NATO PARLIAMENTARY ASSEMBLY

ECONOMICS AND SECURITY COMMITTEE (ESC)

ALLIED DEFENCE SPENDING: ENDURING THREATS AND NEW CONSTRAINTS

General Report

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EXECUTIVE SUMMARY

The COVID-19 pandemic and the global recession it has triggered have placed serious pressures on Allied defence budgets. As governments enact fiscal stimulus packages to bolster aggregate demand, there is growing concern amongst strategic thinkers that defence spending could be sacrificed to cover other pressing spending priorities. The problem is that the security landscape remains daunting and, if anything, the pandemic and related economic crisis have only aggravated a range of defence-related challenges. There is a litany of traditional and new threats with which Allies need to cope. Doing so comprehensively requires both adequate financial resources and efforts to enhance efficiency.

Even prior to the pandemic, Allied governments had identified a shared need to ensure that military spending and investment would be sufficient to meet both current and future security requirements. The challenge became clear in the aftermath of Russia's illegal annexation of the Crimean Peninsula and its aggression in Eastern Ukraine. At the 2014 Wales Summit, Allied leaders committed to spending 2 percent of their national economic output on defence spending and 20 percent of their respective defence budgets on heavy equipment, research, and development. Since 2014, several of Allies – especially those closest to NATO's Eastern flank – have made important progress towards these commitments, either reaching or surpassing their obligations over the past three years. But others have moved with less haste, and several Allied countries are not on track to meet the goals by 2024.

Invariably the issue of defence spending has spilled over into a larger, and indeed, perennial burden sharing discussion. There are concerns that if the perception that some Allied countries are not meeting minimal spending commitments, the very alliance solidarity that has made NATO so successful will be undermined. NATO itself has sought to encourage Allies to meet their spending commitments, but it has also worked to enhance defence spending efficiencies so that Allied spending yields the greatest possible return in terms of capabilities. The European Union is working towards many of these same ends although the economic crisis has triggered some spending cuts in its defence industrial programmes.

For all these reasons, the Defence Investment Pledge, most recently reaffirmed at the June 2021 NATO Summit, should remain a signpost for Allied governments insofar as it symbolises the kinds of investments that Allies must continue to make for national and collective defence. But the bottom line ultimately is capabilities, and this too must remain a focus of collective and national efforts. Allied governments should avail themselves of NATO's reflection process to galvanise the political will to meet these core security commitments and to deepen cooperation in ways that enhance the efficient use of scarce defence resources. Efforts to achieve greater efficiencies by bolstering tooth to tail ratios, cutting fat from defence budgets, reassessing defence ministerial bureaucracy, as well as through collaborative projects, joint force planning, defence industrial integration, etc. must all be part of the mix. Capabilities development and long-term investment should lie at the heart of these efforts, which become essential at a time of escalating geopolitical uncertainties. Maintaining procurement and defence investment budgets will ultimately be crucial to helping core defence industry players to weather the current downturn. This will likely require a degree of consolidation in these highly stressed industries. This would ultimately reduce pressures on hard pressed government budgets by driving down costs while deepening interoperability and overall defence integration across the Alliance. This should happen at both the European level, where consolidation is clearly needed, but also at the trans-Atlantic level. More open transatlantic defence markets could undergird these efforts.

I. INTRODUCTION

1. The COVID-19 pandemic and the global recession it has triggered have myriad implications for public budgets, and these impacts are likely to endure well into the future. While much of the public discussion is focused on monetary and fiscal efforts to sustain demand through this crisis, there is a range of uncertainties surrounding future public spending in an era of extreme scarcity. One unknown of great concern to strategic thinkers is the future of national defence budgets.

2. Controversy and concern surrounding Allied defence spending is hardly new to the transatlantic Alliance. Indeed, NATO member governments confront a perennial challenge allocating funding for defence budgets considering the objective security risks that they confront. Of course, they must work through this challenge in a general setting of scarcity. A government only has so many financial resources available to it from tax derived revenues and borrowing to meet all the competing financial demands placed on it.

3. Finding reasonable balances between cost and security constitutes a serious and enduring challenge for democratic governments and parliamentarians. There are few societies prepared to dedicate virtually all available budgetary resources to security. To do so would fail to account for all the competing demands on a national budget that a normal society makes on those charged with leading the state. North Korea might be considered an example of a country that dedicates a huge share of its budget on security, and it does so precisely because the North Korean people are not permitted to make demands on the state. The misery the North Korean security state imposes on its people is hardly a model for democratic societies, and it reveals the absurdity of making security the sole end of the state.

4. On the other extreme, there are very few examples of countries that spend almost nothing on national defence. Those cases might hypothetically include countries that are enclaves inside other countries or very remote island nations where military threats are extremely remote or simply beyond these micro-states capacity to counter no matter what they allocate for defence. Again, this is hardly a model for most states and is rather an exception that proves the rule.

5. Indeed, states generally operate between these extremes, and the process of allocating funds to defence requires careful and complex analysis of threat, and then a process which weighs those threats and the costs linked to countering them against the need to allocate resources to address other societal concerns. Decision makers are asked to undertake uncomfortable and challenging assessments that consider the level of acceptable security risk and then calculate how much threat ought to be hedged against through the procurement of defence capabilities both at a national level and, when relevant, at a collective alliance level. It is important to consider here that security risks can also be dealt with by non-military means. Diplomacy and development aid might be considered as complimentary tools in this regard, and they can be very effective when they pre-empt threat or, for example, address root causes of conflict.

6. In any case, assessing threat and determining affordable means to cope with it hardly constitutes a scientific process, nor is the practice uniform across countries. Indeed, tolerance for risk may vary considerably. Risk perception is conditioned by historical experience, geography, size, potentially competing interests like economic opportunities, and culture, among many other factors. Citizens of a so-called front-line state, for example, may understand risk in an almost visceral manner. They discern threat daily simply because their country lies in a region close to zones of dispute or even conflict. In such cases, force deployments across the border, constant cyber-attacks, violations of air space, or efforts orchestrated by rival states to divide society through sustained misinformation campaigns or other hybrid warfare tactics would all heighten threat perceptions. A mounting sense of threat, in turn, would likely increase the public's propensity to allocate more on defence budgets to hedge against those threats.

7. In contrast, a country remote from zones of potential conflict would have to summon a degree of imagination to properly fathom rising security risks. Those risks could still be substantial,

but the public may not face daily reminders of external threat unless the government manages to communicate that risk effectively. A country in this category might be inclined to lower the priority for defence spending in the greater budgetary competition for scarce financial resources among competing claims.

8. To complete this sketch of archetypes, a large and powerful country, one recognised as the lynchpin of a regional or indeed the global security order, is likely to understand security risks differently than a significantly smaller country, particularly one occupying a reasonably secure geographical position remote from zones of conflict. The former might be inclined to see risks wherever new powers with potentially hostile intentions emerge. Such a large state would readily allocate scarce budgetary resources to the defence budget to cope with scenarios of systemic consequence. Smaller countries in remote regions less fraught with tension could well be less attuned to emerging challenges to the global order, at least at the early stages of nascent conflict. Although such states have a stake in that order, their perceived capacity to affect outcomes might reduce the impetus to increase outlays on defence and security to cope with them.

9. Of course, all the countries described above are simplified profiles. The purpose here is to provide a potential explanation for the political and geo-political dynamics that drive defence spending in Allied countries, and why this can become a source of tension within an alliance of countries sharing ideals but not necessarily the exact same sense of threat and agency. It is a dynamic that game theory might help to explain, although not in this report.

10. In an alliance such as NATO, security is theoretically, at least, a collective or indivisible concept. An attack on one constitutes an attack on all, and a security risk to one becomes a risk to all. That NATO members share risk should work to overcome the proximity problem described above. This is not entirely the case, and Allied governments often must work against the inclination of some sectors of national societies to discount security risk or to write off risks as being remote when, in fact, they are real and more proximate than generally understood. Governments may also have to work to counter the related so-called “free rider” phenomenon. In such cases, when certain Allied countries respond with alacrity to perceived risk by purchasing a surfeit of military security, political actors in other Allied countries might feel that this, in essence, has let them off the hook and provided them with the leeway to purchase more proverbial butter and less proverbial guns. In alliances, the perception of free riding can quickly become a source of diplomatic tension and, at its worst, can undermine the solidarity essential to an alliance’s credibility.

II. BURDEN SHARING: A PERENNIAL CHALLENGE FOR NATO

11. Doubtless, at various points in the long history NATO, these kinds of phenomena have been at play in discussions about defence budgets and have all factored into the greater trans-Atlantic burden sharing conversation. Indeed, burden sharing has been a constant leitmotiv of Allied relations, although its salience has ebbed and flowed over time along with evolving threat perceptions.

12. Since the end of the Cold War, the burden sharing issue has undergone a significant transformation. After the collapse of the Berlin Wall, the reunifications of Germany, and the process of accession to NATO and the EU of many former Warsaw Pact states, defence spending among NATO countries fell precipitously. For some, this embodied the onset of a kind of Kantian peace in which the spread of democracy promised a new era of European comity and economic prosperity premised on liberal democratic foundations. Russia itself seemed to have been swept up by this democratic wave, and the sense of threat among Allied nations on both of sides of the Atlantic declined precipitously. The fall in defence spending was popularly characterised as a kind of “peace dividend,” with each society deciding how best to use that perceived windfall through policies that ranged from large tax cuts to new projects undergirding continental reunification. Moreover, this was not simply a European phenomenon. On the heels of the Berlin Wall’s collapse,

the US Administration of George H.W. Bush reduced military manpower by 600,000 and slashed the military budget by 26% (Mathews).

13. As it turned out, the post-Cold War period hardly marked the much-heralded “end of history” and liberal democratic triumph. Indeed, the notion of enduring peace proved an illusion ultimately shattered by an array of cataclysmic events including conflict in the Western Balkans, the September 11 terrorist attacks, wars in Afghanistan, Iraq, Syria, and Libya, the end of the democratic experiment in Russia, rising Chinese military ambitions, and Russian aggression in Georgia and Ukraine, to name just a few. A patently worsening security landscape factored into a reappraisal of defence spending in NATO countries, although orchestrating U-turns away from national budgets premised on the peace dividend proved remarkably difficult due to public and political resistance, the simple fact that defence budgets are unwieldy, and that it takes time and very considered planning to increase outlays efficiently.

14. The global financial crisis in 2008-2009 gravely complicated matters, as that crisis put a squeeze on national budgets and made it more difficult politically to make the case for greater defence outlays despite the worsening security situation. Defence spending plummeted in Europe. EU member governments collectively reduced defence budgets by 11% in the wake of that global crisis (Billon-Galland). Smaller states slashed defence budgets by roughly 30%, medium sized states undertook cuts of roughly 10 to 15%, while large states reduced defence budgets by 8%. All told, combined European defence spending fell by roughly USD 27 billion over the six years following that global forecast (Goldgeier and Martin). If Europe were to engage in similar cuts today, it would severely undermine defence capabilities, dramatically reduce investment in future capabilities development, and make even more elusive the collective commitment of NATO member governments to allocate 2% of GDP to defence spending and 20% of defence budgets to investment.

15. According to the European Defence Agency (EDA), EU member states’ military investments decreased by 22% between 2007 and 2014, and outlays on defence research and technology development in 2016 were roughly half of what they had been in 2006. As the United States began to ramp up its own defence spending to cope with a range of old and emerging strategic challenges, defence outlays declined significantly in Europe between 2009 and 2013, falling in 2009 alone by 3% with some countries engaging in far greater defence cuts than others (Morcos). Not surprisingly, capabilities plummeted as well, and many governments engaged in making those cuts also documented the rapid degradation of operational capacity (DW, 20/2/2018).

16. This was the setting for the 2014 NATO Wales Summit when NATO heads of government committed to a national defence spending target of 2% of GDP by 2024. At that moment, only three NATO member governments were spending at this level: Greece, the United Kingdom, and the United States. By 2015 there were signs that a U-turn was underway, galvanised not only by the Wales commitments but also by worrying strategic developments to the East and to the South including Russia’s illegal annexation of Crimea, ongoing instability in Syria, Iraq, and Libya as well as Iran’s ongoing military build-up and nuclear weapons programme.

17. Even with a flat budget, US defence spending remains significantly higher than Europe’s. This has long been a source of tension within the Alliance and the gap has long been compounded by the fact that Europe’s defence spending and its defence industrial base are fractured across national borders despite myriad efforts to foster integration both within NATO and within the EU – efforts that range from military specialisation to common defence projects. Of course, not all of NATO Europe is in the EU, and indeed, Brexit has removed a major European defence player from that institution, furthering Europe’s fragmentation. In any case, the capabilities gap between the United States and its Allies remains substantial, and this continues to drive US burden sharing concerns.

18. Consistent U.S. messaging that it was essential for all Allies to meet the commitments made in Wales helped keep defence spending on the front burner of trans-Atlantic diplomacy. This

message, which the NATO PA has long- affirmed, has had important results. In the six years since this commitment was made, governments have registered important progress on defence spending. European NATO Allies and Canada boosted defence outlays every year between 2015, when spending increased by 1.65%, and 2020 when it rose by 3.87%. These increases were facilitated by relatively strong national economic performances.

19. The following tables from NATO show official figures and estimates of Defence Expenditure as a share of GDP and the annual real change in defence spending between 2014 and 2021 (NATO, 11/6/2021).

Table 3 : Defence expenditure as a share of GDP and annual real change

Based on 2015 prices

	2014	2015	2016	2017	2018	2019	2020e	2021e
Share of real GDP (%)								
Albania	1.35	1.16	1.10	1.11	1.16	1.31	1.27	1.44
Belgium	0.97	0.91	0.89	0.88	0.89	0.89	1.05	1.12
Bulgaria	1.31	1.25	1.25	1.23	1.45	3.15	1.55	1.56
Canada	1.01	1.20	1.16	1.44	1.30	1.30	1.44	1.39
Croatia*	1.85	1.78	1.62	1.67	1.57	1.65	1.80	2.79
Czech Republic	0.94	1.02	0.95	1.03	1.10	1.16	1.31	1.42
Denmark	1.15	1.11	1.15	1.14	1.28	1.30	1.40	1.41
Estonia	1.92	2.01	2.05	2.01	2.01	2.03	2.32	2.28
France	1.82	1.78	1.79	1.78	1.81	1.83	2.03	2.01
Germany	1.19	1.19	1.20	1.23	1.25	1.36	1.55	1.53
Greece	2.22	2.31	2.40	2.38	2.54	2.36	2.65	3.82
Hungary	0.86	0.91	1.00	1.19	1.01	1.25	1.79	1.60
Italy	1.14	1.07	1.18	1.20	1.23	1.18	1.38	1.41
Latvia**	0.94	1.03	1.44	1.59	2.06	2.03	2.22	2.27
Lithuania**	0.88	1.14	1.48	1.71	1.97	2.00	2.11	2.03
Luxembourg	0.38	0.43	0.39	0.51	0.50	0.54	0.56	0.57
Montenegro	1.50	1.40	1.42	1.34	1.37	1.33	1.73	1.74
Netherlands	1.15	1.13	1.16	1.15	1.22	1.35	1.47	1.45
North Macedonia	1.09	1.05	0.97	0.89	0.94	1.16	1.25	1.61
Norway	1.55	1.59	1.74	1.72	1.73	1.86	2.01	1.85
Poland**	1.86	2.22	1.99	1.89	2.02	1.98	2.28	2.10
Portugal	1.31	1.33	1.27	1.24	1.34	1.38	1.43	1.54
Romania**	1.35	1.45	1.41	1.72	1.81	1.85	2.03	2.02
Slovak Republic	0.99	1.12	1.12	1.11	1.23	1.71	1.96	1.73
Slovenia	0.97	0.93	1.00	0.98	1.01	1.06	1.08	1.28
Spain	0.92	0.93	0.81	0.91	0.93	0.91	1.00	1.02
Turkey	1.45	1.38	1.45	1.51	1.82	1.85	1.86	1.57
United Kingdom	2.14	2.03	2.08	2.09	2.11	2.10	2.29	2.29
United States	3.73	3.52	3.51	3.30	3.27	3.51	3.72	3.52
NATO Europe and Canada	**1.43**	**1.42**	**1.44**	**1.48**	**1.51**	**1.55**	**1.71**	**1.70**
NATO Total	**2.58**	**2.48**	**2.48**	**2.40**	**2.40**	**2.54**	**2.75**	**2.65**
Annual real change (%)								
Albania	-2.74	-11.76	-1.90	4.32	8.96	15.21	-6.53	18.57
Belgium	-2.25	-4.44	-0.36	0.36	2.61	2.02	10.63	10.97
Bulgaria	-8.29	-1.07	3.59	1.80	22.05	124.99	-52.71	3.93
Canada	4.95	20.10	-2.52	27.76	-7.27	1.48	4.79	2.71
Croatia*	25.92	-1.00	-5.88	6.22	-2.80	7.71	0.58	62.58
Czech Republic	-4.91	14.14	-4.61	14.32	10.32	7.53	6.89	11.33
Denmark	-4.84	-1.03	6.61	1.98	14.67	4.79	4.76	3.36
Estonia	3.71	7.32	5.18	3.18	4.28	5.57	11.47	1.05
France	-1.21	-1.00	1.39	1.72	3.65	2.61	1.76	4.98
Germany	-1.39	1.42	3.36	5.66	2.91	9.03	8.26	1.70
Greece	0.45	3.71	3.47	0.05	8.48	-5.32	3.17	49.61
Hungary	-5.31	9.37	13.08	24.41	-11.15	30.33	35.22	-6.50
Italy	-9.81	-5.83	12.05	3.75	2.78	-3.82	7.28	6.04
Latvia**	2.39	14.78	42.29	14.59	34.52	0.62	5.17	5.76
Lithuania**	19.38	31.96	33.13	20.84	19.37	6.18	4.29	0.06
Luxembourg	5.28	17.94	-5.88	32.93	1.86	10.83	0.86	6.91
Montenegro	4.49	-3.50	4.33	-1.34	7.29	1.36	10.01	7.95
Netherlands	0.19	0.26	4.43	2.17	8.41	12.67	5.14	1.21
North Macedonia	-3.58	-0.09	-4.71	-6.75	8.40	27.42	2.50	33.33
Norway	5.35	4.78	10.70	0.90	1.51	8.58	7.12	-4.75
Poland**	11.39	24.10	-7.45	-0.56	12.67	2.74	12.09	-4.72
Portugal	-8.52	3.25	-2.51	1.03	11.40	5.33	-3.99	11.48
Romania**	8.52	11.06	1.40	31.35	9.60	6.43	5.81	4.48
Slovak Republic	3.25	18.61	2.51	1.80	15.17	42.95	9.01	-8.05
Slovenia	-4.42	-2.37	11.42	2.44	7.27	8.06	-3.81	23.18
Spain	0.36	4.60	-10.15	15.30	4.87	-0.41	-1.42	7.72
Turkey	0.78	1.44	8.64	11.61	23.90	2.82	2.25	-10.74
United Kingdom	-1.51	-3.05	4.55	2.03	2.20	0.76	-1.73	7.54
United States	-5.20	-2.85	1.55	-3.82	2.23	9.57	2.18	1.23
NATO Europe and Canada	**-0.98**	**1.65**	**2.92**	**5.89**	**4.24**	**3.67**	**3.46**	**4.14**
NATO Total	**-4.08**	**-1.61**	**1.94**	**-1.04**	**2.84**	**7.74**	**2.57**	**2.11**

Notes: Figures for 2020 and 2021 are estimates. The NATO Europe and Canada and NATO Total aggregates from 2017 onwards include Montenegro, which became an Ally on 5 June 2017, and from 2020 onwards include North Macedonia, which became an Ally on 27 March 2020.

* Year 2021: estimated average derived from the range reported.

** These Allies have national laws or political agreements which call for 2% of GDP to be spent on defence annually, consequently future estimates are expected to change accordingly. For past years Allies defence spending was based on the then available GDP data and Allies may, therefore, have met the 2% guideline when using those figures. (In 2018, Lithuania met 2% using November 2018 OECD figures.)

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20. Perhaps not coincidentally, five of the countries that have met the 2% commitment share a border with Russia, and while all Allies had not yet achieved the 2% spending level by 2019, all had nonetheless managed to increase defence spending as a share of GDP. It is also the case that recessions have helped push several countries either toward the 2% threshold or across it. While Allies set defence spending before the pandemic, shrinking economies raised the

percentage share of defence outlays in GDP. In any case, from 2019 to 2020, collectively NATO member defence spending rose from USD 1.031 trillion to USD 1.108 trillion and Europe and Canada had collectively raised defence spending from USD 301.311 billion to USD 322.67 billion. By comparison, this figure stood at USD 254.406 billion in 2015 (NATO, 16/3/2021).

21. These increases should be put in further perspective. European defence spending in 2018 equalled the level of spending in 2009, the year the financial crisis struck the continent. And many experts considered defence spending levels that year to be insufficient given the ominous security landscape. By 2019 the United States was spending roughly 2.5 times more than European NATO Allies, or 3.51% of its GDP – significantly above the agreed targets for all NATO countries (Morcos). This was bound to generate a degree of tension within the Alliance and, indeed, it has done so despite European progress since 2014. It is also noting, however, that as a globally engaged power, the United States has extensive military commitments outside the NATO area, and this too is a factor in its high percentage of military spending.

22. There have also been long-running concerns about low levels of defence investment, and this is precisely why NATO heads of governments included an Allied commitment to dedicate 20% of defence spending to investment. Many Allied defence budgets were structured to prioritise current expenditures like salaries over long-term investment. This effectively meant that national militaries were not preparing to conduct future operations in a world where rivals, including Russia and China, were making significant long-term investments aimed at modernising their militaries. Very significant reductions in procurement spending had adversely effected capabilities across the Alliance, reduced the deployability of forces, and undermined overall force effectiveness. The shortfalls in capabilities became evident in several NATO operations including Afghanistan and Libya.

23. Still, some analysts on both sides of the Atlantic think that NATO governments should consider concentrating both on capabilities and on overall defence outlays. Anthony Cordesman, a noted specialist at the Center for Strategic and International Studies and certainly not an apologist for low defence spending, recently wrote that, “NATO needs to focus on finding an integrated and fully interoperable approach to force modernisation and force quality – not simply increasing national spending. NATO needs to create net assessments of NATO and Russian capabilities, and it needs to develop country force plans, programmes, and budgets that consistently allocate resources to key areas and mission priorities and that put collective security first. It needs to build upon NATO’s new strategic concept and multinational security concepts at the Ministerial level, rather than on burden sharing as defined by arbitrary spending goals like 2% of GDP and the subsequent 20% of total defence spending on equipment.” (Cordesman).

24. Cordesman calls for far deeper trans-Atlantic planning integration and points to several ways to achieve this: carrying out comprehensive net assessments; developing real strategies with plans; programmes, budgets, and progress reports; creating full-scale rolling five-year plans and progress reviews; focusing on joint all-domain future requirements; and providing transparency and a forum for independent analysis. This is not the consensus position in Washington, but it does reflect an outlook about possible ways both to maintain defence spending while focusing on outputs in a time of unprecedented fiscal crisis and ongoing strategic challenges (Cordesman).

25. The 2021 defence expenditure figures across the Alliance currently remain estimates, but several overarching spending trends are emerging. Following the June Summit in Brussels, NATO declared that ten Allied nations would meet or exceed the 2% spending guideline by the end of 2021, with fully two-thirds of NATO member countries on pace to meet that same commitment by 2024. Equally, 24 Allies are currently meeting their 20% equipment investment pledges, with NATO projecting those 27 members in total would spend 20% on equipment by 2024 (NATO, 14/6/2021). These trends, although tentative, are welcome and indicate that member states will prioritise defence spending despite the fiscal pressures experienced in the aftermath of the pandemic.

III. THE COVID-19 RECESSION AND DEFENCE SPENDING

26. Despite positive news regarding Allied defence spending trends, there remain legitimate concerns that Allied governments could be tempted to reduce defence outlays in absolute terms in the future to consolidate budgets highly stressed by the COVID-19 recession and the massive fiscal measures employed to counter its worst impacts. This is particularly worrying because, if anything, the threat environment for Allied countries has only worsened. Indeed, in many ways, the COVID-19 crisis has increased the risk of instability and insecurity. At the same time, some polls suggest that defence spending is becoming less of a priority because of the current economic crisis. Experts from across Europe were recently asked to rank policy goals for their country's governments over the coming five years. European defence ranked at 14th out of 20 places in this ranking, markedly below fiscal issues, migration policy, and climate change. Sixty percent of these experts did not rank defence in their top ten priorities. Only five, Cyprus, Greece, Romania, Hungary, and France included European defence in their list of top five spending priorities (Franke).

27. These hesitations are already being reflected in decision making. In June 2020, Jane's Defence Weekly forecast a 0.97% fall in European defence spending driven by the continent's largest defence spenders'- the United Kingdom, France, and Germany. Prior to the crisis it had foreseen European military expenditure rising by 2% in 2021. It now foresees additional spending cuts enduring until 2025, after which, governments will undertake small increases in defence outlays (although at rates less than GDP growth). Jane's now forecasts that European defence expenditure will amount to USD 270.9 billion by 2025, down nearly 20% from the pre-COVID-19 estimate of USD 324.4 billion. According to Ana-Roxana Popescu, senior industry analyst at Jane's, "given the economic impact of the COVID-19 crisis on overall budgets, they are likely to implement cuts to their military expenditure in the near term, bringing down the overall European average. The effect will be relatively long lasting, and their combined defence spend in 2031 will be USD 25 billion less than initially expected: USD 165 billion versus USD 190 billion." (Janes)

28. It is difficult today to fathom how stressed national budgets may be in the future. Currently governments are borrowing massively to finance public spending programmes to help their citizens and businesses weather a crisis characterised by massive lockdowns, the shuttering of thousands of businesses, unemployment, and the precipitous decline in tax revenue. Budget deficits and national debt burdens have soared as a result. As the pandemic begins to recede, NATO governments will begin to wind down debt and put public spending on a more sustainable footing. Leaders will establish a hierarchy of priorities and, among many other things, will have to lay out pathways for future defence spending despite financial pressures and potential domestic political polarisation. Unrelenting strategic uncertainties will help make the argument to continue to make defence spending a key priority. Advocates will note that defence spending can bolster growth, foster job creation, and generate new technologies with important commercial applications. They will warn, moreover, that sharp and sustained programme cuts can weaken the defence industrial base, lead to permanent loss of human capital specialised in this sector, and thereby make it very difficult to ramp up future production when and if this is needed.

IV. EUROPEAN UNION

29. Over the past decade the European Union has become a more active player in the defence field. It now has some capacities to play a role in military research and development, engage in military equipment procurement, and conduct military-operations (Billon-Galland). Defence markets were initially excluded from the Common Market because national defence remained the sovereign preserve of member states, and not the Union. This has not changed, but the EU has managed to create structures both for conducting EU military missions and for fostering synergies in defence planning, defence investment, and procurement that aim to give EU members more bang for their Euro.

30. Although some non-EU member states have worried that the EU could distract focus on meeting core defence objectives and NATO commitments, these will only be allayed if it is clear

that the EU is working to undergird the European commitment to NATO, coordinate with it on security matters, and reinforces efforts to spend more and better on defence. In this case, then there are certainly legitimate arguments that the EU might be well positioned to foster greater efficiency in European defence markets while reinforcing Europe's sense of a shared strategic destiny.

31. More recently there has been a discussion in European circles about the need for greater European strategic autonomy. The idea has been to endow Europe with an enhanced capacity to operate in its own neighbourhood on hard security matters without relying too heavily on American strategic support. But strategic analysts have warned that strategic autonomy will elude European governments unless they develop more capabilities and cooperate more closely on everything from force planning, research and development, defence industrial restructuring, and procurement. Doing so requires both political will and financial resources, and none of this should come at the expense of NATO. It should, rather, both complement and reinforce it.

32. The context in which the discussion about strategic autonomy is unfolding now appears to be shifting. The Biden Administration's clear commitment to multilateralism generally – and its unambiguous support for NATO specifically – could undercut one of the arguments for strategic autonomy. Improved trans-Atlantic relations could potentially revive calls for deeper trans-Atlantic strategic integration through NATO, something that might include strategies for achieving more capabilities through deeper cooperation and efforts to unearth efficiencies to finance capabilities upgrades. This was certainly a message that allied heads of government relayed at the June summit in Brussels. It is also the case that the COVID-19 recession has shrunk the fiscal space for the kind of defence spending that would have to undergird any European ambition for strategic autonomy. Indeed, there are currently other politically powerful claims on the EU budget including spending to nurture recovery and to transition to more sustainable energy use (Erlanger). Already in May 2020, EU High Representative of the Union for Foreign Affairs and Security Policy Josep Borrell warned against cuts to defence spending, noting that, if anything, the pandemic would likely "deteriorate the security environment" in the coming years. He pointedly added that coping with these challenges would require a stronger Europe. His warnings, however, did not prevent a reordering of spending priorities within the EU at the expense of defence (Morrow).

33. In 2018 the EU created two pioneer programmes launching the EU into the game of capabilities development. The Permanent Structured Cooperation(PESCO) is collectively funded by member governments and is focused on shared military procurement and investment projects, while the European Defence Fund (EDF) concentrates on multi-national military research and development and is underwritten directly out of the EU's seven-year budget. The EU had also agreed with NATO to work on a mobility initiative to enhance Europe's capacity to move heavy military equipment throughout the continent. The programme aimed, in part, to reinforce rail lines and strengthen and widen bridges and roads, but it also seeks to harmonise procedures that would allow swift collective military response in the event of a crisis.

34. The Commission initially agreed to allocate EUR 13 billion to the EDF under the Multiannual Financial Framework 2021-2027. That facility co-funds a range of common European defence projects. Due to the pandemic, however, both the EDF and the Military Mobility Initiative (MMI) have undergone funding cuts. The EDF has endured cuts in the Commission's initial allocation of EUR 13 billion to EUR 7 billion, while the Council has cut reduced the initial Commission proposal to fund the MMI from of EUR 6.5 billion to EUR 1.5 billion (Quintin; Brzozowski, 25/2/2020; Morcos). There are now pressing new demands on scarce funds needed to underwrite economic recovery and a range of other policy goals, including public health and climate change (Billion-Galland). European defence thus appears to be moving down the priority list in Brussels in the current crisis climate. The question now is how long this will endure and whether a deteriorating strategic environment might provoke a reassessment. "The proposed cuts to the EU's defence budget will not put an end to the EU's ambitions," says Sophia Besch, a research fellow focusing on defence and security policy at the Centre for European Reform, "but they show that, on defence, the Union is only as effective as member-states allow it to be." (Morrow).

35. On the other hand, EU member states continue to collaborate on a range of multilateral defence projects to meet national security needs and to ensure a European capacity to develop critical military platforms. One example is the Future Combat Air System (FCAS), a Franco-German-Spanish collaboration that looks to develop a so-called “sixth generation” fight aircraft that will include cutting-edge capabilities. The programme initially received significant funding promises from both the French and German legislatures, with both countries looking to contribute EUR 77 billion to the programme’s initial research and development phase (DW, 12/02/2020). In the first months of 2021, those funding promises gradually materialised as the FCAS initiative cleared further financial hurdles in the French and German parliaments (Sprenger, 2021; DW, 17/05/2021).

V. SELECTED NATIONAL DEFENCE SPENDING TRENDS

36. It is important to compare Allied defence spending to the actual and potential defence spending of rivals. NATO’s European Allies collectively constitute an economy that is ten times the size of Russia’s, while Europe NATO’s collective defence spend is four times greater than that of Russia’s (USD 287 billion versus USD 65 billion in 2019) (Peña). Of course, Europe is penalised by its fragmentation. It is also the case that comparing spending with Russia can be a case of apples and oranges insofar as Russian costs can be very low (Russia, for example, relies on cheap conscripted forces while most of Europe employs far more costly professional forces, to take one example). Europe must also increasingly consider China’s military rise, particularly as its military projection capabilities are ever-expanding. In 2019, China’s official defence budget stood at roughly USD 178 billion, although the Stockholm International Peace Research Institute (SIPRI) estimated that in nominal terms it stood at USD 261 billion. Its 2020 defence spend grew at 6.6%, the lowest level of defence spending growth in many years. This fall was directly linked to pandemic economic slowdown. Since 2016, the annual growth of China’s defence budget has varied between 7.2% and 8.1% (Glaser). As China’s economy revs up, it will inevitably pour additional resources into its military and defence industrial sector and its military rise will continue to shape the global strategic environment in which NATO must operate. Allied leaders for the first time ever recognised that China poses a “systemic challenge” with direct implications for NATO.

A. THE UNITED STATES

37. According to NATO, in 2019 United States defence spending stood at USD 730.149 billion or 3.51% GDP, by far the largest defence spend in the world. Defence spending rose in 2020 to USD 784.952 billion or 3.87% of GDP (NATO, 16/3/21). NATO estimates that this sum will rise further to USD 811.14 billion, or 3.52% of GDP, for FY2021 (NATO, 11/6/21). To put this into perspective, according to SIPRI the U.S. represented 38% of the world’s defence expenditures in 2019 (Weisgerber).

38. In May 2021, the Biden Administration released its proposed defence budget for FY 2022, requesting USD 753 billion in national security funding, which constitutes the bulk of US defence spending. US officials calculate that this amounts to a 1.6 percent increase compared to the previous budget, an increase that trails the rate of inflation and falls below the 3 to 5 percent increase that some had requested (Gould and Shane, 2021). Administration officials note that the new budget total amounts to roughly 3.3% of GDP, although this will depend on the rate of GDP growth. As the proposal makes its way through the US Congress, further changes to these figures are inevitable (Mehta and Gould).

39. Beyond FY 2022, US defence budgets may not be immune to mounting budgetary pressures arising out of the pandemic and the unprecedented fiscal countermeasures it has adopted to sustain the national economy. It entered the crisis with a relatively high debt and a substantial budget deficit. The pandemic recession complicated the challenge, although very low interest rates have made it possible to finance extraordinary levels of public spending needed to bolster the economy. By the first quarter of 2020, the US federal debt stood at 107.71% of GDP, and as of

22 January 2021, it amounted to USD 27.8 trillion and rising. Massive stimulus packages pushed the US deficit for fiscal year 2020 to over USD 3.1 trillion – the largest ever in real terms (Daniels).

40. The Biden Administration has used the budgetary process to impose its own priorities. It is for example, seeking to reduce funds for certain legacy systems while devoting more resources research and development. The Administration is clearly striving to achieve greater efficiency while building future capabilities (Mehta and Gould, 2021).

41. Although economists warn that over the short-term, high levels of government spending are essential to prevent national economies from falling into depression, over the longer term, the United States will face pressures to consolidate its debt position, presumably once the national economy has returned to sustainable growth. There are five ways to reduce a national debt: increasing taxation, slashing spending, restructuring debt, monetising debt (or debasing the currency), or default (Investopedia). Any of these measures or combination of them would act as a drag on growth and would prove politically difficult to undertake. It is also important to note that most Allied countries will face similar pressures in the future. The sheer size of the US economy, however, suggests that any move to debt consolidation would likely have global implications. In any case, some economists and security analysts recognise that eventually the United States will need to address the deficit-debt problem and suggest that the recent growth of massive US defence budgets may prove unsustainable over the long term. In an era of increased scarcity, the challenge for the United States will be to ensure that it focuses both on capabilities and finding efficiencies within that very large budget (Mathews; Dowdy).

42. Of course, there are countervailing pressures that may lead to continued prioritisation of defence outlays, including China’s ongoing and alarming increase in defence spending and its ever more apparent global ambitions. Early indications from the Biden Administration are that it intends to remain deeply engaged in the multilateral system that the United States helped create in the post-war period, including NATO, and that it will continue to urge its Allies to meet the Wales Commitments to reinforce the foundations of trans-Atlantic security. Strong support for the Wales Commitments is a matter of bi-partisan support in the US Congress, and members of the Congress have precisely made this point at numerous meetings of the NATO Parliamentary Assembly.

43. But there are also voices in Washington urging a reassessment that would focus on capabilities and joint force planning to increase efficiencies in a time of serious fiscal crisis (Cordesman). Finally, the United States has traditionally benefitted from international sales of US manufactured military equipment to help sustain its defence industrial base and drive down costs. That may prove more difficult in the current environment when many potential customers are also confronting serious budgetary and economic stress (Weisgerber).

B. FRANCE

44. France has enjoyed a relatively strong political consensus supporting its military, and this certainly reflects the important role that country plays in the regional security equation. France managed to retain budgetary support for defence through the 2008-2009 financial crisis, although it did undergo significant personnel reductions despite decisions to deploy forces in the Sahel and the Middle East. President Macron has emphasised his government’s commitment to achieving the 2%-20% NATO goals early on in his administration, and indeed, in 2020, it managed to cross that threshold, moving from 1.83% in 2019 to 2.04% in 2020 (NATO, 16/3/21). NATO estimates that France will spend EUR 53.170 billion on defence in 2021, which amounts to 2.01% of GDP (NATO, 11/6/21). The 2019-2025 planning document allocated EUR 198 billion in total to the military for 2019-2023, and notably increased the defence budget by EUR 1.7 billion per year until 2022 and by EUR 3 billion in 2023. One quarter of this spending is allocated for modernisation. The new budget, however, provides leeway for cuts if the economy falters and, of course, this is precisely what has transpired. Roughly one half of French defence spending covers personnel costs (Morcos).

45. The 2019-2025 Military Program Act increased spending by more than 40%. The bill purposefully aligns French defence spending with NATO commitments and bolsters equipment procurement efforts (France24; Tran). It is worth noting, however, that the government designed this spending framework prior to the pandemic. The *Institut national de la statistique et des études économiques* (Insee) now projects an 8.3% decline in France's GDP in 2020 and an additional 4% decline in the first quarter of 2021 (Insee).

46. The defence establishment has been braced for unanticipated spending cuts linked to mounting claims on the national budget, although there has been no indication that the government intends to reduce defence spending. In October 2020, President Macron announced that the planned defence budget increase of 4.5% remained a government priority. This brought total spending up to EUR 49.7 billion in 2020, and, in line with the Program Act's stipulations, increased a further EUR 3 billion to the current estimated sum of EUR 53.1 billion total for 2021 (Huberdeau; Mackenziel NATO, 11/6/21). Of this total, EUR 22.3 billion will fund equipment and building upgrades. EUR 12.3 billion would underwrite wages, and EUR 4.6 billion would cover operating costs. An additional EUR 2 billion will underwrite veteran's affairs and EUR 8.5 billion has been allocated for pensions (US Embassy to France). Equipment expenditures are projected to hover around 26.5% of GDP (NATO, 16/3/2021). France thus remains on track to meet its NATO spending obligations (Emmott).

C. THE UNITED KINGDOM

47. The 2008-2009 global financial crisis struck the United Kingdom hard and it responded by enacting significant reductions in defence spending. It reduced the army from 104,000 to 85,000 soldiers and cut both the number of surface ships in its navy and the Royal Air Force (R.A.F.) fleet. That number is expected to decline further to 72,500 soldiers by 2025, allowing the UK armed forces to free up resources currently dedicated to personnel and to prioritise procurement and R&D over the next five years (BBC, 22/3/21). The government, however, also undertook procurement cuts while managing a significant fall of the Pound against the Dollar over the past two years. This has complicated plans for F-35 purchases.

48. The pandemic has taken a greater toll on the UK economy than others in the Alliance. The OECD has projected that the UK economy contracted by 11.2% in 2020, while GDP fell another 1.5% the first quarter of 2021 (OECD, UK 12 /12er 2020) (Bank of England) (UK Office for National Statistics). The British economy has also absorbed a range of Brexit-linked costs, some of which are substantial (The Economist, 13/03/2021).

49. The pandemic recession thus has placed enormous pressure on British defence ambitions, although, like France, it has vowed to meet NATO defence spending commitments. In October, Defence Secretary Ben Wallace told Allies that the UK remained committed to keeping spending above the 2% GDP level and promised that the government would increase defence spending in real terms over the coming years to underwrite force modernisation (Gov.uk, 2020). Its spending exceeds the NATO target, and, indeed, rose from 2.10% of GDP in 2019 to 2.32% in 2020 (NATO, June, 2021). Very serious fiscal pressures arising out of the COVID-19 crisis, nevertheless, pose daunting economic and political challenges. Roughly 40% of UK defence spending is allocated for personnel (Morcos).

50. Despite these pressures, then, British defence spending is expected to rise significantly from its current budget of GBP 40 billion. In August 2020, Prime Minister Boris Johnson announced a GBP 16.5 billion annual increase in the defence budget between 2021 and 2025, a real term spending rise of 10 to 15% or GBP 4 billion over the next four years (Chalmers and O'Neill). This commitment goes well beyond the 2019 UK Conservative Party Manifesto pledge to increase defence spending by 0.5% above inflation annually and stands as the largest expansion in the UK defence budget since the end of the Cold War (Brzozowski and Fox). Total expenditures are expected to reach GBP 190 billion or 2.2% of GDP by 2025, making the UK the second largest NATO spender in absolute terms (Johnson).

51. In March 2021, the UK Government confirmed its August 2020 announcement of defence spending increases when it released the *Integrated Review of Security, Defence, Development and Foreign Policy*, a comprehensive strategy document outlining the UK government's vision for a "Global Britain in a Competitive Age" between 2021 and 2025 (Cabinet Office, 2021). Military Research and Development will be a major winner as part of both the 2022 budget and within the Review program. An extra GBP 1.5 billion (GBP 5.8 billion in total) in funding for R&D is expected for 2022. New funds will also be dedicated to shipbuilding, new agencies for Artificial Intelligence (AI) and Cyber Defence, and the establishment of a national Space Command (Chuter, 19/11, 2020). More concerning, however, are predicted shortfalls in heavy equipment expenditures. In January 2021, the NAO, the government's financial watchdog, bluntly stated that, "for the fourth successive year, the [MoD's] Equipment Plan remains unaffordable," overrunning funding by up to GBP 17 billion (National Audit Office).

D. GERMANY

52. Although German defence spending increased by 35% between 2005 and 2010, the government enacted cuts of EUR 8 billion between 2011 and 2014, or 22% from 2010 levels. This led to substantial reductions in forces, acquisition, and capabilities. Russia's illegal annexation of Crimea and the war in Eastern Ukraine precipitated a reassessment of these cuts, and Germany has since engaged in substantial increases in defence spending, although it is not yet close to achieving the 2% target. In 2019 German defence spending stood at 1.36% of GDP and rose to 1.56% in 2020 (NATO Press Release, 16/3/2021). Although Germany's economy has fared better during the COVID-19 crisis then much of Europe, it too has experienced setbacks, including huge unanticipated fiscal outlays. These setbacks could increase the temptation to slow or even reverse anticipated defence spending increases. Draft plans for 2021 foresaw a reduction in defence investment from EUR 17.9 billion to EUR 15.9 billion in 2024. 50% of the defence budget is allocated for personnel costs (Morcos).

53. As Europe's largest economy, Germany is front and centre in Alliance defence spending debates. German defence spending has been consistently below the agreed-upon NATO targets of 2 and 20%, and current defence projections suggest that Germany will be unable to reach these thresholds with the next decade – let alone the 2024 deadline agreed to at the 2014 Wales Summit. Some have suggested that the challenge for Germany has been made greater because its economy has grown dynamically, and this has made the 2% a moving target. But that is not the entire story. In July 2020, German Defence Minister Annegret Kramp-Karrenbauer argued that due to the pandemic, the 2% defence spending commitment may no longer be an accurate means to measure NATO member contributions to collective security. She has said Germany continues to shoot for the 2% goal, but she also noted that Germany currently provides around 10% of the alliance's military capabilities (DW, 17/7/20).

54. That said, Russia's illegal annexation of Crimea in 2014 constituted a turning point for Berlin. Since 2014, German defence expenditures have increased steadily from EUR 34.7. billion in 2014 to EUR 51.6 billion in 2020, and again to USD 53.17 billion estimated for 2021 (NATO, 11/6/2021). In 2019, no country among the world's top 15 defence spenders increased the relative size of its annual defence spending by as much as Germany. Over that period, Berlin increased national defence outlays by almost 10% (Morcos). In 2019, Kramp-Karrenbauer affirmed her country's intention to reach the 2% threshold by 2031 – the first time that Germany linked the commitment to a precise date, albeit one that falls well after the agreed 2024 deadline (EURACTIV).

55. The pandemic has rendered the picture even more complex. The IMF projects that the German economy contracted by 5.5% in 2020 (IMF). Germany's 2021 defence budget is EUR 53.1 billion – a modest but nonetheless notable 3.2% increase compared to 2020. For some the 2021 budget conveys a set of "mixed signals". The government reduced equipment and research investments from EUR 17.2 billion in 2020 to EUR 15.9 billion in 2024. Analysts suggest that this represents a setback to modernisation efforts and could impinge on Germany reaching the

20% investment target (Morcos). But considering the toll this pandemic has exacted, Germany 2021 defence spend at least holds the line insofar as spending will rise to 1.57% of GDP from 1.36 % with equipment expenditures likely to increase slightly from 16.3% in 2020 to 16.8% in 2021 (Carter).

E. LITHUANIA

56. In the introduction to this report, it was noted that member states farther from NATO frontlines might find it politically more challenging to justify increased defence outlays to publics that are less viscerally attuned to remote but nonetheless real security risks. As a frontline state, Lithuania clearly does not have this luxury. Russian aggression in Ukraine resonated deeply in Lithuanian society and spurred significant changes to Lithuania's defence policies. In 2013, Lithuanian defence spending accounted for just under 0.8% of GDP, the second lowest amongst all NATO member states (Sytas). Spending has since increased roughly fourfold, from EUR 322 million in 2013 to EUR 904 million in 2020, putting Lithuania in the top half of all NATO spenders in relative terms. In 2019, it allocated 2.00% of GDP to defence, rising to 2.13% in 2020 (NATO Press Release, 16/3/2021). Moreover, Lithuania's political parties agreed in November 2018 to further expand defence outlays until the budget reached 2.5% of GDP – a margin that would put Lithuania near the top of all NATO spenders in relative terms (Sytas).

57. As with every other NATO member, of course, the pandemic has damaged the Lithuanian economy, although the OECD suggests that the contraction was milder than expected due to effective intervention by the Lithuanian state. GDP contracted by only 2 %, and a strong rebound of 2.7% is expected for 2021 and 3.1% for 2022 (OECD, Lithuania, 12/2020). Lithuania remains committed to meeting NATO targets. Modernisation efforts are ongoing, and defence spending will remain consistent with 2020 numbers – as planned – at EUR 1 billion (Meilutis). In 2021, NATO projects that Lithuania will spend 2.03% of GDP on defence and the share of equipment expenditure in the defence spend is expected to remain consistent at 26.5% (LRT English).

F. CANADA

58. In 2020, Canadian defence spending relative to total GDP rose to its second highest point in nearly a decade –1.42% compared to the 1.29% figure for 2019. These figures exceeded the Liberal Party's 2017 plan to allocate 1.4% of GDP to defence by 2024-2025 (NATO Press Release, 16/3/2021) (Berthiaume, Lee, 21/10/2020). Still, this is largely because GDP fell relative to defence spending. In its 2020 economic outlook report, the OECD projects that the Canadian economy contracted 5.4% in 2020, while defence spending remained constant at CAD 21.9 billion (OECD, Canada 12/ 2020). Defence Minister Harjit Sajjan has assured Canadian officers and other stakeholders that a spending target of CAD 553 billion for the next 20 years remains "secure." (Berthiaume).

VI. NATO EFFORTS TO FOSTER NEW EFFICIENCIES

59. NATO itself recognises the need to foster greater efficiency among Allied nations to build capabilities and cope with burden sharing challenges. At the February 2021 Defence Ministerial, the NATO Secretary General proposed launching a NATO defence innovation initiative to promote interoperability, reinforce NATO standards and boost transatlantic cooperation on defence innovation.

60. NATO later announced at the 2021 Brussels Summit that this defence innovation initiative would be referred to as the Defence Innovation Accelerator for the North Atlantic (DIANA). DIANA will be tasked with multiple competencies, placing a particular emphasis on the financial coordination aspects of innovation. DIANA will act, amongst other responsibilities, as a tech-financing hub, wherein public investment funds and private venture capital funds are efficiently

matched with start-ups and SMEs working on advanced defence technologies. This will involve the creation of a NATO Investment Fund, underwritten by member states, as well as the establishment of a trusted capital database, which will allow start-ups to source investments from private actors vetted directly by NATO advisors. Overall, the initiative is a welcome step forward in achieving greater interoperability and reducing the transaction costs associated with the innovation process. DIANA should be especially beneficial for small and medium NATO economies that are eager to contribute to NATO innovation efforts and are looking to scale up their technological innovations rapidly and efficiently (NATO, 14/6/2021).

61. The NATO Secretary General has proposed increasing NATO common funding to ensure the Alliance has the resources to fully implement the NATO 2030 decisions and fulfil its three core tasks in a more complex and competitive world. This would include raising common funding to support, inter alia, NATO’s deterrence and defence adaptation, joint training and exercises, stronger cyber defences, cutting-edge capabilities, and more capacity-building for NATO partners. At their 14 June 2021 Summit, Allied leaders acknowledged the need for increased common funding and tasked the Council develop a concrete way forward by their next Summit in 2022. As stated in their final communiqué: “Delivering on the NATO 2030 agenda, the three core tasks and the next Strategic Concept requires adequate resourcing through national defence expenditure and common funding. Based on requirements, we agree to increase such resourcing, including as necessary NATO common funding starting in 2023, taking into account sustainability, affordability and accountability. When we meet in 2022, we will agree, alongside the Strategic Concept, the specific requirements for additional funding up to 2030 and the resource implications across the NATO Military Budget, the NATO Security Investment Programme and the Civil Budget, as well as identify potential efficiency measures”. It is worth noting here that NATO common-funded budgets and programmes are underwritten through direct contributions and currently constitutes less than 0.25% of total Allied defence spending, an equivalent of around EUR 2.5 billion to run the organisation, its commands, and military infrastructure (NATO, 19/2/2021). It is worth noting however, that while the goals linked to common funding are strongly welcomed in the Alliance and championed by countries like Norway, the details about this are not yet fully agreed. There are disagreements on how extensive this effort should be. Some have expressed concerns, for example, that this initiative could lower the capacity of national governments to make decisions about their spending priorities and that it would also reduce funding available for European defence efforts (Brzozowski, 2/6/2021).

62. Multinational capability development and delivery efforts can also play an important role in allowing Allies to increase their collective purchasing power, reduce costs, increase interoperability, and address their assigned capability targets. There are currently 14 multinational High Visibility Projects (HVPs) that enable Allies, and in some instances NATO partners, to develop, procure and train together, all while saving money, increasing interoperability, and moving towards reaching their assigned targets.

63. In 2020, 21 Allies virtually launched four new HVPs covering a wide range of capabilities. First, the NATO Flight Training Europe initiative aims to create a network of pilot training campuses across Europe, catering to the entire spectrum of air crews including those dedicated to operating fighter jets, fixed wing aircraft, helicopter, as well as remotely piloted air systems. Second, the Modular Ground Based Air Defence project seeks to develop a more versatile, flexible solution against the full range of air and missile threats by building a systematic modular capability. Third, the Rapidly Deployable Mobile Counter Rockets, Artillery and Mortar effort will explore the development and procurement of innovative solutions such as directed energy-based capabilities to increase the resilience of Allied forces. Finally, the Next Generation Rotorcraft Capability will focus on designing and potentially developing a brand new medium multi-role vertical lift capability, by leveraging a broad range of advances in technology, production methods, as well as operational concepts.

64. In 2020 significant physical deliveries for some of the more mature multinational High Visibility Projects were registered including: the first three aircraft were delivered to the

multinational fleet in Eindhoven under the Multi Role Tanker Transport Capability framework. The fleet will take delivery of the remaining five aircraft over the next months, with the final delivery scheduled for 2023; under the Air-to-Ground Precision Guided Munition effort (now called Air Battle Decisive Munitions, participating nations received munitions from the second multinational acquisition cycle, achieving cost savings of 15-20% and deliveries up to one year ahead of schedule; an initial batch of 19 students graduated from the first training module made available under the umbrella of the Multinational Special Aviation Programme, specifically dedicated to training Special Forces aviators. The training facility just officially opened its doors last December; finally, the Composite Special Operations Component Command effort reached its full operational capability in December 2020. The three participating Allies – Belgium, Denmark, and the Netherlands – will then make the command available for the upcoming NATO Response Force rotation in 2021.

65. Existing multinational High Visibility Projects are attracting additional participants from both Allies and partners. The Land Battle Decisive Munitions initiative, the largest multinational High Visibility Project, welcomed two new participants - the Czech Republic and Sweden, bringing the total of participating nations to 23. Canada, Romania, and Australia joined the Maritime Unmanned Systems effort. Australia's joining marks the first occasion of a "Partner around the Globe" joining one of NATO's multinational High Visibility Projects, reflecting the growing global appeal of these NATO initiatives.

66. NATO is also taking steps to enhance intelligence-sharing information among Allies through the Alliance's Joint Intelligence, Surveillance and Reconnaissance. In 2019, NATO awarded contracts worth EUR 8.5 million to procure data servers that support the sharing of intelligence products, such as images, reports or video clips from across the Alliance. The NATO Alliance Ground Surveillance will provide a state-of-the-art Joint Intelligence, Surveillance and Reconnaissance capability for all NATO Allies and is a vital new capability for NATO operations and missions. In 2019, the Programme completed developmental flight tests and achieved successful airworthiness certification. Five aircraft and ground stations were delivered to the NATO Alliance Ground Surveillance Force for operations in 2020. The system is collectively owned and operated by all NATO Allies and all Allies will have access to data acquired through it.

VII. CONCLUSION: BOLSTERING NATIONAL AND COLLECTIVE EFFORTS

67. It might be possible to countenance across the board defence spending cuts were the trans-Atlantic community to find itself on the cusp of an era of Kantian peace. Unfortunately, the prospects for such a munificent moment seem to have grown ever more remote. If anything, the strategic landscape has become fraught with rising risks and new dangers which the pandemic has only exacerbated. China is the only major power to have experienced economic growth in 2020, and its military is undergoing a massive rearmament programme that will give teeth to leadership's highly ambitious global ambitions. Its naval armaments programme immediately threatens to alter the strategic balance in the Pacific region, and this will have consequential implications for the global balance of power.

68. The pandemic has struck Russia far harder, and its economy is hardly as robust as China's. But like China, it is undertaking an ambitious rearmament programme, including the development of new nuclear missiles, unmanned aircraft and weapons, and a range of cyber weapons. Russian aggression in Ukraine and Georgia, its military build-up in the Black Sea, the Mediterranean and the Arctic, its use of chemical weapons to murder perceived political opponents living in NATO member countries, its ongoing military modernisation and provocative deployment of forces, and its conduct of information war aimed at Western societies all suggest that the threat environment on NATO's Eastern flank has hardly diminished. Instability in parts of North Africa, the Levant and the Gulf, and China's ever more aggressive posture in East Asia suggest that security challenges to the South and increasingly in the Far East are daunting.

69. If anything, the COVID-19 pandemic has only exacerbated these security challenges as it constitutes a powerful potential source of instability. NATO member governments need to keep this in mind when allocating scarce resources for defence spending. Such spending remains a high yield investment, particularly as security writ large will invariably be a precondition for economic recovery. The Wales Defence Investment pledge, as reaffirmed at the 2021 NATO Summit in Brussels, should thus remain a signpost for Allied governments insofar as it symbolises the kinds of investments that Allies must continue to make for national and collective defence. The final communique at the recent Brussels Summit made this point explicit:" Fair burden sharing underpins the Alliance's cohesion, solidarity, credibility, and ability to fulfil our fundamental Article 3 and Article 5 commitments. We are, individually and collectively, committed to further improving the balance of sharing the costs and responsibilities of Alliance membership" (NATO, 14/6/2021).

70. Allied governments should avail themselves of NATO's reflection process to galvanise the political will to meet these core security commitments and to deepen cooperation in ways that enhance the efficient use of scarce defence resources. For their part, NATO members in the EU should work to ensure that cooperative defence projects among EU states engage as many states as possible to drive down costs. The goal should be to modernise national militaries, make them more interoperable and to enhance the collective capabilities not only of the EU but also of NATO. Plans for the Future Combat Air System and the Main Ground Combat System battle tank, the development of a Medium Altitude Long Endurance Remotely Piloted Aircraft System (MALE RPAS), the Airbus A400M Atlas, and the European multipurpose frigate are among the programmes that align with these goals (Morcos).

71. The 2% metric remains a useful tool to focus government and public thinking about the need to increase the commitment of Allied countries to national and collective defence. But it is not without its drawbacks, particularly at a moment when GDP figures are fluctuating wildly due to economic shocks. Additional metrics can help paint a more complete picture at a moment of unprecedented financial instability. These might include outputs like capabilities development and/or spending trends; furthermore, efforts to achieve greater efficiencies by bolstering tooth to tail ratios, cutting fat from defence budgets, reassessing defence ministerial bureaucracy, as well as through collaborative projects, joint force planning, defence industrial integration, etc. must all be part of the mix. Capabilities development and long-term investment should lie at the heart of these efforts, which become even more essential at a time of escalating geopolitical uncertainty (Dowdy), (Mathews), (Cordesman), (Goldgeier and Martin). To that end, Allied governments should celebrate the establishment of DIANA as both a concrete step forward in improving collective defence innovation, as well as a broader symbolic step demonstrating that NATO takes the challenge of achieving efficient and integrated innovation across Allied member states seriously.

72. Maintaining procurement and defence investment budget will be crucial to helping core defence industry players to weather the current downturn. Likewise, preserving a functioning defence industrial base will be essential to ensuring future capabilities development. This will likely require a degree of consolidation in these highly stressed industries. Consolidation will, in turn, reduce pressures on hard pressed government budgets by driving down costs while deepening interoperability and overall defence integration across the Alliance. This should happen at both the European level, where consolidation is clearly needed, but also at the trans-Atlantic level to unearth new cost savings and foster broader Alliance solidarity. More open defence markets could undergird these efforts.

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