typically quick to copy and adapt the concepts to their particular national markets, resulting in many European eBay, Amazon and Facebook clones, developed in the 2000s. Instead of Facebook, there was the German Facebook clone studiVZ and the Polish LinkedIn clone GoldenLine. However, most of these regional players were able to grow only

Over the last two decades of the internet revolution, for a variety of reasons, Europe has failed to produce relevant, domestic, internet-based business champions, instead becoming a target market for American technology and e-commerce companies.

as long as the American originals were busy elsewhere. When Google, Amazon, eBay and Facebook directed their eyes towards European markets and started entering them, the local players were heavily disadvantaged against them – having a smaller domestic market base,

There is no common European market for local identity and culture. The only common denominator is the English language and American popular culture.

often a non-English original language and user community, and less access to growth capital, leaving them with too few resources to defend their market leader positions. With a few notable exceptions, for example the Swedish music streaming service Spotify – European players had to let themselves be taken over by their American big brothers or risk slowly bleeding user numbers into irrelevance. Today, the European internet is firmly ruled by the American triumvirate of Google, Amazon and Facebook, with the sharing economy dominated by the American Airbnb, Uber and others.

In the short term, this seemed like a beneficial, win-win situation for both sides of the Atlantic, the result of globalization and integrated markets. America gives Europe Facebook and Twitter, while Europe gives America German cars and French wine, so what could be wrong with that? Also, this type of development might be structurally unavoidable. In industries where scale matters above all, the fragmented cultural landscape of Europe just doesn't seem fit with the creation of large internet players. If service offers are unique and customized to the specific cultural needs of a European country, they are automatically confined to this particular market – be it German, French, Polish or Hungarian. It is very unlikely for a French

person to use a Polish social network or vice versa. There is no common European market for local identity and culture. The only common denominator is the English language and American popular culture. And therefore Facebook, Twitter, and the like, are a natural fit.

This phenomenon is similar to the European movie industry. Economically, production budgets in the film industry are directly correlated with the size of the addressable market. The 80 million Germans, 35 million Poles and the 10 million Hungarians, will never be enough to justify similar budgets as 320 million Americans and the additional billions associated with the English language and American culture.

Therefore, the European film industry has become marginalized and dominated by Hollywood and is currently only in existence due to state subsidies. Today, having a domestic film industry is a luxury that European societies choose to afford themselves, rather than a self-sustained driver of economic growth.

II.

So maybe the same applies to web pluralize or social networks? Perhaps all of this isn't a problem? Google and Uber work just fine in Europe, so what does it matter where their headquarters are?

The problem is that it is increasingly the cash accumulation from web searches and advertising, social networks and e-commerce applications that fuels the development of next generation technologies such as artificial intelligence, virtual and augmented reality, zero-emission and autonomous mobility, robotics and more. While old economic giants such as Siemens and Daimler struggle to quickly change course, it is the dynamic players in Silicon Valley who push forward into new terrain. The

mountains of cash collected by Google from its basic search and advertising services give the company the resources, stamina and appeal to pioneer artificial intelligence, robotics and self-driving cars. For example, Google has invested \$400 million in the artificial intelligence company DeepMind, which then created AlphaGo, which defeated the world champion in the boardgame Go, a game until recently considered unwinnable for computers due to the need to use intuition to navigate through the almost infinite number of potential moves. Facebook, Amazon and Uber all invest heavily from the cash they collect from their American and European user base and global investor base into artificial intelligence startups.

This division of labor between the innovative U.S. and consumer-providing Europe creates a vicious structural circle for Europe where risk-friendly capital generated from first generation e-commerce players only accumulates outside of Europe, further amplifying the already pronounced dearth of private risk capital. What seemed like a win-win example of globalization might end up as a win-lose setup with Europe left with the short-end of the stick.

Another worrisome example is the European auto industry. For decades, Europeans were used to considering their car industry – German, French, Italian – as vastly superior technologically to the struggling American giants like GM and Chrysler. However, the tables appear to be turning due to the entrance of Silicon Valley players into the industry. The breakout success of built-from-scratch Tesla cars was a first warning shot that could have been brushed off as a billionaire's extravagance. Google's less public effort to develop self-driving technology resulted in more than one million kilometers driven on public roads

China has developed their own players, which are now catching up to and sometimes overtaking the American archetypes.

by autonomous, self-driving cars in 2016 alone, a figure which no traditional automaker can come close to. All this testing has allowed Google's self-driving car company, Waymo to refine its technology to a level where human intervention is required once every 5000 kilometers on average – an improvement from once per 1000 kilometers one year earlier; and while Google and Elon Musk revolutionize the car industry, and with companies like Apple joining in, Europe's biggest car manufacturer, Volkswagen, is still dealing with the fallout from its diesel emission cheating scandal.

So while it is no problem that European consumers are using Facebook or Google, it is becoming a problem that Europe hasn't been able to create any comparable, large-scale applications on their own, which could direct their resources and investment to pioneer next generation technologies. Europe risks being left behind.

III.

China, on the other hand, has kept American internet companies at bay. The restrictions set on Google, Facebook, and others in China, were officially driven primarily by concerns that they could undermine the censorship and control of the ruling party. However, no matter how just the motivations for these restrictions were, in consequence, China has developed their own players, which are now catching up to and sometimes overtaking the American archetypes. The web search



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leader Baidu, social networks like Sina Wei and the messenger-turned-mobile-platform WeChat, have grown strong, protected from Western competition. The strength of the Chinese internet industry gained global prominence with the IPO of China's largest e-commerce platform Alibaba, which is now the world's fifth biggest internet company by market capitalization.

Among the top-10 biggest internet-based businesses in the world, there are now seven American firms (Amazon, Google, Facebook, eBay, Netflix, Priceline, and three Chinese ones: Tencent, Alibaba and Baidu). There is not a single European company.

However, what is more critical is how these first generation social and e-commerce players are the catalysts for the next generation of internet businesses. A good example is the ride-hailing application Didi. Didi, a local competitor to Uber, was backed by investments from Tencent, the Chinese social media champion and Alibaba, the Chinese e-commerce behemoth. After a long battle for market dominance with Uber, Didi finally overtook Uber China and became the largest ride-hailing application in the

world, with all three Chinese internet giants among its shareholders (Tencent, Alibaba and Baidu).

Similarly to their American counterparts, it is these Chinese internet companies which use the cash generated from their mass applications to push forward next generation technologies. Baidu, for example, recently acquired the Beijing-based artificial intelligence outfit Raven Tech and is also pushing into the autonomous vehicles industry. It is telling that Baidu is among the companies to have received an Autonomous Vehicle Testing Permit by the Department of Motor Vehicles in California.

IV.

What does that development mean for Europe? Unfortunately, nothing good. Once the boat is missed on a certain technological development, it is not that easy to catch up. A good example is the economy of the Soviet Union. While, of course there is only limited sense in comparing the European Union to the Soviet Union – one being a voluntary union of democratic and capitalist states, and the other a totalitarian planned economy created by force – the Soviet case still provides a useful illustration.

There are many reasons for the economic and as a consequence, political collapse of the Soviet Union – the economic costs of the revived arms race, the oil price drop of 1986 and so on. But one interesting element is the Soviet failure to compete in the realm of microelectronics. Semiconductor-based electronics was initially developed in the U.S. and mass manufacturing was successfully developed in Asia. By the 1970s, the Soviets realized the growing importance of that technology and made some strides to catch up with the West in integrated circuit production, but were always lagging behind by several years. By the mid-1980s, the Soviet integrated circuit production capacity was approximately 10% of that in the U.S. and two generations behind the latest chip models, while at the same time microprocessors started playing an ever-bigger role as growth drivers of the global economy. By the late 1980s, the Soviet Union de-facto gave up on developing its own microprocessing technology and started refurbishing plants to copy American technology, just as developing Asian countries had done many years before.

So, does Europe stand a chance of catching up or is it structurally destined to become a backwards backwater, doomed to watch the technological progress of the future from the sidelines, at most as passive consumers? Over the last few years, the EU – and the Eurozone in particular – has already become the sick man of the world's economy. Average annual growth rates over the last five years were 2.7% for the world, 2.1% for the U.S., 7.9% for China and 6.7% for India. The economy of the Eurozone however grew only by 0.7% in that period. While many Europeans still believe that this prolonged economic stagnation is a temporary challenge that will somehow be overcome, it could also be the beginning of a long-lasting structural disadvantage that will make Europe fall behind in the growth drivers of the future.

To avoid this, a paradigm shift is required – European leaders need to stop focusing on how to restore the wealth generators of the twentieth century, and let European companies join the competition for building the twenty-first century. European states need to help alleviate the lack of private risk capital and investment structures, while avoiding the trap of creating a bureaucratic parallel world where startups adjust their business models to the requirements of EU funding programs, rather than market needs. Europe needs to rethink its often-restrictive regulations, that protect the vested interests of the old economy at the expense of disruptive, new technologies, be it with financial services and the upcoming blockchain revolution, or elements of the shared economy, such as ride and apartment-sharing.

Europe needs mechanisms for quicker, pan-European rollouts of local ventures and must improve direct access to the U.S. market, to restore the transatlantic economic relationship to a two-way street, especially when it comes to new technology. Both the private and public sectors can team up to create platforms to ease access to overseas markets. But most of all, Europeans need to overcome complacency and a sense of false security. In focusing our attention on fighting fires, we might be missing the boat to the future. A wake-up call is required. And it seems that the more dynamic East-Central European region is quicker in understanding and adapting. Increasingly, countries like Poland, Romania, Hungary and the Baltics are becoming growth drivers, including in the new technology space. The innovation zone is shifting outside the Eurozone. But will it be enough to turn the European ship around?

Roch Baranowski ■

February 1, 2017

ANALYTICS AND BIG DATA IN THE ENERGY SECTOR

SEBASTIAN SAKOWSKI, PhD

Tremendous advances in computer technology, huge storage capabilities, and fast communication through computer networks have enabled the application of sophisticated statistical methods for knowledge discovery from data warehouses.

In recent years, we have started storing and processing data like never before and data mining techniques have become vital in various spheres of real life, e.g. the retail industry, finance, and fraud detection. Most electronic information was only recently created,

and now we only need to look into data storage to discover new knowledge. Nowadays, we can observe a lot of big data and data mining applications in various areas including energy industry, chemical engineering, ecosystem modeling, and biomedical research. Data mining and big

data techniques are still evolving and the latest trends in these fields include web mining, text mining and integration with warehouse systems.

ANALYTICS IN BUSINESS AND INDUSTRY

Investment banks and asset management use advanced mathematical algorithms to analyze huge data sets to make reasonable investment decisions. Goldman Sachs, one of the biggest investment banks in the world, uses artificial intelligence solutions to improve existing business processes. Meanwhile, JPMorgan, another global leader in financial services, is currently developing big data applications and robotics. These banks have a large database of customers and could apply big data analytics to build a risk prediction model and to credit risk scores. Another example of applying big data analytics is Netflix, a multinational entertainment company that specializes in streaming media and attempts to predict which books, music and movies clients may enjoy.

British Petroleum (BP) is an industry leader in using new computer technology such as big data and data mining. It has opened in Houston (USA) the “*Center for High-Performance Computing*” (CHPC) which is one of the world’s largest supercomputers for commercial research. These computers use big data techniques to support the energy industry from around the world. Using this approach, BP can gather data with the use of seismic technology and geophysical sciences that can be applied in drilling and could help in oil and natural gas exploration. In addition, this data center opens new possibilities for the application of data mining techniques in other areas of business activities, such as midstream and downstream. Recently BP has established the first “*Big Data, Data Sciences Instruction and Research Centre*”

Data mining and big data techniques are still evolving and the latest trends in these fields include web mining, text mining and integration with warehouse systems.

in Azerbaijan, which is located at ADA University in Baku and aims to provide an excellent opportunity for people to share knowledge about big data analytics.

Another oil and gas company (Royal Dutch Shell) collects data from sensors which monitor the low frequency seismic waves of tectonic activities. These huge data are considered alongside information about exploration drilling in order to then make recommendations about where to drill. Shell uses advanced computer technology to improve the operation of the machinery used in drilling and to streamline the transportation of oil and gas. Furthermore, Shell applies complex mathematical models to set prices at petrol stations and strives to increase the efficiency of the distribution of oil and gas.

Polish companies are in the initial phase to explore big data technology. This is because data analytics requires investment in computer infrastructure. For this reason, the first projects in this area were developed by Poland’s largest company. For example, the largest online transaction platform in Poland (Allegro) uses big data analytics to analyze users and to help them find the products they desire. It is worth noting that in the coming years the biggest Polish companies want to develop big data analytics, and those which operate in the drilling industry and geophysical services industry have the potential to use

Some Polish companies are able to build global strategies based on innovative technologies such as big data and cloud computing.

big data analytics and pattern recognition techniques as they process and store huge amounts of seismic data. It can be said that this move is somewhat necessary for companies to excel and compete in today's competitive global economy. Some Polish companies are able to build global strategies based on innovative technologies such as big data and cloud computing.

For example, the Polish company Cloud Technologies applied big data technology to online advertising and the optimization of advertising campaigns. It should be noted that Poland has great opportunities to further develop in the areas of big data and data mining as Polish computer scientists enjoy global respect. This is due to the fact that Polish software developers have won some of the most challenging programming competitions in the world such as the Google Code Jam and the Microsoft Imagine Cup.

It should be emphasized that in the latest world ranking of the best countries for computer programming Poland took third place. Therefore, supporting innovative areas of computer science such as big data is crucial from a strategic point of view of the Polish government. It is important both to develop entrepreneurship based on advanced computer techniques and to implement big data technology in Polish companies partly owned by the treasury.

BIG DATA IN THE ENERGY SECTOR

The energy industry includes four main areas: the petroleum industry, the gas industry, the coal industry, and the

electrical power industry. For example in the oil industry we can distinguish different cases for using big data analytics, such as in upstream, midstream and downstream. In upstream big data analytics are used to store, to analyze seismic data, and to decrease crashes in production. However, midstream big data infrastructure is used to store conservation logs and to analyze transport data in real-time. In the oil and gas industry (downstream) big data technology has been employed to gas station automation optimization and to minimize financial risk. Big data techniques and data mining models could be used by energy companies for high frequency trading on financial and energy markets. The ability to collect and analyze data such as day prices and information about trading positions can allow for reduced transaction risks associated with the management of positions on commodity markets. Big data analytics could help commodity traders make better transactions on financial markets and decision makers to quickly respond to rapidly changing commodity markets. Such solutions can provide many advantages, including the discovery of new correlations among commodities, a decrease in transactions costs and improving the calculation of transaction risks. It is worth noting that big data techniques can help trading organizations to identify aberrant trading behaviors and to regulate financial markets too.

Most companies collect data from different sources, such as sensors for drilling technological parameters, demographic data, and from social media. Therefore the integration and management of big data collections are crucial for companies working in the sphere of international business. The complexity and diversity of this information requires algorithmic approaches that can be implemented by data scientists who can use statistical analysis, reporting services, and neural



WARSAWINSTITUTE.REVIEW

networks. The energy industry uses business intelligence and data mining techniques to optimize decision making, to improve the efficiency of refineries, and to predict the prices of financial markets. In recent years an increasing number of data mining systems have been presented and implemented in various domains. Most energy companies store huge amounts of information in the form of a relational database (e.g. SQL Server) and in the form of unstructured data, (e.g. text documents). This information includes data from IT infrastructure such as real-time data from different industrial sensors and environmental monitoring. Energy companies should use new methods and technologies to integrate and analyze data, e.g. Hadoop and NoSQL. Hadoop technology allows for the distributed processing data on clusters of computers and is designed to scalability of calculation processing. New technologies have lowered the cost of data processing and technology, such as Hadoop, thus making the analysis of large data sets more efficient. We distinguish other big data platforms that can be used in the energy industry, such as IBM open source InfoSphere platform, Microsoft Upstream

Big data analytics could help commodity traders make better transactions on financial markets and decision makers to quickly respond to rapidly changing commodity markets.

Reference Architecture (MURA platform), and Oracle Architecture Development Process. Analytics in the energy industry provide tools for knowledge management and thereby generate new added value for economic growth. As such, the energy companies that wish to use analytics in their businesses can start by developing big data and data mining strategies. Due to the complexity of these issues big data strategies should be carried out by a team composed of academicians and experienced data scientists.

DATA MINING TECHNIQUES

Data warehouses store information gathered from different sources such

The main goal of using big data techniques is to improve the efficiency of strategic decision making.

as databases, computer systems, and from social media. The amount and the complexity of these data are such that a company must use sophisticated analytics techniques such as machine learning. The main goal of data mining techniques is the optimization of the business process and to use data sets to improve business decisions. Data mining methods focus on the extraction of previously unknown (nontrivial) information from data, and use advanced computer science methods to discover knowledge from large volumes of data and to present the results of big data analysis in a form that is easily comprehensible. Data mining can help a company's managers with regard to fast and better strategic decision making. These methods can enable the development patterns and relationships which occur in the data in order to then build a model for the real world. The managers can use these models to make predictions and to improve the business process. Data mining is used to build many models, e.g. clustering, time series, and classification, the main aim of which is to solve business problems. The most popular application of analytics in the energy industry is to reduce energy costs and to oversee energy consumption.

However, the concept of big data is to apply in practice advanced computer analysis by using complex mathematical models that are executed on large data sets. The main goal of using big data techniques is to improve the efficiency of strategic decision making. Effective analysis of data allows

for quick decision making and responses to changes in the business environment.

FUTURE TRENDS:

It is estimated that the global market analysis of big data is currently growing six times faster than that of the IT sector. There is little doubt that big data analytics has afforded additional benefits to businesses and improved the functioning of corporations. Today's businesses must be able to react quicker, should be profitable, and must focus on high quality customers services. Company managers should be interested in new analytics methods such as data mining and business intelligence, which impact every industry in the modern world. The implementation of big data and data mining techniques has many advantages for companies, such as improving the efficiency of production process, integrating data from different sensors, improving management processes, and speeding up exploration and production. Big data and data mining are major disciplines in computer science with growing industrial impact which clearly influences the energy industry. It is predicted that big data and data mining technology will face plenty of interesting new challenges in the future, such as finding ways to improve predictions and forecast models. If companies can use data science and big data tools for making predictions, this is likely to optimize investments and help cut costs. In the near future we will see more smart machines with sophisticated sensors that will enable the storage of huge amount of data, while new products based on big data will be created with many companies having to apply big data analytics in order to increase their competitiveness in global markets.

Sebastian Sakowski ■
January 4, 2017



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REVIEW**

**RUSSIA
MONITOR**



RUSSIA MONITOR

RUSSIA MONITOR OFFERS:

- Analysis of forces in the ruling elite of Russia
- Forecasts of political developments in Russia
- Assessments of Moscow's moves on the international scene and their impact on Russia's economic policy
- Analysis of connections between business circles and policy makers
- Assessment of the risks associated with Russia's energy expansion
- Information about the situation in Russia's security apparatus

As a result of its aggressive policies, especially after the escalation of its operations since 2014, Russia has become the subject of renewed interest among politicians, entrepreneurs, academics, journalists and pundits. This makes access to expert knowledge about the situation in Russia, the direction of Russian politics, economic and military expansion, and forecasts of consequences for Europe and the world all particularly important today.



Russia Monitor is a review of the most important events relating to Russian security. Warsaw Institute experts monitor and analyze the activities of the Kremlin and its subordinate services to anticipate the short-term and long-term consequences not only for Russia, but also for neighboring countries and the Western world. Therefore, the subjects of our analyses are both events and phenomena closely related to the internal situation in Russia, as well as its foreign policy. We are interested in Russian politics behind the scenes, changes in security forces and special forces, and the driving factors behind offensive activities, including military operations. Our analytical experience, including the ability to form in-depth assessments and forecasts, is here to serve you. Our experts, who have been monitoring the situation in Russia for years, provide an unmatched quality and depth of analysis. We want *Russia Monitor* to help politicians and businessmen in making decisions, while bringing the attention of all concerned to the reality of Putin's Russia.



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