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Thomas-Durell Young (2019) What are Governments in Central and Eastern Europe not Buying with their Defence Budgets? The Readiness Clue, The RUSI Journal, 164:2, 36-55, DOI: 10.1080/03071847.2019.1621481 https://hdl.handle.net/10945/62627

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What are Governments in Central and Eastern Europe *not* Buying with their Defence Budgets? The Readiness Clue

Thomas-Durell Young

This article examines why readiness has not been accepted as a critical element of defence governance by defence institutions in Central and Eastern Europe. Thomas-Durell Young presents a survey of known instances of readiness under-performance, based on an analysis of publicly available information, to create a macro view of the problem, grouped by services across the region to facilitate comparability. He highlights cases of success and identifies the factors which contributed to such outcomes to learn lessons which can be replicated elsewhere. Finally, in order to provide a degree of continuity and context, the Slovenian armed forces are examined in each category.

he return of Russia's muscular foreign policy towards the Western alliance has brought with it the inevitable debate among allies over inadequate defence budgets. At the Wales Summit in 2014, it was agreed that member states would endeavour to reach 2% of GDP dedicated to defence within a decade, as well as aiming to achieve at least 20% of defence spending on modernisation. Additionally, members agreed 'guidelines for deployability and sustainability and other agreed output metrics', that include 'agreed NATO standards and doctrines'.1 Two allied readiness initiatives - in 2014 as a recommendation of the Wales Summit,² and more recently in 2018 - have been launched to improve the collective's ability to respond to threatening Russian actions against front line allies: to be capable of deploying 30 battalions, 30 warships, and 30 squadrons at 30 days' notice.³

Since 2014, a number of studies have assessed the challenges of key Western European states to meet this ambitious objective in a critical light.⁴ These studies, however, have all but ignored the readiness challenges that face the armed forces of NATO's front line states in Central and Eastern Europe. In these countries, the emergence from communism and a long period of financial penury have combined to impede reform, modernisation and the creation of modern capabilities.⁵ Analysts have not addressed the 'readiness' of these armed forces as part of a systematic assessment.

A basic assumption of Western defence policy is the need to factor into the development of defence plans sufficient guidance and funding to enable armed forces to create and maintain 'readiness'. This concept is well defined by the US Department of Defense as constituting 'The ability of military forces

1. NATO, 'Wales Summit Declaration', press release (2014) 120, 5 September 2014.

^{2.} NATO, 'Readiness Action Plan', last updated 21 September 2017, https://www.nato.int/cps/en/natohq/topics_119353.htm>, accessed 10 May 2019.

^{3.} Jens Stoltenberg, 'Doorstep Statement', remarks made prior to the meetings of NATO Defence Ministers, 7 June 2018.

^{4.} See, for example, Michael Shurkin, *The Abilities of the British, French, and German Armies to Generate and Sustain Armored Brigades in the Baltics* (Santa Monica, CA: RAND, 2017).

^{5.} The current writer addresses this subject in Thomas-Durell Young, *Anatomy of Post-Communist European Defense Institutions: The Mirage of Military Modernity* (London: Bloomsbury Academic, 2017).



to fight and meet the demands of assigned missions.'6 From a policy and planning perspective, creating the conditions by which armed forces can develop and maintain readiness necessitates two requirements. First, it is essential that armed forces' missions are established; and, ideally, national-level contingency planning guidance is promulgated. Second, ministries of defence must continuously finance 'operations and maintenance' (O&M), to use US nomenclature. As to the former point, contingency guidance is essential for armed forces with little tradition of, or orientation for, conducting operations.

With this basic background established, one can better appreciate the challenges faced by armed forces in Central and Eastern European states as they have struggled to create readiness. In fact, available evidence from these armed forces suggests that the Western concept of readiness is not widely understood, let alone embraced, in the region. Within the Alliance, political considerations trump military logic when low readiness of these forces is accepted without challenge⁷ – for instance, declared brigades at readiness levels as low as 180 days, or much longer (that is, Forces of Lower Readiness).⁸ This creates an unshakable mental algorithm that if NATO accepts low readiness, there is no need to spend more money on it.

A general failure to value readiness is all the more surprising when one considers how important it used to be among most communist armed forces. In the 1980s, US intelligence estimated that the then Soviet army could be 'ready' for war in no more than two days.⁹ In the German Democratic Republic, commanders would be dismissed in the National

^{6.} US Department of Defense, Office of the Chairman of the Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms* (Washington, DC: 4th Watch Books, April 2018).

^{7.} Slovakia provides an example of this logic in a recent defence policy paper. See Slovak Republic, *White Paper on Defence of the Slovak Republic* (Bratislava: Ministry of Defence, 2016), pp. 8–9.

^{8.} NATO, 'The NATO Force Structure', 13 February 2015, <https://www.nato.int/cps/en/natohq/topics_69718.htm>, accessed 1 May 2019.

^{9.} The estimate stated that 'Soviet theater forces now in place in the region give the Warsaw Pact the ability to meet a sudden attack with formidable military power. We judge that, without prior warning, the Soviets could alert these forces, arm and supply them with essential materials, and organize and deploy them for combat in a hastily constituted but effective defensive posture in about one or two days'. Directorate of Intelligence, 'Readiness of Soviet Forces in Central Europe: Implications for a Rapid Transition to War: An Intelligence Assessment', HR70-14, September 1987, viii.

People's Army if they failed to deploy from their barracks in the established timeframe.¹⁰ Despite being based on territorial defence, the Yugoslav People's Army was also able to create a high degree of readiness in periods of tension.¹¹ The loss of this norm may not have been important immediately after the Cold War, but it takes on immediacy in light of the recent reforms of the Russian Army that include creating high readiness forces as a priority.12

This article argues that the state of readiness of these armed forces is dangerously low, and will provide a survey of known instances of readiness under-performance and failures, as well as a corresponding lack of institutional self-learning to address these lacunae. Although official readiness levels are generally not public information, one can piece together what is available in the public realm to create a macro view of the problem. The article is organised as follows: examination of evidence from budget data; and specific sections on air, naval and ground forces. These analyses will be grouped by services across the region to provide comparability. The article will highlight cases of success, and the reasons for such outcomes, with the objective of ascertaining lessons which can be replicated elsewhere. Finally, to provide a degree of continuity and context, the Slovenian armed forces will be examined in each category as the author recently undertook a detailed analysis of the force for the then chief of defence. This analysis provides some clues as to successful as well as ineffectual policies that affect readiness levels.

Imbalances and Policy Shortfalls

One can identify three factors that have impeded the armed forces in Central and Eastern Europe from adopting the policy 'norm' that recognises readiness as the *sine qua non* in defence planning. First, the focus and missions of armed forces after 1991 have been slow to crystalise in policy. In light of Russia's more assertive foreign policy, the missions of these armed forces are becoming more focused, but evidence demonstrates that this has not resulted in higher rates of readiness. Second, a contributing factor has been these armed forces adopting missions exogenous to their raison d'être, such as sovereignty protection and self-defence. In short, the West's well-meaning encouragement of creating special units for peace support operations, explosive-ordinance disposal, and so on, as well as later contributing forces to Iraq and Afghanistan, has inadvertently resulted in these forces becoming unbalanced, in many cases with over-sized special operations forces.13 Third, following the end of major combat operations in Afghanistan and Iraq, Western assistance to these forces has been reduced (at least until recently) leaving them underfunded, resulting in more unbalanced force structures. These events have distracted military and defence leadership in the region from focusing on fundamentals during a period of poorly designed defence reform efforts, followed by the international financial crisis which significantly reduced defence budgets.

The combination of perceiving forces as needing to be 'ready' only when they are deploying has produced an unintended and pernicious habit, if not policy norm. By this, defence and military officials in the region define 'readiness' as a function of executing deployments and not as constituting the daily essential lifeblood of an armed force. As such, as most chiefs of defence and chiefs of services do not control O&M budgets (even where they exist), funding for 'readiness' is generally only funded by ministries of defence to support a specific exercise, international training event or deployment (for example, gaining certifications necessary to undertake Allied air-policing missions). Conceptually, defence and military officials have struggled to change their organisations from large, conscript-based armies, to professional forces that need different training concepts, that is to say, from training to time, to training to standard.¹⁴ The current policy of defining

10. Christian O E Millotat, 'The Bundeswehr in the New Federal States: Aspects of the Development of Home Defense Brigade, 38: Sachsen-Anhalt', Defense Analysis (Vol. 9, No. 3, 1993), pp. 311-18.

- 12. Keir Giles, 'Assessing Russia's Reorganized and Rearmed Military', Carnegie Endowment for International Peace, Washington, DC, 3 May 2017, p. 8.
- For a precis of the support provided to NATO and partner nations' special operations forces, see Buck Dellinger, 13. 'Special Operations Command Europe: Strengthening Partnerships for Global Security', Special Warfare (Vol. 25, No. 2, April–June 2012).
- 14. 'Training to time', often associated with conscript forces, can be described as a centralised training regime that treats all individuals and units as the same. 'Training to performance' or standard is used by professional forces in a decentralised fashion with the objective of allowing them to reach or exceed established standards.

Directorate of Intelligence, 'Yugoslavia: Military Dynamics of a Potential Civil War: An Intelligence Assessment', declassified 11. document, March 1991, pp. 1-3.

readiness as episodic has contributed to fallacious planning assumptions that allow structures to remain larger than what is affordable: a characteristic one can find throughout the region.¹⁵

Supporting Data

Before addressing readiness specifically, it is instructive to assess these armed forces from a financial perspective. A cursory review of their financial posture reveals systemic under-investment. Table 1 represents a snapshot of these armed forces, using 2018 data.¹⁶ The most relevant data the table displays is the individual spending per service member. Note that a world-class standard is provided by the British armed forces where the average annual spending per soldier is an eyewatering \$337,437. Equally, the French armed forces' annual spending per individual is a healthy \$248,651. Conversely, the highest performing Allied country in Central and Eastern Europe is the Czech Republic, which spends \$118,103 per service member per year. What is revealing is that many other Allied countries invest so little as expressed in spending per service member. Perhaps the most concerning consideration is that the enormous spread between east and west implies a multi-generational divide in technology, capabilities and readiness; which combined, will impede interoperability with Western forces, let alone simply surviving on the modern battlefield. Clearly, absent a significant increase in defence investment across the board, this qualitative divide will only increase.

Table 2 shows a breakdown in defence spending by the standard categories of personnel, equipment, and infrastructure, and 'other', which is defined as constituting 'operations and maintenance expenditure, other R&D expenditure and expenditure not allocated among above-mentioned categories'.¹⁷ While it is commendable that the Alliance at the Wales Summit established the goal of countries spending at least 20% of their defence budget on acquisition – and, arguably, some countries in Central and Eastern Europe are making solid progress to meet this goal¹⁸ - missing until the 2018 readiness initiative has been political attention paid to the need to increase O&M spending. How much is 'enough' is a debatable point, but it is arguable that once a defence budget falls off the principle that personnel, acquisitions and O&M should roughly account each for one third of the budget, those underfunded elements of defence correspondingly suffer; and thus in a mid- to longerterm perspective, capabilities decline. Given a fixed budget, spending is zero-sum; expending too much in one area must come at the expense of at least one of the other areas. Thus, if personnel costs are high, it is difficult to afford modernisation while maintaining high levels of readiness.¹⁹

That said, care must be exercised in making blanket judgements on armed force when examining the macro-distribution of a defence budget. Countries with large air forces and navies will have correspondingly high O&M costs (if they are operational), as well as armed forces undertaking deployments on operations. Moreover, high O&M budgets do not necessarily imply that the funding is being spent effectively in training. That said, assessing imbalances in budgets can suggest underlying policy and capability incoherence. Last, this gross data of money spent per service member needs to be treated carefully due to the great disparity between the costs of items in the UK and France for example, as opposed to their corresponding costs in, for instance, Albania or Bulgaria. Thus, the use of purchasing power parity can flatten these data. However, there are two points that need to be factored into this analysis. First, the most expensive 'sinews of war' are priced largely by international markets (for example, fuel, training ammunition, spare parts and other major consumables), which soften these disparities. Second, notwithstanding predictable improvements in the final numbers spent per service member, the magnitude of difference between countries in the region and 'old' NATO members is what should be concerning to Western officials. Not only are these

15. Argued in Young, Anatomy of Post-Communist European Defense Institutions.

^{16.} A caveat is necessary when assessing and comparing defence expenditure data. Table 1 is drawn from data provided by the 2019 edition of the *Military Balance* produced by the International Institute for Strategic Studies. In the other three tables assessing defence spending, the data is drawn from NATO directly. A careful reader will note that there are differences in spending data; therefore, cross comparison between the two sources is problematic.

^{17.} NATO, 'Defence Expenditure of NATO Countries (2011-2018)', communique, PR-CP(2019)034, 14 March 2019, p. 13, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2019_03/190314-pr2018-34-eng.pdf>, accessed 1 May 2019.

^{18.} Michael Birnbaum, 'NATO Members Increase Defense Spending for Fourth Year in Row Following Trump Pressure', *Washington Post*, 14 March 2019.

^{19.} As perceptively identified in John R Deni, 'NATO's Shaky Return to Collective Defense', *Strategic Europe*, Carnegie Europe, 26 October 2017.

armed forces not trained to the same standards of a world-class armed force (such as those of the UK and France), but most are also still using legacy and timeexpired equipment.

When examining the data in Table 2, what is notable is that only Hungary spends a healthy percentage of its budget on O&M; however, there are troublesome aspects of the Hungarian case which will be addressed below. In Estonia, much of the defence budget is being spent on O&M (42.1%), implying that investments and personnel are underfunded (26.1%).²⁰ Conversely, front-line Romania has the worst performance in this group of allies, spending less than 10% on O&M. Of greater concern is that apropos O&M expenditures, of the 13 countries, only three of them break 25% of their budgets dedicated to these expenditures, albeit Poland and Latvia are on the cusp of also doing so.²¹ To be sure, these measurements are arguably crude and lack nuance; however, what they do demonstrate in the aggregate is that O&M spending is below the ideal target. Admittedly, the imbalance in defence budgets is not terribly out of the norm of some 'old' NATO nations (for instance, Portugal spends less than 15 % of budget on O&M).²² Yet, those armed forces are equipped with Western platforms and weapons and where additional funding for training would result in higher performance in relatively short order.²³

The concern, however, is how ineffectively money is being spent. A partial answer to this question is found, once again, by looking at the question of annual spending in O&M per soldier (see Table 3). Using the UK again as an example of possessing a world-class defence force, it leads with almost \$170,000 spent per year on each service member; while France, despite an imbalance in its defence budget, remains able to spend some \$65,000 per service member. One can state, in general, that it is clear that most countries in the region could expand and improve existing capabilities if they were to lower personnel spending. However, even with these few positive exceptions, the gap between world-class readiness and the lower performers in the region is wide and this fissure cannot be closed quickly, particularly as these defence institutions attempt to modernise with meagre defence budgets.

Finally, the often-ignored tangibles of low spending on O&M must be addressed. By not conducting effective individual, collective and leadership training, as well as testing the results of such training in demanding field exercises using free-play (that is to say, not 'scripted', or 'canned' exercises), aerial combat-training and assessments (such as the Exercise *Red Flag* series), and lengthy sea deployments, how can an armed force 'grow' leaders outside of war, when they are not tested in exacting and stressful conditions? Thus, it is not only that current performance of armed forces is compromised by low expenditures in O&M funding, but it also has severe mid- and long-term effects on inhibiting the growth of the leadership competence of their armed forces.²⁴

Armed Forces' Readiness Assessments Air Forces

One begins with an examination of air forces as there is an unclassified database of annual flying hours for pilots. This data can be found for the period up to 2018 in the annual publication by the International Institute for Strategic Studies, *The Military Balance*.²⁵ To be sure, the data is imperfect at best, as it is all based on self-reporting, and a review of the data shows that the reported flying hours of some do not change over time; this suggests the need for caution in their usage. Acknowledging these caveats, a review in Table 4 shows an uneven record of performance. It is a longstanding NATO standard that to maintain proficiency, pilots need, at a minimum, 180 flying

^{20.} This disparity could arguably be an anomaly due to NATO definitions of spending categories as under Estonian definitions of budgetary categories (as defined in the State Budget Act) these figures are 23% for labour cost, 46% for infrastructure and procurement and 31% for everything else. Riigi Teataja, 'State Budget Act', https://www.riigiteataja.ee/en/compare_original?id=504072014004>, accessed 10 May 2019.

^{21.} NATO, 'Defence Expenditure of NATO Countries (2011-2018)', pp. 12–13.

^{22.} Ibid., p. 13.

^{23.} For an explanation of defence expenditures as reported to NATO, see *ibid.*, pp. 12–13.

^{24.} The author addresses the specific question of 'commanders' in Thomas-Durell Young, 'Mission Command: Strategic Implications – Legacy Concepts: A Sociology of Command in Central and Eastern Europe', *Parameters* (Vol. 47, No. 1, Spring 2017), pp. 31–42.

^{25.} The International Institute for Strategic Studies (IISS), The Military Balance 2018 (Abingdon: Routledge, 2018).

hours per year.²⁶ If one accepts the validity of this self-reporting, the Polish air force is the only one that meets/exceeds the 180 flying hours per annum threshold.

However, there are nuances even in the case of the Polish air force which cast doubts on its actual readiness levels. It was the first post-communist air force to procure a modern Western multi-role fighter aircraft (MRFA) – but it suffered considerable challenges before achieving full operational capability (FOC) in 2012, seven years after entering into service.²⁷ Even then, the Polish defence institution and air force struggled to determine how to use this modern capability. Inexplicably, Poland deployed MiG-29s during its first five deployments in support of the NATO Baltic Air Policing mission. It was not until May 2017 that it finally deployed the F-16s on this mission.²⁸ This is despite the fact that MiG-29s are ostensibly more expensive to operate.²⁹ Finally, these aircraft only saw their first operational employment in Iraq in summer 2016 – 10 years after their introduction into service.³⁰ This suggests that despite the reportedly high number of flying hours, there is not a high utilisation of these aircraft, except for Quick Reaction Alert (QRA) missions.

The Hungarian and Czech air forces provide a contrasting record when they introduced JAS 39 C/D Gripen MRFA into their respective inventories. Opting to obtain these aircraft via lease agreements, the introduction and utilisation of the aircraft are very different. In case of the Hungarian air force, the aircraft arrived between 2006 and 2007, and the fleet was declared FOC at the end of 2008. However, weapons, sensors and essential training (such as airto-air refueling) were not part of the lease agreement and subsequent procurement lagged. Indeed, even as weapons have been procured, required targeting pods and other components were purchased

piecemeal, thereby inhibiting these aircraft from meeting their full potential.³¹ For instance, it was only in June 2018 that the aircraft actually dropped ordinance in training (using GBU-12, MK-82 bombs) and fired AGM-65 Maverick air-to-surface missiles, despite the fact that these weapons were in the inventory for years, but the air force lacked funding for requisite training, thereby limiting the aircrafts' armament to its cannon.³² The Hungarian air force's performance reached its nadir in May and June 2015 when two aircraft crashed while attempting to land. In one case, the aircraft was a write-off and it was acknowledged in public that the pilot had flown only 4.5 hours in the previous six months, clearly much less than needed to meet the declared annual rate of a meager 50 flying hours per pilot.³³ This record of poor performance is all the more perplexing given that the O&M budget constitutes 34.8% of the defence budget, leaving open the question as to what these funds are being spent on.

The Czech air force followed a similar path as its government also leased JAS 39 C/D Gripens, yet its experience has been more successful. Wisely, the Czechs (unlike the Hungarians) selected an arrangement to lease flying time (up to 2,100 hours per year) and not the airframes themselves; ergo, leaving maintenance the supplier's responsibility. Also, the Czechs moved quickly after the lease agreement was signed in 2005 to begin pilot conversion training, well before their Hungarian counterparts.³⁴ That said, there are inherent limitations in the agreement. It is acknowledged by Czech air force officials that the lease agreement is only suitable for peacetime airpolicing operations given that there are almost always two aircraft in Sweden undergoing deep maintenance needed after 800 flying hours, and which can last from 7 to 10 weeks. To date, the Czechs have not lost any aircraft to accidents and have procured necessary

 $34. \quad Dycka and Mares, `The Development and Future of Fighter Planes Acquisition in Countries of the Visegrad Group', pp. 535-36.$

^{26.} Joint Air Power Competence Centre, 'Enhancing NATO's Operational Helicopter Capabilities: The Need for International Standardisation', Joint Air Power Competence Centre, August 2012, p. 7.

^{27.} Lukas Dycka and Miroslav Mares, 'The Development and Future of Fighter Planes Acquisition in Countries of the Visegrad Group', *Journal of Slavic Military Studies* (Vol. 25, No. 4, 2012), pp. 544–46, 555.

^{28.} For an overview of the aircraft used in the missions and to access further sources, see Wikipedia, 'Baltic Air Policing', ">https://en.wikipedia.org/wiki/Baltic_Air_Policing>, accessed 11 May 2019.

^{29.} Barre R Seguin, 'Why Did Poland Choose the F-16s?', *George C Marshall European Center for Security Studies Occasional Papers Series* (No. 11, June 2007), p. 11.

^{30.} Remigiusz Wilk, 'Polish F-16s Deploy for First-ever Combat Operation', *IHS Jane's 360*, 7 July 2016, http://www.janes.com/article/62046/polish-f-16s-deploy-for-first-ever-combat-operation, accessed 17 January 2017.

^{31.} Lazar Zsolt, 'The Hungarian Experience with Gripen Fighter Aircraft', *Defence and Security Analysis* (Vol. 34, No. 2, June 2018), pp. 161–75.

^{32.} Peter Snoj, 'Túl az első félidőn; Folytatódott a Légi Fölény 2018' ['Beyond the First Half: Air Supremacy 2018 Continued'], Honvedelem.hu, 17 June 2018, <https://honvedelem.hu/cikk/110908_tul_az_elso_felidon>, accessed 10 May 2019.

^{33.} Zsolt, 'The Hungarian Experience with Gripen Fighter Aircraft', pp. 161–75.

sensors and weapons,35 so their aircraft have not had to rely solely on their cannon. Equally important has been the fact that the Czech Air Force has been able to obtain sufficient funding to give its pilots 120 flying hours a year, which is not that different from the amount of flying hours of Gripens in the Royal Swedish Air Force (100 to 150 flying hours per annum).36 This is sufficient to conduct its 24/7 QRA mission for air-policing, undertake periodic Baltic Air Policing, as well as certifying the pilot for daytime air-to-air refueling. However, what is missing is the additional flying time needed to train for airto-ground operations. A challenge facing the Czech Air Force is that unless it can increase flying hours, it will be unable to train sufficiently for both air-toair, as well as to obtain certification to employ newly procured air-to-ground capabilities (for example GBU-12 Paveway laser-guided bombs, supported with the acquisition of Link 16).37

The case of the Bulgarian Air Force encapsulates the duality of poor defence governance, while maintaining legacy aircraft, both of which have resulted in low readiness even in a mission as critical as air policing via maintaining QRA aircraft and trained crews. One study argued in 2016 that as the air force's ageing MiG-29 fleet is in frequent need of overhaul by Russian aerospace industry, its pilots (as shown in Table 4) have precious few flying hours (30 to 40 hours per annum), and there is a growing deficit of qualified pilots.³⁸ The lack of sufficient flying hours was suspected to have caused the crash of an Mi-17 helicopter in 2018 near Plovdiv that killed both pilots. It was reported that both pilots had only 17 and 18 flying hours respectively during the previous six months.³⁹ The then chief of the air force argued that they should have had 10 times that number,⁴⁰ and the minister of defence subsequently acknowledged this as the official cause of the accident.⁴¹ The minister further acknowledged that only one-half of the air force's 245 pilots get any flying hours and of the 28 helicopters in its inventory, only eight are flyable.⁴² The explanation for the inability to fund flying hours to standard is that there is an insufficient defence budget.⁴³

In addition to insufficient funding for air operations, the Bulgarian Air Force relies heavily on maintenance provided by the Russian Aircraft Corporation MiG (Rossiyskaya samoletostroitel'naya korporatsiya MiG - RSK MiG) and is subjected to lengthy delivery times for spare parts and repairs.44 Readiness is also negatively affected by underfunding and the mere design of the aircraft itself. Its engines need to be overhauled after 350 hours and must be replaced after 1,000 hours of operations.45 Significantly, Soviet/Russian-designed aircraft are ill-suited for QRA missions as defined in NATO doctrine,46 and the aircraft are incompatible with Western MRFA (for example, they lack Tactical Radio Line and Link 16). One author estimated that if the air force procured Western MRFAs with 130–50 flying hours per year, this would be one-half the cost of maintaining its fleet of MiG-29s.⁴⁷ Finally,

35. *Ibid.*, pp. 539–41.

- 36. IISS, *The Military Balance 2017* (Abingdon: Routledge, 2017), p. 162.
- 37. Author's interview with Czech air force officers, Prague, September 2018.

- 41. See comments by Krassimir Karakachanov, Bulgaria's minister of defence, on BTV Bulgaria, 31 July 2018, https://btvnovinite.bg/bulgaria/krasimir-karakachanov-izsledvah-se-za-narkotici-shte-sadja-mareshki.html, accessed 1 May 2019.
- 42. Nikola Lalov, 'Polovinata ot Voennite Piloti Izobshto ne Letyat' ['Half of the Military Pilots do not Fly at All'], Media. bg, 14 February 2019, https://www.mediapool.bg/polovinata-voenni-piloti-vaobshte-ne-letyat-news280279.html, accessed 1 May 2019.
- 43. This is argued in Republic of Bulgaria, Council of Ministers, 'Doklad za Usloviyata na Otbrana i Vůorůzhenite Sili na Republika Bůlgariya' ['Report on the Condition of Defense and the Armed Forces of Republic of Bulgaria 2017', March 2018.
- 44. Lalov, 'Half of the Military Pilots do not Fly at All'], citing Major General R Radev, 'Problematic Issues and Prospects of Ensuring the Air Sovereignty of the Republic of Bulgaria', 2015. https://www.mediapool.bg/polovinata-voenni-piloti-vaobshte-ne-letyat-news280279.html>, accessed 1 May 2019.
- 45. Rusev, 'Bulgarian Compatibility with NATO Air Power', p. 11.
- 46. Rusev argues that NATO's 'Allied Command Operations Forces Standards, Volume III Standards for Air Forces' and 'Bi-SC Agreed Capability Codes and Capability Statement', establishes the requirement for an air defence advance fighter capability. *Ibid.*, p. 10.

47. *Ibid*.

^{38.} Nikolay R Rusev, 'Bulgarian Compatibility with NATO Air Power', research report, Air War College, 16 February 2016, pp. 5–6.

^{39.} *24 Chasa* (Sofia), 'Padnali Piloti imat 17 i 18 Chasa Vǔv Vǔzdukha za 6 Mesetsa' ['Fallen Pilots have 17 and 18 Hours in the Air for 6 Months'], 12 June 2018, https://www.24chasa.bg/novini/article/6909493, accessed 10 May 2019.

^{40.} Radio Bulgaria, 'Flight Hours of Bulgarian Military Pilots are Way Below NATO Standards', 12 June 2018, http://bnr.bg/en/post/100982617/flight-hours-of-bulgarian-military-pilots-are-way-below-natos-standards, accessed 1 May 2019.

it should be noted that readiness of both the Bulgarian and Slovak Air Forces (which have MiG-29s as their principal fighter assets) are dependent on the good will of *RSKMiG* as these aircraft could be grounded at any time by Russian actions.⁴⁸ As a positive note, both countries have recently announced the replacement of their MiG-29s and Bulgaria has additionally announced the replacement of its Sukoi-25s. F-16s will be delivered to both Slovakia⁴⁹ and for Bulgaria which has begun procurement negotiations.⁵⁰

Finally, one should not overlook the readiness of the Alliance states' helicopters: a high demand, low-density capability. In Table 4 the reporting data of flying hours per year is more limited than for fixed-wing aircraft. However, the data paints a troubling picture of insufficient flying hours; Estonia and Slovenia fund the most, but still fall short of the Alliance's 180-hour minimum threshold. Moreover, it should be noted that not all helicopters are equal. For instance, Hungary's Mi-8/17s (recently overhauled in Russia despite Western sanctions⁵¹) and Bulgaria's Mi-8/17s and AS 532 Eurocopter Cougars are not equipped with anti-missile defence systems, nor with night-vision goggles, limiting their utility on the battlefield. Even if the latter had these needed capabilities, the Bulgarian government failed to purchase a maintenance support contract from Airbus Helicopters SAS (formerly Eurocopter Group) when it procured the fleet. As such, piecemeal support agreements have been signed, but the overall effect has been to limit their readiness to 42%.52

Conversely, if one examines the case of the Slovenian 15th Air-Wing, it is hardly small (some 39 aircraft), has its own flying school, organic logistic support (to include the ability to conduct 1st, 2nd, and 3rd levels of maintenance), and it regularly conducts Joint Forward Air Controller (JFAC) certification

training. It should be noted that the latter was developed by the air-wing and it has a reciprocal agreement with the US Air Force to provide 200 hours of JFAC training per annum. Its small fleet of advanced trainer Pilatus PC-9M aircraft have been configured for QRA missions to intercept slow-moving aircraft during daylight hours and will soon have the necessary radars to undertake 24/7 operations. Its helicopters are national assets and can be tasked by civil authorities for search and rescue (SAR) operations and therefore must maintain a state of high readiness.53 There are two explanations for what is, by regional standards, a rare example of achieving and maintaining high readiness. First, there is no question that strong leadership within the 15th Air-Wing has played no small role in maintaining readiness by orienting the force to focus on operations. But equally important, what distinguishes the air-wing from its regional counterparts is that it is 'commanded' by an empowered commander; and critically, he possesses and controls an O&M budget.

Navies

There is little objective and unclassified data available to judge the readiness levels of navies.⁵⁴ For instance, one rather blunt measurement is days-at-sea per year. A complicating factor is that the days-at-sea needed to attain and maintain proficiency vary across classes of warship. An additional caveat needs to be mentioned, one regarding participation in the Alliance's 'standing maritime formations'. Participation in these formations offers an opportunity for particularly smaller navies to be exposed to operating alongside modern warships and within formations of warships, providing higher levels of demanding collective

- 48. 'The problem with the Russian planes is the Russian way of doing business', stated an anonymous high-ranking official with knowledge of the Royal Malaysian Air Force who was frustrated with problems experienced maintaining the country's fleet of Sukhoi Su-30MKMs. See FMT News, 'The Real Problem with the Sukhois: The Russians', 6 September 2018, https://www.freemalaysiatoday.com/category/nation/2018/09/06/the-real-problem-with-the-sukhois-the-russians/, accessed 1 May 2019.
- 49. The Slovak government is purchasing 14 Block 70/72 F-16Vs. See Joe Gould, 'With F-16 Buy, Slovakia "Cutting Off" Russian Hardware', *DefenseNews*, 18 November 2018.
- 50. Sofia Globe, 'Bulgarian Parliament Mandates Government to Negotiate with US on Getting F-16s', 16 January 2019.
- 51. Laszlo Kovari, 'Elkezdodott a Mi-24-esek harmadik elete: Hind Tortenelem' ['The Third Element of Mi-24 Begins: The Hind's Background'], *aranysas*, 2019. Marcius, 10-14.
- 52. See Republic of Bulgaria, Council of Ministers, 'Doklad za Usloviyata na Otbrana i Vŭorŭzhenite Sili na Republika Bŭlgariya' ['Report on the State of Defense and the Armed Forces of the Republic of Bulgaria'], March 2017, https://www.mod.bg/bg/doc/cooperation/20181005_Doklad_2017.pdf, accessed 10 May 2019.
- 53. Information provided during interviews with staff and commanders at 15th Air-Wing, Command briefing, Cerklje ob Krki, Slovenia, April 2018.
- 54. For additional analysis of the overall state of development of these navies, see Thomas-Durell Young, 'NATO's Selective Sea Blindness: Assessing the Alliance's New Navies', *Naval War College Review* (Vol. 72, No. 3, Summer 2019, forthcoming).

training. The problem is whether the crews are truly individually 'trained', and therefore can profit from these deployments. One hears complaints from officers in some of these navies that ships are sent to these formations without having been fully trained in a collective sense to agreed NATO standards.⁵⁵ Thus, there is little question that the crews of postcommunist navies gain invaluable experience on these deployments. By depriving crews of generally accepted standards provided by necessary days-atsea, they lose invaluable opportunities to build on a firm foundation of expertise to attain *higher* levels of professionalism and capability, particularly on the part of their leadership.

While measurable data is difficult to find, anecdotal evidence paints a picture of low-readiness among these navies. In the Baltic, albeit ostensibly balanced and large by regional standards, the Polish Navy does not habitually maintain ships at sea. Its un-modernised FFG-7s have only been on three deployments in their almost 20 years in service. Its Type 207 submarines (gifted from Norway) and its sole Kilo-class submarine are aged and slated for retirement, and so get little sea time.⁵⁶ Of the other 'new' NATO navies in the region, the Latvian Navy claims that its mine countermeasure vessels get the minimum number of days-at-sea, but not the other ships in its inventory (that is to say, its patrol vessels which are *unarmed* it should be noted).57 Undermining readiness of the Lithuanian Navy is the practice of the navy not controlling its own maintenance budget. However, its naval officers claim that their ships average some 40 to 60 days-atsea per year.58

In the Black Sea, in 2004, in an effort to revitalise the Romanian Navy, Bucharest purchased two ex-Royal Navy Type 22 frigates. However, the agreement did not include Western surface-to-surface or surface-to-air missiles, active ship defence, nor modern electronic warfare systems. To date, none of these systems have been procured.⁵⁹ In an exchange with Romanian naval officers, this author was informed that the Type 22 frigates, despite having had a positive effect on the orientation of the navy, still only get one-half the time at sea they felt was needed.⁶⁰ From a wider perspective, in 2016 the Romanian Navy spent only 159 training days-atsea, while participating in some 170 international activities (undefined), a doubling over the previous year.⁶¹ The latter may indicate that days-at-sea may have been more aligned with these activities, as opposed to focusing on its own training needs and priorities.

Modernisation came late to the Bulgarian Navy (in 2005) with the purchase of three Wielingenclass ex-Belgian frigates (one for spare parts) and one Tripartite mine-hunter.⁶² On paper, the frigates possess Western missiles;⁶³ however, how often these weapons are test-fired is likely constrained by their limited time at sea. While the frigates regularly deploy to Standing NATO Maritime Group 2, one Bulgarian official acknowledged to this author that these ships get only half the amount of days-at-sea that are considered to be the norm for ships of their class.⁶⁴ This brief assessment of the Bulgarian Navy indicates that the fleet is ageing and lacks sufficient funds to cover essential training. Like the Romanian Navy, the Bulgarian Navy maintains a fleet, over half of which comprises ageing legacy Soviet-designed warships and auxiliary vessels. As they would be unsuitable for modern warfare at sea, they are liabilities bleeding money from needed training. As Deborah Sanders observes, this situation is unlikely to improve in the medium term given the past performance of the defence institution.⁶⁵ After all, when in spring 2011 the minister of defence directed the deployment

- 55. Author's interviews with Romanian naval officers, Constanta, June 2017 and Polish naval officers and sailors, Gdynia, November 2018.
- 56. Jane's World Navies, 'Poland-Navy', 9 May 2019.
- 57. Author's discussions with Latvian naval officials, Liepāja, February 2018.
- 58. Author's discussions with Lithuanian naval officials, Klaipėda, February 2018.
- George Visan, 'Romania's Naval Forces at Crossroads', *Policy Paper*, Romania Energy Centre, March 2017, pp. 3–4. To be sure, the Romanian Navy does have in its inventory 'missiles' but they are of Soviet origin and outdated. For example, SS-N-2C/D Styx. IISS, *Military Balance 2019* (Abingdon: Routledge, 2019), p. 141.
- 60. Author's discussions with Romanian naval officials, Constanta, June 2017.
- 61. Contraamiral Alexandru Marsu, 'O raza de speranta? Submarine pentru Marina Militara?' ['A Ray of Hope: Submarines for the Navy'], Romania Military, 27 January 2017, http://www.rumaniamilitary.ro/o-raza-de-speranta-submarine-pentru-marina-militara, accessed 10 May 2019.
- 62. Deborah Sanders, *Maritime Power in the Black Sea* (Surrey: Ashgate, 2014), pp. 171, 181.
- 63. RIM-7 Sea Sparrow surface-to-air missiles and MM-38 Exocet surface-to-surface missiles. IISS, Military Balance 2019, p. 93.
- 64. Author's discussions with Bulgarian naval officials, Sofia, November 2018.
- 65. Sanders, Maritime Power in the Black Sea, p. 195.

of the 'high readiness' frigate to support Allied operations off the coast of Libya, due to the lack of funding within the navy, it took two weeks to deploy the vessel.⁶⁶

The security environment in the Adriatic, at present, is benign given that the sea is essentially a NATO 'lake'. Navies on the eastern seaboard consist of small vessels and are small in numbers (Croatia is an exception) and largely oriented towards fulfilling civil, as opposed to wartime, tasks. None of them possess any variant of the Link tactical data link, nor are any capable of conducting anti-submarine operations and they have limited offensive capabilities. Even the Croatian Navy with offensive weapons has struggled to maintain adequate levels of readiness when it receives only 6% of the defence budget.⁶⁷ This is despite having an almost 6,000km coastline with over 1,000 islands, inlets, and reefs to protect.

This brief survey of the readiness challenges confronting NATO's 'new' navies suggests several observations. First, it is clear that legacy communist concepts continue to maintain their hold over how these navies are operated and managed. The old Soviet adage that it is more important to be ready 'to go to', as opposed to the Western concept that navies should 'be at', sea is observable among these navies.⁶⁸ Thus, readiness is not seen as an inherent requirement to maintain an effective force. Second, with the exception of the Romanian Navy, each headquarters for the other navies is colocated with its fleet commands. This means that the commands are geographically separated from national capitals where financial decisions are made. Given that these are continental states, such isolation feeds into the prevalence of sea-blindness in their respective capitals, and contributes to their low priority in the defence budget.⁶⁹ Third, amalgamating these headquarters into essentially one naval command combines tactical, operational, and national levels of responsibilities. It is little surprise that tactical level and day-to-day issues crowd out operational, and particularly, essential national-level planning efforts. Such organisational dissonance plays no small part in impeding the development of properly drafted (and *costed*) staff work which has deleterious effects on readiness, as well as force planning.

The very modest Slovenian 430 Naval Division offers a counterpoint to these examples. Although consisting of only two small patrol craft/vessels and divers, it has been able to deploy its larger ship, Triglav II, well outside of the Adriatic for extended periods of time. It also has been able to ensure that crews are exposed to a minimum of 80 days-at-sea per annum, which is claimed to be sufficient for this class of vessel.⁷⁰ When visiting the Port of Ankaran in April 2018, this author was shown the patrol craft Ankaran which was on stand-by to support SAR missions and was impressed to find the engine compartment *heated* to ensure that the vessel could push off and make way within minutes of alert. When one assesses the evidence, it is clear that what sets the 430 Naval Division aside from some of its communist-legacy counterparts is strong leadership and, again, the navy has a 'commander', and an operations and maintenance budget that he controls.

Armies

There are many readiness challenges faced by armies in Central and Eastern Europe. Low readiness in navies and air forces is quickly discerned in peacetime as poor performance can have immediate fatal consequences for pilots and ship crews: their operating environments are unforgiving. Assessing the readiness of an army is more complex. There are modern objective training methods (for example, tasks, conditions, standards) and force-on-force exercises that can offer objective judgements of levels of readiness. However, in the end it is only when an army goes on operations, or to war, that readiness assessments are truly validated. From an analytical perspective, one starting point to determine readiness is to examine how an army is organised and manned. In essence, is it a conscript-, or professional-based, force? This is an important factor in assessing readiness of Central and Eastern European armies. With the exception of Estonia and Lithuania, all other Allied armies have transitioned from being conscript, to professional, forces. What

^{66.} See, *Dnevnik* [*Diary*] (Sofia), 29 March 2011.

^{67.} *Jane's World Navies*, 'Slovenia - Navy', 14 September 2018; *Jane's World Navies*, 'Croatia - Navy', 7 May 2018; *Jane's World Navies*, 'Albania - Navy', 6 March 2019; IISS, *Military Balance 2019*, pp. 129–30.

^{68.} US Office of the Chief of Naval Operations, *Understanding Soviet Naval Developments*, NAVSO P-3560 (Rev 7/91) (Washington, DC: Department of the Navy, 1992), p. 32.

^{69.} Geoffrey Till, 'Are Small Navies Different?', in Michael Mulqueen, Deborah Sanders and Ian Speller (eds), *Small Navies: Strategy and Policy for Small Navies in War and Peace* (Farnham: Ashgate Publishing, 2014), p. 26.

^{70.} Specifically, in Operation Mare Nostrum and Operation Sofia. Author's discussions with naval officials, Ankaran, April 2018.

has been missing, however, is that, with minor exception, professionalisation concepts have been poorly implemented, leaving many armies in a netherworld of being neither conscript-based, nor fully professionalised. The persistence of legacy concepts, and ineffectual Western advice and assistance programmes, have contributed to impeding the full adoption of this Western concept.

The result has been 'conceptual incoherence'. This is evidenced in the fact that many armies comprise legacy 'empty' battalions and 'brigade' headquarters, none of which ever deploy to the field on exercise. In some severe cases, conceptual incoherence can be found in armies that have transitioned to being 'professional', but continue to plan and operate as a conscript force, often with a strong focus on territorial defence (as opposed to embracing the concept of manoeuvre warfare). An example of this problem is found in the Serbian Army, which ended conscription in 2011. Yet, in 2017, it contained 13,250 personnel, but was saddled with a vast organisational structure of five brigade headquarters and 31 battalion-equivalents. Conversely, the Belgian Army during the same period consisted of 10,350 personnel, but was organised into a much more functional structure of two brigade headquarters and 14 battalion-equivalents.⁷¹ Clearly, the latter army has made the organisation transition from a conscript to professional force. Like the Serbian Army, the Slovak Army remains profoundly mired in legacy concepts of conscription,72 and based on territorial- and area-defence doctrines, which combine to produce 'empty' units, undermining the ability of commanders to conduct basic collective training, and inhibiting commanders being developed properly for the next higher rank. These legacy policies impede the adoption of modern training methods and prevent officers, noncommissioned officers and soldiers from becoming fully professional.

There are many explanations for such widespread weaknesses in army readiness throughout the region: failures in policy; the persistence of legacy concepts; weak staff training; and institutional ambiguity over which officials are responsible for training. Arguably, a key starting point is to examine the degree to which these armies systematically conduct collective training. A review of available information reveals that few of these armies organise this training organically in a systematic fashion (see Table 5). Those that do are in the minority: the Czech Republic; Estonia; Latvia; Lithuania; and Poland.⁷³ One can postulate that the legacy concept of conscription, as it relates to collective training, is still *de facto* policy in the institutional thinking throughout Allied, and particularly Partnership for Peace, armies.74 For context, in communist, conscription-based armies, conscripts were given only the most basic individual training and taught a minimum of field-craft skills. As conscripts were not going to serve for long, there was little incentive to spend resources to 'grow' them into an effective fighting force. Equally, given the prevailing operational concept of mass (Soviet/Warsaw Pact), or territorial/area defence (Yugoslavia), there was little need for a highly trained and skilled force; rather priority was placed on mobilising large numbers, and these under-trained soldiers were only expected to undertake basic elements of manoeuvre.75 The resilience and strength of legacy concepts related to training are indeed quite formidable. For instance, in 2000, a US government report found that the Slovak Army's combat readiness was virtually non-existent as it conducted no combined-arms training.⁷⁶ Even as late as 2013, Slovak defence officials publicly acknowledged that some 70% of Slovakia's ground equipment was past its envisaged lifecycle, and doubted that the army could defend the country, let alone support its NATO commitments.⁷⁷ In fact, it was only in 2015 that the Slovak Army conducted its first live-fire exercises.78

- 71. IISS, The Military Balance 2018, pp. 85, 143.
- 72. A fact also acknowledged by the Slovak government. See Slovak Republic, *White Paper on Defence of the Slovak Republic* (Bratislava: Ministry of Defence, 2016), p. 10.
- 73. A possible caveat apropos the Polish Army is complaints expressed by junior and field grade officers to the writer of the troubling practice that the army always 'wins' its FTXs a clear legacy norm. Author's discussions with Polish Army junior officers, Gdynia, November 2018.
- 74. In 2014 a key Serbian defence official acknowledged to the writer that the army did not conduct collective training on a systematic basis. Author's interview with Serbian defence official, Belgrade, April 2014.
- 75. See Christopher Donnelly, *Red Banner: The Soviet Military System in Peace and War* (Coulsdon: Jane's Information Group, 1988); and Mensur Seferovic (ed.), *Total National Defense in Theory and Practice* (Belgrade: Narodna Armija, 1975).
- 76. Contained in what has become known as the Garret report. See Zoltan Barany, *The Future of NATO Expansion: Four Case Studies* (Cambridge: Cambridge University Press, 2003), p. 81.
- 77. Slovak Republic, The White Paper on Defence of the Slovak Republic (Bratislava: Ministry of Defense, 2013), pp. 16, 18.
- 78. Slovak Republic, The White Paper on Defence (Bratislava: Ministry of Defence, 2016), p. 23.

On the comparative case of Slovenia, an examination of the readiness of the army proves that its performance differs from the 15th Air-Wing and 430 Naval Division. The army is organised in two manoeuvre and one logistics brigades (with a special forces company), a structure too large for its size (the entire armed forces has an authorised strength of 7,250 personnel).79 Upon examination of the army, one finds empty units and little training taking place. Institutionally, the army is saddled with regulations and management practices which hinder it achieving the readiness standards one would expect of a professional force: from 1997 until 2014, some 4,700 personnel served on deployments.⁸⁰ Unfortunately, achieving capability coherence is undermined by regulations and bureaucratic norms that undermine the authority of commanders. For instance, a commander cannot move soldiers among assignments, civilians within the ministry manage recruitment and selection, and soldiers and officers are defined in law as civil servants, but do not possess 'warrants'.⁸¹ Moreover, the Slovenian Army shares the dubious distinction with Montenegro of not possessing a 'commander' of the army. Rather, this function is subsumed by the general staff. As there is no commander, the army does not possess an O&M budget. Little wonder, therefore, that the army's premier battalion (72nd Brigade) failed a combat readiness evaluation (CREVAL) in February 2018.82 Yet, while the navy and air-wing have been able to escape a bureaucratically overbearing and oversized ministry of defence (at the end of 2017 it had 1,118 civil servants for a force of 7,250),83 such freedom comes at a cost. As they are both highly operationally focused, neither are fully capable of conducting effective force planning.

Finally, apropos the issue of the readiness of armies in the region, one needs to examine in a critical light the role played by CREVALs. In principle, 'CREVAL represents SACEUR's operational tool to evaluate the capability and combat readiness of the available HQ and forces. The ACO Forces Standards, Vol VII, lays down a general base of criteria for readiness, which apply to all FDC HQs within the CREVAL Programme^{',84} The problem with CREVALs is that they are misunderstood particularly by civilian defence officials as constituting a false standard. CREVALs are seen as establishing 'readiness', while in reality they are essentially testing for the floor of readiness, and not beyond. When units are task-organised to attend these exercises - often sponsored by US Army Europe in Germany – they create a 'false positive' because units assessed are not permanent establishments, and therefore, the value of examination of readiness is meaningless. Finally, what many fail to appreciate is that CREVALs are simply a test or a check list and not a judgement by a *commander* that a unit is 'ready'. Unintentionally, Western armies are contributing to a misunderstanding of what should constitute readiness of post-communist Allied armies.

Conclusion

Any dispassionate review of the data related to assessing the readiness of armed forces in Central and Eastern Europe can only conclude that it is problematic at best. This is not to imply that the armed forces of longstanding members of the Alliance do not also need to improve the readiness of their forces – for instance, Germany being a case in point.85 That said, these armed forces have the institutional experience and knowledge of how to improve their readiness; what is needed is strong leadership and more funding. Concerning the armed forces of Central and Eastern Europe, the causality of current failures can be identified and therefore solutions are at hand if senior political, defence and military officials are serious in embracing the Alliance's goal to improve readiness. Unfortunately, there are too many cases where readiness is simply not defined as a key priority. To wit in the case of

^{79.} IISS, Military Balance 2019, p. 146.

Andrej Osterman, 'Republic of Slovenia in NATO: Slovenian Armed Forces Ten Years Later', *Contemporary Military Challenges* (Vol. 16, No. 3, 2014), pp. 49–51. Senior military leadership informed the writer in spring 2018 that, on average, 6% of the armed forces personnel are on operations; in other NATO countries the average is approximately 1–2%.

^{81.} Author's discussions with various senior officers and commanders of army formations throughout Slovenia, April 2018.

^{82.} This failure came despite senior army officials claims that they had been informing civilian leadership that the army was not combat ready. See UA Wire, 'Elite Slovenian Military Brigade Fails NATO Combat Readiness Test', 22 February 2018, https://www.uawire.org/elite-slovenian-military-brigade-fails-nato-combat-readiness-test, accessed 12 May 2019.

^{83.} Republic of Slovenia, Ministry of Defence, 'Annual Report of the Ministry of Defence for 2017', n.d., p. 92, http://www.mo.gov.si/fileadmin/mo.gov.si/pageuploads/pdf/javne_objave/2018/letno_mo17_eng.pdf>, accessed 1 May 2019.

^{84.} Supreme Allied Commander, Europe and Supreme Allied Commander, Transformation, 'Education and Individual Training Directive', Bi-Sc Directive 75-2, 2 October 2013, p. 46.

^{85.} See DW, 'Limited Number of Weapons in German Military Ready for Action: Report', 27 February 2018.

Slovakia: 'our efforts in the upcoming years will be focused on maintaining and perhaps enhancing the capabilities of the Armed Forces, along with gradually improving their overall readiness'.86

One can discern a number of discrete issues which should be addressed by officials if they are to improve readiness. First, it would be incorrect to lay the blame for low readiness solely at the feet of the military leadership. Many senior military leaders in the region were brought up in institutions based on conscription, or ones that continue to struggle to implement fully the basic principles of professionalism. The mere fact that too many senior defence and military leaders perceive of CREVALs as a test to be passed, as opposed to being an instrument to be used to evaluate performance, speaks to the overall need for more demanding expectations. Conversely, Western donors of advice and assistance need to examine their policies and programmes to ensure that they are not contributing to what could be false positive indicators of performance.

Second, the most basic methods by which ministries of defence control and manage armed forces need to be examined in a critical light. Financial centralisation within ministries of defence has led to a debilitating practice of micro-managing armed forces. Decision-making is so centralised that commanders, as capability providers, are not entrusted with O&M budgets to create and maintain readiness.⁸⁷ Thus, 'readiness' is incorrectly defined as episodic budgetary activities that are only funded just prior to a major exercise, or deployment. The concept that forces need to be 'ready' (at various levels, to be sure), and therefore carefully managed by commanders to support endorsed concepts of operations is not widely accepted.

What this implies is the need for a policy initiative that empowers all commanders, which, as this article has shown, governments in the region undermine systematically. Even if ministries of defence can reform themselves to become less micro-managing and start delegating O&M budgets to capability providers, in the end the most difficult challenge will be changing how institutions define the proper roles and responsibilities of commanders. Coming from a communist tradition whereby all but the most senior generals were not empowered to make even the most minor decision, governments must recognise that they need to change policies, incentives, and indeed their defence institution's behaviour. They also need to embrace the concept that empowered commanders, with O&M budgets, are the sine qua non for creating military force. Thus, perhaps surprisingly, readiness of armed forces is not solely dependent on higher defence spending, or a more balanced execution of current budgets. Without 'growing' commanders through rigorous selection and utilisation in stressful command postings, defence institutions will lack commanders upon whose unique judgement alone can and should be able to define what constitutes adequate readiness. Politicians in the region need to recognise the existence of the problem and that they alone can solve it; and it must start with changing their own behaviours and expectations.

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^{86.} See Slovak Republic, White Paper on Defence of the Slovak Republic (Bratislava: Ministry of Defense, 2016), pp. 8-9. Emphasis added.

^{87.} For a critical analysis of these defence institutions see Thomas-Durell Young, 'Programming Challenges and Impediments to Reform: Identifying Pragmatic Solutions', Defence and Security Analysis (Vol. 34, No. 1, Spring 2018), pp. 73–92.

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Countries	Population	Defence Budget* (current US dollars)	Military Personnel	Key Structures	Per Soldier (dollars)
UK	64.7 million	\$50,700,000,000	150,250	1 Corps HQ, 2 Divisions (-) SOF, 19 warships, 10 submarines, 258 ac, 615 helos	\$337,437
France	67.3 million	\$50,700,000,00	203,900	1 Corps HQ, 2 DIVs, 2 SOF regts, 570 ac, 492 helos, 4 SSBN, 10 SSN, 24 ships	\$248,651
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Czech Republic	10.6 million	\$2,740,000,000	23,200	2 BDEs, 1 SF gp, 45 ac, 52 helos	\$118,103
Latvia	1.9 million	\$648,000,000	6,210	1 BDE (-) + SF Coy, 4 helos, 11 (Non- armed) ships	\$104,347
Estonia	1.2 million	\$624,000,000	6,600 (3,200 conscripts)	2 BDEs, 1 SF Bn, 2 ac, 4 helos, 3 MCM ships	\$94,454
Poland	38.4 million	\$10,900,000,000	117,800	Element of Corps HQ, 3 Divs, 3 BDEs, 3 recce regts, 3 SF units, 213 ac, 296 helos, 4 subs, 9 ships, 21 MCM	\$92,530
Slovakia	5.4 million	\$1,290,000,000	15,850	2 BDEs, 1 SF bn, 32, ac, 43 helos	\$81,318
Slovenia	2.1 million	\$553,000,000	7,250	2 BDEs, 1 SF coy, 40 ac, 2 ships	\$76,276
Romania	21.4 million	\$4,630,000,000	69,300	2 Div HQs, elements of 1 Div HQ, 1 SF BDE, 9 BDEs, 2 recce regts, 81 ac, 66 helos, 27 ships, 10 MCM	\$66,811
Hungary	9.8 million	\$1,700,000,000	27,800	2 BDEs, 1 SF Regt, 22 ac, 31 helos	\$61,151
Lithuania	2.7 million	\$1,040,000,000	19,850	2 BDEs + SF Coy, 8 ac, 9 ships	\$52,392
Croatia	4.2 million	\$781,000,000	15,200	2 BDEs, 2 SF groups, 38 ac, 62 helos, 6 warships	\$51,382
Montenegro	614,000	\$85,000,000	1,950	1 Bn, 1 recce coy, +/- 13 helos, 3 ships	\$43,590
Bulgaria	7.0 million	\$991,000,000	31,300	2 BDEs (-), 2 SF Bns (-), 66 ac, 15 warships	\$31,661
Albania	3.0 million	\$178,000,000	8,000	1 BDE (+), SF Bn, Cdo Bn, 24 helos, 8 ships (some armed)	\$22,250

Table 1: Defence Spending Per Service Member, 2018

*: NATO definition

Source: International Institute for Strategic Studies, The Military Balance 2019 (Abingdon: Routledge, 2019).

		1999	2000	2001	2002	2003	2004	2005	2006	
POL	Personnel	62.4	62.3	64.3	64.9	64.6	60.6	57.3	53.8	
	Equipment and Infrastructure	12.5	10.7	11.0	12.8	14.5	18.4	20.0	22.0	
	Other	25.1	27.1	24.6	22.3	20.9	21.1	22.7	24.2	
CZE	Personnel	46.9	42.8	46.0	45.5	41.8	48.2	47.2	47.4	
	Equipment and Infrastructure	23.4	25.8	24.9	23.6	23.4	21.6	16.2	22.9	
	Other	29.8	31.5	29.1	30.9	34.8	30.2	36.6	29.7	
SVK	Personnel						50.6	46.7	49.1	
	Equipment and Infrastructure						18.3	21.6	17.9	
	Other						31.1	31.8	33.0	
HUN	Personnel	46.7	48.7	47.9	49.3	48.8	49.4	48.1	51.2	
	Equipment and Infrastructure	25.0	15.3	16.2	17.5	16.9	18.9	13.0	17.1	
	Other	28.3	36.1	35.9	33.2	34.3	31.7	38.8	31.7	
BLR	Personnel						59.9	54.7	51.8	
	Equipment and Infrastructure						9.3	13.5	18.2	
	Other						30.8	31.8	33.5	
ROM	Personnel						50.6	57.0	59.8	
	Equipment and Infrastructure						26.7	21.8	26.1	
	Other						22.8	21.3	14.2	
SLO	Personnel						61.6	64.0	60.1	
	Equipment and Infrastructure						21.8	10.3	13.0	
	Other						23.2	29.1	26.9	
EST	Personnel						32.8	29.2	26.0	
	Equipment and Infrastructure						26.2	30.9	30.9	
	Other						40.9	39.9	43.2	
LTA	Personnel						43.8	49.8	39.2	
	Equipment and Infrastructure						22.2	19.8	22.0	
	Other						34.0	30.4	38.8	
LIU	Personnel						51.1	58.2	54.8	
	Equipment and Infrastructure						16.1	19.7	20.5	
	Other						32.8	22.2	24.6	
ALB	Personnel									
	Equipment and Infrastructure									
	Other									
CRO	Personnel									
	Equipment and Infrastructure									
	Other									
MON	Personnel									
	Equipment and Infrastructure									
	Other									

Table 2: Defence Expenditures by Categories

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2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018e
54.4	63.2	61.1	56.8	57.8	57.3	57.7	51.5	42.0	47.2	50.0	48.5
23.6	18.6	20.9	22.1	20.9	19.9	19.5	24.3	37.9	26.2	26.3	27.6
22.0	18.2	18.1	21.1	21.3	22.7	22.8	24.2	20.1	26.6	23.8	23.9
49.2	51.5	46.1	50.7	56.3	61.7	62.0	61.4	55.3	62.0	56.2	55.3
19.9	18.5	26.3	18.2	15.8	16.4	12.2	8.9	15.1	10.6	15.1	17.4
30.9	30.1	27.6	31.1	27.9	22.0	25.8	29.7	29.7	27.4	28.7	27.4
51.5	51.7	55.8	62.4	69.5	66.5	70.1	69.1	56.2	58.7	58.2	52.7
18.7	16.6	17.7	14.0	8.2	9.9	7.7	11.7	20.3	19.1	20.7	26.0
29.8	31.7	26.5	23.6	22.4	23.6	22.2	19.2	23.5	22.2	21.1	21.0
46.4	48.1	50.4	56.4	50.6	47.7	49.0	49.8	48.2	49.7	42.4	43.6
17.3	17.4	16.6	14.2	13.6	8.0	13.4	8.8	11.0	14.5	17.0	19.6
36.3	34.6	33.0	29.5	35.8	44.4	37.6	41.4	40.8	35.8	40.6	34.8
44.8	44.9	59.2	64.3	67.4	64.7	65.4	72.8	73.7	65.6	68.3	58.0
16.2	28.3	20.3	17.8	7.9	4.4	5.0	1.7	4.7	9.8	8.9	29.3
29.1	29.3	20.6	17.9	24.8	30.9	29.6	25.5	21.6	24.6	22.7	21.2
72.3	69.1	79.8	79.1	79.1	84.0	79.0	71.2	63.3	65.0	54.7	51.3
14.4	17.8	10.1	10.6	9.0	5.3	11.9	16.9	20.9	23.2	35.3	38.6
13.3	13.1	10.1	10.3	11.9	10.7	9.1	12.0	15.8	11.8	10.0	9.5
59.8	62.2	67.1	61.7	74.6	78.9	80.5	82.3	82.2	76.0	75.1	72.4
15.4	12.3	11.7	20.7	8.3	3.2	2.6	1.3	2.5	2.2	4.5	8.7
24.8	25.5	21.3	17.6	17.1	17.9	16.9	16.4	15.3	21.8	20.5	19.3
27.0	31.5	34.5	34.5	32.3	29.8	39.8	38.6	39.6	38.7	34.9	31.8
38.5	25.5	27.9	25.6	23.7	22.5	26.0	30.4	21.3	30.0	30.5	26.1
34.4	43.1	37.6	39.9	44.0	47.7	34.1	31.0	39.2	31.3	34.6	42.1
38.9	46.3	59.3	55.9	51.3	56.2	53.0	53.0	50.1	43.9	36.5	32.9
25.9	28.5	11.8	21.4	20.1	14.6	18.4	16.4	20.2	31.9	33.8	42.7
35.1	25.1	28.9	22.7	28.6	29.2	28.7	30.6	29.7	24.3	29.7	24.4
54.7	56.3	60.9	65.6	66.9	66.8	66.5	57.5	48.5	45.5	40.8	41.5
21.9	19.7	18.5	12.0	10.8	12.7	11.3	16.2	23.7	33.7	35.5	34.0
23.4	24.0	20.6	22.4	22.4	20.6	22.2	26.2	27.8	20.9	23.7	23.9
		66.2	75.7	77.1	70.0	75.3	68.1	78.2	68.1	68.2	68.2
		15.0	17.5	14.1	15.1	17.5	17.5	10.3	9.4	7.9	11.8
		18.8	6.8	8.8	15.0	7.3	14.4	11.5	22.6	23.9	20.0
		72.4	71.6	67.2	68.1	68.1	69.3	63.6	67.1	62.7	61.9
		11.8	9.5	16.5	15.3	11.9	9.0	13.2	11.8	12.3	15.1
		15.8	18.9	16.3	16.6	20.0	21.8	23.2	21.1	25.0	18.2
			73.6	82.9	82.7	87.7	78.5	78.0	75.3	79.6	71.7
			9.5	4.2	4.5	1.4	8.4	7.9	6.9	5.8	12.3
			16.8	12.9	12.9	10.9	13.1	14.1	17.8	14.7	16.0

Source: NATO, 'Defence Expenditure of NATO Countries (2011-2018)', Communique, PR-CP(2019)034, 14 March 2019.

	O&M% of	Defnce budget	O&M budget in	Personnel	O&M per soldier
	budget	in US\$	US\$		in US\$
UK	39.76%	\$61,662,000,000	\$24,516,811,200	145,000	\$169,081.46
France	25.92%	\$51,200,000,000	\$13,271,040,000	203,900	\$65,086.02
Estonia	42.12%	\$627,000,000	\$264,092,400	6,200	\$42,595.55
Hungary	34.82%	\$1,820,000,000	\$633,724,000	19,000	\$33,353.89
Czech Republic	27.37%	\$2,754,000,000	\$753,769,800	25,000	\$30,150.79
Latvia	24.42%	\$711,000,000	\$173,626,200	6,310	\$27,516.04
Poland	23.85%	\$12,156,000,000	\$2,899,206,000	118,000	\$24,569.54
Slovak Republic	20.99%	\$1,316,000,000	\$276,228,400	13,000	\$21,248.34
Lithuania	23.94%	\$1,071,000,000	\$256,397,400	15,000	\$17,093.16
Slovenia	18.87%	\$558,000,000	\$105,294,600	6,800	\$15,484.50
Croatia	18.17%	\$1,057,000,000	\$192,056,900	15,000	\$12,803.79
Montenegro	16.01%	\$85,000,000	\$13,608,500	1,500	\$9,072.33
Bulgaria	21.19%	\$937,000,000	\$198,550,300	25,000	\$7,942.01
Romania	9.46%	\$4,678,000,000	\$442,538,800	69,000	\$6,413.61
Albania	20.01%	\$181,000,000	\$36,218,100	6,800	\$5,326.19

 Table 3: Operations and Maintenance Budgets Spent Per Soldier, 2018

Estimates of calendar year 2018. Using current prices and exchange rates.

Source: NATO, 'Defence Expenditure of NATO Countries (2011-2018)', Communique, PR-CP(2019)034, 14 March 2019.

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Countries	Aircraft	2010	2011	2012	2013	2014	2015	2016	2017	2018
UK	Fast jets					210				210
	Transport					290				290
	Helicopters			204-240		90				240
Belgium	Combat capable					110				165
	Transport					160				300
	Helicopters			150/16++		160				150
Albania		N/D	10-15	10-15	10-15	10-15	10-15	10-15	10-15	10-15
Bulgaria		30-40	30-40	30-40	30-40	30-40	30-40	30-40	30-40	30-40
Croatia		50	50	50	50	50	50	50	50	50
Czech Republic	Gripen	100	100	120	120	120	120	120	120	120/22++
	Transport	150	150	150	150	150	150	150	150	150
	Helicopters			80						
Estonia		120	120	120	120	120	120	120	120	120
Hungary	Gripen	50	50	50	50	50	50	50	50	50
Latvia		N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Lithuania		120	120	120	120	120	120	120	120	120
Montenegro	Gazelle helos	N/D	N/D	N/D	N/D	N/D	N/D	N/D	~100	~100x
	Bell 412 EPI helos	Х	Х	Х	Х	Х	Х	Х	Х	~160x
Poland	Fixed-wing	160-200	160-200	160-200	160-200	160-200	160-200	160-200	160-200	160-200
	Helicopters			40/20++						
Romania	Fixed-wing	120	120	120	120	120	120	120	120	120
	Helicopters			80/15++						
Slovakia	Mig-29s	90	90	90	90	90	90	90	90	90
	Mi-8/17	140	140	90	90	90	90	90	90	90
	Helicopters			75						
Slovenia	Pilatus PC-9M	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	<120-160*
	Helicopters			100-140						

Table 4: Annual Average Flying Hours (Note: NATO Standard: 180 hours)+

N.B.: All data are self-declared.

N/D: Not declared.

†: Source: Joint Air Power Competence Centre, 'Enhancing NATO's Operational Helicopter Capabilities: The Need for International Standardisation', Joint Air Power Competence Centre, August 2012, p. 7.

*: Pilots in staff positions fly from 20 to 50 hours per year. Information provided to the author by Headquarters, 15th Air-Wing, Cerkijeob Krkl, Slovenia, April 2018.

*: Bell 212 helicopters are in IOC to FOC status. Information provided to the author by Headquarters, Montenegrin Air Force Knjaz Danilo Air Force Base, Podgorica, January 2019.

the Second figure designates declared training hours in a flight simulator.

Source: International Institute for Strategic Studies, The Military Balance, 2010–2018 editions (Abingdon: Routledge); Joint Air Power Competence Centre, 'Enhancing NATO's Operational Helicopter Capabilities', p. 7. Note: The Military Balance 2019 did not report annual flying hours.

Armies	Organic Collective Training	Collective Training with External Forces	Comments
Albania	No	US Army Europe at lower tactical level	Light infantry only, no indirect fires, and no BDE HQ
Bulgaria	No	With US Army Europe: CAX/CPXs/FTXs/LFXs	O&M is one of the lowest per soldier in NATO. Units are far below strength to support regular collective training. Participation in US-sponsored exercises to observe collective training/tasks, but participating units are task-organised and not standing. FTXs consist of executing tactical tasks by small units. Battalion CREVALs are considered to be collective training events and are conducted every 4 th year. No force-on-focus field exercises
Croatia	Superficial	With US Army Europe: CAX/CPXs/FTXs/LFXs	Collective training is observed by junior officers in national-level exercises, but is not part of collective training
Czech Republic	Yes	With US Army Europe: CAX/CPXs/FTXs/LFXs	3 BDE-level FTXs in 2017. For first time at FTX Saber Junction 2018, a BDE manoeuvred against a battalion task force acting as an OPFOR
Estonia	Yes	With US Army Europe: CAX/CPXs/FTXs/LFXs	Conscript force
Hungary	Limited	With US Army Europe: CAX/CPXs/FTXs/LFXs	As a matter of policy, at brigade level, live-fire FTXs are conducted every 2 years; and annually at battalion level. However, the 2 BDE HQs do not go into the field, nor do they conduct CPXs. Army training has been curtailed by border security tasks. In 2013, a battalion battle group passed CREVAL; but: 1) the battalion was tasked-organised before the exercise; 2) certification was granted, but with caveats; and 3) there are 2 battalion battle groups declared to NATO, but it is unlikely that both could pass CREVAL at the same time
Latvia	Yes	With US Army Europe: CAX/CPXs/FTXs/LFXs	BDE FTX in Allied Spirit 2017 at CTC Hohenfels
Lithuania	Yes	With US Army Europe: CAX/CPXs/FTXs/LFXs	Conscript force. At battalion level during FTX Sabre Strike and FTX Allied Spirit VII, there was BDE free-play
Montenegro	No	US Army Europe, but at lower tactical level	Army consists of 1 infantry battalion. No collective training has been conducted since independence in 2006. First live-fires of 122-mm artillery and mortar training since 2006 took place in 2018

Table 5: Assessment of Armies' Collective Training Concepts

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Armies	Organic Collective Training	Collective Training with External Forces	Comments
Poland	Yes	With US Army Europe: CAX/CPXs/FTXs/LFXs	Despite legacy and territorial defence influences, the army organises 3 FTXs and CPXs per year involving divisions. Each DIV is exercised every 6 th year. Brigades rotate annually as the main player with the other 2 BDEs in support. Previously, CSS was exercised independently, but is now being pulled into divisional/brigade FTXs. General Staff undertakes an exercise every other year
Romania	Limited due to resource constraints	With US Army Europe: CAX/CPXs/FTXs/LFXs	Resource-starved and lacking in modernisation makes the army dependent on US and Allied- sponsored FTXs. O&M consists of less than 10% of the defence budget which is the lowest percentage in the Alliance.
Slovakia	Limited	With US Army Europe: CAX/CPXs/FTXs/LFXs	Low readiness is due to under-manning of units, restrictions on training, most equipment is obsolete and at a low level of serviceability. Training at the battalion and brigade levels is limited in scope, e.g., it was only in 2015 that the army introduced live-fire exercises
Slovenia	Limited	With US Army Europe: CAX/CPXs/FTXs/LFXs	Battalion battle group failed CREVAL at Hohenfels in 2018: observer controllers found weakness in 4 of 5 key areas of assessment, i.e., C2 and logistics

Source: Refer to Table 1, International Institute for Strategic Studies, The Military Balance 2019; Exercise Strike Back is a Bulgarian armed forces exercise that certifies the Bulgarian 38th Mechanized Battalion to respond to crisis operations while demonstrating the interoperability of the armed forces and land forces. The exercise included section- to platoon-level situational training exercises on offensive and defensive operations, providing both countries opportunities to learn the tactics and techniques used by their allies. Ryan Tatum, '3ID, Bulgarian Soldiers Train Together for Exercise Strike Back', US Army, https:// www.army.mil/article/166626/3id_bulgarian_soldiers_train_together_for_exercise_strike_back>, accessed 15 May 2019; Author's personal communication with BG Zoltán APÁTI, Head of Training Directorate, General Staff, Budapest, Hungary, 5 October 2018; Honvedelem, 'Combat Ready: The End of This Year's Largest Training Event in the Hungarian Defence Forces', https:// honvedelem.hu/cikk/38196 combat ready>, accessed 15 May 2019; Martin Egnash, 'Largest Deployment in Latvian History Takes Place at NATO Exercise in Germany', Stars and Stripes, 17 March 2017; David Overson, 'Lithuanian Army Infantry "Griffin" Brigade Controls the Fight at Allied Spirit VII', US Army, https://www.army.mil/article/197137/lithuanian_army_infantry_griffin_ brigade controls the fight at allied spirit vii>, accessed 15 May 2019. The Polish Army ostensibly conducts collective training of its relatively large army. However, in discussions with the writer, young officers and non-commissioned officers complain that while pre-deployment training is robust and includes collective training, training for national defence devolves to centralised command in territorial/area-defence scenarios. Refer to Table 2; NATO, 'Defence Expenditure in NATO Countries (2011–2018)', Communique, PR/CP(2018)091, 10 July 2018; Slovak Republic, White Paper on Defence of the Slovak Republic (Bratislava: Ministry of Defence, 2016), pp. 10, 23; UA Wire, 'Elite Slovenian Military Brigade Fails NATO Combat Readiness Test', 22 February 2018, https://www.uawire.org/elite-slovenian-military-brigade-fails-nato-combat-readiness-test, accessed 12 May 2019.