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The Case for National Resilience Training for Teenagers

Elisabeth Braw







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Contents

Executive Summary	V
Introduction	1
I. Background	5
Turning the Population into an Asset	7
II. National Resilience Training for Teenagers	11
Organisation	14
Putting Training into Practice	16
Opportunities as Part of Global Britain	17
Popular Opinion	18
Conclusions	19
About the Author	21



Executive Summary

N LIBERAL DEMOCRACIES including the UK, there is growing recognition that the armed forces alone cannot respond to every national security threat. They are already stretched. Perhaps more importantly, the forms of aggression that are increasing are of a non-kinetic kind and directed against civil society. These forms of aggression include disinformation campaigns and cyber attacks, with the latter often directed against companies. In addition, severe weather events are increasing, as is the risk of disruption caused by contagious diseases such as COVID-19, a new strain of coronavirus. Like attacks by state actors, such events cause disruption to daily life. With this in mind, the wider population could play a crucial role in helping limit the effects of non-kinetic aggression against the country. Such involvement would also aid deterrence by signalling to adversaries that the benefits of an attack will not be worth the cost.

In a previous RUSI Occasional Paper, this author presented a model for how the UK can adopt and adapt Scandinavian countries' competitive national service model, thus building a core of highly trained people affiliated with all parts of government.¹ Such a model would allow the government to surge during a crisis. This paper forms the second part of the author's proposal for citizen involvement in national security: resilience training for teenagers aged 16 to 18. The (non-weapons) training would include crisis preparedness, emergency response and information literacy. It would be taught by experts seconded to the Home Office and completed during school breaks, with participation incentivised through UCAS points or, for those bound for the labour market, tax credit.

Graduates of this training would also attend refresher training and would, crucially, enter a command-and-control system connected to the blue-light services, so that they could be called up for duty during a crisis. This would allow the government to direct skilled crisis personnel to the most challenging tasks.

This skilled corps could also be an asset to the UK's post-Brexit 'Global Britain' strategy, with the government being able to call up willing graduates for deployment to crisis-stricken countries requesting assistance from the UK.

^{1.} Elisabeth Braw, 'Competitive National Service: How the Scandinavian Model Can Be Adapted by the UK', *RUSI Occasional Papers* (October 2019).



Introduction

N JUNE 2019, a massive cyber attack hit a dozen Western mobile network providers and other telecommunications companies. The attackers, thought to have been Chinese government proxies, stole huge amounts of data and inserted an externally controlled virtual private network. In another case, after the British government attributed the March 2018 assassination attempt on Sergei and Yulia Skripal to Russia, the Russian government launched a disinformation campaign aimed at muddying the British public's understanding of what had occurred.²

Attacks on civil society as part of geopolitical competition are, of course, not new. For as long as humans have competed for scarce resources, communities, cities, principalities and countries have found themselves under threat from external forces. During the First World War, in the 'hunger blockade', the Royal Navy successfully cut off supplies of raw materials and foodstuffs to Germany. During the Second World War, after Germany's bombing of London, the UK and the US switched from targeted bombings of Germany to strategic bombing aimed at destroying the morale of the German population. All warfare is, in fact, hybrid, involving as it does aggression both against the adversary's armed forces and — to a lesser extent — its civilian population. Vietnamese women and children, among many others, can attest to that reality.

For the past three decades or so, residents of liberal democracies have become accustomed to international conflicts taking place in areas and countries far from them, with aggression not reaching the homeland. Today, however, liberal democracies find themselves with foes pressing from every side. Because the West's collective conventional defence – national shortcomings notwithstanding – is so strong, adversaries opt to attack in other ways. Indeed, in a departure from traditional warfare, adversaries primarily target liberal democracies in non-kinetic ways, making minimal use of military force. Russia's alleged interference with the US 2016 presidential election led to lengthy investigations and, perhaps more importantly, a widespread belief that Russia had indeed interfered in the election. A 2018 poll by YouGov showed that 50% of Americans believed that Russia had interfered with the election, versus 28% who believed it had not. Regardless of the extent and details of the interference, the perception of Russian success clearly mattered to the public.³ Last year, Chinese government-linked hackers were found to

^{1.} Warwick Ashford, 'APT Attack on Telcos Highlights Need for Comprehensive Defence', Computer Weekly, 25 June 2019, https://www.computerweekly.com/news/252465671/APT-attack-on-telcos-highlights-need-for-comprehensive-defence, accessed 13 February 2020.

^{2.} Gordon Ramsay and Sam Robertshaw, 'Weaponising News: RT, Sputnik and Targeted Disinformation', Centre for the Study of Media, Communication and Power, Kings College London, 2019.

^{3.} Kathy Francovic, 'Americans Don't Like Election Interference, Even If the US Does It Too', YouGov, 25 October 2018.

have attacked at least 20 US utilities.⁴ An Iranian hacker group, thought to be a government proxy and referred to by analysts as 'Refined Kitten', was reported to be interfering in the control systems of power plants, factories and refineries.⁵ These attacks are so effective because civil society – unaccustomed as it is to state aggression – is vulnerable, and because attacks on civil society without accompanying kinetic aggression create confusion as to whether they even constitute aggression that warrants a government response.

While the West's competitors act entirely logically in identifying and exploiting Western countries' vulnerabilities, liberal democracies seem surprised that other countries would use methods Western citizens consider uncouth. To be sure, liberal democracies such as the US engage in offensive cyber activities against their adversaries too, and some countries accuse both the US and European countries of meddling with their domestic politics. While these countries will consider ways to strengthen their defence, this paper focuses on how liberal democracies can do so.

The aggressor, then, acts with ambiguity and fluidity while liberal democracies are constantly on the backfoot. It is perhaps not surprising that despite the increasing prevalence of grey-zone aggression, liberal democracies (including the UK) still lack defences against this. Given that this is non-kinetic aggression – which not only aims to disrupt daily life but, by extension, also aims to discredit and weaken institutions – defence against them cannot, and should not, primarily rest with the armed forces.

In the UK, the armed forces are already used for assistance in civilian contingencies such as flooding.⁶ During Storm Dennis in February 2020, for example, the British Army dispatched soldiers to particularly badly affected areas to build flood barriers and repair defences.⁷ Such duties are, however, not the best use of the armed forces' skills and resources, and most armed forces are already stretched. In a severe contingency situation, they would be needed for specialist duties only the armed forces can carry out. In the UK, the reliance on the British Army during contingency situations has been exacerbated by repeated budget cuts. Between 2010 and 2019, central government funding for local authorities decreased by nearly 50%.⁸

- 4. Centre for Strategic and International Studies (CSIS), 'Significant Cyber Incidents', https://www.csis.org/programs/technology-policy-program/significant-cyber-incidents, accessed 13 February 2020.
- 5. Andy Greenberg, 'A Notorious Iranian Hacking Crew is Targeting Industrial Control Systems', WIRED, 20 November 2019.
- 6. See, for example, British Army, '200 UK Troops Deploy to Support Flood Relief', 13 November 2019, https://www.army.mod.uk/news-and-events/news/2019/11/200-uk-troops-deploy-to-support-flood-relief/, accessed 13 February 2020.
- 7. BBC News, 'Storm Dennis: Army Called in to Help Shore Up Defences', 15 February 2020.
- 8. Abdool Kara, 'Local Government in 2019: A Pivotal Year', National Audit Office, blog, 13 February 2019, https://www.nao.org.uk/naoblog/local-government-in-2019/, accessed 13 February 2020.

Trained civilian volunteers could carry out easier contingency duties such as building sandbag barriers, along with grey-zone defence duties such as identifying disinformation or minimising disruption to their daily lives and the daily lives of their communities after a crippling cyber attack. Indeed, as climate change causes more severe and frequent severe weather events like floods and storms, populations will be able to rely less on the armed forces to assist in emergencies. Such skills among the civilian population not employed by blue-light services – police, ambulance, fire departments – would ease the burden not just on the armed forces but also on wider state infrastructure. Currently, these skills are not present in an organised fashion. Although some individuals such as Boy and Girl Scouts and Duke of Edinburgh Award graduates may possess them, they are not captured for the benefit of national security. That is a loss.

This paper proposes a model through which the wider population can be trained in basic national security skills, specifically those required for citizens and their communities to (partially) mitigate the effects of non-kinetic aggression, in addition to nature-related contingencies such as severe weather events and contagious diseases.

To be sure, involving the wider population in national security is counter-cultural in countries like the UK, where large parts of the population are uneasy about the government reaching into their personal lives. With large parts of the population also ill-equipped to take action for themselves in case of serious disruption or interference, that leaves a significant gap. That gap is, of course, what liberal democracies' rivals target in their use of blended aggression. There are examples of productive state—population engagement in other countries: the Danish Home Guard, for example, consists of volunteers with duties such as guarding of crime scenes or sensitive installations. The effectiveness of this cooperation is reflected in the fact that 75% of Danes trust that the Home Guard can fulfil its duties, according to a recent survey.

The training proposed in this paper, combined with a designated command-and-control (C2) system linked to the armed forces and blue-light services, would ease the burden on uniformed personnel, allowing the armed forces to focus on tasks for which they alone have the necessary expertise. The proposed model involves three-week-long, non-weapons national security training for teenagers, to be completed during school break during year 11, 12 or 13 (that is, when they are aged 16–18). Participants would be able to opt either for one three-week segment during the summer or two partial segments during other school breaks. The training would encompass: training in emergency preparedness and crisis response; resilience training for sustained disruption of power and/or the internet; and information literacy. Graduates would be entered into a C2 system, which would also comprise refresher training, without which the initial training would soon lose its value. The refresher training – which would only need to consist of a few hours every six months – could take place during the school day and would, again, be taught by teachers specially trained to administer the teaching of the foundational summer

^{9.} Danmarks Statistik, 'Holdninger til Hjemmeværnet' ['Attitudes Towards the Home Guard'], 2017, http://www.hjv.dk/oe/HJK/nyheder/Documents/Holdninger%20til%20Hjemmev%C3%A6rnet_2017%20rapport_final.pdf, accessed 13 February 2020.

courses. While participation would not be mandatory, it could be incentivised by, for example, added university entrance (UCAS) points awarded to pupils applying to university, and tax credit awarded to pupils entering the workforce. A resilience training certificate (which would be kept updated through refresher training) would also be a useful asset in the labour market.

There are currently two national programmes that provide a brief period of training for teenagers: Britain's National Citizen Service and France's national service. Both schemes are relatively new; unlike the National Citizen Service, France's national service is mandatory and involves training by officers from the armed forces. Both schemes, however, loosely aim to create national cohesion and do not form a response to new national security challenges. Latvia, meanwhile, has introduced a national defence curriculum that is being rolled out in all secondary schools. The curriculum is tailored to Latvia's security needs as a country bordering Russia, and includes different areas of knowledge:

- Understanding the role of citizens in national defence.
- Basic military and defence skills.
- Physical training.
- Civic engagement and patriotism.
- Leadership and teamwork.
- Situational awareness.¹⁰

The national resilience training proposed in this paper would address new, non-kinetic national security challenges and thus fit squarely within Britain's Fusion Doctrine. The Fusion Doctrine, launched in 2018, features a whole-of-government approach to national security challenges. The training would be similar to Italy's *servizio civile universale* (universal civil service), where young people can volunteer for training and service both in emergency preparedness and response but also, for example, in protecting Italy's cultural heritage. The security challenges are security challenges.

^{10.} Elisabeth Braw, 'From Schools to Total Defence Exercises: Best Practices in Greyzone Deterrence', *RUSI Newsbrief* (Vol. 39, No. 10, November/December 2019).

^{11.} HM Government, 'National Security Capability Review', 2018, https://www.gov.uk/government/publications/national-security-capability-review-nscr, accessed 20 February 2020.

^{12.} Presidenza del Consiglio del Ministri [Presidency of the Council of Ministers], 'Cosa e' il Servizio Civile Universale' ['What is the Universal Civil Service'], https://www.serviziocivile.gov.it/menusx/servizio-civile-nazionale/cosa-e-il-sc.aspx, accessed 17 February 2020.

I. Background

HREATS TO THE security of Western nations are changing, as demonstrated by the events listed in a weekly threat report from the UK National Cyber Security Centre in September 2019:¹³

- A cyber attack rendered Wikipedia inaccessible to users in Europe and the Middle East.
- A researcher discovered vulnerabilities in Internet of Things (IoT) devices that could allow attackers to remotely hijack the systems to which the devices are connected.
- The British government's contingency planning for a no-deal Brexit (Operation Yellowhammer), was partially released following a decision by Parliament. It showed that the government considers possible: shortages of some types of fresh food; soaring energy prices; disruption of medical supply chains; and extensive public disorder and protests.¹⁴

All these events did, or would, significantly affect ordinary citizens in the UK. The situation is similar in other liberal democracies. During the 2016 US election campaign, Britain's Brexit referendum and the 2019 European Parliament elections, the Russian government influenced the public debate by means of social media campaigns, yet most ordinary citizens were not equipped to deal with or even identify disinformation directed at them. WannaCry, a global cyber attack launched in 2017 and thought to be of North Korean origin, targeted institutions such as Britain's National Health Service, which as a result was forced to cancel both routine appointments and surgical procedures. NotPetya, the virus unleashed by Russian intelligence against Ukrainian institutions and companies, went on to significantly harm Western companies including Maersk, Merck and Mondelez in 2017. General Sir Mark Carleton-Smith, Britain's Chief of the General Staff, was reported by *The Sun* to have told British media during a visit to observe Russian aggression in Ukraine in June 2019: 'They're not playing by any set of rules. There are now no rules, and people are having to gauge their own political and military tolerances'.

^{13.} National Cyber Security Centre, 'Weekly Threat Report', 13 September 2019, https://www.ncsc.gov.uk/report/weekly-threat-report-13th-september-2019>, accessed 13 February 2020.

^{14.} Laurie Clarke, 'Operation Yellowhammer Fails to Address Some Serious No-Deal Brexit Issues', WIRED, 14 September 2019.

^{15.} See, for example, the European External Action Service's EUvsDisinfo initiative: EUvsDisinfo, 'EU Elections Update: Reaping What Was Sown', 23 May 2019, https://euvsdisinfo.eu/eu-elections-update-reaping-what-was-sown/, accessed 13 February 2020.

^{16.} William Smart, 'Lessons Learned: Review of the WannaCry Ransomware Cyber Attack', NHS and the Department of Health and Social Care, February 2018, https://www.england.nhs.uk/wp-content/uploads/2018/02/lessons-learned-review-wannacry-ransomware-cyber-attack-cio-review.pdf, accessed 13 February 2020.

He labelled the aggression 'virulent and insidious'.¹⁷ Although acting less overtly than Russia, China similarly tries to weaken Western societies by means of sub-threshold activities such as cyber attacks.¹⁸

Even a popular website such as Wikipedia being rendered inaccessible causes a certain degree of disruption and confusion. The West's vulnerabilities increase in tandem with progress that makes daily life even more convenient to create what this author calls a 'convenience trap'. Progress towards the IoT and smart cities accelerates that trend.¹⁹ Electricity, traffic management, banks and food retail would be significantly disrupted if one part of their systems became temporarily unusable. In the UK, a 15-minute power cut on 9 August 2019 caused by a lightning strike left 1 million homes as well as two major railway stations without power²⁰ and led to news media reporting, for example, 'apocalyptic scenes at King's Cross'.²¹ In addition, all of today's market sectors rely on extremely complex supply chains, which often involve not just subcontractors but sub-subcontractors and sub-sub-subcontractors across a number of countries, and are correspondingly vulnerable to disruption.²²

Climate change will, in turn, lead to an increasing number of extreme weather events such as floods and storms.²³ In its 2017 National Risk Register, the UK government lists cyber attacks as an increasing threat, with climate change listed as a long-term risk.²⁴ In addition, contagious diseases such as COVID-19 present a national security threat. This stems both from the illnesses and deaths they cause and the associated fear and panic among large segments of the public, who are largely unfamiliar with how to act and react in case of such outbreaks. At the time of this paper's publication, the novel strain of coronavirus first detected in China has spread to at least 30 countries and has caused almost 3,000 deaths, including almost 100 outside China.

- 17. David Willetts, 'Head of British Army on the Frontline of "Battle Laboratory" Where Russia "Prepares for War with the West", *The Sun*, 20 June 2019.
- 18. See, for example, Birgitta Forsberg, 'Staten sålde spjutspetsbolag till Kina under radarn' ['The Government Sold Tip-of-the-Spear Firms to China Under the Radar'], *Svenska Dagbladet* [*Swedish Daily*], 18 December 2018, https://www.svd.se/staten-salde-spjutspetsbolag-till-kinatrots-militara-kopplingar, accessed 13 Feburary 2020.
- 19. See, for example, Shaun Mirani et al., 'SOHOpelessly Broken 2.0: Security Vulnerabilities in Network Accessible Services', Independent Security Evaluators, 16 September 2019, https://www.ise.io/casestudies/sohopelessly-broken-2-0/, accessed 13 February 2020.
- 20. Reuters, 'Final Report on UK Power Cuts to be Published Sept 10 Ofgem', 2 September 2019.
- 21. Jacob Jarvis and Olivia Tobin, 'UK Power Cuts: Generator Meltdown Sparks Travel Chaos as Mass Power Outage Affects London, South East, Midlands and the North West', *Evening Standard*, 9 August 2019.
- 22. See, for example, Christoph Bode et al., *Supply Management Research: Aktuelle Forschungsergebnisse 2019* (Wiesbaden: Springer Gabler, 2019).
- 23. Kai Kornhuber et al., 'Extreme Weather Events in Early Summer 2018 Connected by a Recurrent Hemispheric Wave-7 Pattern', Environmental Research Letters (Vol. 14, No. 5, 2019).
- 24. HM Government, 'National Risk Register of Civil Emergencies', 2017 Edition, September 2017.

Governments should clearly lead the response to such events. Indeed, in its 2018 National Security Capability Review, the UK government states that 'National Security Objective 1 is to protect our people – at home, in our Overseas Territories and abroad, and to protect our territory, economic security, infrastructure and way of life'. In a severe crisis, however, no Western government is in a position to attend to all residents individually. Thus, national security threats primarily affecting civil society have the potential to severely weaken the country.

Nor can Western governments fully prevent hostile state aggression against their population: as evidenced by non-kinetic aggression in recent years, traditional military deterrence by punishment is ineffective against such sub-threshold aggression. In May 2019, for example, Deutsche Telekom's honeypot system was targeted on average 30 million times per day; by November the figure had increased to an average of 42 million times per day.²⁶ In 2019, Chinese government-linked hackers attacked at least 20 US utilities.²⁷

This reality prompted the Swedish Civil Contingencies Agency to send a brochure, *If Crisis or War Comes*, ²⁸ to all households in the country in May 2018. The brochure provides instructions for what to do in case of a grey-zone attack, an extreme weather event or a kinetic attack. The UK National Risk Register similarly provides advice to the population, but given that it is not sent out to households its advice is of limited reach.

Turning the Population into an Asset

Contingencies harming civil society are not always caused by a hostile state or its proxies. However, because of their potential to disrupt daily life, such contingencies are national security threats. Referring to civil contingencies, the UK Government's 2015 National Defence and Security Strategy states that:

We will expand and deepen the government's partnership with the private and voluntary sectors, and with communities and individuals, as it is on these relationships that the resilience of the UK ultimately rests. We will concentrate in particular on improving the resilience of our CNI [critical national infrastructure], our energy security and our resilience to major flooding.²⁹

Three years later, the UK government introduced the Fusion Doctrine, designed 'to improve our collective approach to national security, building on the creation of the NSC [National Security Council] eight years ago so that we use our security, economic and influence capabilities

- 25. HM Government, 'National Security Capability Review', 2018.
- 26. Information provided to the author by Deutsche Telekom.
- 27. CSIS, 'Significant Cyber Incidents'.
- 28. Swedish Civil Contingencies Agency, *If Crisis or War Comes* (Karlstad: Swedish Civil Contingencies Agency, 2018), https://rib.msb.se/filer/pdf/28706.pdf>, accessed 13 February 2020.
- 29. HM Government, *National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom*, Cm 9161 (London: The Stationery Office, 2015).

to maximum effect to protect, promote and project our national security, economic and influence goals'.³⁰

As Jon Coaffee and Paul O'Hare note, 'resilience is conventionally understood in terms of resisting and recovering from natural hazards. The term "resilience", when used by built environment professionals, refers to how environments may be calibrated to ensure that potentially devastating stresses can be repelled, resisted or redressed, or ideally, embrace a combination of these qualities'. The term has, however, expanded to also include resilience against terrorism and, now, state aggression. The UN defines resilience as '[t]he ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner'. 32

The UK government's resilience objective in the 2015 National Security Strategy and Strategic Defence and Security Review (SDSR) is clearly a laudable step. Defence – and deterrence – should be a combined shield comprising a wide range of societal actors. As Vlasta Zekulić, Christopher Godwin and Jennifer Cole point out, no government agency 'owns resilience'.³³

Indeed, because the armed forces' primary focus is defending the territorial integrity of their country and that of allied nations, not the provision of iron-clad security for all, there is a clear need for comprehensive citizen involvement in national resilience. The public should not be expected to possess the same skills as blue-light services or the armed forces. Instead, liberal democracies need a critical mass of citizens trained in the basics of national security – preparedness, first aid, information literacy, cyber hygiene – and able to use their skills in an organised fashion.

Although public–private partnerships in national security areas such as cyber have developed well,³⁴ the UK government's plans for involving communities and individuals in resilience have not progressed far since the 2015 SDSR. That is hardly surprising, because the UK lacks a comprehensive system for citizen training and C2 that would allow the government to productively involve significant numbers of residents in resilience. The Red Cross, the Boy and Girl Scouts movement and the Duke of Edinburgh Award train individuals in resilience skills including first aid, but graduates of these schemes are not automatically enrolled in a national contingency C2 system. Thus, in an emergency, the government (whether national or local) may be unable to access residents who possess the necessary skills. Apart from the Scandinavian

- 30. HM Government, 'National Security Capability Review'.
- 31. Jon Coaffee and Paul O'Hare, 'Urban Resilience and National Security: The Role for Planning', *Urban Design and Planning* (Vol. 161, No. 4, December 2008), pp. 173–74.
- 32. UN International Strategy for Disaster Risk Reduction (UNISDR), 2009 UNISDR Terminology on Disaster Risk Reduction (Geneva: UNISDR, 2009).
- 33. Vlasta Zekulić, Christopher Godwin and Jennifer Cole, 'Reinvigorating Civil–Military Relationships in Building National Resilience', *RUSI Journal* (Vol. 162, No. 4, 2017), pp. 30–38.
- 34. See, for example, Madeline Carr, 'Public–Private Partnerships in National Cyber-Security Strategies', *International Affairs* (Vol. 92, No. 1, January 2016), pp. 43–62.

Home Guards, Sweden's defence volunteer organisations,³⁵ Germany's *Technisches Hilfswerk* (THW) – a government disaster-relief agency primarily operating as a volunteer organisation³⁶ – and to a lesser extent the Red Cross, there are virtually no national security-related organisations in Europe in which members of the public can volunteer their time.

A small number of countries, recognising that national security contingencies affecting primarily civil society pose an additional burden on the armed forces and the wider government, highlight the need for a whole-of-society approach. In its Security Strategy for Society, the Finnish government prescribes the role of civil society:

In securing society's vital functions, along with the public administration and the business community, non-governmental organisations (NGOs) that base their activities on voluntariness play a significant role in providing everyday security as well as in improving crisis resilience. They produce and maintain resources and expertise that support the authorities and, in addition, implement education and communication that support and promote preparedness.³⁷

In its Cyber and Information Security Strategy from 2018, the Danish government notes that 'Danish society must be able to function in a secure and responsible manner', which it states is not just a government responsibility. On the contrary:

This requires that our digital infrastructure is resilient to cyber threats, and that citizens, businesses and authorities continuously improve their digital skills. This applies to security specialists, who will be in even greater demand over the next few years. It also applies to private individuals whose knowledge of how to navigate safely in a digital world will have to be continuously improved so as to support a high level of information security in Denmark.³⁸

- 35. Swedish Armed Forces, 'Frivilliga försvarsorganisationer' ['Voluntary Defence Organisations'], https://www.forsvarsmakten.se/sv/organisation/frivilliga-forsvarsorganisationer/, accessed 13 February 2020.
- 36. Bundesanstalt Technisches Hilfswerk, 'Das THW', https://www.thw.de/DE/THW/thw_node.html, accessed 13 February 2020. The TWH operates in five areas: technical hazard prevention; C2 and logistics; technical infrastructure assistance; technical environmental assistance; and emergency food provision for the population.
- 37. Finnish Ministry of Defence, 'Security Strategy for Society: Government Resolution 16.12.2010', December 2010.
- 38. Danish Government, 'Danish Cyber and Information Security Strategy 2018–2021', 2018.



II. National Resilience Training for Teenagers

OW, THEN, TO best involve a significant number of citizens in national security? Traditionally, governments have done so by means of conscription. Only a very small number of Western countries — including Finland and Estonia — currently maintain mandatory universal conscription (and in their cases, only for men), while several other countries including Sweden and Norway have selective, gender-neutral national service.³⁹

Because the forms of aggression that are currently growing are primarily of a non-kinetic nature, this paper proposes a new form of citizen participation that focuses on contingency skills as opposed to warfighting expertise. A model that would work, with national modifications, for both the UK and allied nations is national resilience training for teenagers.

In the UK, compulsory government service ceased with the end of national service in 1960. Until then, a large share of men – and, for some time, women – had spent up to two years in mandatory government service.⁴⁰ Often-negative memories of previous generations' national service, combined with a culture of limited government, may make large-scale resilience training for teenagers an uncomfortable thought in the UK, and indeed in other countries unfamiliar with citizen participation in national security.

The scheme proposed in this paper, however, bears little resemblance to traditional forms of national service. Resilience training for teenagers would be fully civilian, delivering fundamental skills such as crisis preparedness, emergency response and information literacy required in cases of grey-zone aggression. Critically, these skills are beneficial not just to the country but to individuals themselves and to their communities. Resilience training would, at its most fundamental level, equip residents of a modern society such as the UK to become more competent members of their local community: they would be elevated from a role as largely passive bystanders to active participants in their own fate and that of their community. The resulting benefits to national security are highly desirable. Moreover, because it would be voluntary and incentivised through university admissions points for university-bound teenagers and tax credit for school leavers joining the workforce, it would reward good citizenship. The tax

^{39.} For an overview of current national service approaches and how selective national service can become a useful asset in UK national security, see Elisabeth Braw, 'Competitive National Service: How the Scandinavian Model Can Be Adapted by the UK', RUSI Occasional Papers (October 2019).

^{40.} UK Parliament, 'National Service', https://www.parliament.uk/about/living-heritage/ transformingsociety/private-lives/yourcountry/overview/nationalservice/>, accessed 13 February 2020.

credits would be extended to university-bound participants when they enter the labour market, provided they complete refresher training and remain in the C2 system. During their university years, their participation could be incentivised through student loan reductions.

In focusing on teenagers, national resilience training would be able to make use of an untapped segment of society in national security. Currently, only countries that have some form of national service involve young people in national security, ⁴¹ and while more countries are considering the reintroduction of military service, it is unlikely to be adopted by all. This author has proposed competitive national service – based on the Scandinavian model ⁴² – across all national security-related branches of government (including the NHS), but even such national service is only a partial answer to grey-zone national security needs.

An embryonic UK citizen service scheme does exist. Launched by then Prime Minister David Cameron in 2011, the National Citizen Service (NCS) programme is open to 15 to 17 year olds. By the end of 2017, 300,000 teenagers had participated. Although that is a significant number, it is just a fraction of the 600,000–700,000 children born in the UK each year. The NCS is, furthermore, not focused on national resilience. Instead, its objective is to increase participants' confidence. Its website states that 'whether you're a daredevil or creative genius, talkative or more reserved, you'll be surprised by how much you're actually capable of, coming away with a host of new skills and bags of confidence'. A 2016 NCS evaluation reported that 85% of summer participants felt confident in 'having a go at things that are new to [them]', compared with the baseline figure of 67%.

Meanwhile, in 2019 France began rolling out one-month residential national service comprising first aid, information literacy, gender equality and self-defence. The programme, which involves two weeks of training and two weeks of service with a charity or local government, does not involve weapons but is partially taught by military officers. When the programme becomes mandatory in 2026, the cost to the taxpayer will be €1.5 billion (£1.3 billion) per year.⁴⁷ The programme's primary objective, however, appears to be strengthened social cohesion rather than national defence and deterrence. Although Gabriel Attal, a state secretary in the education

- 41. For more information about European military service models, see Braw, 'Competitive National Service'.
- 42. *Ibid*.
- 43. National Citizen Service (NCS) Trust, 'Annual Reports and Accounts 2018', 2018.
- 44. Office for National Statistics, 'Births in England and Wales: 2014', July 2015, https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthsummarytablesenglandandwales/2015-07-15, accessed 13 February 2020.
- 45. NCS, 'What is NCS?', https://www.ncsyes.co.uk/what-is-ncs, accessed 13 February 2020.
- 46. Kantar Public and the Department for Digital, Culture, Media and Sport, 'National Citizen Service 2016 Evaluation: Main Report', December 2017, https://www.ncsyes.co.uk/sites/default/files/2018-10/NCS%202016%20Evaluation%20Report.pdf, accessed 13 September 2019.
- 47. Angelique Chrisafis, 'Macron's National Service Sparks Criticism from French Left', *The Guardian*, 19 June 2019.

ministry, explained to French media that 'we want to give youngsters reflexes for defending, protecting and reacting to terrorist attacks or natural disasters, organising search parties for missing people, and so on', but also said that a main objective of the programme is 'getting young people out of their habitual familial, social and regional surroundings, and to open their eyes to new experiences'.⁴⁸ To that end, they will debate social issues such as radicalisation as part of their training.

Thus, there is potential to build on the steps taken by the NCS and France's national service and establish a universal resilience training programme for teenagers that would focus on national security needs and feed into a C2 system accessible to the armed forces and blue-light services.

National resilience training would provide basic non-weapons training to all teenagers in the form of a residential course, either for three weeks during the summer break or split into two segments during other school holidays. The course would teach them basic contingency skills required to counter sub-threshold threats including:

- National security: how it is set up; the role of the armed forces and blue-light services, and which functions they do and do not fulfil.
- Crisis preparedness: hostile state/proxy attacks; natural disasters; terrorist attacks; and extended cuts to power and/or internet service.
- Crisis response.
- Information literacy: the ability to identify disinformation and act accordingly.

While the first three modules are straightforward, teaching information literacy – which most importantly includes teaching how to identify disinformation – is a challenging task in an era when the public even disagrees on what constitutes truth. As Andrew Reid notes:

For political voice to be effective for all, citizens must enter deliberation prepared to justify their opinions, and to listen to others and in some cases change their minds. Citizens do not always enter deliberation in this spirit ... [and] the state cannot coerce citizens into doing so in an unobjectionable way.⁴⁹

The success of information literacy instruction, then, depends heavily on who delivers it. According to the UK Audit Commission's Trust in Public Institutions survey, the professional group most trusted among the British public is doctors (91% trust), followed by teachers, professors, judges and clergymen. Politicians, journalists and cabinet ministers are the least trusted groups. Thus, it would seem advisable to engage secondary school teachers willing to work during a portion of the summer to teach the information literacy module.⁵⁰

- 48. France24, 'France Begins Trial of Compulsory Civic Service for Teens', 16 June 2019.
- 49. Andrew Reid, 'Buses and Breaking Point: Freedom of Expression and the "Brexit" Campaign', Ethical Theory and Moral Practice (Vol. 22, No. 3, June 2019), pp. 623–37.
- 50. Audit Commission, 'Trust in Public Institutions', , accessed 13 February

Organisation

While resilience training would benefit from being population-wide, teenagers still in secondary education are an easy-to-engage demographic, as they are far less dispersed than the adult population. In addition, they generally possess levels of physical strength less prevalent in older demographic segments. Teenagers, therefore, are uniquely suited to resilience training.⁵¹ Furthermore, many struggle to fill their long school holidays. It was against this background that David Cameron launched the NCS.

Today's military service models conscript teenagers following the end of their secondary education, mostly at the age of 18 or 19. This makes sense for military training, which usually lasts for around a year. Resilience training, however, would involve no arms training. As a result, it could be much shorter in length and would include citizens reaching the age of 16, 17 or 18 in a given calendar year. As the training would not require disproportionate mental or physical fitness, the vast majority of teenagers would be able to participate.

The training should be regionally executed, although it should mix teenagers from different towns and cities in a given area, exposing them to fellow teenagers from other backgrounds. It would thus encompass the societal cohesion and personal development sought by the NCS, while also answering a national security need. Social cohesion at the local level is important, considering that this is where disaster preparedness and response begins.

As the training would take place during school and university holidays, the courses could take place on university campuses and boarding school grounds. Although residential training would involve more expense than day-time courses, it would aid group cohesion and make the training more valuable. As with the NCS, the government should cover the costs for the programme, including insurance for the participants and reimbursement of their expenses travelling to the training and any subsequent crisis deployment.

The training could be administered by the interior ministry (in the UK, the Home Office) and taught by seconded police officers, military officers, disaster relief experts, communications professionals and, as previously mentioned, secondary school teachers. While the trainers would need training in educating the teenagers, police forces, the armed forces and other

2020. Although there has been no survey of the same kind since this one, the Edelman Trust Barometer UK 2020 provides similar results. Asked whether they trust a category of people to do what is right, UK citizens gave the following answers: 77% percent of respondents trust scientists to do what is right; 72% trust 'people in my local community'; 63% trust 'citizens of my country'; 42% trust religious leaders; 39% trust CEOs; 35% trust journalists; 33% trust government leaders; and 30% trust the very wealthy. See Edelman Trust Barometer 2020, 'UK Results', https://www.slideshow=1, accessed 13 February 2020.

51. The author would like to thank Vice Admiral Ewa Skoog Haslum of the Swedish Navy for information about the setup of potential resilience training programmes.

national security agencies already have staff with either the tactical or strategic knowledge (or both) required for the modules. Such staff could volunteer to spend the designated weeks teaching and additional days receiving the trainer training. So could secondary school teachers. As the complete course would only be three weeks, the teaching by military officers would be very limited in time. It could even be carried out during their holidays, with the Home Office compensating them for their time.

Instructors would need to receive up-to-date training in disinformation techniques. The training could be provided by NGOs and would be underwritten by the government. While this would add additional expense, it is clearly preferable to today's near-complete lack of civil preparedness.

The courses should involve roleplay with members of the public and residents living near the training facilities. To distinguish them as resilience responders, the trainees would wear some type of distinctive clothing, such as a high-visibility vest. Not only would this further bolster levels of social cohesion, but it would also boost the teenagers' authority to direct ordinary citizens in crisis situations. Participants would need to successfully complete all modules before graduating from the course, with unsuccessful candidates invited to participate in catch-up courses.

On completing the course, graduates would be entered into a database of local residents with expertise in disaster preparedness and response. They would also be placed in a C2 system centred on their home counties. These regional units would oversee uniforms, equipment, refresher training and deployment during crises, which would be coordinated with the armed forces or blue-light services requiring surge capacity.

The C2 system could be built on the model used by the Danish Emergency Management Agency (DEMA). Each year, 420 Danish teenagers complete their national service with DEMA, and on completion of their service, many join DEMA's C2 system as volunteers.⁵² There was a similar setup in New Zealand. In response to the 2011 Christchurch earthquake, university students formed the Student Volunteer Army to assist survivors. The organisation remains active, with around 3,600 members assisting in contingencies in New Zealand.⁵³

Germany's THW presents another C2 system that could be used as a model. Although the THW is a government agency, 99% of those involved with it – 80,000 people, including 16,000 under-18s – are volunteers. They belong to 1,400 rescue units and around 1,000 specialist units, which are hosted by 668 local sections. Central staff train local leaders at their respective units, and volunteers and staff conduct regular exercises. In 2018, THW volunteers were deployed on 12,000 occasions, spending a total of 870,600 hours on tasks including fires, wildfires, storms, traffic accidents and flooding. They spent 318,826 hours in training and on exercises.⁵⁴

- 52. See Braw, Competitive National Service.
- 53. Student Volunteer Army, 'Our Story', https://sva.org.nz/our-story/, accessed 17 February 2020.
- 54. Technisches Hilfswerk, '2018 Jahresbericht: Annual Report, May 2019', https://www.thw.de/SharedDocs/Downloads/DE/Hintergrund/Jahresberichte/jahresbericht_2018.pdf?___blob=publicationFile, accessed 17 February 2020.

The temporary inclusion of trained civilians in a national emergency C2 system has been used in Britain as well. During the Second World War, the government used the Boy Scout movement for basic national security duties: by 1940, an estimate 53,000 Scouts had been trained for some 170 National War Service tasks, including collection of waste paper and felled trees. Women, in turn, fulfilled national security duties as part of the Auxiliary Territorial Service, working, inter alia, as telephonists, drivers and cooks.

In a prospective resilience training system in the UK, teenagers leaving their home area should be reassigned to the respective regional unit of their new home, much like the THW does when its volunteers relocate. Each person's connection with a local and regional unit near their home would ensure that the government would always have expertise at its disposal in case of an emergency.

Putting Training into Practice

Because it would comprise a significant share of teenagers in a given year-group, resilience training would teach large parts of the population the fundamental preparedness and crisis response skills necessary to help defend themselves, their communities and their countries against non-kinetic attacks. In minor incidents — such as traffic accidents and local power cuts — graduates would be able to look after themselves and others in need. In major crises, graduates (activated as part of their regional units) would — like the First Aid Nursing Yeomanry, an all-female voluntary organisation that deploys rapid-response teams to support civil and military authorities during crises⁵⁷ — relieve the armed forces and blue-light services of the bulk of resilience tasks, thus allowing those professional services to focus on their specialist skills. Within the UK's blue-light gold-silver-bronze incident command structure, ⁵⁸ national resilience training graduates would be situated at the bronze level. Bronze participants operate at the tactical level of incident response and function as a resource of first resort.

Resilience training for teenagers would, of course, involve expense to the taxpayer. France's national service provides a good comparison, as France and the UK have similarly sized populations (67 and 66 million, respectively) and numbers of teenagers. As has been mentioned, France's budget for mandatory one-month national service is €1.5 billion (£1.3 billion) per year. Britain's NCS costs £1,500 per participant, of which the government pays £1,450.⁵⁹ With an assumed

- 55. Scout Association's Heritage Collection, 'The Boy Scouts are Carrying on: Scouting During the Second World War', http://www.scoutsrecords.org/explore.php?dil=&icerik=84&bparent=CB6FCCF1AB7A8F1765FC3A9D09C9ACAE&, accessed 13 February 2020.
- 56. BBC, 'Fact File, Auxiliary Territorial Service 1938–1949', https://www.bbc.co.uk/history/ww2peopleswar/timeline/factfiles/nonflash/a6650237.shtml, accessed 13 February 2020.
- 57. First Aid Nursing Yeomanry, 'Who Are We?', https://www.fany.org.uk/about-us, accessed 13 February 2020.
- 58. See Home Office, 'Critical Incident Management: Version 12.0 Immigration Enforcement and UK Visas and Immigration', August 2018, pp. 9–10.
- 59. National Citizen Service, 'FAQs', https://wearencs.com/faqs, accessed 13 February 2020.

cost of twice the expense per NCS participant (given the resilience training's national security objectives and residential training) and participation of 300,000 out of an annual cohort of 600,000 teenagers, national resilience training (without refresher training and operational costs during crises) would cost the UK taxpayer £555 million per year. Because the training outlined in this paper would be short in duration and involve no expensive equipment, it would be a cost-efficient way of enhancing defence against non-kinetic aggression. In 2019, the UK government allocated defence spending of around £39.6 billion. ⁶⁰ By adding skills and cohesion among parts of the population where there is currently little cohesion, ⁶¹ the UK (and similar countries) could increase its deterrence capabilities alongside its existing kinetic defence.

Opportunities as Part of Global Britain

Even though the UK has left the EU, continued cooperation is vital to the national security of all parties. To be sure, resilience is a national responsibility, not one situated within NATO or the EU, but if one country is dangerously destabilised through grey-zone aggression or other national emergencies, it will have negative effects on that country's partners as well. Furthermore, the UK's departure from the EU has left uncertain the future of Britain's participation in the EU's flagship youth exchange scheme, Erasmus+, beyond the current programme (2014–20).⁶²

Youth resilience training provides an opportunity to enhance national security in all of Europe while furthering cross-border cohesion. If several countries launched youth resilience training programmes, the training could be provided across the continent, either within an EU-led framework (including partners such as Norway and the UK) or within a NATO-led framework. Each member state would be invited to provide the training in English as well as its official language(s), with citizens given the option of attending resilience training in any other participating member state. This arrangement would turn a national security need into an opportunity for young citizens, most of whom otherwise only have the opportunity to live in another country through Erasmus+, the much smaller EU European Solidarity Corps (which provides volunteering opportunities), or if they personally arrange work or education in another country.

In addition, resilience training could form a highly positive, practical and deployable part of Global Britain. Currently, British nationals participate in international disaster aid efforts led by NGOs. The coordination between these initiatives is, however, inconsistent, as is the participants' level of training. With youth resilience training in place, and graduates part of a C2 structure, the UK government would be able to invite graduates to deploy outside the UK

- Sian Grzeszczyk, 'UK Defence Spending is Declining, Defence Select Committee Says',
 Forces Network, 16 July 2019, https://www.forces.net/news/uk-defence-spending-declining-defence-select-committee-says, accessed 17 February 2020.
- 61. See, for example, the BBC's 2018 Loneliness Experiment, which showed that 40% of those aged 16 to 24 feel lonely, compared to 27% of those aged 75 and over. Claudia Hammond, 'The Surprising Truth About Loneliness', BBC Future, 1 October 2018.
- 62. For more information on Erasmus+ after Brexit, see European Commission, 'Erasmus+', https://ec.europa.eu/programmes/erasmus-plus/about/brexit_en, accessed 13 February 2020.

whenever a country asks for help. In addition to providing qualified assistance, the participants would by definition help the UK extend its (benevolent) presence worldwide: in other words, Global Britain.

Popular Opinion

Public support of any policy involving large-scale citizen participation is, by definition, central to the policy's success. As detailed in a 2019 report on competitive national service by this author, universal military service has little prospect of success in the UK. Furthermore, there is little military need for it, though competitive national service for specific skills presents a viable option. There is some popular support for wider citizen involvement in national security. According to a 2018 YouGov poll, 48% of Britons support one-month mandatory military service. Crucially, only 10% of 18 to 24 year olds support the concept, and it is at any rate unclear how one month of military service would benefit the UK armed forces. However, in a 2010 YouGov poll, a large majority of Britons of all ages supported the idea of mandatory citizen service. In answer to the question of whether they thought that a modern, non-military version of national service, with all young people spending 2 months working on social action projects, such as looking after the elderly' was a good idea, 77% responded 'yes', with only 9% disliking the concept. Among 18 to 34 year olds, 71% liked the idea, while 13% did not. In the property of the concept. Among 18 to 34 year olds, 71% liked the idea, while 13% did not.

^{63.} Braw, 'Competitive National Service'.

^{64.} YouGov, 'Does Processed Food Increase Your Cancer Risk? Plus, Military Service, and Getting "Hangry" Results', 15 February 2018, https://yougov.co.uk/opi/surveys/results?belboon=031b39 08984b04d39d00589b,4711849,subid=83015X1540103X68c05b7b9f809f2eb7ad79027038de62&pdl.rlid=203577#/survey/4f4a8615-1239-11e8-abab-f9e75fbb5f97/question/c746c64b-1239-11e8-960d-2d3eccb856b3/age>, accessed 13 February 2020.

^{65.} John Sarbah, "National Citizen Service" Should be Compulsory', YouGov, 9 April 2010, https://yougov.co.uk/topics/politics/articles-reports/2010/04/09/Cameron-National-Service, accessed 13 February 2020.

Conclusions

OUTH IS A resource in national security. It is, however, rarely treated as such. Apart from a small number of countries with universal or selective national service, most liberal democracies do not have nationwide, government-led programmes that train youths in practical aspects of national security. That is a loss. Indeed, with increasing non-kinetic threats against liberal democracies it is vital to involve the wider population in preparedness and crisis response. The question is, of course, how to involve the population – specifically young people – without having to resort to universal national service, a model that would not work in the UK and, crucially, would not be the appropriate answer to today's national security needs.

This paper proposes (non-weapons) national resilience training for teenagers during their last three years of secondary education (or the last year for those leaving at age 16). It foresees the training comprising four parts:

- National security: how it is set up; the role of the armed forces and blue-light services, and which functions they fulfil and do not fulfil.
- Crisis preparedness: hostile state/proxy attacks; natural disasters; terrorist attacks; and extended cuts to power and/or internet service.
- Crisis response.
- Information literacy: the ability to identify disinformation and act accordingly.

The course would be residential, with participants able to opt for either one three-week segment during the summer holiday or two partial segments during other school breaks, and taught by experts seconded to the Home Office (or the interior ministry in other countries). Teenagers would be incentivised to participate by receiving additional university admissions points upon successful completion of the course (which includes subsequent refresher training and inclusion in a preparedness/emergency response C2 system), or receiving tax credit for those joining the work force directly from school.

In addition to helping strengthen defence against, and thus deterrence of, non-kinetic threats, the national resilience training could be used for Erasmus+-style exchanges with other countries, were similar programmes to be launched elsewhere. It could also gainfully be used as part of the UK's Global Britain strategy, with resilience training graduates invited to deploy to disaster areas requesting outside assistance.



About the Author

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