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INTRODUCTION

In 2014 Ukrainians decided to fight for the choice of Europe. The Euromaidan forced President Yanukovich to flee to Russia in February 2014, and initiated an unprecedented transformation process. A month later, Russia invaded and occupied the Crimean Peninsula, and supported separatist forces of Donetsk and Luhansk, pitting pro-Russian forces against the Ukrainian army.

The aggression in Ukraine led to a massive deterioration – unseen in scope since the Cold War – in the relations between Russia, on the one hand, and the EU and the US on the other. Since the beginning of the conflict more than 6000 people died, and 2 million people had to leave their home.

The Ukrainian army suffered heavy losses. It had not only lost more than 3000 soldiers, but some of its most modern equipment. Due to budgetary restrictions, the condition of the Ukrainian Army was extremely low already by 2014, but the conflict brought massive increase in the budget and a huge modernisation program.

Not only the professionality and the equipment have been improving rapidly in the last 3 years, but there are significant changes in the interoperability and policy planning of the Ukrainian Forces.

On 23 December 2014, the Ukrainian parliament renounced Ukraine's non-aligned status. The Ukrainian military is since transforming to NATO and adapting its armed forces to the NATO standards. Recent military exercises proved, that there is a real chance to improve and increase cooperation. Obviously due to the shared threats and transformational experience, regional cooperation has a strong logic. That is already proven by the operation of the LITPOLUKR Brigade. As Visegrad countries increase their defence cooperation, they should further investigate how to involve their Eastern neighbours to these activites. From a geographic perspective, Moldova is the next country in the region, which should be invited to this broader cooperation. This paper would like to evaluate the different fields of cooperation and recommend future steps for the decisionmakers.

Visegrad support to the security sector of Ukraine Introduction

Prior to 2014 cooperation with Ukraine on the field of security and defence focused on occasional trainings and exercises mostly on a bilateral level. The game changer on this front was the Ukrainian participation in the V4 Battle Group. The cooperation on this field of CSDP was essential for the Visegrad countries, as their airlift capability is more than limited. The ongoing crises limited Ukrainian possibilities of closer cooperation in EU missions, on the other hand due to the nature of the conflict, cooperation on tactical and strategic airlift remained open.

Following the Russian aggression in Ukraine, numerous NATO countries launched programs to support the Ukrainian armed forces. The division among V4 countries visavis the relations with Russia, created major differences in the level of support. While Poland provided support from the early stage of the crises, other V4 countries mainly concentrated their support to the humanitarian field, and it has changed very slowly. Still by 2016, most of the V4 countries launched military support projects and cooperation with the Ukrainian MoD.

V4 decided to support the Ukrainian transformation on a regional level as well. Countries divided main topics along they support the country, and the Slovak republic volunteered to coordinate programs focusing on the security sector reform. Unfortunately, these programs were mainly implemented only in the Civil Servant Mobility Program (CSMP) of the Think Visegrad platform. Through this format between 2014-2016 Slovak NGOs hosted more than 18 civil servants from the field of security sector.

The situation is much brighter when we are focusing on bilateral projects. Hence, it is worth to hereby summarize the most important actions taken by individual Visegrad countries. Obviously on this field Poland stands out, but every single V4 country provided some sort of support in the past three years.

Poland

Poland actively followed the situation in Ukraine from the very beginning of the conflict. Warsaw was among the first sending troops to observe the situation in Crimea. As the situation escalated in Eastern Ukraine, Polish MOD prepared humanitarian aid for Ukrainian

soldiers. Since August 2014 Poland is supporting Ukraine with humanitarian but also with meaningful defence equipment assistance.

Poland was also the first V4 country which actively participated in an exercise responding to Russian aggression and supporting deterrence. The Rapid Trident training exercise took place following the Wales Summit as one of the first responses of NATO, from 13th to 26th September 2014. 35 Polish soldiers took part in it together with soldiers from the United States, Romania, Moldova, Bulgaria, Spain, Estonia, Great Britain, Germany, Lithuania and Norway.

The next major step in supporting Ukrainian forces and fulfilling the goals of the Newport Summit of NATO was the agreement on the creation of LITPOLUKBRIG, which was signed by the Defence Ministers of Lithuania Jouzas Olekas, Ukraine LtGen Valeriy Heletey and Poland's Tomasz Siemoniak, respectively, on 19th September 2014.

LITPOLUKRBRIG is the Joint Lithuanian-Polish-Ukrainian Brigade, a multinational joint military unit based on the model of the European Union combat groups, which includes three infantry battalions – one per state – and is complemented by other supporting elements as well. After the signing of the agreement on its creation, multiple trilateral meetings between the Ministers of Defence were held. The main aim of these discussions was the improvement of interoperability, command procedures and technical defence cooperation between the partner countries. LITPOLUKRBRIG units have also undergone numerous training exercises, such as the multinational MAPLE ARCH 2016 and the ANAKONDA 16, with civilmilitary cooperation operations. With the development of interoperability, mutual understanding and training, the goal is to reach full operational capability, so that the brigade has the prospect in the future to be able to actively take part in peacekeeping operations and execute assignments in the name of the United Nations, NATO or the European Union. Since the official inauguration of the joint military brigade, 25th January 2016, headquarters and staff of the formation is located in Lublin, Poland.

With the participation in LITPOLUKRBRIG, Ukraine has definitely gained, from multiple aspects. Ukrainian soldiers have the opportunity to implement NATO standards of operations and take part in future NATO projects, this way, the brigade also approximates Ukraine to NATO. In addition, as formerly stated by the President of Ukraine, Petro Poroshenko: "It will play a key role for the training of servicemen of the three countries, exchange of experience, establishment of efficient dialogue and participation of Ukraine in the Visegrad

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military tactical group of the European Union", so relations with the EU have also improved greatly.

Besides the formation and regular improvement of cooperation in the framework of LITPO-LUKRBRIG, Poland continuously provided assistance in many forms to Ukraine. Following the outbreak of the crisis, multiple instances of aid arrived from Poland, complemented by discussions between Ukrainian and Polish medics in order to help in the reform of Ukrainian military medicine.

As for other fields of reforms, to adjust military education to the NATO standards, Polish professionals actively took part in the training of Ukrainian instructors in the framework of NATO-s DEEP program (Defence Education Enhancement Program), which aims at rebuilding Ukrainian military education. In addition, as part of the NATO program, Ukrainian NAVY cadets were trained for two months on the Polish ship Vodnik. The opportunity to be able to participate in the Poland based multinational NATO exercise was also provided for Ukraine servicemen. These operations and trainings were parts of a bigger strategy, which intends to bring Ukraine closer to NATO. The mentioned examples show that Poland assisted Ukraine greatly to achieve this goal.

The level of willingness for cooperation could definitely be seen on the meeting between Polish and Ukrainian Defence Ministers held on 14th and 15th December 2015. During the discussions, Minister Antoni Macierewicz said: "Ukraine is a strategic partner of Poland and our top priority. That is why I pay to Kiev my first official visit as the minister of defence. Safe Ukraine means safe Poland and safe Europe." The conference was organised to discuss interaction in the sphere of regional security, and the most important aspect was that it restored cooperation between the National Security and Defence Council of Ukraine and the National Security Bureau of Poland.

Czech Republic

Similar to Poland, the Czech Republic was also among the first countries to assist Ukraine after the beginning of the crisis. The first action of the country was to provide medical supplies for the Military hospital in Dnipropetrovsk in February 2015, with help coming from France as well. The first part of Czech humanitarian aid consisting of 10.000 items such as winter uniform, boots, backpacks, tents, was delivered to Kiev shortly after, by the 3rd March 2015.

The most important event considering the Czech-Ukrainian bilateral collaboration was the

Ukrainian and Czech Defence Cooperation Forum, that started on 26th March 2015 with the attendance of First Deputy Minister of Defence of Ukraine and Deputy Minister of Defence of the Czech Republic. Focus was on the intensification of the Ukrainian-Czech defence and defence industrial cooperation, also with regards to the provision of the Ukrainian army with modern weapons, equipment and uniform. The representatives of the defence sector of both countries exchanged experience in European and world security, reforms of the defence sector, bilateral military and military cooperation between the countries and their enterprises as well. In addition to all these, the Czech Republic also organized military trainings for Ukrainian servicemen, including a onemonth training course exclusively for Ukrainian paratroopers.

Slovakia

In coordination of the OSCE, Slovakia also sent members of the SVK Armed Forces to Ukraine as a part of the International Inspections Group, already in March 2014.

It was also the Slovakian Minister of Defence Martin Glvác on a meeting of MoDs of V4, who suggested that V4 defence ministers meetings could be held with the participation of the Ukrainian MoD. On the same meeting, all members confirmed their interest in letting Ukraine join the V4 Battlegroup.

The first humanitarian aid from Slovakia arrived in January 2015, including mainly clothing and medical supplies. Members of Ukraine military personnel were also received for rehabilitation throughout the country. Besides medical assistance, on a meeting between the two countries MoDs in September 2015, Slovakia offered a training package for Ukrainian EOD personnel (Explosive Ordnance Disposal), and stated that the Slovakians are ready to contribute further to any relevant requirements of Ukraine.

In July 2016 Slovakia announced, that following Bratislava's initiative they would lead NATO's fund for EOD activities in Ukraine. As Hungary offered EOD trainings for Ukraine as well, further V4 cooperation under Slovak leadership within this field has a great potential.

Hungary

Due to the sizeable Hungarian ethnic population in Ukraine, Hungary considers Ukraine as an especially important partner in the region, and has expressed strong willingness to support the country in the wake of the crisis.

Although Hungary ruled out technical-military assistance, Budapest provided multiple in-

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stances of humanitarian aid, probably the most important of these was on 13th February 2015, when Hungary has launched the largest Hungarian aid program (Hungarian Interchurch Aid) in cooperation with the Ministry of Foreign Affairs and Trade to date in Ukraine. The initiative aimed to help refugees in warridden regions of the country. As other form of assistance, Ukrainian military servicemen were received for rehabilitation in the country a number of times. This has included the treatment of severely injured soldiers in the early face of the conflict, and "art-terapy" and rehabilitation recently in the last months, cofinanced by a Hungarian businessman.

Although the program is only distantly related to military assistance, we have to mention, that Budapest supported the holiday of more than 600 Ukrainian children, whose parents were injured or died in the military conflict.

On 12th of July 2015, an aide to MoD of Ukraine visited Hungary. The parties exchanged information regarding organization of military service, treatment and rehabilitation of servicemen. Agreement was also reached on further cooperation and exchanged invitations for scientific conferences.

As part of the Hungarian support, Budapest provided NATO language training for 20 soldiers in 2014. The potential for further cooperation on this field is enormous, as Hungary has the proper capacity to provide similar trainings, while there is a considerable need on the Ukrainian side if cooperation with NATO member states will continue in the upcoming years. Hungary also provided 100 000 euros to support the NATO Trust Fund for strengthening cyber security in Ukraine. Finally, Hungary supported both financially and by sending experts the work of the OSCE mission in Ukraine in the last three years.

Conclusions

Though there are considerable differences between the Visegrad countries in their foreign policy priorities and motivations about Ukraine, and particularly regarding Russia, experiences of the last three years demonstrate that the need to support Ukraine and its broader security sector indeed constitutes a common denominator regardless of the differences. Hence, supporting Ukraine's security sector might serve as a common platform for further joint V4 actions and also as a joint Visegrad venture to present to non-Visegrad partners and allies.

Though any closer coordination between the V4 countries seems unlikely at the moment, even non-coordinated steps could be of great importance, if they answer the needs of Ukraine. With other words, instead of calling in vain V4 countries to coordinate their actions

with each other, something which they have not done much in the last three years, emphasis should be shifted to making sure that V4 countries act on those fields, where Ukraine needs them to act. Even if intra-V4 coordination remains as vague as it is, as long as actions of individual V4 countries answer the needs of Kiev, all V4 countries may still refer to the support provided to Ukraine's security sector as a common denominator of Visegrad actions, and thus strengthen the reputation of V4 in the eyes of non-Visegrad partners.

V4 Defence Planning And Its Lessons For Ukraine And Moldova

Introduction: The Framework of V4 Defence Planning

Cooperation on defence is one of the most visible agendas of Visegrad Four (V4) cooperation, and also the issue on which most expectations lie, both internally within the group but also from partner nations in NATO, the EU, or the Eastern neighborhood. Enhanced cooperation and planning between the four member states can, on paper, foster the closeness of strategic cultures and create necessary economies of scale in procuring defence equipment, an item of utmost necessity whether when talking about mutualization of forces under decreasing budgets or common procurement under the currently observed trends of increasing defence expenditures throughout the region. V4 defence cooperation was strong when the countries were in the NATO or EU waiting room, but diminished after accession to both institutions had been granted to all the countries; however, with the advent of Pooling and Sharing and Smart Defence and the onset of the financial crisis in a less threatening security environment, V4 defence cooperation was rekindled as a necessity to manage future regional military orientations. The rotating EU presidencies of the Czech Republic, Hungary and Poland in between 2009 and 2011 provided the necessary impetus to kickstart joint regional plans for defence cooperation and especially for a concrete deepening of defence planning.

The year 2013 marks the point when largely political declarations of intent were finally turned into more concrete proposals, with the Budapest Joint Statement of the Visegrád Group Heads of Government On Strengthening the V4 Security and Defence Cooperation by the Prime Ministers, which calls on the ministries of defence of the V4 to "develop a longterm vision of a common strategy for security cooperation aiming to strengthen the ca-

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pability building activities", "to explore the possibility of creating a framework for a greater defence planning cooperation" and "to strengthen the training and exercise cooperation of the armed forces".

This statement of intent was followed by the Framework for an enhanced Visegrad defence planning cooperation, dated March 2014 (under the Hungarian presidency of the V4). It is premised around the fact that "the states of V4 need to spend more efficiently on defence" and "must continue to explore areas where capabilities can be pooled, sustained or develop together, or procurement can be conducted jointly when mutually beneficial in order to better explore limited funds". It means, in short, that cooperation needs to serve national development priorities and fill regional credibility gaps.

This document was accompanied by the Long Term Vision of the Visegrad countries on Deepening their Defence Cooperation, which set out three clear priorities (the assessment of the implementation of which should be carried by Defence Ministers on a yearly basis):

- 1. the development of capabilities and joint procurement through increased defence planning cooperation;
- 2. the creation of multinational units in order to conduct crossborder activities based, partly, on the experience of the preparatory period of establishing the Visegrad Battlegroup;
- 3. the strengthening of the education, training and exercises cooperation based on the Visegrad Military Educational Program and of the annual joint military exercises.

Finally, in order to create real prospects for the implementation of these priorities and to reflect on existing discussions since 2007, a Memorandum of Understanding on Establishment of the V4 EU Battlegroup was signed, which states the level of ambition of the battlegroup and provides clarity on the national contributions and divisions of responsibilities. V4 defence planning was then officially institutionalized by the creation of a V4 Defence Planning Group, which has become one of the two main structures to implement this agenda, alongside the Senior Body. The former is composed of national defence planning directors, armament experts or other relevant officials, the latter of Secretaries of State, Defence Policy or Armament directors; in effect, the Senior Body has the power to decide whether a project proposed by the Planning Group should be implemented. The project can concern any of the three priorities that is set out in the long term vision document.

Lessons Learned from V4 Defence Planning: Successes and the Long Way to Go

Drawing an assessment of the implementation of this project in 2017 requires looking at whether the V4 has delivered on the three areas envisaged by the framework document: the pooling and sharing of assets, joint procurement of equipment, and research and development. An objective analysis also should note that proper defence planning within the V4 is a relatively new agenda, and judging such a complex policy area after only a bit more than two years would not be fair. Any analysis also needs to account for the extremely volatile geopolitical environment that has triggered in shift in certain national priorities, especially in Poland, and refocused discussions on a political level which makes joint decision making more complicated.

The very existence of the framework was supposed to mitigate the problems posed by countries maintaining different planning cycles, rules for classified information, approaches to security of supply, and of course national standards and requirements. As a matter of fact, the Visegrad documents do not stress the fact that defence planning coordination should eventually lead to a synchronization of the replacement of military equipment and do not highlight a certain level of ambition for their harmonization. This is a problem to the extent that the ultimate aim of the planning cooperation is to better spend resources (whatever their level), to develop new and adequate military capabilities, in order for the V4 to be able to weigh in more decisively within the military structures and decisionmaking processes of NATO and the EU.

The Value of Regional Unity for the EU and NATO

The V4 has delivered clearly on one of the priority areas identified by the Long Term Vision, namely the creation of multinational units and common training and exercises with the V4 Battlegroup's standby during the first semester of 2016. As the result of almost nine years of uninterrupted discussions, this is undoubtedly the flagship project of regional defence planning, alongside the very important participation of national V4 country forces in the measures of the Readiness Action Plan and the planned deployment for 2017 of a unit of each country's military for a trimester in the Baltic region. However, this should be

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mitigated by the fact that the V4 denied itself the opportunity to 'make history' by becoming the first EU battlegroup to be deployed in operation; after the terrorist attacks on 13 November 2015 in Paris and the activation of article 42(7) of the Lisbon Treaty, France requested the deployment of the battlegroup around the end of January, after a proposal in this direction had been made by Poland. However, any progress was nipped in the bud by the unwillingness of the Czech Republic – especially to approve of the deployment because of uncertainties about the legal mandate under which the battlegroup would operate and a series of logistical concerns. At this point, regardless of this episode, the V4 armies are in lessons learned more about the battlegroup and already working on the structure of its planned standby for 2019, while also still keeping open the possibility of a permanent regional force by the 2022 horizon. One key point in observing future evolutions will be to see how the plans made for the next iteration(s) of the battlegroup will integrate into the stronger role that the EU wants to give itself on security and defence, especially on the measures destined to reform the process of deployment of battlegroups and their financing, which may provide a new incentive to mutualize forces.

In parallel, the joint regional response in implementing the deliverables of the Wales and Warsaw NATO Summits of 2014 and 2016 also counts a success on implementing the priorities of the Long Term Vision. The ongoing consecutive rotational deployment (for training purposes) of national forces of each four countries in the Baltic States (currently, for a duration of three months exemplifies the third priority (the strengthening of the education, training and exercises cooperation based on the Visegrad Military Educational Program and of the annual joint military exercises) and highlights how regional cooperation and close defence planning can directly participate into carrying out collective decision making. The Czech Republic, which inaugurated the rotation by participating in the Training Bridge 2017 exercise in Lithuania, additionally signaled its intention to participate directly in an Enhanced Forward Presence battalion in the very near future, either under British command in Estonia or German command in Lithuania. While these deployments are national in nature, they however are the result of regional cooperation and planning, and it is to be specially noted that they could deliver a regional perspective by 2020, after the second rotation of the EU BG: the Ministers of Defence have "identified the 2020 rotation of the NATO VJTF under the Polish command as an important opportunity for V4 to tighten its cooperation", with "the Czech Republic confirm[ing] its readiness to make a substantial contribution to it". A successful regional cooperation on the Very High Readiness Joint Task Force would highlight the ability of the V4 to contribute successfully to both the EU and NATO frameworks and will come as a powerful symbol of what defence planning can achieve, on top of placing the region as a model of how it can "address the security challenges for all the EU members in an effective manner and strengthen NATO at the same time".

Of course, maintaining such intensive and ambitious deployment schedules will require both increasing defence spending, an issue all countries have prioritized, with varied levels of intensity in its implementation; the more important element that should follow on from this is industrial cooperation, on which a huge premium will be placed if it can help the region sustain its new ambitions on defence policy.

Defence Procurement: The Real Challenge, And Little To Indicate Progress

At this point, joint deployment seems to be the low hanging fruit of V4 defence planning, even if it represents a notable accomplishment. On the other aspects that the framework document and long term vision lay out, the pooling and sharing of assets, the joint procurement and focus on research and development, frustratingly little progress has been made, owing in part to the fact that the framework document do not plan for the alignment of procurement processes or the harmonization of requirements. The text however opens the possibility of a projects being carried in bilateral and trilateral formats using the procedures set out in the documents, even if it would not be explicitly be carried out under the V4 framework. Despite this possibility being open, few such projects have been carried out, even including between the Czech Republic and Slovakia. There exists a joint training center for the Czech and Slovak Air Forces (both operating the SAAB JAS-139 Gripen) in the Czech Republic, and plans were drawn up for a joint training center for Black Hawk helicopter operators, a project so far foiled by the fact that the Czech Republic has decided to delay the modernisation of its helicopter wing. Other plans, such as a Polish-Czech cooperation on the joint procurement of small weapons, are also being discussed, but do not yet represent a breakthrough cooperation that would reverberate up to the minds of the politicians and change the way they think.

It is, at this point, glaringly obvious that the strategic environment has not created incentives to push forwards projects on common procurement, as the pace of these suggest nothing else but standard levels of cooperation that benefit narrow parts of national armies or correspond to industrial expertise of one country. It is therefore clear that enhanced V4 defence planning has suffered the most from one of the very principles of existence of the

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V4: political disagreements, especially regarding threat perception and more generally the strategic environment, trump the willingness that may be expressed at the military level concerning the importance of regional cooperation. Priorities are steered at a political-strategic level, but the actual task of identifying possible cooperative projects, negotiating their specifics and launching them is to be done by technical and administrative Working Teams comprised of civilian and military experts.

No specific office or agency (something like a "V4 Defence Agency", perhaps based on the European Defence Agency) is tasked to carry out these tasks which remain at the initiative of the countries themselves, and place a higher value on regular meeting of armament directors and defence planners. The Framework document (specifically Annex C) has set standards in order to enable the participation of other V4 observers when one country has a relevant planning meeting or a consultation with NATO regarding the NATO Defence Planning Process, and opens the possibility for short and longterm exchanges of defence planning experts. However, these possibilities have not been implemented to the extent that they could have, meaning that capitals themselves are left to coordinate these exchanges on a largely bilateral and uneven basis. This comes in addition to the fact that there is also little coordination at the level of the defence industry itself, a key player in any regional (or European) project; competition between companies in the region, or different competences make it different for blanket agreements to be found for the four countries which often still count on offset mechanisms to be part of international projects, or whose export strategies are more often targeted towards emerging markets located outside of Europe.

Searching for Opportunities in a Closer European Defence Union

The investment plan put forward by the European Commission, destined to support European defence industry and reinforcing the role of the European Defence Agency, is destined to provide additional incentives for regional groupings such as the V4 to coordinate joint procurements via the participation of defence planners in a European Semester, destined to take stock of where synergies may be created between EU member states in order to achieve European military strategic autonomy. However, one main issue will remain the primacy – or the competition - of the NATO Capability Targets, which the V4 Defence Planning Group uses as a reference guide in order to assess the necessity of regional cooperation

projects. Therefore, in the context of a reinforced role for the EU in security and defence, V4 countries will have to make calculations about whether their influence and industrial interests are better defended by trying to weigh into the NATO Defence Planning Process or the new formats at the EU level; this also spells out the imperious necessity of proper cooperation and coordination from both institutions in order to ensure that clear incentives are created for regional cooperation in the context of groupings such as the V4. This also leads to the remark that while strategic choices, which are decided at the political level, inform the industrial orientations (rather than the other way around), there is an imperious need for industrial strategies piloted by the governments with a real input from industry representatives, such as was recently published in the Czech Republic.

One challenge for the V4 will be, in the current strategic context, to deliver on this imperious necessity to beef up its spending, while doing it in a way that comforts the new European orientation that its countries have taken. Quick increases in defence spending go hand in hand with purchasing, in some cases, U.S.made capabilities; therefore, in the context where each country wants to highlight the positive nature of its relationship with Donald Trump's America, showing that it is taking is 2% commitment seriously and in the process reinforcing the dominant position of U.S. defence industry could go counter the agreed upon goal to close this competitiveness gap with the European industries, which is set in the medium to long term. Here again, there is a real danger that politics may trump strategic choices, with the extra risk of further harming V4 political unity.

1. Linking Ukraine and Moldova to EU and NATO missions

The development of the V4 shows that participation in multinational projects acts a powerful integrating force in international institutions acts as a symbol of how the region has been able to gradually align its strategic objectives with NATO's collective decisions. In this light, it is extremely important for Ukraine and Moldova to be able to articulate precisely how they envision their possible participation in international operations. This means there is a clear need for a realistic assessment of how Ukraine and Moldova's current and future force structures can participate in reinforcing NATO's territorial defence, collective security and crisis management priorities, and the EU's Common Security and Defence Policy.

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While there are obviously limitations to this exercise given the current situation in Eastern Ukraine, prospects of Ukraine's EU and NATO membership – and Moldova's further down the road – mandate such a process, for which the V4 defence planning experts can play a key advisory role. It is therefore recommended that contacts at this level be strengthened in order for Ukrainian officials to benefit from the V4 expertise in terms of meeting NATO and EU headline goals, increasing interoperability to minimum required levels in a first place. (In a second place, this knowledge will be useful in helping the country meet NATO and EU Capability Targets) This exercise should also help Ukraine and Moldova consider their participation, already now, in future NATO and EU operations (to the extent possible), in order to provide early training and interoperability opportunities for their armed forces. The V4 could, on an ad hoc basis, advocate within the relevant structures for the integration of these partner nations in operations in order to reinforce Allied unity and to benefit from some of the unique capabilities a country like Ukraine maintains, especially on tactical and strategic airlifting, key enablers that are often missing in the NATO and EU toolkits.

2. Linking Ukraine and Moldova to V4 defence planning initiatives

In parallel of technical expertise, the experience of the V4 in terms of devising (and planning for) common training and exercise formats can also serve an important purpose to build up the capacity of the Ukrainian and Moldovan armies. In the light of possible NATO integration, the ability to "fight together" – to increase the interoperability of forces— will be a key element in determining these countries' readiness. The V4 can play an important role in devising a strategy to integrate Ukrainian and Moldovan forces in multinational exercises where V4 (full or partial) participation is planned, in order to also firmly anchor the military structures to the West. Down the road, such common training could lead to the integration of Ukraine and/or Moldova in a future standby of the V4 Battlegroup, whether already in 2019 or later. Given the current political dynamics of the V4, one way to maintain and preserve unity will be to deepen engagement with partners such as Ukraine and Moldova who can enhance European security and provide decisive contributions to international efforts.

3. Building up independent budgetary and planning processes

V4 countries also have the possibility to pass on important knowledge about the importance of the relationship between the civilian and military sides of the Ministry of Defence, along-side involvement of the Ministry of Economy/Budget in ensuring proper management of the funds that are attributed to defence. This process is important to the extent that it allows for the calibration of politicalmilitary ambitions, for the size and equipment of the armed forces to match the political wishes that are set out for its use, and to determine what the necessary resources are for their training. These are the processes that allow the armed forces to attain the desired level of readiness and to contribute efficiently to multinational operations.

The V4 countries can provide valuable experience in creating a positive process of division of responsibilities between short, medium and longterm planning for the armed forces, in order to make processes immune from the potential negative interventions of political actors. There is an ongoing challenge for Ukraine and Moldova to prevent political interventions into annual budgetary processes and to quell any tendency that may be observed of low discipline in the implementation of state budgets. Finding a proper level of balance for civilian and military control of the defence spending area, as part of a larger comprehensive and normal democratic control of defence activities (also detached from industrial influences, as we will see later), is a crucial process that enhances the quality and predictability of defence planning. An ideal system, based on the ones that exist within the V4, would create separations between departments in charge of planning and budgeting, and to institute an independent controlling structure and committee, which could for example be based in the national parliament and presided by parliamentarians. Since the V4 countries have accumulated knowledge on creating such institutional balances, capacity building for Ukrainian and Moldovan decisionmakers, political, military and legislative should be set as a priority in order to enhance the quality of national defence planning processes.

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4. A strategic guidance for national defence industries

There is a real need for Ukraine to already think about the documents that are necessary to support and defend its domestic industry. In course, the prelude to any strategy should be to ensure that national procurements, or Ukrainian participation in international procurements, is done free of political pressures, especially from industrial groups that may have a proximity with the political power. Therefore, in order to properly support its industry, Ukraine, as part of the strategic documents that will support its defence planning processes, should start a whole of government process to draft a defence industrial strategy, similar to the one Poland and the Czech Republic. This document would clearly underline the role foreseen for the national defence companies in achieving Ukraine's strategic objectives, articulate how some Ukrainian companies play a role in ensuring security of supply for the Ukrainian armed forces, and overall would allow for a better regulation of the sector. Experience from the Czech Republic also shows that the Ministry of Defence acting – even in a limited fashion – as a representative for the industry in its dealings with foreign counterparts can prove beneficial and help integrate the industry in European or global supply chains.

The V4 countries could prove a valuable partner in sharing their experience with Ukraine on the development of these strategic documents and open up regular discussions with the Ukrainian defence planners about which projects could be carried out jointly in the near future. Using the flexibility that is built into the Framework document, which allows for bilateral or trilateral cooperation, consideration should be given to opening up, on an ad hoc basis, planning discussions to Ukraine and Moldova. Doing so could provide an important step to bring Ukrainian (and Moldovan, to a lesser extent) industries to NATO standards and further ensure smooth integration of the armed forces.

5. Reviving and expanding the exchange of defence planning experts

The V4 seems to have purposefully set low ambitions regarding the exchange of defence planners, by leaving the implementation of the program to the interest of the ministries rather than formalizing the process. This highlights the sovereign nature of defence planning and creates a challenge in attempting to harmonize certain procurement cycles and processes. The question that is already relevant as regards the NATO Defence Planning Process will only become more so as the EU sets comparable standards for the member

states to follow. There is therefore a demonstrated need for the V4 to take these programs of exchange of staff to a superior level if the desire is to reach the level of cooperation that the Nordic countries benefit from in their cooperation.

In this regard, two recommendations can be issued:

- the ministries should set aside a yearly budget enabling the participation of their defence planning experts in the meetings of other V4 countries; and a yearly calendar of such meetings should be shared ahead of time in order to make this participation feasible. Participation at Brussels based conversations should be included in this framework.
- a structured plan for the training and integration of Ukrainian and Moldovan defence planners, via their participation in national and regional exercises, should be drafted.

Based on other successful programs such as the Civil Servant Mobility Program, and focused on young officials in Ukraine and Moldova, such a program would allow participants to take away valuable knowledge and implement best practices at home. A small budget could be dedicated to the implementation of this program and could involve outside actors such as think tanks, which have experience in carrying these programs out.

Conclusions

Defence planning, as this paper has attempted to show, represents one of the pillars on which Ukraine and Moldova will continue to build up their Euro-Atlantic integration, given the variety of issues that it encompasses. It also represents one of the elements on which V4 cooperation is the strongest, and its careful exercise has been one of the bases on which V4 countries have built up their influence and positioning within the structures of NATO and the EU. It is from careful defence planning, the existence of reliable mechanisms for intra-governmental cooperation, and an overarching legal framework that other key issues discussed in the framework of the project will naturally follow and create the conditions for a whole of government approach to defence.

The V4 is, along with Nordic countries, the only region in Europe to have created ad hoc mechanisms to undertake specific projects in a joint fashion (on capabilities, the creation of multinational forces, or carrying out exercises), within the Euro-Atlantic structures for a

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vast majority of these initiatives. The V4 countries, which have experienced some similar challenges as currently faced by Ukraine and Moldova, can prove key partners not only in capacity-building, but also harnessing the existing cooperation structures of the V4 to integrate its partners in select discussions, but also advocate on their behalf in international organizations where relevant. Planning, as this paper has attempted to show, represents one of the pillars on which Ukraine and Moldova will continue to build up their Euro-Atlantic integration, given the variety of issues that it encompasses. It also represents one of the elements on which V4 cooperation is the strongest, and its careful exercise has been one of the bases on which V4 countries have built up their influence and positioning within the structures of NATO and the EU. It is from careful defence planning, the existence of reliable mechanisms for intragovernmental cooperation, and an overarching legal framework that other key issues discussed in the framework of the project will naturally follow and create the conditions for a whole of government approach to defence. The V4 is, along with Nordic countries, the only region in Europe to have created ad hoc mechanisms to undertake specific projects in a joint fashion (on capabilities, the creation of multinational forces, or carrying out exercises), within the Euro-Atlantic structures for a vast majority of these initiatives. The V4 countries, which have experienced some similar challenges as currently faced by Ukraine and Moldova, can prove key partners not only in capacity-building, but also harnessing the existing cooperation structures of the V4 to integrate its partners in select discussions, but also advocate on their behalf in international organizations where relevant.

Industrial and R&D Co-Operation In The Field Of Defence Within V4 Introduction

The inspiration behind the cooperation among Visegrád Group states was threefold: to continue the cooperation which had existed in the region prior to the fall of Communism, to take steps to bolster democracy and to prepare for the accession into the Euro-Atlantic Communities. The need for integration into the European security system and cooperation with NATO were foreseen right at the beginning.

Despite the political declarations made in the first years, the Visegrád Group did not launch any specific defence and security measures. This was due to the weakening foreign relations, absence of integration measures, dynamic changes in the political scene, the breakup of Czechoslovakia (which led to the V4 Group, which was originally the Visegrád Triangle) and the different pace of the accession talks with the EU and NATO. The cooperation was re-established only in the final stage of the accession process, as it was assumed that working together could improve V4's negotiating position. It was just after the accession of V4 countries to the EU in 2004 that an updated V4 regional cooperation agreement, the so called Kromeriz declaration was signed, replacing the founding agreement of 1991. One point of the declaration called for cooperation among the defence industries of the member states.

The EU membership strengthened cooperation among the V4 countries, involving them into European regional initiatives, such as the EU's rapid reaction battlegroups (recently within the Visegrád Battlegroup).

Recent political changes and new security threats promote enhanced cooperation in the region. Politicians have suggested that strengthening V4 in the face of weakening EU structures is the way forward for the member states. Nevertheless, a more advanced collaboration among V4 countries in the area of defence still seems to be a melody of the future.

Armed Forces Modernisation Within V4 – A Next Missed Opportunity for Deepening Cooperation?

After the dissolution of the Warsaw Pact, Poland, Czechoslovakia and Hungary inherited huge and massive armed forces, disproportionate to their economic potential. Their armed forces were based on standardised Soviet military equipment incompatible with

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NATO standards. As the accession to the North Atlantic Alliance became a priority for V4 countries, reduction of manpower as well as the replacement and modernisation of older equipment accelerated.

Modernisation And Consolidation Of The Armed Forces Within V4

At the beginning of integration process with NATO, in 1995, the Polish Armed Forces were composed of 280,000 military personnel, 1800 main battle tanks (MBT – T-55, T-72), 1570 infantry fighting vehicles (IFV – mainly BWP-1), 1735 artillery pieces, 85 combat helicopters and around 300 combat aircraft. The Land Force was grouped in 10 divisions (8 mechanised, 1 tank and 1 airborne) and 14 independent brigades. In 1996 an ambitious programme of adjusting the Polish Armed Forces to NATO standards was launched. The main priority was to reduce the number of military units (consolidation) and to replace obsolete equipment (modernisation). By 2006, the Land Force was expected to consist of 4 divisions, 4 independent mixed brigades and 2 airborne brigades. In 2008, the programme of professionalisation of the Armed Forces was adopted and as a result, the military draft was terminated. Simultaneously, new types of military equipment were introduced. Mechanised units received a modern Finnish wheeled IFV – Patria AMV (Armoured Modular Vehicle), known as "Rosomak". Anti-tanks units were equipped with Spike, the Israeli man portable fire and forget anti-tank guided missile. In 2003 the German Bundeswehr handed over 180 Leopard A4 main battle tanks to the Polish Land Force. Additional 105 Leopard A5 and 14 Leopard A4 were purchased in 2013.

The changes touched also the Air Force. The 'Army 2012' programme (Armia 2012) defined its potential on the level of 160 multirole fighters grouped in 10 squadrons (16 aircraft each). Between 2006 and 2008 the Polish AF received 48 modern 4th generation multirole fighters F-16 Block-52+ purchased from the United States, what significantly changed the Air Force as a whole, making it the most modern branch of the Polish Armed Forces. Transport aviation was reinforced by the new military transport aircraft CASA C-295 and used American C-130E Hercules. Less attention was paid to the Navy, which received some

[&]quot;Armia 2012" programme, replaced by "Program integracji z Organizacją Traktatu Północnoatlantyckie-go i modernizacji Sił Zbrojnych RP w latach 1998–2012". In 2001 "Program przebudowy i modernizacji technicznej Sił Zbrojnych RP w latach 2001–2006" was adopted and followed by "Program rozwoju Sił Zbrojnych w latach 2007–2012".

used Western vessels (2 Oliver Hazard Perry class frigates and 4 Kobben class submarines) as temporary solution, but it still waits for modern combat units.

Nowadays, the Polish Armed Forces have 120.000 military personnel under command. The main combat potential of the Land Force is presented by 3 divisions (2 mechanized and 1 tank) and 4 independent brigades (1 mechanized, 2 airborne and 1 aviation one). The Air Force combat units are grouped in 2 tactical wings (6 squadrons, around 100 combat aircraft) 1 transport and 1 training wing, while the Navy includes 2 main fleets.

In 2013 the "Plan of Armed Forces Technical Modernisation for 2013-2022" and the "Priority Goals of Armed Forces Technical Modernisation Programme" were adopted. They have determined priorities in defence procurements for the Armed Forces in the following years. The latter include 14 priority programmes, such as e.g. Air Defence System (e.g. Medium Range Air Defence Missile System, Short Range Air Defence System,); Combat Support, SAR and VIP Transportation Helicopters; Modernisation of Armoured and Mechanised Forces (e.g. new Infantry Fighting Vehicle and Direct Support Vehicle, modernisation of Leopard A4 MBT), Combating Threats on Sea (e.g. new costal defence vessels and patrol vessels as well as new generation submarines) and Modernisation of Missile and Artillery Forces (e.g. self propelled gun howitzer, self propelled mortar and multiple launcher missile system). For all 14 priority programmes in 2014-2022 period PLN 91,5 billon was assigned (USD 22 billion).

As in the case of Poland, the Hungarian Armed Forces (the Hungarian People's Army) were far larger during the Cold War period than they are today. The Hungarian Ground Force consisted of 6 divisions and it had around 1200 MBT (mainly obsolete T-54, T-55) and several hundred artillery pieces at its disposal. The Air Defence Force was based on 2 air defence divisions and 1 air defence artillery brigade. The Hungarian government have implemented several significant and decisive changes in the national defence system since 1996, including the modernisation of the Hungarian Defence Forces and the achievement of the NATO membership. It put a lot of attention to the individual training of soldiers and developing the independent combat capabilities of small military units. Priority was also given to the development of logistic infrastructure, including host nation support capabilities and the capacity of working with Allied forces. Along with the 10 year development plan for the period between 2004 and 2013, the transformation of the Hungarian Defence Forces was accelerated. The Parliament adopted a new national defence act called the Act on National Defence and the Hungarian Defence Forces. The HDF became an all volunteer professional army in which NCOs and enlisted personnel are volunteers who perform their

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duties on the basis of service contracts with the HDF. The mandatory conscript service scheme was finally abolished in November 2004.

For several years, the Hungarian Armed Forces have suffered from cuts in defence budget. Hungarian defence spending has lagged behind the NATO goal of GDP 2 percent for defence. Although impropriate financing postponed the process of modernisation of military equipment, some significant programmes have been successfully completed. Since 1997 the Hungarian army has used man portable surface to air missile Mistral produced by MBDA and last year a contract for a new M3 version and an upgrade of launchers was signed. In 2001 Hungary decided to lease 14 JAS-39 Gripen fighters (delivered in batches starting in 2006) and in 2015 the programme was extended. Hungary effectively reformed its command structure. In January 2007, the Joint Forces Command, HDF (HDF JFC) was established, as the successor of the abolished Land Force and Air Force Commands. In 2016 the Hungarian Defence Forces had 31.000 personnel (additional 20.000 is expected to be in operative reserve). The main potential of Ground Force is combined in the 5th and the 25th infantry brigades, while Air Force transport aircraft (An-26) and jet fighters (JAS-39) are grouped in the 59th Tactical Wing. Hungarian helicopters (M-8/M-17, Mi-24) operate from the 86th Helicopter Base.²

Czechoslovakia inherited from the Communist period the most modern armed forces in the region. It was a result of the Warsaw Pact military doctrine, according to which its armed forces were expected to play a significant role in a potential offensive against the NATO. The Army of the Czech Republic was formed after the Czechoslovak Armed Forces split as a result of the dissolution of Czechoslovakia in 1993. The Czech armed forces in 1993 had 90,000 military personnel. They were reduced to around 65,000 in 1997, to 63.000 in 1999, and to 22,000 in 2004.

In the Czech Republic, as in case of other V4 countries, conscription service system was abandoned. From the beginning of 2005 a career soldier system has been built. It was a part of a fundamental reform of the Czech military system launched in 2002, which also involved downsizing, organisational changes, modernisation of equipment and reshaping the locations of garrisons and sites within the country. According to the Czech Ministry of

² Editorial note: Actual situation is much worse based on the 2016 Hungarian budget, that refers to 25533 personnel and 8000 unfilled position. Out of the 17500 active people the approximate number of those working at background institutions and governmental agencies is approximately 11.000. The number of operative reserves is 5200.

Defence, by 2006, the military achieved initial operational capabilities and stabilisation of forces. The full operational capabilities are set to be reached before 2020.

Today, the Army of the Czech Republic comprises the Czech Land Force and the Czech Air Force. The former Joint Forces Command and Support Forces Command HQs were disbanded by 30 June 2013. Main combat units of the Land Force are the 4th Rapid Deployment Brigade, the 7th Mechanised Brigade and the 13th Artillery Regiment. The Air Force operates from 3 airbases (tactical, transport and helicopter one). Ground air defence is provided by 25th Air Defence Missile Regiment. The Czech Army potential in January 2016 was the following: 123 main battle tanks (all versions of T-72), 440 armoured combat vehicles (BMP-1, BMP-2, BPzV, Pandur II 8x8 CZ, Pandur II 8x8, OT-90 and OT-64 types), 179 artillery systems of 100 mm calibre and above (cannons/howitzers SPGH M77 Dana, mortars SPM 85 and M M1982), 35 combat aircraft (versions of SAAB JAS 39 Gripen and L-159 ALCA), 17 combat helicopters (all versions of MI-24 and MI-35). 23 184 career soldiers served in the Czech Army.

Along with the regular units, the Czech Republic also set up the system of the Active Reserve. As the Czech MoD website states, "the Active Reserve is used for strengthening the Armed Forces active force under a state of emergency, state of war, and when non-military crisis situations occur in order to protect the lives and property of people in the aftermath of natural disasters, to include mitigation of their consequences." At present, there are 16 Active Reserve units (levels of platoon, company or units of specialists) affiliated to respective combat units of the Czech Armed Forces, and moreover, a rifle company of Active Reserve is subordinated to any of 14 Regional Military Headquarters.

The Armed Forces of the Slovak Republic were founded on 1st January, 1993. Between 1993 and 1997, the first politicostrategic documents of the Slovak Republic concerning defence were adopted. The fact that the Slovak Republic was not invited to NATO in the first round of enlargement had a significantly negative impact on the reform efforts, which at the end of the 90s resulted in a lower readiness levels of the Slovak Armed Forces. The period from 1998 until 2003 brought qualitative changes in the security and defence policy of the Slovak Republic, related to the intensification of integration efforts on the way to NATO accession. In 2001 new standard strategic documents were approved ³ following by Long Term Plan of the Structure and Development of the Armed Forces (2013).

In turn, the Long Term Development Plan of the Ministry of Defence Until 2015 – approved

³ The Security Strategy of the Slovak Republic, The Defence Strategy of the Slovak Republic, and The Military Strategy of the Slovak Republic. In 2005 they were replaced by, new strategic documents The Security Strategy of the Slovak Republic and The Defence Strategy of the Slovak Republic compatible with the strate-gic documents of the EU and NATO.

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in 2005 - put focus on building expeditionary forces, predicting also a lower level of defence spending. This approach led to a deterioration of the AF SR capacities and capabilities to carry out wartime tasks. On 1 January 2006, the AF SR became fully professional and the conscription was abolished. The Slovak army also suffered from reductions in defence budget in the aftermath of economic crisis, which weakened its potential and capacity to fulfil its basic tasks. The significant rise of instability in the east and south of EU borders make Slovak authorities review defence policy. The White Paper on Defence of the Slovak Republic (2013) announced certain measures in order to enhance capabilities of the AF SR, as stabilising and consequently, increasing defence spending ⁴, as well as rationalising resources, intensifying of AF SR training and increasing the number of professional soldiers. Important modernisation goals were also set, as the modernisation of Infantry Fighting Vehicles, but some of them remained unachieved.

Today the Armed Forces of the Slovak Republic contain around 16.000 military personnel. The Ground Force are based on 2 mechanised brigades and the Air Force comprise one tactical wing, one wing of utility helicopters, and one SAM brigade. Recently, Slovakia has launched the largest armament projects in its history. In 2015 the sale of 9 UH-60M Black Hawk was approved by the US Congress. Bratislava seeks to replace its MiG-29 fleet with a modern multirole jetfighter. Moreover, a programme of modernisation of Infantry Fighting Vehicles has been launched and it is expected not only to enhance tactical and technical parameters but also to support the Slovak defence industry by including it in this modernisation.

⁴ Stabilising defence spending as a percentage of GDP beginning in 2013 (circa 1%), increasing defence spending in real terms beginning in 2014 and increasing it as a percentage of GDP (circa 1.1%) beginning in 2015. The White Paper on Defence of the Slovak Republic (2015)declared an ambition to achieve the level of 1.6% of GDP on defence in 2020, while aiming for 2% of GDP in the long-term.

Chances for Defence Cooperation Within V4

At first glance cooperation within V4 groups in terms of their Armed Forces modernisation seems natural. All four countries of the group have faced similar problems and challenges in regard to this field. Although their military units were based on the same types of equipment, which need to be replaced or modernised, no significant common project was accomplished.

In recent years some trials to reinvigorate regional defence cooperation were made. One example was a common IFV. After a few rounds of preliminary consultations and political declarations, the ambitious programme of replacing IFV in all V4 countries by one standardised platform seemed to be abandoned. Poland launched its own R&D project on new Infantry Fighting Vehicle "Borsuk" and Direct Support Vehicle "Gepard", the Czech Republic and Slovakia work on the project of modernisation of BVP-2 (IFV Sakal) and on the other hand, Praha seeks for quick procurement of new modern IFV. Similarly, the idea of a common 3D radar (Mobile Air Defence Radar) seems not to gain traction as difficulties in describing technical specification emerged and the Czech Republic decided to procure Israeli ELM 2084 MMR.

The reasons of indolent cooperation are complex. They include different potential, industrial capabilities, expectation and threat perception. Poland defence spending, because of the size of its economy, is significantly higher than other V4 countries combined⁵. Poland, because of geographical location (being the only direct neighbour to Russia and Belarus) and historic experiences, not always common with other countries of the region, pays a lot of attention to the modernisation and acquisition of new capabilities for its Armed Forces. It needs particular capabilities primarily suited for territorial self defence against massive assault, while the other V4 counties see their armed forces as an input to the NATO collective defence and crisis management efforts.

Industrial potential plays a role, too while Poland and the Czech Republic inherited a well developed and massive defence industry from the Communist period, Slovakia's and Hungary's capacities in this field are more limited. Thus their input to (and also benefits from) any common industrial project, as a new kind of the equipment, would be reduced.

In spite of the difficulties, there are still a lot of potential fields of defence cooperation in V4. As practice showed, ambitious projects as common IFV for Visegrád Group may be out of reach in the near future, but more attention should be paid on training and integration. Good

⁵ In 2016 Poland spends on the defence USD 10,5 billion (GDP 2,01%), while Slovak Republic – USD 0,98 billion (GDP 1,13%), the Czech Republic – USD 1,92 billion (GDP 1,04%) and Hungary – 1,13 billion (GDP 0,93%). NATO Secretary General's Annual Report 2016, (NATO, 2016).

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opportunities are defence and deterrence measures which NATO established on the Newport and Warsaw summits. Palpable and real display of cooperation could be the creation of a battalion group in the framework of the Enhancement Forward Presence, based on V4 counties contribution. It would also be a clear signal of V4 commitment to the security of NATO's Eastern Flank. Some opportunities for cooperation in V4+ can also be found in the area of Air Force as Poland builds a new, modern system of pilots' training, which can be used also by regional partners (e.g. Romania based its Air Force on upgraded F-16, while Slovakia has a decision about its future fighter ahead). Another field can be pilots training and maintenance of helicopters if Poland chose same type of multirole helicopter as Slovakia and rest of V4 countries follow suits.

As V4 countries have the same shortages and needs in the field of armament, it is possible to coordinate defence acquisition programmes, which can lead to common procurement of some kind of "less strategic" equipment in the future. It demands of course more consultations and more advanced cooperation on the level of armament policy planning institutions, as well as engaging partners from the early stage of process of planning. But the effort is worth to be made, as common procurement of equipment by even two countries would significantly enhance their position toward arms industry and help reduce costs.

Cooperation in Defence R&D Among V4 Countries

High level of research & development (R&D) funding in defence industry is considered one of the most important elements of ensuring proper capabilities of national armed forces in the long term. Although it is possible to have capable military without well funded armaments sector, examples of a number of Western European and East Asian ⁶ countries demonstrate that authorities strive to develop indigenous defence industry and provide it with proper R&D founding, in order to ensure their armed forces have cuttingedge technology and modern hardware without possible hindrance from a foreign supplier. This 'ideal' situation does not occur in reality. However, even nations like the United States, Russia or China have to rely – to some extent - on foreign technologies and supplies in some areas. Such a setting is even more true to European nations and their militaries where outlays on defence have been, until very recently, decreasing for more than two decades.

In order to overcome this trend and achieve better value for money, a number of cooperation initiatives were established in several institutionalized and non institutionalized formats ⁷.

⁶ Such as France, the United Kingdom, Germany, Sweden, Italy, Spain, Turkey, Japan, South Korea, Taiwan, China. There are also other examples of countries having robust arms sectors, e.g. South Africa and Brazil.

⁷ Main defence cooperation actions were taken under the umbrella of NATO, the EU, Western European Union (WEU), Organisation Conjointe de Coopération en Matière d'Armement (OCCAR) as well as multilat-eral or bilateral formats.

V4 countries, due to their membership in major Western organizations and institutions, also voiced willingness to cooperate in defence issues, including arms industry and R&D collaboration. Although much had been said, V4 cooperation in military dimension has become reality only in certain areas (especially in training and exercise, political commitments and V4 Battlegroup creation) and almost non existent in others (such as bi/multilateral procurements programmes and common R&D projects). What is even more disturbing, prospects for positive developments in V4 research & development cooperation is as bleak as ever.

R&D Outlays in V4 Countries And Cooperation

As it can be seen in Table 1, budgetary spending on research and development is below EU and OECD average in all Visegrád 4 nations and significantly below average in Poland, Slovak Republic and Bulgaria (about half of EU average). Ukraine R&D outlays are even lower. The situation is far worse however in the case of defence R&D spending, where only Poland has relatively significant budget for R&D while other V4 countries spend close to null.

R&D and defence R&D outlays in V4+ countries in comparison to several chosen countries and organizations.

Country / Organization	Overall R&D outlays and in billions of		Defence R&D outlays (in % of defence expenditure and in millions of €, 2014)			
Czech Republic	1,95%	€ 3,25 bn	1,1%	€ 16,4 m		
Hungary	1,38%	€ 1,51 bn	0,0%	€ 0,02 m		
Poland		€ 4,32 bn	2,9%	€ 217 m		
Slovak Republic	1,18%	€ 0,93 bn	0,3%	€ 2,1 m		
Ukraine	0,66%1	€ 0,660 bn	-	-		
Republic of Korea		€ 45,59 bn¹	-	-		
Sweden		€ 14,58 bn	2,2%	€ 105,5 m		
United Kingdom	1,7%	€ 43,88 bn	7,8%	€ 3 752,7 m		
France	2,23%	€ 48,64 bn	9,1%	€ 3 563 m		
EU28	2,03%	€ 298,81 bn	4,5%	€ 8 790,82 m³		
OECD		€ 746,46 bn²	-	-		

Source: Eurostat, http://ec.europa.eu/eurostat/statistics-explained/index.php/R_%26_D_expenditure#Database; European Defence Agency, www.eda.europa.eu; World Bank, http://data.worldbank.org; OECD, https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm. ¹ World Bank data, 2014. ² Estimate, 2013. ³ 27 Member States of European Defence Agency (all EU states except Denmark).

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Comparing V4 data from the Table 1 with EU and OECD average and several chosen countries show extremely stark differences in percentage of R&D and defence-related R&D expenditures. This comparison bleaks however in absolute numbers where combined defence R&D of Visegrád 4 countries mounts € 235,52 million, while the rest of EDA Member States spend € 8 555,3 million (V4 combined defence-related R&D are only 2,68% of all EDA Member States expenditures in this category and Poland alone stand for 2,47%).

During more than a decade of existence, the European Defence Agency has created a large database with a number of defencerelated figures, including on research and development and its subset – research and technology (R&T). Even a superficial look at the date in Table 2 gives an impression that V4 countries almost do not conduct collaborative research in defence. The situation is relatively better in cases of Poland and the Czech Republic, while other four combined did not exceed € 1,5 million in any year between 2006 and 2014. Moreover, as it can be seen in Table 2, and despite numerous calls to increase effort in defence research cooperation, the picture is getting worse in recent years. Although this unsatisfactory state of affair in defencerelated collaborative research is prevalent in most of EDA Member States, it does not mean that Visegrád 4 countries should follow suit.

Collaborative defence R&T expenditure in V4 countries between 2006-2014 (in millions of €).

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014
Czech Republic	€ 1,1	€ 0,98	€ 0,98	€ 1,14	€ 0,99	€ 0,58	€ 0,55	€ 0,54	€ 0,52
Hungary	€ 0,19	€ 0,2	€ 0,3	€ 0,09	€ 0,04	€ 0,0	€ 0,0	€ 0,0	€ 0,0
Poland		€ 3,15	€ 18,27	€ 3,11	€ 1,97		€ 1,68	€ 3,55	€ 1,85
Slovak Republic	€ 0,0	€ 0,0	€ 0,7	€ 1,07	€ 0,04	€0,06	€ 0,0	€ 0,0	€ 0,0
Combined	€ 1,63	€ 4,33	€ 20,25	€ 5,41	€ 3,04	€ 3,72	€ 2,23	€ 4,09	€ 2,37

Source: EDA Collective and National Defence Data 2005-2014, European Defence Agency, www.eda.europa.eu.

Current Situation In Defence R&D Cooperation Among V4

Political, social and economic transformation in Central Europe has left the defence industrial base in difficult situation. Even after more than a two and a half decade after fall of communism, this legacy influences mostly fragile arms companies situated in V4. Due to the fact that most of the defence technological and industrial base (DTIB) of the Warsaw Pact Member States was located in the Soviet Union and its satellites produced the majority of equipment under licence, the role of the Central European DTIB focused mainly on services, maintenance and overhaul of their respective armed forces. Defence industry in V4 countries was adapted to provide services and equipment to large militaries and for export to communist-friendly nations mostly from political reasons. Stark reduction of defence expenditure and dissolution of the Eastern Block entailed catastrophe for DTIB of Central Europe. Furthermore, growing tendencies in the European and global defence market such as consolidation, concentration, increased competitiveness and revolution in military affairs only deepened its already bad situation both domestically and in terms of export opportunities. Although arms industry in post-communist Central European countries followed different paths and today it differs in shape, ownership, market position, production capacities and number of other issues, there are several visible determinants that shape defence-related R&D cooperation in V4:

- Almost no government founding of defence R&D (exception Poland but still far from satisfactory).
- 2. Legacy of state owned, centrally planned enterprises.
- 3. At least three major groups of security and defence-related companies with different market position, business models and authorities acceptance ⁹.
- 4. Different size of DTIB in V4 countries.
- 5. Huge research capabilities dissolved during transformation.
- 6. Similar portfolio of defence industry companies in V4 countries.
- 7. Struggle for survival on the market and mutual competition rather than cooperation.
- 8. Difficulties of national armed forces and MODs in Central Europe to harmonize requirement and procurement timetables.

⁹ These three major groups are: state-owned communist era enterprises; privatized and usually foreign-owned defence companies; high-tech firms created in 90-s without communist era legacy.

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Aforementioned issues have led to serious difficulties in establishing collaborative programs in defence-related procurement and research even among Czech and Slovak Republics which had been one country until 1993. Although serious discussions on joint projects were conducted in several cases¹⁰, all of them ended in failure.

Conclusions

The situation in Europe for DTIB of V4 in the second decade of the 21st century offers a number of opportunities for cooperation. Successful examples in Western Europe demonstrate that even large multinational defence projects are possible to execute and, thanks to increasing defence expenditure in all V4 countries due to Russian threat, military and MOD officials as well as business representatives should consider new options in joint procurement and research. The following options of cooperation in defence-related R&D are available:

- 1. Under NATO umbrella through its Science and Technology Organization.
- 2. Utilization of European Union Fund for dual-use technologies.
- 3. Programmes run with the support of EDA.
- 4. Bilateral cooperation (following such examples as UK-France defence collaboration).
- 5. Multilateral projects (utilising experiences of entities such as OCCAR).
- 6. Incoming European Defence Research Programme (EDRP) and Preparatory Action for Common Security and Defence Policy-related research¹¹.

Apart from that, increase in defence spending in V4 could lead to the creation of common regional defence-related R&D fund which would facilitate collaborative initiatives. Additionally, setting up cluster of high-tech companies operating on security and defence market might be a good idea to further enhance cooperation.

All aforementioned options are at hand, but in order to set up joint R&D projects among Visegrád 4 countries having options is not enough. Today only Poland provides meaningful defence R&D funding in Central Europe so the Number 1 problem to overcome is the lack of money. Second, having in mind that political will for cooperation among policy-makers and military officials exists, there is a need for cohesion for medium- and long-term military planning. Third, a common V4 R&D strategy is needed as well as the removal of existing legal and bureaucratic obstacles. Finally, major incentives for collaboration are needed, such as tax exemptions and concrete funding only for international projects.

¹⁰ Especially in development of radars and ammunition as well as modernisation of T-72 main battle tanks.

¹¹ These initiatives have the potential of becoming a 'game changer' in defence-related research. More in-formation on EDRP and Preparatory Action, see: The future of EU defence research, Policy Department, Directorate-General for External Policies, Brussels, March 2016, http://www.europarl.europa.eu/RegData/etudes/STUD/2016/535003/EXPO_STU(2016)535003_EN.pdf, access: 02.03.2017;

Common Education and Training Projects: An Obvious Choice Introduction

The present chapter analyses the possibility of V4-Ukraine-Moldova cooperation in the field of military education and training. Though one might think that post-Communist transition experiences, as well as similarities in the development of the national armed forces serve as perfect ground for deeper cooperation, in fact the Visegrad countries have yet accumulated so far only limited experience in this field even while cooperating with each other, not to mention external, non-V4 partners. Relative shortage of resources is another hindering component. Hence, a thorough and sober approach is needed for assessing the possibilities of cooperation in the field of military education and training, and for finding the realistic options.

Different partners require a differentiated approach

When addressing the possibility of cooperation between the Visegrad countries (i.e. Poland, the Czech Republic, Slovakia and Hungary) and Ukraine and Moldova in the field of military education, one needs to be aware of important differences between the two partner countries. These differences obviously affect both the possible fields of cooperation and also the readiness to get engaged.

First and foremost, the foreign and security policies conducted by the two countries are significantly different in terms of geopolitical orientation. Since the EuroMaidan in 2014, Ukraine has clearly oriented itself towards the West, and has been pursuing a clearly pro-EU and pro-NATO policy. Meanwhile, Moldova is constitutionally neutral and this by definition limits cooperation with NATO. The new Moldovan president, Igor Dodon and his government plan to conduct a more balanced foreign policy that would take the interests of Russia much more into account than the policy line of the preceding Moldovan governments did.

Another important difference originates from the very nature of the conflicts the two countries are facing. The Transnistrian conflict has been a frozen one since 1992 with no military escalation potential. The situation is quite the opposite: there are intensive trade relations, as well as people to people contacts between Moldova and the non-recognized separatist entity. Meanwhile, Ukraine has been facing an active war in Eastern Ukraine already for the third year in addition to the loss of control over the Crimean Peninsula in 2014.

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The sizes, organizations and tasks of the two armed forces are different as well, as well as are the other security structures. Consequently, in fact the needs of Ukraine and Moldova in terms of security sector modernisation are highly different from each other. These particularities need to be taken into account, when designing the approach of the V4 to strengthening the security of Ukraine and Moldova via cooperation in the field of education and training.

V4 cooperation in military education: limited experience and resources

In addition to the differences, one needs to be aware of the inherent limitations as well, when thinking about using military education cooperation for contributing to the security of Ukraine and Moldova. The first and probably most important obstacle is that exchange between military higher education institutions in the EU, and particularly multilateral exchange is a practically nascent project. The so called Military Erasmus project – by its full name: European initiative for the exchange of young officers inspired by Erasmus - started only in 2008 and on a very limited scale, thus the experience accumulated so far is yet limited.

Second, there are a lot of coordination problems even between EU member states in terms of exchange between military higher education institutions, for example, regarding the harmonization of the curricula, making study modules compatible, translating the relevant material to English, etc. Getting Eastern Partnership countries on board would indeed not make the situation easier. This, of course, does not mean that the project would be impossible – but would surely not be easy either.

The third problem is related to financing. Military Erasmus started on a purely voluntary basis, with no EU financial support involved. Even though since the beginning of the war in Ukraine, and particularly since the election of President Donald Trump NATO countries have been increasing their defence spending due to the threat perceived from Russia, it is highly unlikely that military higher education would be the main beneficiary of the growing defence budgets. With other words, it is not yet visible that there would be any extra financial resources available for facilitating military higher education exchange between V4 and Ukrainian and Moldovan military education institutions.

All in all, when planning to contribute to the security of Ukraine and Moldova in the field of military education, plans needs to be built on the existing capabilities, because any fundamental increase of them in the near future is highly unlikely.

Who learns from whom?

Another question to decide is that whether V4 countries intend only to transfer their knowledge to Ukrainian and Moldovan partners, are they themselves also ready to learn from Ukraine and Moldova? The second option is probably more beneficial, particularly because since 2014 Ukraine has accumulated immense expertise regarding the Russian armed forces and various forms of special operations. So did Moldova, though obviously to a lesser extent.

Most importantly, the V4 would need to learn from the hybrid war experiences of Ukraine (and also of Moldova and Georgia). One option is to add courses on hybrid warfare to the portfolios of V4 military higher education institutions and invite Ukrainian and Moldovan experts as teachers and lecturers. Another option is to lobby together for adding this to the curriculum of the NATO School in Oberammergau. Poland has already lobbied for this change for a while, so far unsuccessfully. However, a joint V4 approach might be more efficient.

A third variant for learning from Ukrainian and Moldovan experiences could be to jointly contribute to the new European Center of Excellence for Countering Hybrid Threats in Helsinki. If participation of Ukrainian and Moldovan partners could be facilitated in one way or another (for example, by joint V4 funding), the new center could also be used for directly channelling in the Ukrainian and Moldovan experiences into the common thinking.

Possibilities for Concrete Actions

The project has identified six main fields, in which the V4 could contribute to the security of Ukraine and Moldova in the field of military education.

Excessive English language training

A high command on English language is an absolute prerequisite for all other ways and means of further cooperation between the V4 and Ukraine and Moldova. Hence, first and foremost, it is advisable to organize excessive language trainings in the V4 countries for Ukrainian and

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Moldovan soldiers. Not only officers, but also NGOs and civilian specialists need to get trained in as high numbers as possible. This is particularly true for the staff of the Ukrainian Navy: while they were based in Sevastopol, not much attention was paid to learning English. Consequently, since the Russian occupation of the Crimea and the loss of control over Sevastopol they desperately need to get their English language skills strengthened.

Regarding possible frameworks, the easiest way to do so is to extend the existing training projects both in terms of size and scope. The V4 countries have already accumulated nearly two decades of experience in providing English language trainings to foreign partners, thus the necessary personnel, infrastructure and knowledge are all in place.

In addition to its relative simplicity and low costs, providing Ukrainian and Moldovan soldiers with English language training is also a longterm investment into the human relations between the militaries, regarding both socialization and people to people contacts.

Training of high-ranking officers and officials

Second, in addition to the en masse training of officers and NGOs in English, specialized trainings need to be provided to high-ranking officers and officials of the Ukrainian and Moldovan armed forces, security structures, ministries of defence and interior, as well as of other competent authorities.

Specialized high level training need to be provided along NATO standards in order to contribute to the NATO-approximation of both countries. Even if they do not have a member-ship perspective, getting them closer to NATO in terms of knowledge, socialization and training is a join interest of the V4.

The main fields of which trainings would be needed for Ukrainian and Moldovan high-ranking officers and officials are defence planning, strategic planning, procurement, as well as command and control.

Training for participation in international missions

Both Ukraine and Moldova are engaged in international peacekeeping and crisis management operations. Ukraine has been the only NATO partner country that contributed to all NATO-led operations. Besides, both Kiev and Chisinau are participating in UN-led missions and OSCE

operations as well. Ukraine has already worked together both with Poland and with Lithuania in Iraq and in Afghanistan, respectively.

Hence, the V4 could contribute to the training of Ukrainian and Moldovan military, as well as police and civilian participants for international crisis management operations. The facilities are in place in all V4 countries, such as the Peace Support Training Center in Szolnok, Hungary or the Joint Forces Training Centre in Bydgoszcz, Poland, thus not much extra investment is needed. For onsite trainings, the Yavoriv facility in Ukraine could also be used, so all in all, the infrastructural background is not a problem at all.

Training Ukrainian and Moldovan personnel for crisis management mission participation would not only be a short term political investment, but in the long run it would also decrease the mission burden on V4 armed forces as well. Besides, of course, it is a good opportunity to build trust between V4 and Ukrainian and Moldovan militaries and also to learn from each other. Besides taking action in V4 framework, another possibility is to lobby jointly at NATO for opening more opportunities at the NATO Defence College in Rome for personnel from the Eastern Partnership countries. In fact, creating regional courses for partners from the EaP countries – similarly to the existing ones for partners from the Mediterranean region - at the NDC though joint V4 lobbying could be a contribution of very high value both for Ukraine and Moldova.

Training civilian experts of defence policy

Both Ukraine and Moldova are in grave need of well trained civilian experts in the field of security policy, international security and defence policy. Even though in both countries there are plenty of people, who gained military, as well as combat experience, particularly in Ukraine, it is indeed not the same as completing specialized, university programs on security and defence policy and to gain in-depth knowledge about it. With other words, instead of self-appointed experts real, well-trained, internationally recognized experts are needed in both countries. This is particularly so, because at present there is no security and defence policy education for civilians either in Ukraine or in Moldova.

Civilian expertise on matters of security and defence policy is needed for the competent state organs (MoD, MFA, MoI, etc.) of both countries for administrative and policy purposes, as well as for establishing meaningful civilian control over the armed forces. The latter is an absolute precondition for real NATO and EU approximation. Substantial civilian expertise on security

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and defence policy is needed also by the political parties as well as by the media, in order to raise the level of public debates about issues of national security and defence.

The V4 is an ideal partner for Ukraine and Moldova in this, due to a number of reasons. First and foremost, Visegrad countries themselves went through on this transformation, i.e. on establishing civilian control over their militaries in the 1990s. Hence, considerable expertise is accumulated, both about the best practices and about the problems to counter. Second, such trainings are easy to do on the basis of the existing V4 education infrastructure, concerning both the civilian and military education institutions, where civilians are also trained.

Regarding financing, the existing mechanism of the Visegrad scholarships provided by the International Visegrad Fund (IVF) offer a perfect opportunity, particularly if more Ukrainian and Moldovan students can get encouraged to apply for it. One option is to consider the creation of a specialized program for Ukrainian and Moldovan students of security and defence policy on the sidelines of the IVF Visegrad Scholarship program by allocating 10-20 places specifically for this purpose.

Besides the IVF framework, the existing bilateral higher education exchange programs could also be used for such a purpose, because in many cases the quotas are actually not fulfilled. Hence, there would be plenty of room for Ukrainian and Moldovan students, who intend to study security in defence policy. The prerequisite for this on the V4 side is that the relevant higher education institutions (i.e. where security and defence policy is taught for civilians) need to become parts of the bilateral exchange programs.

In addition to all these, the V4 could cooperate also in supporting the education of Ukrainian and Moldovan civilian specialists on security and defence policy in higher education institutions outside of the V4. For example, there are high quality training opportunities at the Baltic Defence College in Tartu, Estonia, where the V4 could support the training of Ukrainian and Moldovan civilian experts.

Training of military specialists

The special skills and niche capabilities acquired by V4 military could also be transferred to Ukrainian and Moldovan partners in the framework of concentrated training programs. Such niche capabilities could be, for example, the demining capacities of the Czech Republic, the Slovak knowledge on countering NBCR threats, Hungary's water purification and military police experience, Poland's special forces capabilities, etc. Besides, all four V4 countries have accumulated remarkable expertise also in participating in international crisis management missions,

including even a hew high-intensity ones.

Some of these niches are greatly needed in Ukraine and in Moldova. Part of the inherent reasons is the chronically underfinanced situation of both military, as well as the resources consumed by the war in the Donbass. Concerning particularly Ukraine, combat losses of military specialists contribute to the need for more specialists.

A comparative advantage of training military specialists is that it can be built on the human resources and military infrastructure already existing in the V4 countries. Besides, training Ukrainian and Moldovan military specialists offers also a great opportunity for V4 burden sharing.

Training and exercising together

An additional way to transfer V4 knowledge and expertise to Moldovan and Ukrainian partners is to facilitate their increased involvement in military exercises held in the V4 region, let them be national or multinational ones. In addition to providing expertise, such joint projects are also useful for building trust and getting to know each other better.

Inviting a number of Ukrainian and Moldovan observers is technically easy and requires only very limited financial investment. Besides, V4 militaries have decades on gexperiences gained mostly in NATO-frameworks in inviting foreign observers. Moreover, Poland has already accumulated considerable expertise in working together with the Ukrainian military, so other V4 countries might well build on the experience of Poland.

Initially, of course, other V4 countries would probably start with inviting observers only, because inviting Ukrainian and Moldovan partners to actually participate in and contribute to exercises requires a lot more coordination, resources - and also trust. However, if the experience gained with observers is positive, of course, such a future upgrade is not impossible at all.

Regarding institutional frameworks, besides occasional military exercises, the V4 Battle Group offers an obvious opportunity for getting both Ukrainian and Moldovan partners involved. Moldova already got the proposal about contributing, but has not replied yet.

The LITPOLUKRBRIG, the Lithuanian-Polish-Ukrainian Brigade and the Polish experience gained with it might be particularly relevant. At present this is mostly a training brigade, but there are plans to change the framework. In fact, LITPOLUKRBRIG could serve as training framework for enhanced forward presence in Eastern Europe, and also to place Ukrainian sol-

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diers into a wider NATO context.

In addition to all these, the training ground in Yavoriv, Ukraine offers an excellent opportunity for V4 militaries to train together with their Ukrainian colleagues in the framework of the Joint Multinational Training Group-Ukraine (JMTG-U). From the Visegrad countries so far only Poland has participated in the JMTG-U, but there is indeed room also for other contributors.

Conclusions

In the framework of the present project we identified six important fields, on which the V4 could contribute to the security of Ukraine and Moldova in terms of military training and education. The already accumulated knowledge and expertise, as well as the necessary infrastructure already in place in the Visegrad countries constitute important advantages to build on.

Even though the available resources are limited and are unlikely to increase substantially in the near future, important projects could still be conducted already on the basis of the existing financing and infrastructure. This applies mostly to training programs of various content and size, to be provided to Ukrainian and Moldovan soldiers, ranging from English language trainings to general staff courses. Training civilian Ukrainian and Moldovan specialists on security and defence policy could also be an important contribution. For this, Visegrad scholarships provided by the International Visegrad Fund could well be used, as well as the existing bilateral scholarships and higher educational exchange quotas.

In addition to all these, using multinational channels for strengthening the security of Ukraine and Moldova in the field of military education should be considered too. By lobbying together, V4 countries could achieve such changes in the curricula and functioning of both the NATO School in Oberammergau and of the NATO Defence College in Rome that would be highly beneficial for the Ukrainian and Moldovan partners.

There are a lot of opportunities also in exercising together. Joint exercises contribute not only to the transfer of V4 knowledge to our Ukrainian and Moldovan partners, but also enable V4 militaries to learn from Ukrainian and Moldovan experiences, regarding, for example, on how to counter the hybrid war waged by Russia.

Anti-Propaganda Measures in The Security Sphere Introduction

Defacto, propaganda can be considered as a state information policy, with neither negative nor positive value. It depends on the assumed shape, whether it becomes strategic communication or an aggressive warfare serving the country's both internal and external information policy. Under the country (state) in this case we understand not only governments, but other state or state controlled institutions, including media and lobby groups, as well as political parties (both ruling and in opposition).

In the sphere of defence and security, propaganda can aim at strategic communication, but more often, its goal is to bring fear, and in this context, it can be considered as part of the so called hybrid warfare. It can act as a measure of deterrence, showing the strength of an army or other security institutions, and in this capacity, it can be regarded similar to military exercises by its purpose. It can also be aggressive, being a first phase of an attack or be manipulative, in order to create fake or misleading perceptions about the current situation, threats, adversary potential and its plans, as well as to initiate arms race. Usually propaganda in the security sphere is closely connected with destabilizing efforts in the political sphere.

Propaganda is classified not only according to the spheres, but according to the levels at which it is carried out. It is critical to distinguish levels of disinformation activities, so to contrive symmetrical answers and countermeasures. Multi-level character of propaganda can be efficiently performed and analysed applying the following Pyramid of Influence, which has four levels:

- Level 1 (ground level) instinctive and emotional (fear, anxiety, shock).
- Level 2 Rational (argument picture) schematically explains "why" something has happened at Level 1
- Level 3 Semantic (new stereotypes, manipulation of history) gives historical, geographical, political, economic and other strategic background to the explanations at Level 2
- Level 4 Archetypical (group instincts, culture) confirms the validity of Level 3 by invoking global differences between mindsets, cultural biases and identities.

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Which elements already exist in the EU and NATO?

Both the EU and NATO have announced their intention on future cooperation in response to the hybrid threats (which was confirmed at the NATO Warsaw Summit), however in the sphere of counter-propaganda and tackling disinformation they still prefer to work separately, creating individual task forces within the organizations. Most of the work is currently aimed at strategic communication and "myth busting" rather than search and analysis of existing propaganda, its channels and possible counter measures. Many official statements confirm that both organizations see counter measures only as a spread of their own propaganda— a measure they do not want to repeat after Russia. Such an approach limits the perception of the possible tools which can be used to minimize the effect of the Russian propaganda, but not only.

In August 2015, the European Union established a small task force within the European External Action Service (EEAS) to counter Russian propaganda. Among the main functions of the task force (without allocated budget at the first stage) the following were named: look into Russian propaganda and into the needs of journalists in the Eastern Partnership countries – Ukraine, Moldova, Belarus, Georgia, Armenia and Azerbaijan, prove readiness to communicate and provide help to journalistic training, and provide assistance to the media, which have Russian language versions, in an effort to reach Russian-speaking audiences. The EU's East StratCom Task force should also be engaged in developing communication products and campaigns focused on explaining EU policies in the Eastern Partnership region and creating a positive EU narrative, ad-hoc communication on topical and relevant EU policy issues; myth-busting by analysing trends, explaining narratives and addressing disinformation; etc. Although, the team does not have a task of countering propaganda, it is involved in the correction of disinformation, among others through two weekly newsletters, the Disinformation Review and the Disinformation Digest.

NATO Strategic Communication Centre of Excellence, established in 2014, is a multinational NATO-accredited military organization, which is not part of the NATO Command Structure, nor subordinate to any other NATO entity. Its main activities include research on identifying early signals of a hybrid warfare scenario, study Russia's information campaign against Ukraine and how NATO and its members could protect themselves from subversive leverage, support NATO StratCom training and education, as well as study of the use of social media as a

weapon in hybrid warfare. It should also develop the Academic Magazine "Defence Strategic Communications". As we can see, NATO has a more precise focus, and anti-propaganda concentration, seeing it as an integral part of the hybrid warfare, but also associates it in particular with Russia as a source and Ukraine as the case.

Concerns about Russian propaganda and disinformation activities are justified both by their intensity and systematic character. For example, one of the major tools of Russian propaganda in internet, ria.ru, produces about 700 news entries per day on the average, and in some periods 150 of them were about Ukraine.

Situation in the Visegrád Four

Historical connections, appealing to the "Slavic unity", protracted feeling of being "New Europe" and border position are factors influencing a targeting of the V4 states and their relative openness - compared for example with North or South Europe - in absorbing propaganda in current circumstances.

For spreading propaganda, both open and covert channels are used. In case of the Visegrad Four states, a wide network of the lobbying and pro-Russian elements are used to support actions and present them not as Russian ones, but local, internal processes. Any criticism of media publications are quickly presented as a violation of free speech (this demonstrates one of the mechanisms, when an adversary uses principles of the targeted society for its own benefit, while manipulating the meaning). Direct and indirect support of the pro-Russian politicians is also an important element for the security sphere, especially if they are members of the national parliaments, so they can influence the budgeting in the respected spheres, the authorization of the military support and cooperation, etc. Usually, the representatives of the farleft or far right parties become involved.

A separate group consists of undeclared intelligence officers serving in the respected Embassies. Recent reports of the V4 intelligence services demonstrated the increased amount of such personnel in the Russian embassies and their intensified activities. Except for the analysis and espionage, many of them, especially under the cover of cultural attaché or political advisor's positions, are actively involved in the political discussions in the countries, providing financial support to different NGOs, public events, etc. to spread necessary ideas and shape the public

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discourse. As an example, the Embassy of Russia in Czech Republic currently has 120 accredited personnel, suggesting the country also serves as a hub for Russian operations.

Possible false disinformation topics include:

- NATO will not secure V4 countries if attack happens.
- NATO forces can attack Russia from a territory of the V4 without consent of the national governments.
- It is NATO, which provoked Russia first by its enlargement, and continued provoking by deployment of the additional forces on the eastern borders.
- NATO is planning to store its nuclear weapons in Eastern Europe.
- Sanctions hurt only the EU member states, but are not effective against Russia so should be lifted.
- Europe is unstable because of migrants; EU policy in this sphere is not acceptable for the Eastern states.
- "Everybody is lying" creating a public perception that you cannot trust any local media or politician.
- All liberal governments or politicians are "American puppets".
- Spreading false information about the conflict in Ukraine.
- Manipulation with and securitization of the issue of historical memory.

The main goals of such propaganda are to bring doubts and divisions inside of the Central and Eastern European societies, but also to support political parties with a more favourable approach towards Russia, eurosceptics, etc., while undermining trust in the current governments as well as the European integration project and in the trustworthiness of NATO as a reliable partner and protector. Very often, the task is not to lie but to create confusion in the societies and infuse contradictions between politicians to promote distrust and instability.

At the current stage, it is possible to state that the Czech Republic is the most open towards propaganda, while Hungary, due to the substantial difference in language and low level of Russian proficiency in the society, is the least. However, it does not mean that Hungary is not affected, penetrators just need more creativity and use other channels of information delivery.

Situation in Ukraine And Moldova

In the opinion of some experts, Ukraine became a laboratory of the information war in 2014. While it can be agreed due to the force and scope of the propaganda used and disinformation

involved, neither 2014 can be named as an initial year, nor just Ukraine was a target. Especially after 2008, an activation of propaganda was seen in Ukraine, Moldova, Georgia, Belarus, Armenia and Baltic states. However, as the older population watch Russian TV, news from Moscow had been formulating their perceptions and opinions for much longer.

One of the main problems is that both Ukraine and Moldova, contrary to the V4 states, can accept information in Russian, and use a lot of Russian sources, including the satellite TV and retransmitting of the Russian TV programs via local channels. Although Ukraine has managed partially to decrease this tendency by prohibiting Russian TV, it is still dominant in Moldova. It can be especially dangerous in the border regions, which sometimes have not had physical possibility to watch their national TV or rejected it due to the language issue.

In the security sphere, news programs are not the only source of propaganda, but the entertainment content as well. For a long time, there have been numerous films and soap operas glorifying Russian military, special and security forces. This content could be considered as pure propaganda aimed not only to the "internal" market, but also to construct an image of power and strength among citizens of other countries, while demonizing their own security forces. Glorification of the Soviet security services was also actively used.

Besides, forged letters and leaking of fake information could be actively used, especially about the arms trade and possible contracts. Ukraine has already witnessed it few years ago when a fake letter was published, allowing the Azerbaijan authorities to accuse Kiev of selling weapons to Armenia. Recently the Swedish MoD faced the situation of a fake letter promoting selling weapons to Ukraine, widely discussed in the country and provoking serious scandals.

Both in Ukraine and in Moldova the disinformation campaigns are aimed to undermine the pro-European sentiments and decrease the trust in national governments. In the security sphere, it is also connected with the fear of provocations, and minimization of the army support, as well as presenting this country's army not better than the enemy in terms of behavior and violations of cease fire, human rights, etc. At the same time, they are emphasizing that Russia is not an aggressor, but its reaction is natural as it has a right to secure its spheres of influence by any means. The myth of the extreme economic and energy dependence is also vigorously promoted.

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Conclusions

When it comes to assessing possible variants for cooperation between the V4, Ukraine and Moldova, one of the main problems is that security sphere is a very closed door field, which is not open for public discussions over existing problems and proper strategic communications in case of a necessity to clarify information, which can be classified. As a result, the emotional consequences of the spread of propaganda prevail over the strict and short comments of the official institutions, such as MoD or intelligence services.

As Russia currently is not able to present an alternative ideology (contrary to the Cold War times), most of its propaganda is aimed at deconstructing rather than constructing reality. The practice of the last two years demonstrated that messages used both in the Visegrad Four states, Ukraine and Moldova are very similar: euroscepticism, demonizing NATO and the US, provoking fear and distrust in local governments, supporting particular political parties and activities, opposing sanctions and justifying use of any means to secure Russian spheres of control, which are equal to Soviets.

These similarities present a background for possible cooperation, best practices sharing and joint counter measures both between the governmental structures, civil societies of the described countries and between the civil society and authorities. Security Forces and MoDs are not able to confront propaganda alone and systematically, thus a close cooperation with the respective NGOs and think-tanks are necessary both to outsource some of the work (first of all due to the research component) and to enhance capabilities.

Considering the fact of the overwhelming, intense, multi-level character of the Russian propaganda, countries should acknowledge the inability to answer symmetrically in terms of quantity of information, thus, should focus on the quality of the information and the ways it is transmitted. (Dis-) information, propagandistic activities should be analysed according to the levels at which they are held and be responded accordingly. For example, the first (ground) and the second (rational) levels can be answered through TV, radio and internet, while the third (semantic) and the fourth (archetypical) levels should be also addressed through strategic measures, including publishing history books, organizing specific educational camps, online courses, etc.

V4/V4+ Intelligence Cooperation

Introduction

While discussing intelligence cooperation in V4 or V4+ format, one comes across a string of obstacles which hamper any research progress. This is a sensitive area, often closed to public debate with key stakeholders reluctant to accept invitations to fora such as conceptualized by CEID, GLOBSEC Policy Institute, Europeum and Pulaski Foundation. Our job is made more difficult by the fact that it is the civilian and not the military security agencies which the take rare but growing in number sorties into the outside world. What is more, different security services have different mandates and their remits are not exact matches. Finally, they also compete not only on the international market, i.e. with their international partners, but also on the domestic one, i.e. with other national services.

Thus we are speculating and can only work on sharpening our deliberations so that they become informed speculations. In order to do so, we reached out to the very few open sources available to us, studied some of the intelligence cooperation models of other countries, and brainstormed the potential areas of cohabitation between the V4 services and these of Moldova and Ukraine. What follows is a speculative account which, we hope, correctly identifies some of the potential intelligence sharing trends among the V4+ countries.

Where?

Before we discuss potential avenues of cooperation between the security services of the V4 and V4+ countries, we need to take stock of the current situation. We believe that apart from the bilateral, in this sense traditional, intelligence communication channels (liaison officers, seconded officers etc.) and relations with "sister" services in other states (between 80 to a 100 such relations for each of the three surveyed services), the V4 countries have the following intelligence sharing options:

- a) Via Club de Berne where the services of the EU Member States and those of Switzerland and Norway share their experiences;
- b) Via Counter Terrorism Group which brings together intelligence agencies from the aforementioned countries, and focuses on terrorist and extremism related tasks;
- c) Via Central European Conference (MEC), a Dutchled forum which sees Western European services support their Central and Eastern European counterparts progress towards account-

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ability and rule of law based intelligence and counter-intelligence standards;

- d) Via different NATO forums, e.g. NATO special committee (AC/46) a much more poignant area of cooperation in the aftermath of the NATO Summit, and where a high level of trust already exists amongst the V4 countries, and V4+ countries can contribute with e.g. briefings.
- e) Via Europol,
- f) Via Interpol.

All of the aforementioned platforms come on top of the more open, and from an intelligence point of view less secure, gatherings which bring together both theoreticians and practitioners of intelligence, counter-terrorism, counter-extremism etc. (e.g. the German BKA led European Expert Network on Terrorism Issues).

Thus, in theory, the V4 quarter has a multitude of options when it comes to actual intelligence cooperation and data sharing. We are in no position to measure the extent of their cooperation but are of an opinion that some of the publicly available documents at least hint at the available potentialities of joint action or consultations. Let us now turn our attention to these.

What?

While reviewing such documents, one is first hit with a disappointment – no military intelligence services of the V4 countries publish any annual reports, and only three of the four civilian counter-intelligence agencies (regrettably, Hungarian services has not been doing so since 2010) do. These documents are far from perfect, and often, to quote a respectable defence news provider, "often pass by without leaving a mark." Nonetheless, we decided to run a full scale academic thematic analysis of their content to earmark recurring themes in their content which might help us suggest areas and avenues for future intelligence cooperation between the V4 intelligence services. The key caveat in this analysis is the fact that the agencies which actually do write these reports, however deficient they may be, have different remits what renders some of the seemingly obvious overlaps void (e.g. the Polish ABW has a broader mandate then its Czech or Slovak counterparts).

The structures of the reports are similar but far from identical. While the Slovak reports tend to list a greater number of areas/issues individually in a tactical manner, the Czech and Polish reports have a slightly more comprehensive, strategic approach. However, we are not sure to what extent this is a reflection of strategic thinking on behalf of a given service or more a presentation issue on behalf of the report writers. Interestingly enough, the Polish and Slovak reports

list the key regions that are sources of concern whereas the Czech reports avoid this approach. The greatest difference between reports, however, is in the their 'tone' with the Czech and Polish ones being rather blunt, naming Russia and China, or Russia and Belarus within the counter-intelligence sections, while the Slovak are far more diplomatic in naming names.

Regardless of the tone or the structure, we have identified the following overlapping themes which are spoken about by the three security agencies:

- a) **Counter-terrorism:** surprisingly, and given how low the threat to the three countries actually is, all of the reports flag fight against terrorism/counter-terrorism as their key or number one preoccupation. If could be argued that this is an attempt to "reference" the security service activities (in line with Mariya Omelicheva's theory of counter-terrorism referencing, i.e. modelling on that of more experienced stronger partners) in this field. At the same time, however, in the aftermath of the spectacular terrorist attacks of 2015 and 2016, it would be hard to imagine a single security service which is not keen on flaunting its counter-terrorism credentials. As terrorism is a pan-European and transnational threat, it would be hard to imagine a lack of intelligence cooperation between the security actors of the V4. At the end of the day, the jihadist terrorists are at least notionally targeting ALL U.S. allies from 1998, and the infamous Osama bin Laden's fatwa.
- b) **Counter-intelligence:** while the Slovak reports completely omit mentioning any specific actors and only vaguely describes the general context, the Czech or the Polish reports write more candidly about both Chinese and Russian intelligence activities. The Czech reports also highlight increased activity of the Iranian services in the Czech Republic whereas the Polish also mention actions of the Belarussians. It is worth noting that all the aforementioned non-V4 services are those of non-EU or non-NATO countries. Thus it should be in the interest of all agencies of the region to assist one another in arresting their activities in Central or Eastern Europe.
- c) **Cybersecurity:** all countries claim that there is a continual increase in the intensity of cybercrime, which is also getting a multidimensional character, i.e. it is oriented against state institutions. The Polish reports seem to indicate a higher preoccupation with this security field but it would be hard to name Poland as a leader in this field as it is still struggling with final approval of the cybersecurity strategy, pending since Autumn 2016. Nonetheless, if the V4 countries reach a conclusion, as the aforementioned reports seem to indicate so, that cybersecurity attacks targeting government institutions, critical infrastructure, leading businesses (often state owned) are mostly the work of state sponsored agents/trolls/provocateurs etc. then one should

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not have problems with envisioning a tighter experience sharing in this field amongst the V4 security services.

Another aspect, often confused with cybersecurity but encompassing a broader field, is joint interest and potentially activities which would stem the successes of propaganda and disinformation campaigns, often conducted via social networking platforms and online, especially by or allegedly by state actors. Sharing of insights on how the state actors conduct such campaigns, without developing the more politically challenging joint responses, could be another useful avenue for cooperation.

d) Countering extremism: Both the Czech and the Slovak services note an unprecedented increase in the intensity of hatespeech on the internet and social networks. The Slovak reports, which is not surprising, state that the activities of right-wing extremists have been constantly increasing and reached their historical height in 2015. The Czech BIS also reports activities of the local extreme-left scene, an entity hardly existing in Hungary or Slovakia, and relatively feeble in Poland. What is interesting, the Czech and Slovak reports discuss the extremist threat separately from the terrorist threat whereas the Polish reports often link the two issues. This could be the reflection of the ABW's lesser preoccupation with the local extremist scene but also a recognition that this threat could evolve into purely terrorist, and antistate conspiracies and plots akin to the activities of some of the jihadi terrorists. Regardless of the degree of importance each service attaches to the threat of extremism, it goes without saying that the right-wing radicals of the region have a track record of cooperation, as manifested e.g. by the presence of LSNS and Jobbik (and it offshoots) members at the Polish independence day celebrations organised by the elements of Poland's extreme right. Such cooperation could seem puzzling as it basically sees Slovak neo-fascists with fond memories of the Third Reich share platforms with Polish fascists who deny any links to Nazism. Nonetheless, if these individuals could bridge their gas vis-à-vis potential cooperation, so should the security services of the V4 countries while countering them.

Go Far Eastern

While discussing potential avenues of V4 cooperation in intelligence sharing, we should not necessarily look at the models provided by some of the four nations' Western allies, e.g. the famous Five Eyes alliance. The V4 intelligence apparatus are in a different league and any attempt at copying such models is premature, to say the least. Nonetheless, the aforementioned bilateral cooperation, and the multilateral fora provide the four services with an almost unprecedented,

NATO and EU connected, head start as far as trust building between them is concerned. The question, however, arises: can this go any further and if yes then how? The key issue, as could have been predicted, is in the threat perception(s) which, if aligned, could smooth the way for a more permanent cooperation between the V4 intelligence services. The thematic examples established above could lead to the development of a similarly thematic, and not wholesale, cooperation between the services. Thus e.g. Slovakia would ask for assistance and data on political extremism, the Czech Republic on countering cyber-attacks, Hungary on illicit flows of migrants, and Poland on activities of the Russian and Belarussian intelligence services. These arrangements, if successful, could in the future lead to a more wholesale intelligence agreements between the four countries. What is more, the same cooperation could be or perhaps should be extended to the field of open source intelligence collection which constitutes the backbone of any interrelated activity. This would entail sharing openly available sources or alerting colleagues to already publicly available data which they might have missed. What is more, this coop could also take the form of workshops or panel discussions during which experiences would be shared and best practices augmented.

The world knows examples of countries which although traditionally at odds with each other, were able to cast aside their differences and work against a common threat or adversary. General security of military information agreement (GSOMIA) between South Korea and Japan is a perfect example of this approach. The agreement concerns intelligence sharing related to North Korea, e.g. satellite imagery obtained by Japan. One could perfectly see similar enhanced cooperation between the V4 states which, unlike Japan and South Korea, have a long track record of amicable relations. In short, this could or to an extent perhaps already is working. However, could other states be added to a Central-Eastern European GSOMIA? Could "+" be brought to the V4?

The "+."

The answer to the aforementioned question could be and should be a tentative "yes." If it happens then that would mean the V4 countries established a strong trust based relationship with another partner(s) in intelligence matters. This, in both theory and practice, would provide both with substantial dividends and make them more secure in a volatile post 2016 world. Of course, enhancing this cooperation would be easier if it was to concern other EU Members and NATO Allies, e.g. the Baltic States or Romania and Bulgaria, and even the Western European neutral

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Austria. The addition of Moldova and Ukraine to such thematic based V4 arrangements is, however, far more problematic. The V4 intelligence services have a track record of cooperating especially with their Ukrainian counterparts, e.g. the Polish ABW cooperated with the Ukrainian SBU and the CIS Anti-Terrorism Centre in "Anti-terror Donbass 2011" exercise – in preparation before the UEFA EURO 2012 tournament. However, participation in such endeavors and development of a fullyfledged trust based relationship are a completely different matter, especially as e.g. the Moldovan state now seems to be emanating different foreign policy messages to the outside world with the president and the government running parallel track foreign policies.

Nonetheless, we are of an opinion that cooperation in the V4+ thematic format is possible and desirable. There exist an area in which, regardless of mutual suspicions, the six services, be it civilian or military, could engage in fruitful conversations with each other. It concerns the war in Ukraine and especially the issue of foreign fighters, present at both sides of the country's conflict. All of Ukraine's potential five intelligence interlocutors have seen nationals of their countries join either the ranks of the Ukrainian volunteer battalions or the anti-government forces of the socalled DNR and LNR. The services would surely appreciate a data sharing agreement on the individuals present in the pro-Russian ranks. It can get a bit more complicated as the V4 + Moldova would also expect to hear from Ukraine of its nationals who joined e.g. the Azov Regiment or the Right Sector. From Ukraine's point of view there is hardly anything wrong with foreigners joining these units but certainly a guid pro quo, i.e. information exchange, could be established. This exchange could entail V4+ receiving the data on the aforementioned persons, and in return they would be obliged to offer Ukraine its knowledge of facilitation networks and contact points used by the pro-separatist foreign fighters moving through their territory to reach Eastern Ukraine. Some of the non-V4 or non-Moldovan fighters who joined the DNR and the LNR forces travelled through e.g. Poland and Hungary, sometimes illegally crossing the border with Ukraine. What is more, they also visited the territory of V4 countries on "speaking tours" in the aftermath of their involvement in the war. All of this comes on top of e.g. Belarussian foreign fighters fundraising tours in Central Europe which should be in the interest of the Ukrainian security service.

Such cooperation could also be extended to the field of countering extremism – a larger topic, of huge interest to all V4 services and also their Ukrainian counterparts. The services should establish to what extent the extremist scenes of the respective countries cooperate, and also how their successful activities might be animating their counterparts in other countries who could attempt to emulate their most 'prolific' peers. What is more, some of these scenes might

be conductive to Russia's influences, and here again lies a key area in which more cooperation could be relatively easily fostered.

Conclusions

As the aforementioned was mostly a speculative account, we would like to conclude with questions which could animate the discussion related to intelligence cooperation in the V4+ format. Namely, we would like to hear more on the following:

- Are there any other models of cooperation you would like to see included (both thematic and non-thematic)?
- What further obstacles stand in the way of V4+ intelligence cooperation?
- What other topics should be included in the V4+ thematic cooperation?
- How would this cooperation fit into the broader EU and NATO led intelligence partnership(s)?

Cybersecurity in The V4 Introduction

The field of cybersecurity is under intensive development - permanently redefining itself and its borders. In the name of cybersecurity, competences have been drawn and redrawn in the last years. Russia's strategic deception campaign is clearly supported by cyber operations, creating more doubts where cyberwarfare starts and cyber defence begins. Does cybersecurity end there? Or is it encompassing both? The Visegrád Four are also coping with the answers in their successive national strategies that govern the policies of cybersecurity.

Already the notion is widely debated and its use is far from synchronised. The European Network and Information Security Agency (ENISA) produced a separate paper on the different usages of "cybersecurity". Their proposed definition stated that "Cybersecurity shall refer to security of cyberspace, where cyberspace itself refers to the set of links and relationships between objects that are accessible through a generalised telecommunications network, and to the set of objects themselves where they present interfaces allowing their remote control, remote access to data, or their participation in control actions within that Cyberspace" (Cf. ENISA paper: Definition of Cybersecurity - Gaps and overlaps in standardisation, 2015).

We have got rather far from the original meaning of "cyber". The term was related to the general system theory (Cybernetics) of the fifties. The Greek word kubernētēs (κυβερνᾶν), 'steersman' comes from kubernan 'to steer'. It translates as "skilled in steering or governing" and can be referred to Cybernetics as a transdisciplinary approach to explore regulatory systems.. Nowadays "cyber" is much more about the cyberspace an ungoverned, free zone of intervention with its doubts and challenges.

The current paper examines the development of cybersecurity perceptions in the Visegrád countries in order to identify the possible niches of cooperation. It would be categorically more burdensome to investigate the situation on the ground: few datasets are available when it comes to the real depth of cybersecurity, while comparing CERT reports is also not offering a truly comparable database. The respective strategies and policies of the V4 were already compared and are permanently analysed. GovCERTs and technical level issues are examined in detail elsewhere too. Instead, I will look for opportunities whether cybersecurity cooperation

might reach a level of defence cooperation as it can be found in any other domain - just like the NATO Heavy Airlift Wing at Papa airbase. Or is cybersecurity such a different domain that one has to think of very different ways for countries to pool resources?

From the first moment it is evident that cybersecurity is such a new domain that competence dilemmas abound even on the national level. The Czech Center Against Terrorism and Hybrid Threats demonstrated the issue: to operate without interferences it remains to be specified where are the limits of intervention against disinformation campaigns and where are reserved domains of other actors of national security. All countries have a double structure of civilian and military cybersecurity - one that falls under the General Staff and another civilian one that falls under ministerial control. The importance of hybrid threats increased in comparison to classical threats: cybercrime units of the classical law enforcement agencies have been online for a long time, yet criminality, espionage, active measures and strategic deception walk hand in hand.

External actors

The framework of cybersecurity is rich in actors for the Visegrád countries. The European Union Agency for Network and Information Security (hereinafter: ENISA) was launched in Crete in 2005. Originally it was created to support the European Commission, the member states and the business community in their efforts to coordinate addressing, responding and preventing network and information security problems. Meanwhile the NATO joined as well. Its New Strategic Concept - introduced in Lisbon in 2010 - recommended the development of NATO capabilities in preventing, detecting and defending from cyberattacks and building capabilities of effective recovery after attacks. The NATO-EU cooperation has been deepened, but it might pose dilemmas for member states. It needs to be solved how to differentiate certain tasks, where to allocate resources and how to decide questions of priorities.

The NATO Cooperative Cyber Defence Centre of Excellence (NATO CCDCOE) was set up and published the National Cyber Security Framework Manual in late 2012. Around that time all Visegrád countries drafted their strategies, but the dynamics of the partnerships just recently become more active. From the legal point of view, Poland is battling to get its first true strategy out, while it has an older policy paper, Budapest has one strategy paper, while Prague has issued already its second strategy. In Central Europe it is though clear that absence of a strategy does not mean that no legislation takes place, while it is also true that despite of a strategy, legislation and executive orders may be absent. Daniel Berzsenyi compared the first strategies

in early 2015 in his study "New dimension in V4 defence cooperation. A comparative analysis of the cybersecurity strategies of CECSP countries" (Cf. Visegrád Plus: New dimension in V4 defence cooperation. A comparative analysis of the cybersecurity strategies of CECSP countries). "Austria and the Czech Republic initiated the creation of the Central European Cyber Security Platform (hereinafter: CECSP) in 2013 with the participation of Poland, Slovakia and Hungary" (Cf ENSIA: Meeting of Central European Cyber Security Platform 2014). Within one year, Budapest noted that "so far the CECSP-meetings were largely devoted to trust-building, mutual acquaintance and exchange of information on the respective country-situation". Hungary then hosted the first joint cyber defence exercise of the Central European Cyber Security Platform (Cf. Hungarian Government: Hungary to Host the First Exercise of the Central European Cyber Security Platform (CECSP) in 2014). Nowadays the V4 and CECSP coordination has become an issue mentioned in Visegrád presidency papers. It shows the Austrian effort to mitigate the successful coordination of V4 is present in this field as well, matching to the impression the Slavkov declaration left behind.

While the EU was busy to negotiate its NIS directive, the Warsaw Summit in July 2016 recognised the cyberspace as an operational domain, in addition to air, land and sea. NATO also signed a Technical Arrangement on cyber defence cooperation with the European Union in February 2016. They were not in uncharted waters, as the partners previously agreed on information exchange, training, research and exercises.

Cyber defence has also been integrated into NATO's Smart Defence initiatives allowing member states to pool and optimize resources. "Smart Defence enables countries to work together to develop and maintain capabilities they could not afford to develop or procure alone, and to free resources for developing other capabilities. The Smart Defence projects in cyber defence, so far, include the Malware Information Sharing Platform (MISP), the Smart Defence Multinational Cyber Defence Capability Development (MN CD2) project, and the Multinational Cyber Defence Education and Training (MNCDE&T) project." These areas of cooperation prove that the member states are still hesitating to get closer in more sensitive areas. Smart defence domains are an excellent step forward though.

The EU-level Directive on security of network and information systems (NIS Directive) was adopted by the European Parliament on 6 July 2016. As Danielle Kriz highlighted, NIS is "a milestone law (the EU's first cybersecurity-specific legislation) that all EU member states must implement by May 2018. (...) It was interesting, however, that much of the focus on NIS at [the Polish CyberSec] conference was on its provisions calling for a pan-EU strategic Cooperation

Group comprised of representatives from the member states, the European Commission, and the European Union Agency for Network and Information Security (ENISA). Per the Directive, the Cooperation Group is to support and facilitate strategic cooperation and share information and best practices on risks, incidents, awareness-raising, training, and research and development (R&D) among member states and to develop trust and confidence." (Cf. Paloalto Networks: Poland Expands Leadership Role on Cybersecurity)

The handling of information became the central challenge of cybersecurity by focusing on information exchange and collection. There is no blueprint how to build up the national structure of cybersecurity since all member states have a diverse hierarchy by now. Therefore, different public bodies and agencies with various competencies are trying to share information as quick and as secure as possible. Meanwhile international fora for information sharing are also getting richer and richer. Yet, it does matter which national agency is assigned to which international body's cyber forum. The risk of information mismanagement is inevitably growing given the myriad of actors at all level.

There is also a fundamental bifurcation in approaching cybersecurity: shall V4 states strive for an own, bottom-up cooperation that is sui generis, or shall they much more rely on the multi-lateral, international frameworks and drive their own smaller structures top down from these entities such as NATO and EU?

In other words, is there a special need or security necessity that may push Visegrád countries to adopt their own form of cooperation or shall they just let themselves be embedded in larger structures? Given the regional specifics, it is not irrational to consider frameworks where sui generis Visegrád cooperation makes sense.

Command and Control

The structures around cybersecurity are also in quick development when it comes to the control and oversight competences. While basic human right questions are kept on the agenda since issues with heated debates like the US Patriot Act, the passenger data exchange between EU and the US or the earthquake caused by the Snowden-leaks, very pragmatic questions are newly formulated: is it possible to ban hostile powers' information channels, like RT (former Russia Today) or Sputnik News? How can Visegrád countries build more checks and balances in the cybersecurity process? The oversight of the intel community as such is not yet as developed and rooted in the democratic process as in some of the more advanced countries of

the West. Who can decide about website blockings, and what makes a website a propaganda outlet? Especially if it is edited by "useful idiots" which means that they are the citizens of the given county who do the task voluntarily. It is quickly becoming inevitable that a certain sort of content screening – censorship – is necessary in the process, outside the circle of counterespionage activity, as strategic deception campaigns entails much more than simple measures of espionage that could be countered.

The Visegrád countries might show the strength of their democratic process by developing procedures for the evaluation of hostile information campaigns and how to tackle them in the framework of rule of law. The transitional democracies have fresh institutional memories about lustration, tackling of cases where their own citizens served foreign interests, disclosing of formerly confidential materials etc. This experience is actually a truly valuable one in the current context, V4 countries could easily capitalize on that.

Intra-Competition

The Visegrád countries have started early to compete for the regional leadership. The competition runs until today and does not foster the cooperation on the short term. Cyber security was among the priorities of the Hungarian Presidency of the European Council in 2011. The first years of the 2nd Orbán government showed that Budapest understands the importance of cyber security. After 2014, Hungary did not continue in the same pace. Now Prague aspires to the regional leadership which was announced in its new strategy adopted in 2015. Warsaw also made it clear that it takes the cyber industry seriously and significantly caught up to become a competitor when it organised the Warsaw NATO summit. The question remains how efficiently the new PiS government will lead this region, but the intention does not seem to be broken.

The competition between Prague and Warsaw can be well illustrated by the two conferences both organised on an European level: CyberCentral in the Czech Republic - which took over the Cyber Security Summit - and the CyberSec in Poland which will be organisedalready for the 2nd time by the Kosciuszko Institute in 2017. Hungary sticks with its Internet Security Days (ITBN) since 2005 which is mainly a market-oriented independent event by Arthúr Keleti, strategic advisor at T-Systems.

The V4 rotating presidency also focused on cybersecurity, but without quick results. The Program for the Czech Presidency (July 2015–June 2016) claimed that "they will push to deepen

and increase the efficiency of cooperation within the Central European Cyber Security Platform (CECSP). This will particularly include harmonising the positions of the V4 countries on fundamental topics of cyber security, including their positions within international organisations, organising expert workshops and introducing standards and secured channels as part of communication among the CECSP states. The V4 will also continue in the practice of cooperation among specialised police units and national "centres of excellence" focused on research in the area of cybernetic crime." The text already shows the basic problem of shifts in national definitions (cybernetic crime vs cybercrime and what it entails possibly), or the tension between CECSP and V4. As for concrete propositions, the Czech Presidency was rather modest: "At the operational level among top CERT sites we want to organise workshops on selected topics (e.g. intrusion detection and honeypots, penetration testing, etc.)".

The Polish Presidency declared the following "[C]yber-security (sic!): cooperation to enhance the protection against cyber threats inter alia by means of CSIRT cooperation and the Central European Cyber Security Platform (CECSP); building permanent relations between the CECSP and the V4. Furthermore encouraging cooperation between special Police units and national "centres of excellence" that focus on conducting research in the field of cyber-crime." (Cf. Visegrád Group: Programme of the Polish Presidency of the Visegrád Group) It is hard not to notice the similarities between the two texts – despite the time that passed meanwhile. While Prague adopted its second strategy and Poland developed its regulative environment and policies further, Hungary reorganized substantively its cybersecurity set up during the third Orbán government. In July 2016 the Hungarian Electronic Information Security of Central and Local Government Agencies have been modified significantly - just three years after their initial adoption. As a result, the National Cyber Security Center was established in 2015 by bringing together the GovCERT-Hungary, National Electronic Information Security Authority (NEISA) and

the Cyber Defence Management Authority (CDMA) - all under the Ministry of Interior.

Level of activity

The sources differ in their answers when asked about the diversity of Russian cyber activity in the V4 countries or Ukraine. While in Ukraine, obvious interventions are regularly going on, in the V4 it is not as evident. A comparison of the quantity and the level of activities is therefore more difficult. The first and most important obstacle is the divergent transparency. Whereas Czech's intelligence BiS report is probably the most informative among the Four and also Warsaw is speaking out very openly when expelling a persona non grata or finding a suspicious drone in the sky due

to the Russian-Polish relations. Hungary is not only very silent, but the second Orbán government all in all gave up the practice to publish the yearbooks of the intelligence services, hence open information are rare. According to Hungarian officials, however, great breaches were not performed. Also the Slovakian SIS is less informative about cyber intelligence and defence.

Prague definitively brought the Russian furore over itself when the Czech Republic decided to take part in the missile shield program. Since then they clearly became a target of Russian intelligence services, not only in the field of cyber activities, as BiS reports showed. Hungary and Slovakia are less affected in this regard as they kept inviting high-ranking Russian officials and tried to maintain a pragmatic – but unavoidably imbalanced – relationship.

Ever since, Czechia is an active promoter of the cyber-related issues and communicated it actively. It maintains a cyber-attaché at its embassy in Washington D.C., while for example Hungary has no dedicated diplomat for this.

By comparing incidents reported by CERT, it might be a possibility to see the extent of Russian cyber interventions. However, the true extent of cyber-intelligence is just as incomparable in V4 countries as it is in other domains of intelligence activities. Nonetheless, it would be an important political information to be aware of parallel Russian tactics in our countries. A confidential comparison should be maintained.

Scope - Ukraine

The NATO Cyber Trust Fund for Ukraine was set up in late 2014. By mid-2016 the Fund collected almost one million EUR. While Romania (the Intelligent Service and Rasirom Ltd) is the lead nation behind the Fund, from the V4 countries only Hungary took part in the initiative. It is declared to serve solely defensive purposes - with both training and capacity-building included - and to establish a CERT structure. Certainly, it is a challenge to implement such a sensitive NATO program in an environment where the infiltration of hostile agents is almost inevitable. Ukraine has faced several occasions in the last years where its critical infrastructure or other important elements of services were penetrated. Most notably, the partial blackout in Kiev in December 2016 or the malware which targeted the artillery precision application on mobile devices. The computers involved in the electoral system were also attacked. It is an excellent terrain for NATO-members to discover the Russian cyber-tools in the making and at the same time to help a partner in need. Most probably Russia is using Ukraine as a testing platform for its growing cyber capabilities.

V4 countries could benefit in different perspectives from a cooperation with Ukraine. Never theless they have to take care that their own operational details are not exposed by gaps in the Ukrainian system. The Visegrád Group can learn how Russia operates, how targets are chosen and what kind of tools are used to reach the objectives over time. In Ukraine, the human factor is just as important in cyber-related cases as it might be in the former Soviet-bloc V4 countries. Russia has a certain advantage in HumInt which enhances its cyber operations further. Practices how to counter this might also be shared.

Ukraine is also a great example where critical infrastructure defence and cyber defence need to be coordinated and integrated at multiple levels. Critical infrastructure definitions greatly differ in V4 countries and hence the level of cyber defence in their protection might also vary. Cooperation with the Ukrainian partners might bring some common language in these very sensitive but central definitions, such as critical infrastructure for the Visegrád countries.

Honey pots in Ukraine are offering a different level of attraction and perhaps can be met with less caution by the Russian state-sponsored hacker groups. V4 countries could test such honey pots together in the Ukrainian network, later they could use the experience back in their home countries. Ukraine is offering anyway a great reason for cooperation: a neighbouring country at permanent cyber war shall be cause enough to bring V4 cyber forces on an operational level together.

Although it should be noted that cyber cooperation – as all other cooperation related to Ukraine – might be restrained from time to time by the very different takes on the Russian bilateral approach.

An Easy Way: Cyber Hygiene

As a first step of cooperation, cyber awareness or understood more broadly, cyber hygiene could offer an excellent and easy way. It does not need data sharing, it is not prohibitively expensive, it opens the door for civil and expert cooperation besides the public bodies. It might touch on multiple actors: shared training material for public administrators and civil servants, while it could also share best practice how to educate cyber hygiene for the elderly, for students and for NGOs.

Such common practices can start with YouTube videos, training manuals, information filtering techniques or for example a guide to handle Internet of Things related security minimum requirements, beginning with the largest ISPs at national level – which are usually the outlets of

the same multinational companies anyway in our countries.

Opportunities for V4, conclusions for Ukraine And Moldova

Visegrád countries are not alone out there to help and support Moldova or Ukraine. NATO's Defence and Related Security Capacity Building Initiative (DCB) is a cornerstone in that for all the allies since its launch in Wales in 2014. Moldova has been active in the program, which is strictly demand-driven. Another NATO-level tool is the Defence Education Enhancement Programme (DEEP), which provides support in developing and reforming professional military education institutions in individual countries. DEEP is active since 2007 and claims 350 experts from approximately 75 defence education institutions in NATO member and partner countries.

- 1) The national cyber defence strategies were all adopted with different **review mechanisms.** The Hungarian one is especially weak in that perspective, while Poland and Czechia are making yearly reviews on a government level. Enhancing transparency, building trust and relying on each other's expertise could begin with common review mechanisms, experts exchanges, a composition of common review strategies and drafting common annual review materials. The countries are taking part at the same NATO and other cyber exercises, but to audit parts of the cybersecurity structures of the neighbouring states would mean a deeper level of cooperation. Cyber defence may become the first domain where V4 countries build up a substantive liaison office system and push for an intensified administration-level cooperation. Review mechanisms provide great insights for the Ukrainian partners as well.
- 2) In general, a V4 task force could draft a **model strategy** of cyber defence: it could give guidance which domains must be treated and what are the experience of our countries, offer follow up options and recommendations. Or just simply asking the questions that each 21st century government has to answer. The whole process can be built on assistance by V4 personnel. While for example in Ukraine the NATO Trust Fund makes similar projects, a national-level strategic document on cybersecurity could use Visegrád sources. One cannot copy US or UK examples to Central or East European contexts, our strategies fall much

closer to the cases to our Eastern neighbours.

- 3) **Regional-level exercises** should be carried on and expanded: while at certain level security clearance matters, it is in no way an obstacle for complex common exercises. It is in the V4 interest to secure its neighbourhood, hence we have to keep up the bonding of cybersecurity personnel and to develop their shared perception of threats.
- 4) While the EU's NIS directive is an important step, there are plenty of **under harmonised domains of cybersecurity**, even in cybercrime related classical law enforcement areas. Visegrád countries are not compelling their ISPs to guard the metadata for the same period, which may in turn hamper joint investigations or simple requests for data if one party already deleted relevant data while others keep it for years. Such smallscale harmonisations could bring operational advantages.

The Visegrád Fund put cybersecurity among its priorities for 2017. Common research and academic collaboration in the field are strongly advised in order to optimize costs and pool resources as well as expertise. It should be elevated to the meetings of the V4 prime ministers and would deserve a dedicated new funding - after the designation of partners who are eligible for taking part in the research consortium. It is also possible of course in V4+ format.

- 5) It is easier to exchange best practices concerning campaigns that raise **public awareness.** This would create again more feedback on the campaigns and show whether they were useful or not. All the V4 face similar levels of dilemmas in the orientation of their users. It would be stimulating to see how the Ukrainian population is actually perceiving the ongoing cyber conflict. Is their perception very different from the V4 countries? Does the extent between the actual level of interventions in our countries differ from the extent presented in the media? What are the critical elements of the public mindset to enhance cybersecurity awareness at national level? Comparative studies could offer deep insight.
- 6) There exist more technical questions like the **IPv6 transition** or other infrastructure level cooperation possibilities. Given the small size of the countries, we already have experienced how concerned a given population might get when the neighbouring country's critical infrastructure is seemingly unstable, for example nuclear power plants. But one does not have to go that far: it is the core interest of Budapest that Slovakia secures the critical parts of the Gabcikovo power plant on the Danube for example. If national-level cooperation in

cybersecurity is more difficult, then protecting critical infrastructure elements together might be a good first step.

- 7) **The procurement** of safe ICTs is also a key question. While common defence procurement did not become a success story of the V4, it is a less sensitive domain because none of the countries produces its own router or chipset. Therefore, a common presence on the ICT market might even drive the prices down for public procurement given the economy of scale. At the same time, security considerations are also easier to deliberate through cooperation. Not to mention that corruption is more difficult in joint platforms where players can check on each other.
- 8) While two centres of excellence were created in the Baltic states and another one is coming up in Helsinki relating to cyber defence and strategic communications, it seems that only Prague is considering to initiate another centre on its own. It should be noted though that Poland already hosts the not yet accredited NATO Counter Intelligence Centre of Excellence (NATO CI COE) located in Krakow, jointly run by Slovakia. The Czech Republic runs the Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence (JCBRN Defence COE) in Vyškov. Otherwise Romania opened the HUMINT COE. It might be a great NATO-level visibility opportunity for the four countries together to come up with an idea of a centre that is concerning all of them, shall that be cyber hygiene education for public officials (a sort of training centre) or a real research-oriented centre of excellence in a specialized cyber defence subfield.
- 9) Partner countries Moldova and Ukraine are particularly interested in creating **sustainable assistance programs.** That means not only a dose of equipment or a consultation on a given framework for a restricted period, but more integrated programs with true followup, which could in turn help the local governments to take it more seriously, over government cycles and ministerial changes as well. More deeply rooted assistance programs might bring more sound results, NATO and other donors must avoid otherwise general symptoms of the donor-problematics.
- 10) The Estonian government is considering to create a **data services mirror**, with the support of Microsoft, in possibly an alternative NATO member state that would enable Estonian government to function in the event of a cyberattack and maintain its citizen services and data integrity. The idea is very advanced and presumes high level of trust on behalf of both

countries, the one that hosts the data of another allied government. V4 could not fingertip a single ally that they would have the same level of confidence, but already to consider the idea together and discover its advantages and disadvantages are truly pointing ahead.

The Ultimate Challenge

One of the most important field is HR and the recruitment of cyber experts. An assessment from 2012 already highlighted the human factor: "The lack of qualified employees at the key positions in the public sector presents the major challenge for the Czech Republic. Without qualified personnel it would be very difficult to control the implementation of security measures and to govern the cyber space of the Czech Republic. Furthermore, lack of skilled experts may jeopardize international cooperation." (Cf. Tomas Rezek: Cyber Security in the Czech Republic, p. 8) This recently became more relevant as the brain-drain did not stop - to the contrary, it accelerated in the IT sector. None of the V4 countries are in a truly competitive position against the market forces, yet Poland tries to compensate the situation with higher salaries - the socalled "golden hundred" program. The Hungarian Ministry of Interior also started to provide legal framework for visibly higher salaries in certain positions. Despite the small amount of experts that government agencies want to recruit, vacancies might stay open for months. The UK has launched a special program where they aim to assure the continuity of cybersecurity professionals by bringing the IT-training to the level of high schools: thousands of students might participate in a four year long training which would then provide a pool for recruitment later. V4 countries could develop similar common incentives and long term solutions. They will have to offer less rigid and more attractive career paths for IT professionals that enter the public administration, not to mention the security services (where for example cannabis consumption might already jeopardize recruitment in Hungary or other countries where cannabis is banned).

Conclusions

As it was demonstrated above, pooled resources are the solution in the future for the Visegrád countries. However, they need to build trust in the first place, as their cooperation is also undermined by competitive attitude, mistrust, significantly different foreign policy operations and under harmonised law enforcement legislation. Hence they need to work on the cooperative environment and the human factor as much as they can, if they want to be able to save taxpayers' money on cyber defence through pooled resources.

Joint Exercises and Missions Introduction

The current changes in the European security environment raised the political awareness on security and defence policies within the EU. Discussions on the increased cooperation within Europe also focused on existing regional formats, such as the V4 defence cooperation. The main focus became handling the threat of terrorism and deterring Russia in Central and Eastern Europe.

The new directions were set at the Newport Summit of NATO, and their implementation started as early as 2014. NATO's Wales Summit considers V4 contribution in the following areas of interest: NATO Response Force (NRF); Very High Readiness Joint Task Force (VJTF); NATO Force Integration Units (NFIU); V4 modular Force operational for NATO and EU Rapid Reaction Forces; V4 European Union Battlegroup (V4 EU BG) certification exercise. Beyond reinforcements to the Eastern Frontier, primary to the Baltics and Poland, the cornerstone of NATO actions were the improvement of commanding structures and regular exercises.

These joint military exercises are not only vital for the development of the armies, but also improve interoperability among the participating states. They serve as a precondition for any deeper cooperation, such as future cooperation within international missions. The V4 joint exercises and missions in the field of defence and security cooperation are among the most important topics discussed. Furthermore, V4 joint exercises represent a genuine opportunity to provide training, exchange experience and improve bilateral and multilateral relations among V4 member states and external participating countries. In this sense, V4+ cooperation a well-known political format within the Visegrad cooperation - could be extended to the field of security and defence cooperation in a more structured way. An important question is the depth of such a cooperation and how to politically coordinate the inclusion of non-NATO and non-EU members. Being aware of the strategic goals of the NATO, the cooperation would be welcomed by the members of the Alliance.

In our case, the involvement of Ukraine and Moldova is a tricky question, especially when it comes to the latter country. While Ukraine seeks deeper cooperation, primarily with NATO to ensure US commitment, in Moldova's case the principle of neutrality is anchored in its Constitution. Cooperation must be narrowed down to issues supporting peacekeeping operations, as also the Moldovan defence leadership often highlights. This definition narrows cooperation down to mainly EU focused actions, under the umbrella of the Petersberg tasks.

Recently, a special attention was paid to the cooperation between V4 countries and Ukraine. This form of cooperation has been developing most dynamically in the format "V4+Ukraine". One of the main results of military cooperation is the assistance provided by the V4 countries for the reform of the Ukrainian armed forces and their transition process to NATO standards. This assistance was mainly provided by individual V4 countries without effective and meaningful coordination. The present paper would like to evaluate existing cooperation and map potential opportunities for deeper cooperation on the field of joint exercises and missions.

Joint exercises: background Information

The cooperation in terms of defence and security among the V4 countries dates back to 1999 when the very first meeting at the level of Ministers of Defence was held in Przemyśl, Poland. In the early years of cooperation V4 members were concentrating on their Euro-Atlantic integration. Following its success, the V4 were looking for new agenda, which was first articulated in the Kroměříž Declaration. Member states agreed to support their neighbours on the South and the East on their path towards EU and NATO integration, by sharing experience and support transformation processes. The framework of a "V4 + Ukraine" cooperation was developed by 2005 and focused on security, military, energy, social and cultural spheres, as well as on regional level cooperation, with a special emphasis on the Carpathian Euroregion. In the following decade, cooperation was maintained mainly on the political level, with a very limited cooperation as described below. Unfortunately, a similar structured format has never been developed for Moldova.

The aggression of Russia against Ukraine and the subsequent annexation of Crimea have changed the security environment in Europe and made the V4 and NATO leadership rethink the defence context. The acknowledgement of closer regional defence cooperation among the Visegrad countries has been officially stated in the framework of the "Budapest Declaration of the Visegrad Group Heads of Government on the New Opening in V4 Defence Cooperation" in March 2014, when the V4 Ministers of Defence signed three documents of strategic importance: "Long Term Vision of the Visegrad Countries on Deepening their Defence Cooperation", the "Framework for Enhanced Visegrad Defence Planning Cooperation" and the "Memoran-

dum of Understanding on Establishment of the V4 EU BG".

According to the "Long Term Vision of the Visegrad Countries on Deepening their Defence Cooperation" signed in 2014, V4 countries agreed on a common vision focusing on 3 main areas:

- Capabilities of development, procurement and defence industry;
- Establishment of multinational units and run cross border activities;
- Education, training and exercises.

The areas of cooperation included the setup of the V4 EU Battle Group in 2016 as well as Defence Planning Cooperation, Joint Training Exercises and Military Education programmes.

The joint Visegrad EU Battle group provided on standby in the first half of 2016 is considered to be one of the contributions meant to further enhance the EU's rapid reaction capacities. At the same time, the Visegrad EU Battle group could be seen as an asset that not only contributed to the EU's role in the field of crisis management, but it has also served as a driving force for V4 capability development efforts and increased cooperation. It has offered ample opportunities to increase cooperation with regard to training, joint exercises and the development of capabilities of a various range of defence forces which could be used either by the EU or NATO in the forthcoming period. This was recognized by defence leaderships, and although the effectiveness of Battle Group is highly disputed, the Visegrad countries offered a joint battlegroup to the EU in 2019.

The involvement of Ukraine was intensified. In order to increase the interoperability of V4 armed forces, it is highly important to organize joint V4 exercises on an annual basis, harmonised with NATO, EU and national exercises. The participation of Ukrainian and Moldovan contingents would open new opportunities of further engagement of the countries in common initiatives and strengthen the relations with the EU and NATO security policies and practices.

Soldiers and units of all sizes need to train and participate in live exercises in order to keep their skills in peacetime. For a sustainable capable military, modern weaponry and proper training represents an important prerequisite.

V4 countries in joint peacekeeping missions in UN, EU and NATO frameworks

Czech Republic

Following the NATO accession on 12 March 1999, the Czech Republic assumed a commitment to take part in foreign military operations under the flag of the North Atlantic Alliance. The Czech military engaged in the integrated NATO military structure, contributing to defence operations and civil crisis management planning. Taking part in the procedural and organizational aspects of nuclear consultations, as well as by participating in joint exercises, the Czech Republic actively commits its troops for NATOled multinational operations, thus contributing to common defence strategies.

By joining the EU in May 2004, the Czech Republic increased its participation, covering EU operations and missions too. An important part represented the awareness raising processes and public information campaigns disseminating information regarding country's soldiers' participation in missions and operations in faraway countries such as Afghanistan, Pakistan, engagement of Czech Military Police contingent in Iraq (training new Iraqi Police Force) or Air Policing operations in the Baltics and in Iceland. A noticeable role has also been played by Czech military observers under the flag of the United Nations, the Organization for Security and Cooperation in Europe, and missions conducted by the international community. Currently, Czech soldiers served in NATOled ISAF operation in Afghanistan, which was renamed to the Resolute Support Mission (RSM) as of 1st January 2015, in Kosovo KFOR, Atalanta in the U.K., MFO in the Sinai, and in EU missions in the Republic of Mali, and Althea in Bosnia and Herzegovina. A group of Czech signal troops officers contributed to NATO Active Fence operation in Turkey from September 2014 to January 2015, and the Czech Air Force served on Air Policing operation in the Baltic area and Iceland. In September – November 2016 the mission Airborne Surveillance and Interception was undertaken to meet Iceland's Capabilities Peacetime Preparedness.

According to the annual report of the Czech V4 Presidency, 2015–2016:

- V4 offered to assist Hungary and Slovenia in protecting the external border of the Schengen Area, including the deployment of police personnel;
- The process of preparing the Visegrad EU Battlegroup (V4 EU BG), including its certification;
- The Czech Presidency achieved considerable progress in the debate on building a permanent V4 modular force;
- In the areas of V4 capability development, defence planning harmonisation, pooling and asset sharing, the main achievement was the finalisation of feasibility studies and the approval of a timetable for capability development in five priority areas;
- In the area of joint procurement, the V4 established close cooperation with the European Defence Agency (EDA).

Poland

Poland's armed forces foresee - as primary component of the national defence system - the implementation of the state's security and defence policy. The Armed Forces of the Republic of Poland concentrate their efforts on the following missions:

- National defence and countering aggression under alliance obligations (i.e. maintaining the capability of using armed forces to defend and protect the inviolability of the borders of the Republic of Poland, in anti-terrorist operations, to solve a local or a regional military conflict and in a defensive operation home and abroad);
- Contribution to the international stabilization process, to the crisis response operations and humanitarian operations (i.e. maintaining forces and capabilities to participate in peacekeeping and crisis response operations led by NATO, the EU and the UN as well as other operations carried out under international agreements and in humanitarian operations led by international, governmental and other organizations);
- Supporting internal security and helping the society.

In addition to the North Atlantic Alliance, the Common Security and Defence Policy (CSDP) is the second main pillar of the Polish security policy. The CSDP, as an integral part of the Common Foreign and Security Policy (CFSP), belongs to the sphere of intergovernmental activities of the EU. It provides the Union with operational capacity based on civilian and military resources to carry out peacekeeping missions outside its territory, prevent conflicts and strengthen international security. Joint exercises and peacekeeping missions in UN, EU and NATO framework open new possibility for the Armed Forces of Poland not only to increase the capacities but also to contribute with a large share to common defence initiatives.

The role of Poland in the new Eastern European regional environment becomes a crucial one not only because its proximity to conflict areas, but also because of its continuously developing military and defence capabilities. Considering the general dynamics in the region, the necessity to increase the interdependence of the Visegrad countries and the improvement of their defence capabilities became more perceptible for Poland in 2016. With this aim in mind, more than 30,000 troops, backed by large numbers of vehicles, aircraft and ships, were deployed on NATO's eastern flank for military exercises. All this happened a month before the Warsaw Summit, where a decision was adopted on strengthening NATO's positions in Eastern Europe. The Anakonda-16 exercises have included a range of specific combat maneuvers. The fact that such kind of exercises were carried out suggested a radical revision in the attitude of NATO member countries in relation to the developments in Eastern Europe.

On the 2nd of February 2017, the joint communiqué of the V4 Visegrad Group Ministers of Defence, in the framework of the Polish presidency, notes:

- The significance of NATO Assurance Measures for the Baltic States in 2017. In particular, a plan has been developed on carrying out joint exercises on the territory of the Baltic States with the participation of the Visegrad countries. The deployment plan agreed on the following set of directions: Czech deployment in Lithuania, Slovak deployment in Latvia, Hungarian deployment in Estonia, Poland's deployment in Latvia;
- Establishment of the Multinational Division North East in Poland with the aim to strengthen NATO's collective defence to the Eastern Flank;
- Enhancement of cooperation until 2020.

Hungary

Hungary's position is formulated clearly on the agenda of the Visegrad Group, taking into account that it understands the role of international structures and organizations that contribute to preserving peace and security. Therefore, it is imperative for Hungary to actively cooperate with the UN, NATO and the EU in security matters, and at the same time fulfil its international obligations. This is a good example on how vital national interests encourage a state entity to actively engage in international affairs. In such an ordeal, participating in crisis management

activities, operations, missions or planning contribute to the collective security system. Hungary also supports the development of a genuine strategic partnership between the EU and NATO, as well as the strengthening of their military and civilian capabilities in a coordinated manner. Hungary pays special attention to multinational military exercises of the Visegrad countries to promote logistics standardization, interoperability and high maneuverability Logistics and command and control have become some of the most demanding areas within military exercises and missions. NATO is increasingly paying attention to these issues, such as improving logistics, drawing out common rules and standards and training the personnel. In Hungary, peace-keeping training is carried out by the International Training Center of the Ministry of Internal Affairs (ITC, Budapest) and the HDF Peace Support Training Centre (PSTC, Szolnok). Within the framework of these institutions, international military observer courses are carried out. The UN Department of Peacekeeping Operations extended the accreditation of the international training centre until 2019. This demonstrates the importance of implementing concrete practical measures aimed at the integration of Hungary into the common peacekeeping international system and increase its abilities on settling crisis situations.

Slovakia

The V4 countries always devote special attention to Slovakia and expressed willingness to cooperate with this country. Namely, they understood that Slovakia would make a genuine contributor to the integration efforts within the renewed Visegrad cooperation framework. The main aim was to improve cooperation with Slovakia and enhance its defence capabilities within the framework of NATO and EU policies.

According to the annual report of the Slovak V4 Presidency from 2014-2015, the V4 Training and Exercise Strategy increases interoperability among V4 countries armed forces and contributes to NATO's exercise programs. The strategy tasks V4 planners with preparing exercise plans every four years, starting with the 2016-2020 cycle. The following areas of cooperation are considered: Training and exercises; Joint Logistics Support Groups; Chemical, biological, radiological and nuclear defence (CBRN); Joint Terminal Attack Controllers; Special Operations Tactical Training; Advanced ground combat vehicle.

The Visegrad countries will hold joint military exercises in the Baltic countries in 2017. Each one of the V-4 states will set up special groups which will include combat training units operating on the principle of rotation that would potentially allow for the involvement of a wider range of

participants. The details on the main training issues were taken not into consideration by the NATO Defence Ministers' meeting in Brussels. The information about the results of the joint exercises will also be discussed within the framework of NATO. The V4 countries and Baltic States are committed to continuing the joint military exercises and their cooperation likewise in the foreseeable future. On their part, the importance of reserve troops training was underlined.

The V4 European Union Battle Group underwent successful certification last year. Despite this achievement, the increasing number of security threats require a more balanced approach in order to enhance the defence capability and combat readiness in peacekeeping missions. Consequently, NATO initiated the process of expanding its influence to the Eastern Flank and the establishment of special military bases in the wake of Russian aggressive policies. Slovakia and other participants of V4 supported the joint action initiative and NATO's presence in the Eastern Flank of the Alliance and encouraged its initiatives in raising the level of combat readiness through joint exercises and missions.

V4+ Ukraine

Cooperation in the military sphere is placed highly on the cooperation agenda of Ukraine and the Visegrad Group countries. This direction of cooperation has been developing most dynamically in the format "V4+Ukraine". Starting from 2002, the defence ministers of the Visegrad states have met annually in order to discuss the most important problems related to the defence policy. Ukraine joined this military cooperation in 2005. Military-political contacts with heads of military authorities were set, and consultations and meetings on NATO issues at the level of directors of departments for security policy and cooperation with NATO, were initiated. Meeting of heads of joint staff have also taken place (since 2007 Ukraine has been included). In order to further develop this cooperation, Ukrainian soldiers have participated in joint military exercises together with V4 countries contingents. The most important military exercises since 2006 have been the following: joint command-staff exercises "Rapid Trident" (Poland, Hungary), exercises of airmobile units "Cossack Steppe" (Poland), "Light Avalon" (Slovakia, Hungary). One of the main results of military cooperation is assistance offered by the V4 countries in the process of the Ukrainian armed forces reform and their transition to NATO standards. At the same time, it is important to mention that the assistance is provided by the V4 countries individually and not by the Visegrad Group as such. Though, the consolidated position of all members of this Group and the necessity of providing this assistance to Ukraine should not be underestimated. In order to improve cooperation at the regional and local levels it is necessary to pay greater attention to trans-border cooperation, decentralization of decision making and better financing of projects on regional cooperation.

Participation of the Republic of Moldova in joint exercises within the V4 Group

The fact that in 2014, the Republic of Moldova was invited for the first time to a NATO Summit cannot pass through without attention. In July 2016, during the NATO Warsaw Summit, a final declaration was adopted, which included special tasks about the need to provide assistance to the Republic of Moldova in its process of strengthening the defence capabilities. Thus, the issues of security, strengthening of defence capacities and militarization are of particular importance. This is confirmed by the recent decision from 16 February 2017 of the North Atlantic Council on the level of defence ministers, to strengthen NATO's presence in the Black Sea region and facilitate cooperation, based on the Alliances' multinational framework brigade in Romania. NATO plans to expand training, raise awareness of the situation and raise the coordination level of the forces in the region.

The cooperation between the Republic of Moldova and the V4 format is rather reduced. Moldova has an extensive partnership with the US and Romania in terms of joint trainings, focusing on the following modules:

- advanced firing techniques;
- close quarters combat;
- artillery fire call;
- field training exercise.

The Republic of Moldova participated in multinational exercises together with some of the Visegrad countries:

- Saber Guardian 16 (Poland)
- Rapid Trident 2016 (Poland)

- Junction Strike 16 (Poland)
- Saber Junction 2016 (Hungary).

During the military exercises, the international partners underlined the high level of professionalism among the military personnel, and called for continuous cooperation. Furthermore, the Republic of Moldova periodically benefits from military and non-military aid from various international actors. Namely, the USA continuously donates military hardware based on the bilateral framework of cooperation, while NATO as a whole makes effort in increasing the number and the quality of the military training exercises, in accordance to its standards.

Conclusions

The Visegrad format of cooperation offers a potential that can both expand the pool of available capabilities and increase the visibility and strength of this region within multilateral partnerships, mainly the EU. However, in order to make this happen the V4 countries need to implement the decisions already taken and the strategies already adopted (such as the V4 Training & Exercises Strategy), significantly strengthen international, interstate and interagency cooperation, as well as cooperation in joint operations, exercises and missions. Moreover, both the quantity and quality of joint exercises need to get increased in order to improve interoperability between V4 armed forces, because it paves the way also for further cooperation with Ukraine and Moldova too.

Recommendations

- While V4 countries have not been particularly successful so far in coordinating their action taken in support of Ukraine's security sector, even non-coordinated steps be of great importance, as long as they answer the needs of Ukraine. Hence, all V4 countries may still refer to the support provided to Ukraine's security sector as a common denominator of Visegrad actions, and thus strengthen the reputation of V4 in the eyes of non-Visegrad partners. The same applies to Moldova as well.
- In terms of concrete cooperations projects, experiences gaining from studying defence planning demonstrate that that political, strategic and institutional levels of security and defence cooperation are closely interrelated. Consequently, expectations about deepening security and defence cooperation should be set realistically, by taking into account all these factors both in

the case of Ukraine and Moldova.

- In the field of defence planning, focus should be on creating and operating multinational units set up for crossborder missions, thus on continuing the already successful projects and starting new ones, if the objective criteria are met.
- Increasing defence expenditures in Visegrad countries offer earlier unprecedented opportunities in the field of defence industry cooperation with Ukraine and Moldova. In defencerelated R&D both the NATO and the EU offer useful frameworks of multinational cooperation, such as NATO's Science and Technology Organization, the EU Fund for dualuse technologies, programmes run with the EDA support, as well as the incoming European Defence Research Programme (EDRP), and Preparatory Action for Common Security and Defence Policy-related research.
- In addition to all these, creating a common regional defence-related R&D fund, which would facilitate collaborative initiatives (with operating principles similar to the ones of the International Visegrad Fund) is an additional option the could be considered. Once realized, it could serve as a framework for getting also Ukraine and Moldova on board.
- Cooperation in the field of training and education offer numerous costeffective opportunities for the V4, which can be built on the already existing capabilities. These include en masse English language trainings to Ukrainian and Moldovan soldiers, trainings for General Staff officers, as well as educating Moldovan and Ukrainian civilian specialists on security and defence policy. For the latter, both the International Visegrad Fund and the existing bilateral scholarships and higher educational exchange quotas could be used efficiently.
- Besides national efforts, V4 could lobby together to achieve such changes in the curricula of both the NATO School in Oberammergau and of the NATO Defence College in Rome that would be highly beneficial for the Ukrainian and Moldovan partners, such as more emphasis put on security and defence issues of Eastern Europe, etc.
- When it comes to trainings and exercises, first and foremost the V4 Training & Exercises Strategy should be implemented. Once it becomes realized, it may serve also as a framework for Ukrainian and Moldovan partners to join, according to their own needs and capabilities.

- Both the quantity and quality of joint exercises should get increased in order to improve interoperability between V4 armed forces, because it paves the way also for further cooperation with Ukraine and Moldova.
- When it comes to countering disinformation and propaganda, the generally schematic nature of Russian propaganda offers plenty of cooperation opportunities. As Russia currently is not able to present an alternative, most of its propaganda is aimed at deconstructing rather than constructing reality, by relatively similar messages delivered both in Visegrad Four states, Ukraine and Moldova, such as euro-scepticism, demonizing NATO and the US, provoking fear and distrust in local governments, supporting particular political parties and activities, opposing sanctions, etc. These similarities in Russia's messaging offer various cooperation opportunities.
- Joint actions should focus on sharing best practices, joint counter measures, as well as fostering V4+ cooperation, both between governmental structures, NGOs, as well as between the governments and civil societies in the V4+ region.
- Other possible actions may include developing a joint communication strategy V4+Ukraine and Moldova on Euro-Atlantic integration and cooperation. Supporting information centres and use of social networks are needed not only in Ukraine and Moldova, but also in the NATO members states to counter negative narratives infused by the propaganda. Organizing study tours for journalists to learn about NATO integration of the respective countries, security sector reforms, conflicts zones, anti-terrorist operation on the East of Ukraine and Transnistrian conflict settlement is another option for strengthening resilience against hostile propaganda.
- While censorship is obviously not an option, improvement of legislation and its active use to follow cases of hostile foreign disinformation should be discussed and considered in the respective parliaments. Politicians, officials and experts should continuously push this issue and cover it on different platforms. These efforts should be systematic and followed by sociological surveys, enabling the development of appropriate ways and means of counterpropaganda. Discussions should include various concrete examples of disinformation.
- It could be considered in V4+ frameworks how to contribute jointly to the work of the various centers of excellence established to counter newly emerging threats, such as the NATO Strategic Communications Centre of Excellence in Riga, the NATO Cooperative Cyber Defence Centre of Excellence in Tallinn, and the recently established and European Centre for Countering

Hybrid Threats in Helsinki.

- Joint and coordinated actions to counter hostile propaganda should be conducted together with closer cooperation in the field of cyber security as well, particularly because in Russia's toolbox cyber actions are often subordinated to information warfare considerations.
- When it comes to cyber security, task forces could be set up in V4+ frameworks, involving cyber security specialists, journalists, specialists in strategic communications and psychological operations, and, linguists to analyse existing propaganda, crisis cases reaction, etc. The purpose of these task forces would be to share information and best practices in the beginning, and thereafter possibly to move towards joint trainings and other forms of cooperation.
- However, for any further and deeper cyber security cooperation first the obstacles posed by competitive attitude, mistrust, significantly different foreign policy operations and under harmonised law enforcement legislation should be overcome.
- In the long run, pooled resources will be the future for V4 and V4+ cyber security co-operation, but only if the necessary trust can be built.
- The same applies to intelligence cooperation. At present, intelligence is not the field where there would be much room for deep cooperation between V4 countries and Ukraine and Moldova, due to both organizational and political restrictions present on all sides.
- Regardless, there are at least two fields, where there would indeed be a lot of room for cooperation. One is information sharing on Visegrad and Moldovan nationals, who have participated in the conflict in Ukraine, because it is highly unlikely that authorities of their home countries would prefer to leave them unattended, once these people return from fighting. The other, partially related field is countering extremism, particularly because using various extremist groups to weaken other countries is an integral part of Russia's hybrid toolbox.

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