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Defence in Scotland: the North Atlantic and the High North

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to the report*

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The Scottish Affairs Committee

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1 Introduction

The North Atlantic and the High North

1. The North Atlantic and the High North have historically been strategically important to the United Kingdom's defence and security. During the Second World War the German occupation of Norway presented the threat of attack from the North by air or sea, while during the Cold War protecting transatlantic routes was an essential part of NATO's defence strategy, allowing reinforcements to cross the Atlantic in the event of an attack in mainland Europe. In both cases, the UK Armed Forces—and in particular the Royal Navy—played an important role in meeting defence and security objectives in the region.¹

2. The challenges the UK faces in the North Atlantic and the High North today have changed, but the region remains important to our defence and security. Russia has been increasing its military presence in the region, and the geopolitical shift in Europe following Russia's invasion of Ukraine has implications for the High North too. At the same time, climate change is reshaping the Arctic and this is introducing new challenges, not just from its direct effect on the landscape but also from increased economic activity.² These factors have led a number of observers to conclude that the Arctic is of growing importance. The Ministry of Defence's own contribution to our inquiry states that

The UK Government recognises the growing importance of the High North to our defence and security, the opportunities it presents, and the potential for growing tensions in the region.³

3. Scotland's geography means it has a particularly important role in meeting defence and security objectives in the North Atlantic and the High North. The UK is not an Arctic State, but Scotland's proximity to the region means it shares concerns and interests with Arctic allies.⁴ Scotland is also a natural location in which to base military assets tasked with operating in the region, and historically this has indeed been the case.⁵ Today, bases like RAF Lossiemouth and HMNB Clyde are crucial to the UK and NATO's northward defences.⁶

Our inquiry

4. In view of the evolving situation in the North Atlantic and the High North, and the particular interest that Scotland has in the region, we decided to hold an inquiry looking at defence in the North Atlantic and High North from a Scottish perspective. This is the

1 House of Commons Defence Committee, [On Thin Ice: UK Defence in the Arctic](#), Twelfth Report of Session 2017–19, HC 388, 15 August 2018

2 See, for example, Dr Peter Hough ([DIS0041](#)); Professor Basil Germond ([DIS0042](#)); Professor Caroline Kennedy-Pipe ([DIS0047](#)); NATO Parliamentary Assembly: Defence and Security Committee Sub-Committee on Transatlantic Defence and Security Cooperation, [Security Challenges in the High North](#), 9 October 2021; RAND Europe, [UK Strategy for the High North: Policy levers to influence developments out to 2050](#), 2022

3 Ministry of Defence ([DIS0048](#))

4 Nicolas Jouan, RAND Europe ([DIS0049](#))

5 Duncan Depledge & Andreas Østhagen (2021) [Scotland: A Touchstone for Security in the High North?](#), The RUSI Journal, 166:6–7, 46–62

6 Ministry of Defence ([DIS0048](#))

third of a series of inquiries we have held on defence in Scotland during this Parliament, following our reports *Defence in Scotland: military landscape*⁷ and *Defence in Scotland: military shipbuilding*.⁸

5. On 2 December 2022 we launched our inquiry. We issued a call for written evidence, which sought contributors' views on the following questions:

- What are the UK's national security priorities in the North Atlantic and the High North?
- What role do Scottish-based defence capabilities have in achieving defence and security objectives in the North Atlantic and the High North?
- To what extent does the MoD's Arctic Strategy work to help achieve strategic defence objectives in the region?
- Is the Arctic Strategy being delivered effectively in Scotland? For example, are Scottish bases sufficiently equipped to meet operational requirements?

We received ten written submissions, a full list of which can be found at the end of this report. We are grateful to all those who took the time to make written contributions to the inquiry.

6. We also held a number of in-person discussions during the early part of 2023. In January we took part in a roundtable meeting as part of a visit to the University of St Andrews. Between March and June we held four public evidence sessions, at which we heard from academic witnesses specialising in geopolitics and security, international and maritime law, and space technology. We also heard from representatives from two of the UK's Arctic allies: the Norwegian and Icelandic Ambassadors to the United Kingdom. In our final session, we took evidence from the Minister for the Armed Forces, the Rt Hon. James Heappey MP. A detailed list of witnesses can be found at the end of this report. We would like to take this opportunity to thank all of our witnesses for their time and for their thoughtful and informative contributions.

The report

7. Our report begins by considering the geostrategic context in the North Atlantic and the High North, and how the UK approaches the region strategically. We begin by giving an overview of the UK Government's defence policy in the North Atlantic and the High North, including the Ministry of Defence's Arctic defence paper, *The UK's Defence Contribution in the High North*, and the Foreign, Commonwealth and Development Office's latest Arctic Policy Framework, *Looking North*. We then consider several political, environmental and economic developments in the region which led many witnesses to consider it an area of growing importance, and discuss the defence and security implications of these. Next, we note the necessity of international cooperation in the Arctic and explore how the UK works together with Arctic states on defence issues, including through its membership of NATO. In Chapter 3 we look at the role Scotland plays in meeting the UK's objectives in the North Atlantic and the High North, and in meeting the challenges that exist in the region. We set out the defence assets present in Scotland—primarily at

7 [Defence in Scotland: military landscape](#), First Report of Session 2022–23, HC 82, 24 June 2022

8 [Defence in Scotland: military shipbuilding](#), Fourth Report of Session 2022–23, HC 1096, 27 January 2023

His Majesty's Naval Base Clyde (Faslane) and RAF Lossiemouth—and describe the duties they perform in the region. We consider how this capability might need to evolve in the future if defence priorities in the North Atlantic and the High North change, including whether the Armed Forces are sufficiently trained and equipped to operate in challenging Arctic conditions and how advanced technology such as space-based surveillance and drones could contribute to defence in the High North in the future. Finally, as a post-script, we include some reflections on the three reports on defence in Scotland we have made over the course of this Parliament.

Note on terminology

8. The terms 'North Atlantic', 'High North', and 'Arctic' occur frequently in the report. Policy documents and academic papers in this subject area do not use shared consistent definitions for these terms, a fact which witnesses, including the Ministry of Defence, acknowledged.⁹ While most readers will have a reasonably clear idea of what is meant by 'North Atlantic' or 'Arctic', the term 'High North' may be unfamiliar to some. While inconsistently defined, this term generally refers to an area that includes the 'European Arctic',¹⁰ with key features including the Greenland-Iceland-UK Gap, Svalbard, the Norwegian Sea and Barents Sea.

9. The Ministry of Defence's Arctic policy paper, *The UK's Defence Contribution in the High North*, states that

[W]ithin this Strategy, "The Arctic" comprises all territory within the Arctic Circle. The High North is less easily defined, but we take it to be the Greater Arctic, including parts of the North Atlantic, for the purposes of this Strategy.¹¹

Although this is not a universally agreed definition, for the purposes of our report it is nevertheless a useful one, as our aim is to scrutinise UK Government—and specifically MOD—policy. In general, when we use the terms North Atlantic, High North and Arctic in this report they should not be taken to mean discrete geographical regions with exclusive boundaries, but rather broadly defined operational areas whose geographies will to some extent overlap.

9 [Qq2–4](#); [Q184](#); Ministry of Defence ([DIS0048](#))

10 [Q2](#)

11 Ministry of Defence, [The UK's Defence Contribution in the High North](#), 29 March 2022, p.4, footnote 1

A map of the Arctic and surrounding areas



10. In several places the report refers to 'Arctic States'. This refers to the eight members of the Arctic Council: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States. Despite its geographical position outside the Arctic Circle, Denmark is included due to Greenland's status as a Danish autonomous territory.

2 Defence and Security in the High North

UK Government policy on defence in the North Atlantic and the High North

Policy documents

11. In March 2022 the Ministry of Defence (MOD) published *The UK's Defence Contribution in the High North*. The increasing importance of the region in recent years is highlighted by the fact this is the UK's first defence policy dedicated to the region. The document is intended to “guide defence efforts over a 10-year period, including long-term capability decisions.”¹² As explained in the previous Chapter, this document takes the High North to include parts of the North Atlantic for the purposes of the UK Government's strategy.¹³ The MOD's document was published shortly after the Russian Federation's invasion of Ukraine, and as a consequence does not reflect ways in which that conflict may have altered UK policy in the North Atlantic and the High North. In February 2023 the UK published *Looking North*, the latest iteration of its Arctic Policy Framework. This document does not focus exclusively on defence, but does comment on the UK's defence policy in light of Russia's invasion, and also addresses wider security issues such as climate change, heightened economic competition and increasing maritime traffic.¹⁴ Other UK Government documents, most recently the *Integrated Review Refresh 2023*, also refer to the UK's defence policy in the North Atlantic and High North in the context of the UK's wider defence strategy.¹⁵ The Secretary of State for Defence has indicated that a new Defence Command paper will be published before the summer recess. Our observations in this report reflect UK Government policy at the time of writing.¹⁶

UK Government policy

12. The *Integrated Review Refresh* states that “the UK's overriding priority remains the Euro-Atlantic, which is essential to the defence of our homeland and to our prosperity as a nation.” It adds that “the UK will work to ensure that Europe, and the broader Euro-Atlantic, is stable, secure and able to prosper politically and economically in the years ahead.”¹⁷ The Refresh states that a further priority is “our wider neighbourhood: the regions on the periphery of the Euro-Atlantic where developments direct consequences

12 Ministry of Defence, [The UK's Defence Contribution in the High North](#), 29 March 2022, p.4

13 Ministry of Defence, [The UK's Defence Contribution in the High North](#), 29 March 2022, p.4, footnote 1

14 UK Government, [Looking North: The UK and the Arctic, the United Kingdom's Arctic Policy Framework](#), 9 February 2023

15 HM Government, [Integrated Review Refresh 2023: Responding to a more contested and volatile world](#), CP 811, 1 March 2023, p. 25, 40–41

16 HC Deb, 26 June, [Col. 19](#)

17 HM Government, [Integrated Review Refresh 2023: Responding to a more contested and volatile world](#), CP 811, 1 March 2023, p. 20

for our home region”, an area in which the Arctic is specifically included.¹⁸ The paper explains that “the UK’s long-term goal is for the Arctic to return to being a region of high cooperation and low tension.”¹⁹

13. *The UK’s Defence Contribution in the High North* says the UK Government’s aim is “to preserve the stability and security of the Arctic region” and sets out four objectives it will pursue in support of this aim:

- Protect our Critical National Infrastructure and our other national interests, and those of our Allies.
- Ensure our freedom to navigate and operate across the wider region.
- Reinforce the rules-based international system, particularly UNCLOS [The United Nations Convention on the Law of the Sea].
- Contest malign and destabilising behaviours.

The paper goes on to explain four ways in which the UK will work to deliver these objectives:

- a) Improve our understanding of the region, how it is changing, and the activities of state and non-state actors within it.
- b) Work with regional Allies and partners, including through NATO, the Northern Group, and the Joint Expeditionary Force, aligning policy, activity, and capability where possible and across all domains.
- c) Maintain a coherent Defence posture, presence, and profile in the region, including training, partnering, and operating from and in the Arctic.
- d) Develop sustainable, modernised, and proportionate Defence capability for the region, including through investment in Research and Development.

14. In its submission to this inquiry, the MOD recognised the important contribution Scotland makes to UK and NATO defence in the North Atlantic and the High North. The MOD acknowledged that “Scotland’s proximity to the waters and skies above the North Atlantic is of crucial importance to the UK and NATO’s security,”²⁰ adding:

Scotland plays a key role in the national security of the UK. This is evident in Scotland’s defence contribution to the UK’s posture and presence in the High North. As the closest land mass to the region Scotland is the UK’s ‘Northern Flank’ but is by no means isolated and draws its strength through close integration with Military Forces across the UK.²¹

15. The UK Government is clear that Scotland’s geography, and the capabilities located there, is critical to meeting the UK and NATO’s defence and security objectives in the North Atlantic and the High North.

18 HM Government, [Integrated Review Refresh 2023: Responding to a more contested and volatile world](#), CP 811, 1 March 2023, p. 25

19 HM Government, [Integrated Review Refresh 2023: Responding to a more contested and volatile world](#), CP 811, 1 March 2023, p. 25

20 Ministry of Defence ([DIS0048](#))

21 Ministry of Defence ([DIS0048](#))

Analysis of UK Government policy

16. Contributions to our inquiry which commented on the aims set out in *The UK's Defence Contribution to the High North* agreed that the document set out appropriate priorities. The Human Security Centre wrote that “the document in its totality succeeds in accurately identifying the UK's priorities in the region.”²² Professor Andrew Dorman, Professor of International Security at King's College London and Editor of the *International Affairs* journal, wrote that “The [MOD's] High North paper provides a sensible outline of British interests and the strategic context prior to Russia's invasion of Ukraine,” although added that “it does not really address the consequences of this action.”²³ The Norwegian Ambassador to the UK, His Excellency Wegger Christian Strømmen, told us that UK policy was clearly communicated, and that when the UK's policy documents and the ongoing dialogue between the UK and its allies were taken together “we absolutely have the necessary understanding of where the UK is on these issues.”²⁴

17. The vast majority of submissions to our inquiry shared the UK Government's view that the High North was a region of increasing strategic importance. Professor Caroline Kennedy-Pipe, Professor of War Studies at Loughborough University, described the Arctic region as “a space of geopolitical competition and rising tension,”²⁵ while Professor Basil Germond, Professor of International Security at Lancaster University, referred to “a strategic acceleration in the High North as a result of two systemic changes: climate change and Russia's aggressive revisionism of the *status quo*.”²⁶ However, several commentators shared the view that the High North was unlikely to be the epicentre of future armed conflict, but that rather the risk to the region came from conflicts spilling over from neighbouring parts of the globe.²⁷

18. Some witnesses told us the UK had given greater attention to defence issues in the High North in recent years. Dr Duncan Depledge, Lecturer in Geopolitics and Security at Loughborough University, told us that although UK Government interest had been “fluid” in the past “we are starting to see more priority and attention given to the region.”²⁸ A 2021 report by the NATO Parliamentary Assembly Defence and Security Committee notes that

The United Kingdom, alongside the United States, has been working to increase its maritime and naval air capabilities to be fit for purpose for the Arctic of the 21st century. In recent years, the United Kingdom has paid significant attention to the renewal of its maritime forces.²⁹

22 Human Security Centre ([DIS0046](#))

23 Professor Andrew Dorman ([DIS0044](#))

24 [Q68](#)

25 Professor Caroline Kennedy-Pipe ([DIS0047](#))

26 Professor Basil Germond ([DIS0042](#))

27 RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022; Human Security Centre ([DIS0046](#))

28 [Q6](#)

29 NATO Parliamentary Assembly, Defence and Security Committee Sub-Committee on Transatlantic Defence and Security Cooperation, [Security Challenges in the High North](#), 9 October 2021

19. Witnesses told us that Russia's invasion of Ukraine and subsequent events had changed the security situation in the High North, and had posed new questions to which policymakers would need to respond. Asked whether the UK had taken a sufficiently long-term view to defence in the region, Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, said:

British policy towards the far north has not necessarily been too short term, but, fundamentally, the politics in the high north have changed, with Swedish and Finnish accession to NATO and with Russia appearing to be a far more revisionist power [...] I do not think that policy before was neglecting long-term ramifications, but we need to take long-term choices today, if we want to be competitive in the high north.³⁰

As noted above, Professor Andrew Dorman, Professor of International Security at King's College London and Editor of the *International Affairs* journal wrote that *The UK's Defence Contribution in the High North* does not address the ramifications of the war in Ukraine.³¹

20. Although there was general agreement that UK Government policy had correctly identified the country's strategic interests and adopted the right policy ambitions in response, some submissions suggested more should be done to give effect to those ambitions. Professor Basil Germond, Professor of International Security at Lancaster University, wrote:

The 2022 *Arctic Paper* is clear about the UK's intent to commit to Arctic Security [...] However, if HM Government wants to secure the UK's interests and those of our allies in the region, the objectives set up in the *Arctic Paper* need to translate into long-term budgetary commitments, including concrete investments in the Royal Navy.³²

The Human Security Centre took the view that "The MOD's Arctic Strategy successfully consolidated the broad set of existing policies, but offers little in terms of new initiatives or resources."³³

21. The UK Government's policy document, *The UK's Defence Contribution in the High North*, adopts appropriate strategic priorities for the region. At the same time, the geopolitics of the North Atlantic and the High North are evolving and the UK will need to be prepared to adapt its approach and commit additional resources as appropriate in response to new security threats, whether those come from malign actors or from climate change. The implications of this evolution will affect defence activities in Scotland in particular. The Russian invasion of Ukraine, which occurred shortly before the publication of the MOD's paper and which has significant implications for the security of the region, illustrates this point. In the next section of this report, we explore several factors which are contributing to the region's growing importance.

22. The Ministry of Defence should commit to updating its Arctic defence strategy every five years, to reflect the strategic acceleration in the region and to bring it into line with the FCDO's Arctic Strategy for the whole of Government, which is updated every

30 [Q9](#)

31 Professor Andrew Dorman ([DIS0044](#))

32 Professor Basil Germond ([DIS0042](#))

33 Human Security Centre ([DIS0046](#))

five years. We hope that, before then, the Defence Command Paper will properly reflect the changed situation in the North Atlantic and the High North resulting from Russia's illegal invasion of Ukraine.

Geostrategic developments in the North Atlantic and the High North

23. Contributions to our inquiry highlighted a number of global trends and factors which have defence and security implications for the North Atlantic and the High North. We explore these factors, and what they might mean for the region, in this section.

Russian militarisation and the invasion of Ukraine

24. There was widespread agreement among witnesses that the Russian Federation's invasion of Ukraine had dramatically altered the security situation in Europe and surrounding areas, including the North Atlantic and the High North. The Norwegian Ambassador to the UK, Wegger Christian Strømmen, said the invasion "has huge implications for northern Europe and for the North Atlantic."³⁴ The Armed Forces Minister, the Rt Hon. James Heappey MP, told us that "since that illegal invasion of Ukraine, there is no doubt that Russia has sought to be more belligerent in the High North."³⁵ Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, said that "the overall climate of confrontation with Russia has now nestled in the High North."³⁶ He said that tensions were likely to increase, in part because of the war in Ukraine "exacerbating Russian nationalism" but also because Russia no longer felt the need to balance its need for cooperation with western nations in the High North against its desire to assert territorial claims in the region.³⁷

25. We were told that Russia had been building its military presence in the Arctic in recent years.³⁸ In 2014 Russia established a new Northern Fleet Joint Strategic Command.³⁹ It is reported to have re-opened 50 previously closed Soviet-era posts since 2007, including air bases and radar stations, and it is believed to have built 475 new military structures in the region since 2014.⁴⁰ Russian military exercises are also reported to have increased in frequency, scale and sophistication.⁴¹ In 2016 the former Commander of NATO's Allied Maritime Command, Royal Navy Vice Admiral Clive Johnstone, reported that NATO was seeing "more activity from Russian submarines than we've seen since the days of the Cold War."⁴²

26. Witnesses explained that Russia sees the Arctic as strategically important in a number of ways, including militarily. Russia has extensive territory and coastline within the Arctic Circle, and places great importance on the natural resources present in the region.⁴³ From a defence perspective, the Russian Navy's Northern Fleet is based in Severomorsk and

34 [Q64](#)

35 [Q185](#)

36 [Q9](#)

37 [Q5](#)

38 [Q10](#); Human Security Centre ([DIS0046](#)); Ministry of Defence ([DIS0048](#))

39 Atlantic Council, [Russia Establishes New Arctic Military Command](#), 9 December 2014

40 Centre for Strategic International Studies, [The Ice Curtain: Russia's Arctic military presence](#), 26 March 2020; FP Analytics, [How Russia's Future with NATO Will Impact the Arctic](#), 25 February 2022

41 NATO Parliamentary Assembly, Defence and Security Committee Sub-Committee on Transatlantic Defence and Security Cooperation, [Security Challenges in the High North](#), 9 October 2021, p. 13

42 Washington Post, [Report: Russian sub activity returns to Cold War levels](#), 4 February 2016

43 [Q23](#)

other parts of the Kola Peninsula. The fleet includes nuclear-equipped ballistic missile submarines which typically deploy in the Barents Sea and the Arctic Circle; the Human Security Centre wrote that “these vessels carry a high percentage of Russia’s nuclear weapons, and represent the most survivable element of its nuclear force.”⁴⁴ We heard that Russia’s approach to defence in the region takes the form of a ‘bastion’ strategy, where in the event of conflict Russian naval assets would be projected north and west from the Kola Peninsula to defend the nuclear submarines and defend against attacks over the North Pole.⁴⁵ Professor Basil Germond suggested that this ‘bastion’ might extend as far as Shetland or Orkney.⁴⁶ Witnesses told us that the High North was likely to increase in strategic importance for Russia in the future, as the retreat of sea ice both made defence in the region more challenging while also opening up new sea routes and therefore economic opportunities.⁴⁷ We also heard that the accession of Finland and Sweden to NATO would present strategic defence challenges for Russia.⁴⁸

27. The UK Government’s Arctic policy documents recognise that Russia views the Arctic as being strategically important, and that the country’s military presence there has been growing, while also acknowledging that it has legitimate interests in the region. The most recent Arctic Policy Framework, *Looking North*, states:

The UK recognises that, as an Arctic state, Russia has a significant presence in the region, which it will seek to enhance in response to environmental changes; in doing so, we expect Russia to comply with international law.⁴⁹

The document also states that Russia’s invasion of Ukraine has made cooperation on Arctic issues more difficult, noting that the work of the multilateral Arctic Council—of which Russia is a member—has been disrupted since the conflict began.⁵⁰

Climate change, economic activity, and navigation

28. Climate change is having considerable effects on the Arctic, and the impacts of global warming are more acutely felt in the region than in other parts of the world. The Arctic has warmed by around 2°C since 1850, approximately double the global average, and it is expected to warm by a further 1°C even if global warming is limited to the Paris Agreement target of 0.5°C.⁵¹ As well as having global ramifications, this is transforming the geography of the region and presenting new defence and security challenges. We heard that the melting of Arctic ice is opening up new sea lanes and making Arctic resources

44 Human Security Centre (DIS0046);

45 RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022, p. 17

46 Professor Basil Germond (DIS0042)

47 [Q20](#)

48 [Q11](#)

49 UK Government, [Looking North: The UK and the Arctic, the United Kingdom’s Arctic Policy Framework](#), 9 February 2023, p. 35

50 UK Government, [Looking North: The UK and the Arctic, the United Kingdom’s Arctic Policy Framework](#), 9 February 2023, p. 13

51 Siegert, M. et al. (2020) [The Arctic and the UK: climate, research and engagement](#), Grantham Institute Discussion Paper 7, Imperial College London.

more easily accessible.⁵² For example, we heard that exploration for oil, gas and rare earth metals might increase, and that fishing fleets might move northwards as the oceans warm and fish populations move accordingly.⁵³

29. We heard that increased economic activity could have defence and security implications in the High North. Nicolas Jouan of RAND Europe called the prospect of increased economic opportunities “potentially destabilising” and said it could “create competition between countries wanting access to sea lanes and resources.”⁵⁴ RAND Europe also indicated that increasing maritime traffic could have impacts on the fragile Arctic ecosystem.⁵⁵ Professor Jacques Hartmann, Professor of Law at the University of Dundee, said that increasing traffic would bring with it new requirements for monitoring ships passing through the area and for search and rescue capability.⁵⁶ The Icelandic Ambassador, His Excellency Sturla Sigurjónsson, also took the view that search and rescue in the region needed to be looked at closely.⁵⁷

30. Although witnesses were in agreement that increasing economic activity could have security implications for the High North, several contributors to the inquiry said the pace and scale of change in the short term should not be overestimated. Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, pointed out that an estimated 70 per cent of undiscovered Arctic oil and gas already lies within the Exclusive Economic Zones of an Arctic State, limiting the potential for inter-state tension in the region.⁵⁸ The Norwegian and Icelandic Ambassadors told us that while parts of the Arctic might become more navigable in the future, hazards like drifting ice and darkness still made it a challenging environment for ships.⁵⁹ The Icelandic Ambassador, His Excellency Sturla Sigurjónsson, said “there has not been much visible evidence so far” that Arctic sea routes were more navigable, but that “the potential is definitely there” and that states should start to consider the implications should this potential be realised in the future.⁶⁰

31. Witnesses also told us that as northern sea routes became more navigable this could lead to disputes about navigation rights and jurisdiction over certain routes. In particular, several contributions to the inquiry highlighted Russia’s increasing assertiveness over the Northern Sea Route along its Arctic coastline. In November 2022 Russia passed a new law limiting navigation rights for foreign warships and state-owned vessels through parts of the Northern Sea Route.⁶¹ Nicolas Jouan of RAND Europe wrote that “Russia is ... testing the limits of the United Nations Convention on the Law of the Sea (UNCLOS)”⁶² with this law, although Professor Jacques Hartmann said that from a legal standpoint “I do not think we can throw out their claim immediately.”⁶³ Dr Marc DeVore, Senior Lecturer in

52 Dr Peter Hough ([DIS0041](#)); Nicolas Jouan, RAND Europe ([DIS0049](#)); Professor Basil Germond ([DIS0042](#))

53 [Qq128–132](#); Professor Basil Germond ([DIS0042](#)); RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022, p. 16

54 Nicolas Jouan, RAND Europe ([DIS0049](#))

55 RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022, p. 23

56 [Q134](#)

57 [Q82](#)

58 [Q23](#)

59 [Qq75–77](#)

60 [Q75](#)

61 Independent Barents Observer, [Russian parliament passes law limiting freedom of navigation along Northern Sea Route](#), 1 December 2022

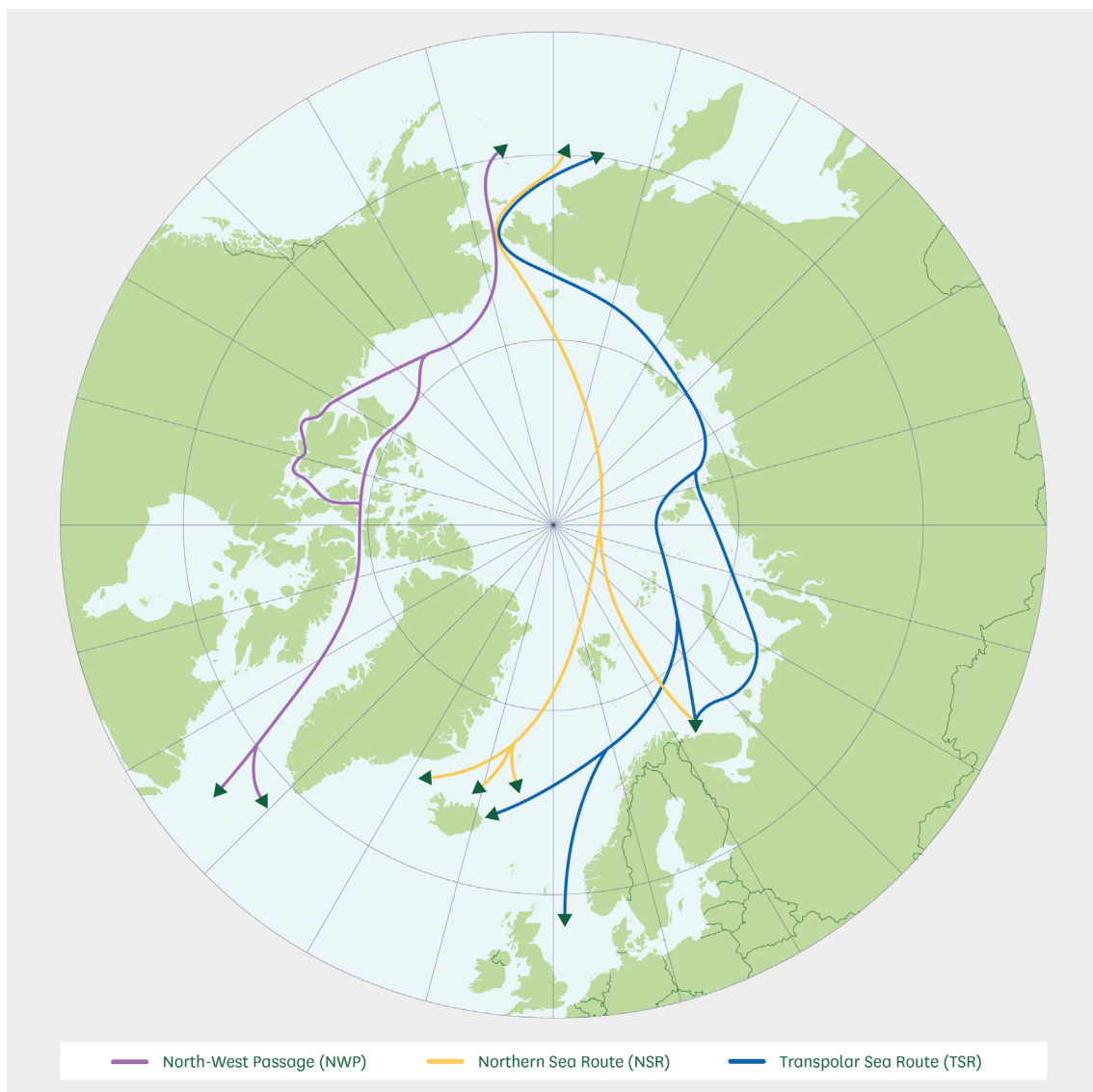
62 Nicolas Jouan, RAND Europe ([DIS0049](#))

63 [Q138](#)

International Affairs at the University of St Andrews, explained that the Russians' claim could prompt a response from NATO members and become a source of tension in the High North:

The Russians have built a series of military positions along their north-east sea route to enforce this attempt to, basically, turn the north-east sea route into a territorial sea controlled by Russia. That creates real incentives for NATO, the UK and partners to conduct freedom of navigation exercises to challenge this Russian attempt to establish a de facto claim to something that is very tenuous or illegal in international law. Of course, if one is doing freedom of navigation exercises, each time we do it we are risking some form of military confrontation up there.⁶⁴

A map of the Arctic region, showing the Northern Sea Route, the Northwest Passage and the Transpolar Sea Route



32. The MOD states that one of its objectives in the High North is to “reinforce the rules-based international system, particularly UNCLOS”.⁶⁵ The document adds:

The right to free and unfettered passage on the high seas must be safeguarded, as must the right of innocent passage and freedom of navigation through territorial seas and Exclusive Economic Zones, and transit passage through straits. The UK will not accept navigation terms which contravene UNCLOS and will remain vigilant to the undermining of UNCLOS by any actor, and is prepared to respond if needed.⁶⁶

The MOD’s submission stated that the new Russian law “impacts upon the interests of the UK, our Allies and partners”, and the Minister took a strong view in his evidence to us that the Russian claim was without merit:

No, it has no merit, and yes, it is a challenge to our freedom. It is impossible to have a sea lane designated as open to all for the purposes of trade while denying it to that traffic. There are very clear UN laws on these matters, and the law that Russia has sought to pass is simply not in its gift.⁶⁷

China’s involvement in the Arctic

33. A number of submissions to our inquiry noted that China was showing an increasing interest in Arctic affairs, and was attempting to increase its influence and economic presence in the region. Professor Caroline Kennedy-Pipe, Professor of War Studies at Loughborough University, wrote that “China has been steadily affirming over many years now a non-military presence in Arctic affairs.”⁶⁸ China’s 2018 Arctic policy described the country as a “near-Arctic state”, although Dr Marc DeVore told us that this has received “blowback” from Arctic States and that the language had been dropped from later communications.⁶⁹ China is one of thirteen states with Observer status on the Arctic Council, a status it was granted in 2013.⁷⁰ We heard that China has been seeking investment opportunities in the region through its Polar Silk Road initiative, including in Greenland and Iceland.⁷¹ The opening of the Northern Sea Route also has the potential to significantly reduce shipping times between Europe and Asia, presenting trade opportunities for China.⁷²

34. Contributions to our inquiry generally did not view China’s interest in the Arctic as a pressing defence concern. Dr Duncan Depledge, Lecturer in Geopolitics and Security at Loughborough University, said that China’s supposed ‘arrival’ in the Arctic had been “overstated,” noting the “pushback” against Chinese investment in the region.⁷³ Dr Rowan Allport said that in the “very long-term ... we might have to think about whether the Arctic becomes a gateway for future Chinese projection into the Atlantic, but we are

65 Ministry of Defence, [The UK’s Defence Contribution in the High North](#), 29 March 2022, p.8

66 Ministry of Defence, [The UK’s Defence Contribution in the High North](#), 29 March 2022, p.5

67 [Q196](#)

68 Professor Caroline Kennedy-Pipe ([DIS0047](#))

69 [Q25](#)

70 Arctic Council, [List of Arctic Council Observers](#), Accessed 14 June 2023

71 Dr Peter Hough ([DIS0041](#)); Professor Caroline Kennedy-Pipe ([DIS0047](#))

72 Ministry of Defence ([DIS0048](#))

73 [Q24](#)

still quite a way from that.”⁷⁴ It was also acknowledged that the UK and China could have shared interests in the Arctic. Dr Peter Hough, Associate Professor in International Relations at Middlesex University, wrote that

Beijing’s Polar Silk Road policy envisions maintaining open sea routes through the Arctic, building cooperative commercial relationships with the Arctic states and indigenous peoples and advancing polar scientific cooperation. None of these aims are contrary to British interests.⁷⁵

In his evidence, the Minister too made the point that China was likely to share the UK’s interest in moving goods along the Northern Sea Route.⁷⁶

Subsea and offshore infrastructure

35. A further issue that was often raised in evidence to us was the need to protect Critical National Infrastructure, and the potential vulnerability of subsea or offshore infrastructure to interference. This issue is not confined to the North Atlantic and the High North, but the issue of subsea infrastructure in Europe and the Atlantic has attracted greater attention following the sabotage of the Nord Stream pipeline in September 2022. A recent report by the NATO Parliamentary Assembly notes that the largest concentration of undersea cables is in the Atlantic, linking Europe to North America, and concludes that protecting such infrastructure is “a relevant and timely issue for Allies in particular.”⁷⁷ NATO’s Assistant Secretary General for Intelligence and Security, David Cattler, has said there are “heightened concerns that Russia may target undersea cables and other critical infrastructure.”⁷⁸

36. Evidence to our inquiry identified risks to subsea and offshore infrastructure in the North Atlantic and the High North. Professor Basil Germond, Professor of International Security at Lancaster University, wrote

The waters north of Scotland host many undersea cables connecting Europe, the UK and America. This includes communication cables and energy interconnectors, which constitute **critical infrastructures of Western Allies (for communication and energy security)**. Oil rigs and related infrastructures in the North Sea and in the waters north of Scotland could be at risk of sabotage.⁷⁹

The Norwegian Ambassador to the UK, His Excellency Wegger Christian Strømmen gave an example:

I would like to mention the infrastructure we have in the North Sea and the North Atlantic. There are pipes for gas and oil, interconnectors for electricity, and other kinds of infrastructure. It is massively important. If

74 [Q20](#)

75 Dr Peter Hough ([DIS0041](#))

76 [Q197](#)

77 NATO Parliamentary Assembly Science and Technology Committee, [Preliminary Draft: Protecting Critical Maritime Infrastructure - the role of technology](#), 6 April 2023c, p. 1

78 Reuters, [NATO says Moscow may sabotage undersea cables as part of war on Ukraine](#), 3 May 2023

79 Professor Basil Germond ([DIS0042](#))

something were to happen on our side of the border, it would have an effect here. The United Kingdom imports somewhere between 35% and 40% of its gas from Norway.⁸⁰

Dr Rowan Allport of the Human Security Centre told us that “we do not have an equivalent of Nord Stream in the UK that we are critically dependant on, but this is still a major threat and it would still cause major economic disruption.”⁸¹

37. The risks to infrastructure in Scottish waters have become more apparent in the past year. A suspected Russian spy ship, the Admiral Vladimirsky, was reported to have entered the Moray Firth in November 2022 as part of an alleged operation to map subsea infrastructure in the area.⁸² The potential effects of damage to cables were also seen in October 2022 when accidental damage to a subsea cable connecting Shetland to the Scottish mainland severely disrupted communications to the islands.⁸³

38. Evidence to our inquiry explained some of the complexities involved in protecting offshore and subsea infrastructure. Professor Basil Germond wrote that the Nord Stream sabotage had shown it was “difficul[t] to trace responsibility back to the perpetrator” and that “responding to sabotage without escalating tensions is arduous and states might be reluctant to claim jurisdiction.”⁸⁴ Professor Jacques Hartmann, Professor in Law at the University of Dundee, said much of the legal regime around subsea infrastructure was unclear:

There are no rules as such on the incidents that we see today of deliberate attacks on cables. I mean, there is a civil liability regime in place, but we do not know for sure, for instance, how the use of force rules apply. The state whose ship damages the cable has jurisdiction. For instance, if a Russian-flagged ship damages a cable in international waters, then per the definition, other states do not have jurisdiction to deal with that as a criminal matter, because they are not allowed to exercise jurisdiction in international waters. That would mean that only the Russians would have jurisdiction. That is a quite significant gap in the law.⁸⁵

When asked whether the lack of legal clarity made infrastructure vulnerable to interference, Professor Hartmann agreed that “since we have absolutely no rules around many of the things that we have seen recently—yes, I would say so.”⁸⁶

39. The MOD’s defence paper *The UK’s Defence Contribution in the High North* recognises the importance of protecting underwater infrastructure, and lists “protect[ing] Critical National Infrastructure” as one of the four objectives for the High North.⁸⁷ The Armed Forces Minister told us that the MOD

80 [Q85](#)

81 [Q27](#)

82 Herald Scotland, [Moray Firth: Russian spy vessel ‘probed windfarm for sabotage plans’](#), 20 April 2023

83 The Telegraph, [Shetland cut off from mainland after undersea cable damaged](#), 20 October 2022

84 Professor Basil Germond ([DIS0042](#))

85 [Q147](#)

86 [Q149](#)

87 Ministry of Defence, [The UK’s Defence Contribution in the High North](#), 29 March 2022, p.8

have recognised that the capabilities Russia has to interfere with our subsurface infrastructure require us to have a capacity to assure that it has not been interfered with, and obviously we are developing that.⁸⁸

The Minister outlined some of the steps the MOD was taking in response to the perceived threat to subsea infrastructure. He explained that the MOD and other interested departments such as the Home Office were working to improve understanding of where the UK's subsea Critical National Infrastructure (CNI) is, and that the MOD "is looking at what capabilities we need to assure the security of our subsurface CNI."⁸⁹ He added that the MOD was already developing this capability, pointing to the acquisition and refitting of the new Multi-Role Ocean Surveillance Ship (MROSS), Royal Fleet Auxiliary (RFA) Proteus which is due to enter service later this year.⁹⁰ The UK Government intends to procure a second MROSS, this time a purpose-built vessel; the MOD's 2021 command paper, *Defence in a Competitive Age*, indicated it was likely an MROSS would be built in Scotland.⁹¹

40. A further issue relates to repairing damaged infrastructure. Professor Jacques Hartmann told us:

The problem—what complicates this matter a bit further—is that many of these cables are private, so are not owned by the British Government. There are very few companies around the world that maintain and can repair these kinds of cables [...] I would have thought that it would be in the national interest of many states to have the capacity at least to repair their own cables, but many states do not have that capacity.⁹²

The NATO Parliamentary Assembly Committee's report noted that 80 per cent of Europe's Critical National Infrastructure is owned by private companies, and that this "complicates the role of national governments in protecting this vital equipment."⁹³ The MOD's Director of Euro-Atlantic Security, Clare Cameron, told us:

We have to remember that these cables are owned by industry, and the responsibilities therefore lie elsewhere across Government and indeed with the industry itself. The responsibility for maintaining the subsea cables is a commercial one, and we recognised that in our national risk register, which is owned by the Cabinet Office. It is a real cross-Government effort, but it is important that we remember the commercial nature of much of this.⁹⁴

41. The UK and NATO face new challenges in the North Atlantic in the High North. In particular, the Arctic faces new environmental and political challenges which must be navigated carefully if the region is to remain one of high co-operation and low tension.

88 [Q208](#)

89 [Q207](#)

90 [Q245](#)

91 Ministry of Defence, *Defence in a Competitive Age*, [CP 411](#), 22 March 2021, p. 60

92 [Qq149–150](#)

93 NATO Parliamentary Assembly Science and Technology Committee, [Preliminary Draft: Protecting Critical Maritime Infrastructure - the role of technology](#), 6 April 2023c, p. 6

94 [Q208](#)

42. *The UK Government should continue to be proactive in considering how the UK's defence and security priorities in the North Atlantic and the High North may change in the future, in response to the changing geopolitical context and the effects of climate change. In its response to this report, the UK Government should set out its most recent assessment of these challenges. Among the most important issues the UK Government must consider are:*

- *increasing Russian belligerence;*
- *growing Chinese interest in Arctic politics;*
- *the opening of new sea routes and the potential for increased maritime traffic as a consequence;*
- *increasing resource competition; and*
- *the vulnerability of offshore and subsea infrastructure.*

Regardless of how the UK's priorities in the region evolve, it is likely Scotland as part of the UK will continue to play a prominent role in meeting those aims.

43. Climate change is likely to lead to the opening of new sea routes due to the retreat of Arctic ice. While the overriding priority should be to minimise the effects of climate change, the UK Government must also be prepared for the likelihood that navigation via these routes will gradually become more possible in the future. Increased maritime traffic presents economic and trade opportunities but also has practical and strategic implications, such as the increased risk of accidents and the probability that navigation rights will be asserted and challenged. It is highly likely that increasing maritime activity in the High North will create new responsibilities for the Royal Navy, and Scotland's geography means it would be likely to play a role in fulfilling those duties.

44. *The UK Government should consider how the effects of climate change might create new defence and security responsibilities in the future, in particular for naval policing and search and rescue. The UK should also seek to promote and uphold the principles of the UN Convention on the Law of the Sea (UNCLOS) such as the right of innocent passage, and we believe that the MOD's paper, The UK's Defence Contribution in the High North, is right to make this a priority.*

45. Events like the sabotage of the Nord Stream pipeline have shown that Critical National Infrastructure that is based offshore or beneath the sea can be vulnerable to interference. This is a concern in the North Atlantic, where transatlantic cables are critical lines of communication, as well as in the UK's own Exclusive Economic Zone. Investment in subsea surveillance like the Multi-Role Ocean Support Ships is welcome, but vulnerabilities remain. We heard that weaknesses in the legal regime governing subsea cables makes them a tempting target for malign actors. The UK Government told us that repair of subsea cables was a matter for the cables' commercial owners; we are concerned that the UK Government did not have more to say about how such important infrastructure could be repaired in the event of sabotage or failure.

46. *The UK Government should produce and publish a strategy for protecting offshore infrastructure. This should include a plan for how attempts by malign actors to interfere with Critical National Infrastructure can be deterred or prevented, and how damaged infrastructure can be repaired quickly by their commercial owners.*

47. *The UK Government should set out the timeline for the refitted Multi-Role Ocean Surveillance Ship, RFA Proteus, and the future purpose-built Multi-Role Ocean Surveillance Ship to come into service. It should state whether it is still the intention, as set out in the 2021 Integrated Review, for the purpose-built MROSS to be built in Scotland.*

The UK's work with NATO and other allies

48. This section considers the various ways in which the UK cooperates with its allies in the North Atlantic and the High North. The UK is a member of the North Atlantic Treaty Organisation (NATO), as well as other structures through which the UK cooperates with allies on defence and security matters relating to the North Atlantic and the High North. The UK also has bilateral relationships and agreements with its allies which support its policy in the region.

NATO

49. The UK is a founding member of NATO, and six (soon likely to be seven) of the eight Arctic States are also members.⁹⁵ UK defence policy in the North Atlantic and the High North is closely tied to its role within NATO, as the region is part of the wider Euro-Atlantic area with which the alliance is concerned. The MOD's submission outlines the UK's contribution to NATO in the North Atlantic and the High North:

As a leading European NATO Ally, the UK must defend our Allies and respond to aggression, including in the Arctic and High North. Within NATO, the UK plays a particular role in protecting our underwater critical national infrastructure and ensuring the freedom to operate in the North Atlantic, especially in the Greenland-Iceland-UK Gap.⁹⁶

The Human Security Centre highlighted the important role the UK plays in protecting NATO's 'northern flank', enabling the free access to the North Atlantic necessary for US support to cross the Atlantic in the event of conflict in Europe.⁹⁷ The Armed Forces Minister highlighted Scotland's specific contribution, telling us that "Scottish geography is absolutely essential"⁹⁸ to NATO's defence. He explained:

Everywhere that I have been in the northern parts of Europe and in North America, they are absolutely clear that Faslane and Lossiemouth—those

95 Canada, Denmark, Finland, Iceland, Norway, and the United States are all members of NATO. At the time of writing, Sweden's application to join NATO has not yet been formally approved. The eighth Arctic State is Russia.

96 Ministry of Defence ([DIS0048](#))

97 Human Security Centre ([DIS0046](#))

98 [Q188](#)

two, most notably, as the two bases from which NATO can most credibly police the Greenland-Iceland-UK gap and the High North beyond it—are of enormous strategic importance to the UK and to NATO.⁹⁹

The Minister described the role that UK forces play in supporting NATO objectives in the North Atlantic and the High North; he explained that this comprised a mixture of sovereign and NATO-flagged operations, which “broadly combine into the deterrence effect that we want.”¹⁰⁰ Specific operations include the UK’s surveillance of the Greenland-Iceland-UK Gap and its contribution to Icelandic air policing, which is periodically undertaken from RAF Lossiemouth.¹⁰¹ The UK also hosts and participates in a number of joint NATO exercises with a focus on the North Atlantic and the High North, such as the UK-led Exercise Joint Warrior which is primarily based in the waters and along the coastline around North West Scotland.¹⁰²

50. Following Russia’s invasion of Ukraine, Finland and Sweden applied to join NATO. A number of witnesses told us this would significantly alter the strategic balance in the North Atlantic and the High North and would require many aspects of NATO defence to be re-evaluated. The Norwegian Ambassador to the UK, His Excellency Wegger Christian Strømme, said that Finland and Sweden’s membership

will change not only the dynamic, but the strategic outlook for northern Europe, including the North Atlantic and, clearly, the northern part of the United Kingdom—for Scotland and for the maritime areas in the north of these islands.¹⁰³

Dr Duncan Depledge, Lecturer in Geopolitics and Security at Loughborough University, said it would “demand a fundamental rethink of an awful lot of the defence assumptions that [NATO and the Nordic countries] had.”¹⁰⁴ Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, pointed out that Russia would similarly need to reconsider its strategy in the region.¹⁰⁵ The Minister told us that new regional plans were in development within NATO, including for the northern command area.¹⁰⁶ We heard some suggestions that NATO could consider setting up a new Arctic command in the future;¹⁰⁷ MOD officials told us they were not aware of any plans to do so at present, but noted that NATO had set up new headquarters, a couple of years ago, at Norfolk, Virginia looking at northern operations.¹⁰⁸

51. Some contributions to the inquiry suggested that Finland and Sweden’s accession to NATO could result in the UK taking on greater responsibilities in the High North. Professor Andrew Dorman, Professor of International Security at King’s College London and Editor of the *International Affairs* journal, wrote

99 [Q187](#)

100 [Q212](#)

101 [Q66](#); [Q111](#)

102 Royal Navy, [Exercise Joint Warrior](#), Accessed 14 June 2023

103 [Q64](#)

104 [Q12](#)

105 [Q14](#)

106 [Q214](#)

107 [Q14](#)

108 [Qq214–216](#)

The United Kingdom's geographical position suggests that its focus within NATO will need to be on the High North and, in particular, developing the requisite capabilities to reinforce the Scandinavian and Baltic states.¹⁰⁹

Professor Basil Germond, Professor of International Security at Loughborough University, recommended that the UK aim to “becom[e] a net provider of security in the High North ... to reassure allies of the UK’s commitment to the defence of NATO’s northern flank.”¹¹⁰ The Norwegian Ambassador suggested Norway would welcome such a role for the UK, stating “we are massively interested in the United Kingdom taking its role as a major regional power in northern Europe”¹¹¹ and described the UK as having a “natural leadership role in northern Europe.”¹¹² However, we heard it was not inevitable that the UK’s role in the region would increase, as Finland and Sweden both brought significant defence capability to NATO. Dr Rowan Allport judged that “Finland and Sweden will definitely be, at least in the short to medium term, net security contributors.”¹¹³

The Joint Expeditionary Force

52. The UK also leads the Joint Expeditionary Force (JEF), a defence initiative whose membership of ten countries includes five Arctic States: Denmark, Finland, Iceland, Norway and Sweden.¹¹⁴ The MOD described the JEF as “complementary to NATO,” noting that JEF could be “more responsive” as any combination of JEF members could choose to cooperate on operations under the JEF flag.¹¹⁵ The Norwegian Ambassador told us the flexibility of the JEF was welcome, while the Icelandic Ambassador highlighted its ability to focus on operations below the threshold of war.¹¹⁶

53. There was some discussion about whether the focus of the JEF would need to shift northwards in response to the growing importance of the High North. MOD’s Director of Euro-Atlantic Security, Clare Cameron, explained that JEF activity was currently focused on the High North, North Atlantic and the Baltic Sea.¹¹⁷ Dr Marc DeVore said that the JEF’s original mission had been focused on the Baltic, and that to shift its focus to the Arctic would require “re-specialisation” including new equipment and training. Both he and Dr Duncan Depledge agreed that JEF needed to have both a High North and a Baltic component,¹¹⁸ an assessment which the Minister said was “in tune with MOD policy”, suggesting that the JEF would be able to operate in both regions in the future.

54. The UK’s role and responsibilities in NATO may evolve in response to changing geopolitics, including increasing tensions with Russia and the consequent accession of Finland and (as seems likely) Sweden to the alliance. This may entail new or changed responsibilities in the North Atlantic and the High North. The same is true of the Joint Expeditionary Force, which may need to respond to new challenges in the North Atlantic and the High North. It is highly likely that UK capabilities based in Scotland will be an important part of the contribution to NATO and JEF in the region.

109 Professor Andrew Dorman ([DIS0044](#))

110 Professor Basil Germond ([DIS0042](#))

111 [Q64](#)

112 [Q96](#)

113 [Q17](#)

114 The other members of the JEF are Estonia, Latvia, Lithuania, and the Netherlands

115 [Qq222–225](#)

116 [Q97](#)

117 [Q223](#)

118 [Q44](#);

55. *We recommend that the UK Government convene discussions with its NATO and Joint Expeditionary Force allies about how these alliances should respond to new challenges in the North Atlantic and the High North, and be prepared to take an expanded role in the region if required.*

Other multilateral fora

56. Outside of operational activities, the UK participates in other multilateral bodies with a focus on the North Atlantic and the High North. The UK leads the European Defence Policy Forum, or Northern Group, whose membership includes Denmark, Finland, Iceland, Norway and Sweden. The Minister described this as a “vehicle for mutual understanding and co-operation, rather than full-on military co-ordination.”¹¹⁹ The forum meets every six months at Defence ministerial level.¹²⁰ The UK is also a member of the Armed Forces Security Roundtable, a group of 11 countries’ military representatives which the MOD’s Director of Euro-Atlantic Security, Clare Cameron, described as “the forum for discussion of defence and security co-operation in the High North.”¹²¹

57. The Arctic Council is the most prominent intergovernmental body focused on Arctic issues. The Council’s remit specifically excludes defence matters, but it does consider issues with a security dimension such as climate change. There are eight full members of the Arctic Council: Canada, Denmark, Finland, Iceland, Norway, Sweden, Russia and the United States.¹²² The UK has held Observer status since 1998.¹²³ Following Russia’s invasion of Ukraine much of the work of the Arctic Council was suspended, and the Council did not meet between March 2022 and May 2023, although in some cases work that did not involve the participation of Russia continued.¹²⁴ Norway took the chair of the Council in May 2023 and the Norwegian Ambassador indicated to us that “some limited activities” will resume.¹²⁵ The Icelandic Ambassador expressed hope that the Council could eventually “return to normal co-operation when we have returned to normality in Ukraine.”¹²⁶ However, Dr Duncan Depledge posed the question of what would happen if normal relations did not resume:

If the Arctic Council... does not recover, what does the future hold for governance in the region? Is it going to be an A7 bloc—a group of Arctic states without Russia—or is there going to be scope for non-Arctic allies like the UK to play an even greater role? The UK has to be prepared to step into that now and, ultimately, do more.¹²⁷

Dr Peter Hough, Associate Professor in International Relations at Middlesex University, wrote that “it is inevitable that new fora for diplomatic cooperation for the non-Russian states of the region will emerge and the UK should strive to be involved in this.”¹²⁸

119 [Q226](#)

120 [Q228](#)

121 [Q227](#)

122 Arctic Council, [Arctic States](#), Accessed 14 June 2023

123 Arctic Council, [List of Arctic Council Observers](#), Accessed 14 June 2023

124 UK Government, [Looking North: The UK and the Arctic, the United Kingdom’s Arctic Policy Framework](#), 9 February 2023, p. 9

125 [Q71](#)

126 [Q101](#)

127 [Q9](#)

128 Dr Peter Hough ([DIS0041](#))

58. Some contributions to the inquiry highlighted the potential for Scotland to play a leading role in the UK's Arctic diplomacy. Dr Hough wrote that "Scotland has an important role to play in an expanded UK security and diplomatic presence in the High North," adding that "the Arctic represents a logical arena for devolved diplomacy from Edinburgh to be exercised."¹²⁹ The Scottish Government's own Arctic Policy Framework emphasises Scotland's ties to the Arctic,¹³⁰ and in 2017 the Arctic Circle Forum conference took place in Edinburgh. A previous version of the UK Government's Arctic Policy Framework, 2018's *Beyond the Ice*, stated:

the UK Government supports these relationships and is keen to work with all the devolved administrations and organisations across the UK to develop appropriate connections in their region.¹³¹

Scotland's historical and cultural links to the Arctic and its relationships with Arctic allies could prove useful in achieving this aim.

59. **The UK's relationships with its Arctic allies are essential to meeting common security objectives in the North Atlantic and the High North. These relationships will become more important should the challenges in the region become more prominent.**

60. *The UK should continue considering how it can best contribute to diplomacy and collaborative problem-solving in the North Atlantic and the High North. Actions it could take include stepping up its participation in existing fora where appropriate and considering the appointment of a dedicated ambassador or envoy to the Arctic region.*

Bilateral cooperation

61. In addition to its membership of multilateral fora, the UK engages directly in bilateral relations with its Arctic allies. The UK has Memoranda of Understanding on security issues with nearly all Arctic States, which act as a framework on which to build cooperation.¹³² In 2022, following Russia's invasion of Ukraine and Finland and Sweden's consequent application to join NATO, the then-Prime Minister Boris Johnson agreed joint political declarations with his Finnish and Swedish counterparts.¹³³ Witnesses told us that joint training and exercising with Finland and Sweden had increased in recent years, even prior to their applications for NATO membership.¹³⁴ According to a RAND Europe research paper, the UK's relationship with Norway is "central to the UK's involvement in the Arctic."¹³⁵ We heard that the UK cooperates closely with Norway: for example, Norway hosts regular cold-weather training for 45 Commando Royal Marines and others, something which the Norwegian Ambassador said was very welcome.¹³⁶ The UK and Norway also work together through the inter-operability of the P-8A Poseidon maritime patrol aircraft used for anti-submarine warfare and patrolling the Greenland-Iceland-UK

129 Dr Peter Hough ([DIS0041](#))

130 Scottish Government, [Arctic Connections: Scotland's Arctic Policy Framework](#), 23 September 2019

131 HM Government, [Beyond the Ice: UK policy towards the Arctic](#), 4 April 2018, p. 9

132 [Q88](#)

133 HM Government, [United Kingdom-Finland statement](#), 11 May 2022; HM Government, [UK-Sweden Political Declaration of Solidarity](#), 11 May 2022

134 [Q15](#)

135 RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022, p. 38

136 Human Security Centre ([DIS0046](#)); [Qq111-113](#)

Gap. Both countries operate P-8s, and this has enabled Norwegian aircraft to use facilities at RAF Lossiemouth, and for the RAF to do likewise at Norwegian bases. The Norwegian Ambassador told us this led to operational flexibility and cost savings.¹³⁷

62. Cooperation around the P-8A Poseidon Maritime Patrol Aircraft, which has enabled Norwegian aircraft to be maintained at RAF Lossiemouth, and RAF aircraft to be supported in Norway, has been a success, and provides a model for similar defence cooperation in the future.

63. *Alongside its efforts to develop defence and security cooperation in the North Atlantic and the High North through multilateral institutions, the UK Government should pursue further opportunities for direct bilateral cooperation with Arctic allies, including new NATO members Finland and Sweden.*

3 Scotland's contribution to defence in the North Atlantic and the High North

64. In this Chapter we explore how military assets based in Scotland contribute to meeting UK and allied defence and security objectives in the North Atlantic and the High North, and how they might do so in the future.

Military assets located in Scotland

65. Witnesses to our inquiry told us that Scotland-based military capabilities make a crucial contribution to defence and security in the North Atlantic and the High North. The Human Security Centre gave a number of examples:

Critical North Atlantic/Arctic taskings of the Armed Forces in Scotland include policing the UK air defence region (as well as periodically undertaking Icelandic Air Policing), securing the Greenland-Iceland-UK (GIUK) Gap, supporting littoral/land operations in the Arctic region (particularly Norway), fielding and defending the CASD (Continuous At-Sea Deterrent), and supporting military exercises.¹³⁸

66. Scotland's geography gives it an obvious advantage as a base for such operations. The MOD told us "Scotland's proximity to the waters and skies above the North Atlantic is of crucial importance to the UK, and NATO's security."¹³⁹ Nicolas Jouan of RAND Europe described Scotland as a "physical asset" to the UK "because it is a convenient launching platform for planes and ships, commercial or military, active in the region."¹⁴⁰ Professor Basil Germond, Professor of International Security at Lancaster University, noted that Scotland's location at the southernmost end of the Greenland-Iceland-UK (GIUK) Gap was important, as the strategic importance of the GIUK gap was increasing due to Russian submarine activity.¹⁴¹

Military bases in Scotland

67. The UK's closest bases to the North Atlantic and the High North are located in Scotland, and accordingly these bases are home to assets which are used to meet defence and security objectives in the region. HM Naval Base Clyde (otherwise known as Faslane) and RAF Lossiemouth are particularly important in this regard.

HM Naval Base Clyde

68. HM Naval Base Clyde is home to the Royal Navy's nuclear-armed Vanguard-class submarines that form the UK's Continuous At-Sea Deterrent, as well as the Astute Class of attack submarines.¹⁴² Additionally, a frigate acting as a Towed Array Patrol ship operates from Faslane in order to protect Trident-equipped submarines and to conduct anti-

138 Human Security Centre ([DIS0046](#))

139 Ministry of Defence ([DIS0048](#))

140 Nicolas Jouan, RAND Europe ([DIS0049](#))

141 Professor Basil Germond ([DIS0042](#))

142 Ministry of Defence ([DIS0048](#))

submarine operations.¹⁴³ Royal Navy Sandown-class minehunters are based at Faslane, as is C Squadron of the Royal Navy's Diving and Threat Exploration Group. 43 Commando, a Royal Marines Unit tasked with protecting the Continuous at Sea Deterrent, is also based there, as is the Faslane Patrol Boat Squadron.¹⁴⁴

RAF Lossiemouth

69. RAF Lossiemouth is the primary RAF base in Scotland.¹⁴⁵ The MOD says that Lossiemouth is “ideally positioned for rapid access to the North Atlantic and the High North”.¹⁴⁶ The base is home to four Typhoon Squadrons which, among other duties, provide the UK's northern Quick Reaction Alert (QRA) response to potential threats in UK airspace.¹⁴⁷ Lossiemouth also hosts all nine of the RAF's Poseidon MRA1 (P-8A) maritime patrol aircraft, which among other things carry out anti-submarine warfare operations patrolling the Greenland-Iceland-UK Gap (GIUK Gap).¹⁴⁸ The RAF's new fleet of three E-7 Wedgetail Airborne Early Warning aircraft, which are designed to provide aerial and maritime surveillance, will also be based at Lossiemouth when they enter service, currently expected to be in 2024.¹⁴⁹ The MOD reports that the base has received circa £0.5 billion of investment “to support this uplift in operational capacity.”¹⁵⁰

Other bases

70. As well as Faslane and Lossiemouth, there are a number of other Armed Forces bases located in Scotland. These include RM Condor in Arbroath, home to 45 Commando Royal Marines, and Remote Radar Heads at RRH Saxa Vord, RRH Benbecula and RRH Buchan. A number of reserve units are also based in Scotland, such as the RAF's 612 Squadron in Leuchars, 602 Squadron in Glasgow and 603 Squadron in Edinburgh, and Royal Marines Reserve detachments at MOD Caledonia, HMS Dalriada and HMS Scotia.¹⁵¹

The role of Scottish-based capabilities in the North Atlantic and High North

71. The capabilities described in the previous section contribute to the UK's and NATO's defence and security in the North Atlantic and the High North in a number of ways. Some of these are described below.

The Greenland-Iceland-UK Gap

72. As noted in Chapter 2, one of the UK's key contributions to both national and NATO defence is monitoring of the Greenland-Iceland-UK Gap (GIUK Gap). Nicolas Jouan of RAND Europe explained:

143 Human Security Centre (DIS0046)

144 Human Security Centre (DIS0046)

145 Ministry of Defence (DIS0048)

146 Ministry of Defence (DIS0048)

147 Human Security Centre (DIS0046)

148 Human Security Centre (DIS0046)

149 Ministry of Defence (DIS0048)

150 Ministry of Defence (DIS0048)

151 Human Security Centre (DIS0046)

Although the UK is not an Arctic country, it is one of the main contributors to the securitisation of the Greenland-Iceland-United Kingdom (GIUK) gap giving access to the North Atlantic. Since the Cold War, the GIUK gap has been an important chokepoint for submarine traffic and therefore saw intense anti-submarine warfare (ASW) activities.¹⁵²

Policing of the GIUK Gap prevents hostile forces from accessing the North Atlantic from the Arctic, protecting an important line of communications between Europe and the United States. The UK's nuclear-armed Vanguard class submarines which form the UK's Continuous At-Sea Deterrent also patrol in the Atlantic, and monitoring the GIUK gap prevents those submarines from being tracked.¹⁵³

A map of Northern Europe and the North Atlantic, with the Greenland-Iceland-UK Gap labelled



73. Policing of the GIUK gap is primarily the responsibility of the P-8A Poseidon maritime patrol aircraft stationed at Lossiemouth, and of patrol ships and attack submarines based at Faslane. The Armed Forces Minister, for this reason, said Faslane and Lossiemouth were “of enormous strategic importance to the UK and to NATO.”¹⁵⁴ Commenting on the potential implications of Scottish independence on NATO's defence strategy, the Minister said:

If we had to move the base for nuclear-powered and nuclear-armed submarines to a different geography [...] the whole of NATO would be incredibly concerned by the loss of that base.

It is an enormously important part of NATO's ability to police the Greenland-Iceland-UK gap and to deter Russian nuclear-armed and nuclear-powered submarines from getting out into the Atlantic and threatening our NATO supply lines.¹⁵⁵

152 Nicolas Jouan, RAND Europe ([DIS0049](#))

153 [Q7](#)

154 [Q187](#)

155 [Q188](#)

He later added:

You will get plenty of NATO countries who would be cautious of opining on what they would regard as an internal domestic political issue for the United Kingdom, but you also wouldn't find a single NATO country, I think, who would be in any way comfortable with the loss of that nuclear submarine base at Faslane.¹⁵⁶

Quick Reaction Alert

74. The UK's north-facing first response against aerial threats has operated from Lossiemouth since 2014.¹⁵⁷ Quick Reaction Alert (QRA) North responds to threats approaching UK airspace from the North, and so covers the North Atlantic and High North region. When a threat is detected, RAF Typhoons from 1 (Fighter) Squadron are scrambled to meet the threat and escort it out of the UK's area of interest. Dr Rowan Allport of the Human Security Centre told us that "The [QRA] in Scotland is primarily dedicated to the Russian threat at the moment."¹⁵⁸ Three Remote Radar Heads based in Scotland—RRH Benbecula, RRH Saxa Vord and RRH Buchan—form part of the Europe-wide radar network which tracks aerial threats.¹⁵⁹

Littoral Response Group (North)

75. Royal Marines from 45 Commando, based at RM Arbroath, form part of the UK's Littoral Response Group (North), or LRG (North), a task group focusing on amphibious deployments that can operate alongside NATO and JEF allies. The Group's area of operations includes the Atlantic and the High North, as well as the Baltic and the Mediterranean. The Group consists of Royal Marines from 45 Commando alongside Royal Navy ships and helicopters.¹⁶⁰ The MOD's paper, *The UK's Defence Contribution in the High North*, states that the Group will:

build on the Mountain and Cold Weather Warfare expertise of our Commando Forces and comprise dedicated Commando Forces, ships, and helicopters optimised for operations in the High North.¹⁶¹

LRG (North) has taken part in training exercises in northern Europe, including the Joint Expeditionary Force's Exercise Aurora, which simulated an invasion of Sweden.¹⁶²

Training and exercises

76. Forces based in Scotland regularly participate in joint exercises alongside Arctic allies as part of NATO or the Joint Expeditionary Force to enhance military preparedness, including many which focus on the North Atlantic and the High North.

156 [Q238](#)

157 Royal Air Force, [RAF Lossiemouth](#), Accessed 15 June 2023

158 [Q3](#)

159 Human Security Centre ([DIS0046](#))

160 Human Security Centre ([DIS0046](#))

161 Ministry of Defence, [The UK's Defence Contribution in the High North](#), 29 March 2022, p.12

162 Royal Navy, [Royal Navy task group heads for the Baltic for Sweden's largest military drills in more than 25 years](#), 21 April 2023

77. Within NATO, the UK hosts NATO's Exercise Joint Warrior twice a year, often on the coast and in the seas around North West Scotland. The exercise is typically run from HMNB Clyde, and, as part of the exercise, ships from allied navies make use of Scottish ports.¹⁶³ RAF Typhoons and P-8As also participate in the exercise from RAF Lossiemouth.¹⁶⁴ NATO's annual Anti-Submarine Warfare exercise, Exercise Dynamic Mongoose, takes place in the High North and aims to improve cooperation on monitoring and responding to submarine activity in the region. P-8A Poseidon maritime patrol aircraft based at Lossiemouth have taken part in this exercise.¹⁶⁵ NATO's regular air and missile defence exercise, Formidable Shield, is also hosted in Scotland, and the latest iteration of the exercise this May saw RAF Lossiemouth host French and Italian aircraft.¹⁶⁶ In 2018 the UK took part in Exercise Trident Juncture, a NATO exercise which took place in Norway to simulate a situation in which an attack on a NATO member required a collective defence response.¹⁶⁷ 45 Commando Royal Marines participated in the exercise alongside other UK forces.¹⁶⁸

78. As part of the JEF, Royal Marines from 45 Commando recently participated in Exercise Joint Viking, inside the Arctic Circle, alongside the Royal Navy and JEF allies. As noted above, the UK participated in another JEF exercise, Exercise Aurora, in Sweden in May 2023.¹⁶⁹ Royal Marines from 45 Commando participated in that exercise, as did RAF Typhoons from Lossiemouth's IX (Bomber) Squadron.¹⁷⁰

Cooperation with allies

79. As part of the UK's NATO responsibilities, RAF Typhoons based at RAF Lossiemouth periodically carry out air policing in Icelandic airspace.¹⁷¹ The UK also has an agreement with Ireland that sees RAF jets perform some policing duties in Irish airspace.¹⁷² The Icelandic Ambassador to the UK, His Excellency Sturla Sigurjónsson, noted that the UK's radar stations, including those in Scotland, co-ordinate air surveillance with Iceland and other European allies.¹⁷³

80. The UK and Norway also collaborate closely on the operation of P-8A Poseidon maritime patrol aircraft. The Norwegian Ambassador to the UK, His Excellency Wegger Christian Strømmen, said that, because the UK and Norway had purchased similar equipment, "the abilities we can use almost totally overlap, so we are talking about more or less exactly the same kind of capacity."¹⁷⁴ He explained that this meant "we are able to substitute for each other ... or cover different parts of the area—if you need your plane to do something else," and also that the two countries could use each other's facilities and bases.¹⁷⁵

163 Royal Navy, [Royal Navy leads huge military exercise around the UK](#), 30 September 2022

164 The Herald, [Joint Warrior: Military to stage major exercise in Scottish waters](#), 29 September 2022

165 UK Defence Journal, [Huge NATO anti-sub exercise kicks off](#), 1 May 2023; Human Security Centre ([DIS0046](#))

166 Royal Air Force, [RAF Lossiemouth hosting NATO allies for major exercise](#), 7 May 2023

167 Ministry of Defence, [Exercise Trident Juncture](#), 10 October 2018

168 Human Security Centre ([DIS0046](#))

169 Royal Navy, [Royal Marines defend Sweden during mock invasion](#), 11 May 2023

170 Royal Air Force, [RAF Typhoons participate in Exercise Aurora over Sweden](#), 10 May 2023

171 Human Security Centre ([DIS0046](#))

172 Human Security Centre ([DIS0046](#))

173 [Q89](#)

174 [Q89](#)

175 [Q89](#)

Future demands on the Armed Forces based in Scotland

81. Some contributions to the inquiry raised questions about how the defence contribution to the North Atlantic and the High North would be maintained if demands on the Armed Forces should increase in the future, or should tensions in the region escalate to the point where a greater commitment of forces was required.

82. Professor Andrew Dorman, Professor of International Security at King's College London and Editor of the journal *International Affairs*, wrote that it would be challenging to commit further fast jet resources to the High North in the event of escalation in the region, stating: "if the RAF is to deploy forces in support of NATO either to the Scandinavian countries, Baltics or Iceland it will need further aircraft".¹⁷⁶ He suggested the RAF's force of Typhoon and F35-B Lightning aircraft could be grown, and that if this happened there was a possibility additional basing would be needed in Scotland.¹⁷⁷

83. A further concern was raised about the number of P-8A Poseidon and E-7 Wedgetail aircraft available to the RAF. Professor Andrew Dorman, Professor Dorman described the fleet of nine P-8As as

insufficient to maintain any long-term deployment to the Indo-Pacific whilst also undertaking its support to the High North and protection of the nuclear deterrent. It is therefore an obvious area for expansion.¹⁷⁸

The Human Security Centre wrote that "nine Poseidon MRA1 and three Wedgetail AEW Mk1 cannot provide a persistent presence," noting that their air-to-air refuelling systems are not compatible with RAF Voyager tankers.¹⁷⁹ In 2022 the House of Commons Defence Committee heard that three E-7s was too few, and ran the risk of the capability being unavailable when aircraft were in maintenance.¹⁸⁰ A RAND Europe research paper, published before Russia's invasion of Ukraine, recommended that in the event of "increase[d] tensions with Russia" it would be "necessary for the UK to keep investing in maritime surveillance and anti-submarine capabilities—such as P-8A Poseidon."¹⁸¹

84. When we asked the Minister about whether the P-8A force was sufficient, he responded:

I think we have enough P-8 for the job that we designed the P-8 force to do, which is submarine surveillance in the Greenland-Iceland-UK gap and contributing to the NATO north Atlantic mission. Very obviously, if our ambition grows beyond that, either we need to say to the US and other P-8 operating nations, "Can you step up your contribution to the Greenland-Iceland-UK gap, because we want to go off and do some stuff over the Sea of Japan?" or we have to get more P-8.¹⁸²

176 Professor Andrew Dorman ([DIS0044](#))

177 Professor Andrew Dorman ([DIS0044](#))

178 Professor Andrew Dorman ([DIS0044](#))

179 Human Security Centre ([DIS0046](#))

180 Evidence taken before the House of Commons Defence Select Committee, 28 June 2022, [Q59](#)

181 RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022, p. 38

182 [Q211](#)

When asked whether three E-7's was enough, he replied that the UK had struck the right balance between immediate and future needs:

E-7 is definitely a relevant capability, which is why we went ahead and bought it, but I think that three rather than five is the right number, given the pace of technological change and where we probably need to be in 20 years' time.¹⁸³

85. We also heard discussion about how the role of the Royal Navy might expand in Scotland in the event of renewed focus on the High North. Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, told us:

as the strategic centre of gravity for UK naval operations shifts, and as allies such as the Americans or some of the western Europeans operate more in the High North, Scottish ports and maritime facilities could play a larger role.¹⁸⁴

He suggested that Scapa Flow, the south harbour of Aberdeen and Rosyth, could potentially be developed to host ships operating in the High North. He described Scapa Flow as "probably the best natural harbour any NATO member possesses for controlling the GIUK gap."¹⁸⁵

86. **Scotland's geography means it will continue to play an important role in meeting UK and NATO defence and security objectives in the North Atlantic and the High North. This means that, should the situation in the region change, Scotland could become home to a larger defence presence. We heard that the naval base at Faslane plays a critical role in UK and NATO defence strategy, because of its location close to the strategically critical Greenland-Iceland UK (GIUK) gap and the role it plays in hosting and protecting the Continuous At-Sea Deterrent. We also heard that the RAF base at Lossiemouth provides vital surveillance and threat response capabilities, including Quick Reaction Alert (QRA).**

87. **The UK's ability to project assets into the North Atlantic and High North if required must be maintained, as this is key to both the UK and NATO's defence strategy. Currently this capability is based primarily at HMNB Clyde and RAF Lossiemouth. NATO views the continued presence of a nuclear deterrent as essential to its defence policy, and Scottish bases are important to the deployment and protection of that deterrent.**

88. **The committee heard evidence during this inquiry of the need to maintain HM Naval Base Clyde as home to the Royal Navy's nuclear-armed Vanguard 15 class submarines that form the UK's Continuous At-Sea Deterrent, as well as the Astute Class of attack submarines. Whilst not all Members of the Committee support this view, we do recognise the serious implications for the UK and NATO should the nuclear fleet ever be removed from Faslane.**

89. *In its response to this report, the UK Government should set out what scope it considers for the defence presence in Scotland to be sufficiently scaled up to respond*

183 [Q233](#)

184 [Q30](#)

185 [Qq30-31](#)

to a scenario where the UK has greater obligations in the North Atlantic and the High North. In particular, its response should consider how rapidly capacity for basing and operating assets from Scottish bases could be increased if required.

90. RAF assets based in Scotland contribute to defence in the North Atlantic and the High North in a number of important ways, including surveillance, anti-submarine warfare and threat response by way of the Quick Reaction Alert jets stationed at RAF Lossiemouth. Several witnesses expressed doubts as to whether the UK has sufficient aircraft to maintain the necessary presence in the North Atlantic and the High North without withdrawing resources from elsewhere.

91. *In its response to this report, the UK Government should address the concerns raised in evidence both to this inquiry and to the Defence Committee over whether the number of P-8A, E7 and Typhoon aircraft is sufficient to provide the coverage required in the North Atlantic and the High North, and whether any increase in activity required in the region will require resources to be diverted from objectives elsewhere. The MOD must review whether the complement of aircraft it has available is sufficient to meet the increasing security demands in the North Atlantic and the High North.*

Cold weather capability

92. Military operations in the Arctic face unique challenges, and demand specialist training and either specialised or specially adapted equipment. The House of Commons Defence Committee's 2018 report on defence in the Arctic found that the focus on operating in cold environments had reduced over the period during which the Armed Forces were more commonly engaged in hot climates.¹⁸⁶ We asked witnesses whether the UK had sufficient cold-weather capability to operate effectively in the region.

93. Witnesses made the point that the UK had a strategic decision to make about how far it should specialise in cold weather capability. Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, pointed out that operating in the extreme north required equipment that is not usable in other theatres, and this would create trade-offs with the Armed Forces' ability to operate elsewhere.¹⁸⁷

94. Some contributions raised the question of whether the Royal Navy fleet was sufficiently equipped to operate in the High North. Several contributions noted that the UK does not possess any icebreakers, and that there are currently no plans to build any.¹⁸⁸ Professor Caroline Kennedy-Pipe, Professor of War Studies at Loughborough University, said that the UK's allies also had limited icebreaking capability: she wrote that the United States has just two icebreakers compared with Russia's fifty-three.¹⁸⁹ In addition, we were told that the UK had not built any ice-hardened ships since the Cold War.¹⁹⁰ Professor Basil Germond, Professor of International Security at Lancaster University, wrote that growing challenges in the High North "requir[e] planning for sustained operations in extreme cold environments, including investments in the Royal Navy."¹⁹¹

186 Defence Committee, [On Thin Ice: UK Defence in the Arctic](#), Twelfth Report of Session 2017–19, HC 388, 15 August 2018, para 118

187 [Q38](#)

188 Professor Basil Germond ([DIS0042](#)); [Q9](#)

189 Professor Caroline Kennedy-Pipe ([DIS0047](#))

190 [Q9](#)

191 Professor Basil Germond ([DIS0042](#));

95. Other witnesses told us the absence of icebreakers or ice-hardened ships was not necessarily a significant vulnerability. The Icelandic Ambassador, His Excellency Sturla Sigurjónsson, noted that icebreakers were only required in the very far north, and that “conditions in the North Atlantic ... don’t really call for them.”¹⁹² The Minister confirmed that there were no plans to build icebreakers, but that the ice-hardened ship HMS Protector “is enough to assert our rights to freedom of navigation in both the Antarctic and the Arctic, and she does so routinely.”¹⁹³ He told us that “all UK naval vessels are built with a presumption in favour of the cold rather than the warm”, adding:

We recognise that our backyard is the Euro-Atlantic, that we are a maritime power, and that our role in the Greenland-Iceland-UK gap is absolutely central to NATO’s plans. Therefore, everything that we build must be capable of credibly operating in the High North.¹⁹⁴

Cold weather training

96. Our evidence also frequently touched on cold weather training for Armed Forces personnel. Several witnesses praised the cold weather expertise of 45 Commando Royal Marines, and the programme of training they regularly undertake in Norway.¹⁹⁵ However, the Human Security Centre argued that numerically they “represent a highly limited capability against a state-level opponent.”¹⁹⁶ *The UK’s Defence Contribution in the High North* sets out plans to expand cold weather training, and the MOD’s submission to the inquiry points to a number of examples of upcoming training.¹⁹⁷ The MOD’s Military Head of Euro-Atlantic Security, Brigadier Chris Ordway, told us the number of Army units training and operating in Finland and Sweden was increasing.¹⁹⁸

97. **The UK needs a clear sense of what kind of specialised cold weather capability it will need to meet its objectives in the High North. We heard that the UK currently has limited capability for operating in extremely cold environments. Where there are gaps, and these cannot be filled by complementary capabilities operated by our NATO allies, this will need to be addressed.**

98. ***The UK Government must review, and report to the House, the extent to which, now and in the future, what capability is needed to operate in extremely cold environments at the scale required to meet evolving defence and security objectives in the High North. The review should consider what equipment and technology might be needed, and whether there are sufficient numbers of appropriately trained personnel to operate in such environments. Because of Scotland’s Arctic-facing geography, Scotland-based capabilities must be a focus of this review. The UK Government should report its findings to the House before Parliament dissolves for the next general election.***

192 [Q112](#)

193 [Q210](#)

194 [Q209](#)

195 [Qq16, 38](#); [Q90](#)

196 Human Security Centre ([DIS0046](#))

197 Ministry of Defence, [The UK’s Defence Contribution in the High North](#), 29 March 2022, p.8; Ministry of Defence ([DIS0048](#))

198 [Q183](#)

Advanced technology and defence in the High North

99. Evidence to our inquiry suggested that advanced technology had particular utility in the High North, and that both space-based defence capabilities and autonomous systems (i.e. drones) could play a significant role in the UK's defence and security operations in the region in the future.

Space and defence in the High North

100. A submission from Dr Adam Bower, Senior Lecturer in International Relations at the University of St Andrews, highlighted the potential advantages of using space-based surveillance to support Arctic defence, and the advantages this presents for Scotland specifically.¹⁹⁹ Dr Bower wrote that “Satellite systems hold particular utility in the context of the High North, where movement, communication, and observation are impeded by weather, terrain and isolation.”²⁰⁰ Professor Iain Woodhouse, Professor of Applied Earth Observation at the University of Edinburgh, told us that space-based radar “has particular value in the context of the High North, because it is often dark and cloudy, and radar can see through clouds and it can see in the dark.”²⁰¹ He said that space-based observation would be particularly helpful for tracking ships.²⁰² Both witnesses pointed out that satellites can carry out observation without legally violating another state's airspace, which gives them an advantage over other forms of surveillance.²⁰³

101. Witnesses told us Scotland was well-placed to contribute to space-based polar observation efforts. One reason given was that Scotland's geography makes it an advantageous place from which to launch satellites into polar orbits. Dr Adam Bower said there were benefits to launching satellites into specific orbits known as “sun-synchronous orbits”, which allow almost total coverage for Earth observation including in polar regions.²⁰⁴ He explained that Scottish spaceports' northerly latitude, and the open ocean to the north-northeast of their locations, made them excellent locations from which to launch into these orbits.²⁰⁵ He described Scotland as “a really optimal place for the launching of smaller rockets in particular.”²⁰⁶ Of the seven prospective spaceports in the UK, five are based in Scotland,²⁰⁷ and the first vertical launches from Scottish spaceports are expected in 2024.²⁰⁸

102. Our witnesses also noted that Scotland has a burgeoning space manufacturing industry, particularly for small satellites; Dr Bower told us Glasgow builds as many small satellites as anywhere else in Europe.²⁰⁹ Professor Woodhouse told us there were over 180 commercial space companies in Scotland—more than 20 per cent of UK activity—and

199 Dr Adam Bower ([DIS0043](#))

200 Dr Adam Bower ([DIS0043](#))

201 [Q160](#)

202 [Q165](#)

203 [Q166](#)

204 [Q161](#)

205 Dr Adam Bower ([DIS0043](#))

206 [Q159](#)

207 HM Government, [A guide to UK spaceports](#), 18 April 2023

208 Science and Technology Committee, [UK space strategy and UK satellite infrastructure: Government Response to the Committee's Second Report](#), Second Special Report of Session 2022–23, HC 1258, 30 March 2023, p. 9

209 [Q159](#)

that “we are, I think, generally seen to be quite ahead of the game compared to many of our allies.”²¹⁰ Both Dr Bower and Professor Woodhouse also noted Scotland’s strength in data analysis.²¹¹

103. The UK Government published a National Space Strategy in September 2021, and a Defence Space Strategy in 2022.²¹² The Defence Space Strategy recognises the utility of space-based intelligence, surveillance and reconnaissance (ISR), and says the UK Government will invest £970 million over 10 years to develop new ISR capability in space.²¹³ The document does not specifically discuss how such technology might be applied to defence in the polar regions. The MOD’s Arctic defence paper, *The UK’s Defence Contribution in the High North*, says the UK Government “will leverage the additional 10-year, £1.4 billion investment in the Defence Space Portfolio to address our National requirements, including for the High North” but again does not refer to specific applications.²¹⁴ Professor Iain Woodhouse commented on the UK Government’s space policy documents that

Both the civilian one and the military one do not focus a lot on specific ambitions. There are not a lot of specific goals that are tangibly laid out with a clear timescale and an ambition to hit these.²¹⁵

However, the Armed Forces Minister acknowledged that the UK Government was “absolutely” looking at the potential military applications.²¹⁶ He added that the MOD was speaking to the space sector “all the time” and that the MOD “spend a lot of money relative to what everybody else in the UK is spending on space. We are a pretty big customer.”²¹⁷ Clare Cameron, MOD’s Director of Euro-Atlantic Security, told us that MOD and the Department for Science, Innovation and Technology were due to publish a space sector policy before the end of the year.²¹⁸

104. Dr Adam Bower said that the dual-use nature of many space technologies was an important consideration, pointing out that the war in Ukraine had given several examples of technologies originally designed for civilian use supporting military efforts.²¹⁹ He also said the UK Government would need a clear idea of the extent to which it wanted to maintain sovereign-controlled capabilities compared with accessing allied capabilities or purchasing ‘off-the-shelf’ systems.²²⁰ The Minister told us

the co-operation between the Departments [MOD and DSIT] is around catalysing the core satellite technologies rather than deliberately seeking to collaborate over dual-purpose platforms. That is not to say that such platforms might not be necessary.²²¹

210 [Q168](#)

211 [Qq159–160](#)

212 UK Government, [National Space Strategy](#), 27 September 2021; UK Government, [Defence Space Strategy](#), 1 February 2022

213 UK Government, [Defence Space Strategy](#), 1 February 2022, p. 23

214 Ministry of Defence, [The UK’s Defence Contribution in the High North](#), 29 March 2022, p.13

215 [Q171](#)

216 [Q248](#)

217 [Qq250–251](#)

218 [Q252](#)

219 [Q176](#)

220 [Q173](#)

221 [Q249](#)

105. We have recently launched an inquiry into *Scotland's space sector*, which will consider in greater detail the UK and Scotland's space ambitions and how the UK and Scottish Governments can support the Scottish space sector.²²²

Drones

106. We heard that drones could play a future role in the North Atlantic and the High North. Dr Marc DeVore, Senior Lecturer in International Relations at the University of St Andrews, told us that “uncrewed or unmanned systems are going to have a greater comparative advantage the further north one goes.”²²³ RAND Europe's paper *UK Strategy for the High North* stated that “the uptake of autonomous and remote technologies may similarly allow the Arctic to become an easier environment in which to operate.”²²⁴ At the same time, witnesses observed that drones were not unaffected by challenging weather conditions in the High North, and that battery life would be affected by operating in colder weather at higher latitudes. Speaking about the UK's new Protector drones, Dr Duncan Depledge, Lecturer in Geopolitics and Security at Loughborough University, said:

The Protector will do fairly well north of Scotland and into the Norwegian sea. Whether it can operate up near Svalbard or north of Svalbard I simply do not know.²²⁵

Dr DeVore said that while drones were “definitely an area one would want to invest for operating in the High North ... one also has to tailor the technologies for it.”²²⁶

107. As noted above, the UK is already investing in drones with a view to deploying them in the North Atlantic. Professor Caroline Kennedy-Pipe, Professor of War Studies at Loughborough University, wrote that the RAF plans to deploy a new fleet of Protector drones “to fulfil Arctic missions (for example, for surveillance in the GIUK-N gap).” She suggested that these drones could be flown from RAF Lossiemouth given its ideal location for such operations.²²⁷ Dr Rowan Allport of the Human Security Centre added:

If, for example, you wanted to operate them as an appendage to the maritime patrol force, the P-8s, it is always useful to have everything at a common base.²²⁸

In addition to the Protectors, the UK is developing other autonomous technology, such as the uncrewed Cetus submarine.²²⁹ The Armed Forces Minister stated “there is widespread experimentation with all manner of uncrewed systems across defence.”²³⁰ Professor Kennedy-Pipe also observed that the UK was not alone in turning to autonomous systems

222 Scottish Affairs Committee, [Scotland's space sector](#)

223 [Q41](#)

224 RAND Europe, [UK Strategy for the High North: Policy Levers to Influence Developments out to 2050](#), 2 February 2022, p. 64

225 [Q40](#)

226 [Q41](#)

227 Professor Caroline Kennedy-Pipe ([DIS0047](#))

228 [Q42](#)

229 Navy Lookout, [Royal Navy purchases its first uncrewed submarine](#), 1 December 2022

230 [Q257](#)

in the Arctic, and that “Russia has in the region led the way with drone deployments,” while Denmark, Iceland and the United States have also taken steps to secure drone capability.²³¹

108. We heard that space-based capabilities provide numerous advantages for surveillance at high latitudes. Scotland, with its burgeoning space sector and a northerly location that is suitable for launch into polar orbits, is well-placed to take advantage of this opportunity. We were encouraged to hear that the Ministry of Defence and the Department for Science, Innovation and Technology will be publishing a space sector policy before the end of the year. We plan to explore UK Government support for the space sector in greater detail in our upcoming inquiry on Scotland’s space sector.

109. We heard that drones can provide an advantage in cold weather environments, but that not all drones were suited to operating in the extreme cold and that specialised systems might be needed to operate in the High North.

110. *As part of the review into cold-weather capability recommended above, the UK Government should consider what contribution a) drones and b) space technology should make to meeting defence and security objectives in the North Atlantic and the High North. Its conclusions should be published as part of that report, before Parliament is dissolved for the next general election.*

111. *When developing and deploying new space-based technologies in support of defence objectives in the High North, the UK Government should make the most of Scotland’s innovative and rapidly growing space sector, and its geographical advantages as a base for launching satellites into polar orbits. The Ministry of Defence and Department for Science, Innovation and Technology’s upcoming space sector policy should clearly identify how to harness the potential of Scotland’s burgeoning space sector to support defence objectives, and set clear and measurable targets against which the success of the policy can be measured.*

231 Professor Caroline Kennedy-Pipe ([DIS0047](#))

Post-script: The Committee's work on Defence in Scotland

112. This report is the third and final in our series of reports on Defence in Scotland. We would like to thank all those who provided evidence to our inquiry, and the Ministry of Defence for their cooperation with our work. Over the course of our three reports we have explored just some of the many ways in which Scottish personnel, bases and industry contribute to the UK's defence and security and that of our NATO allies. Our *military landscape* report described how Scotland is experiencing a new era of confidence and investment in its defence sector, and highlighted a need for the UK Government to do more to involve Scottish SMEs in defence procurement.²³² In our *military shipbuilding* report we heard how Scottish shipbuilding continues to excel in advanced shipbuilding, and were encouraged that the new National Shipbuilding Strategy had given the sector more confidence in its future workload, but that a steady 'drumbeat' of future orders and investment in skills were essential for the long term health of the industry.²³³ In this report, we have highlighted how Scotland's geography and the military presence there makes it indispensable to defence in a region of crucial strategic importance. Taken together, our reports show the invaluable contribution Scotland makes to the UK and NATO's defence and security. We wish to extend our gratitude to all those who work to defend our country and keep us safe.

232 [Defence in Scotland: military landscape](#), First Report of Session 2022–23, HC 82, 24 June 2022

233 [Defence in Scotland: military shipbuilding](#), Fourth Report of Session 2022–23, HC 1096, 27 January 2023

Conclusions and recommendations

Defence and Security in the High North

1. The UK Government is clear that Scotland's geography, and the capabilities located there, is critical to meeting the UK and NATO's defence and security objectives in the North Atlantic and the High North. (Paragraph 15)
2. The UK Government's policy document, *The UK's Defence Contribution in the High North*, adopts appropriate strategic priorities for the region. At the same time, the geopolitics of the North Atlantic and the High North are evolving and the UK will need to be prepared to adapt its approach and commit additional resources as appropriate in response to new security threats, whether those come from malign actors or from climate change. The implications of this evolution will affect defence activities in Scotland in particular. The Russian invasion of Ukraine, which occurred shortly before the publication of the MOD's paper and which has significant implications for the security of the region, illustrates this point. In the next section of this report, we explore several factors which are contributing to the region's growing importance. (Paragraph 21)
3. *The Ministry of Defence should commit to updating its Arctic defence strategy every five years, to reflect the strategic acceleration in the region and to bring it into line with the FCDO's Arctic Strategy for the whole of Government, which is updated every five years. We hope that, before then, the Defence Command Paper will properly reflect the changed situation in the North Atlantic and the High North resulting from Russia's illegal invasion of Ukraine.* (Paragraph 22)
4. The UK and NATO face new challenges in the North Atlantic in the High North. In particular, the Arctic faces new environmental and political challenges which must be navigated carefully if the region is to remain one of high co-operation and low tension. (Paragraph 41)
5. *The UK Government should continue to be proactive in considering how the UK's defence and security priorities in the North Atlantic and the High North may change in the future, in response to the changing geopolitical context and the effects of climate change. In its response to this report, the UK Government should set out its most recent assessment of these challenges. Among the most important issues the UK Government must consider are:*
 - *increasing Russian belligerence;*
 - *growing Chinese interest in Arctic politics;*
 - *the opening of new sea routes and the potential for increased maritime traffic as a consequence;*
 - *increasing resource competition; and*
 - *the vulnerability of offshore and subsea infrastructure.*

Regardless of how the UK's priorities in the region evolve, it is likely Scotland as part of the UK will continue to play a prominent role in meeting those aims. (Paragraph 42)

6. Climate change is likely to lead to the opening of new sea routes due to the retreat of Arctic ice. While the overriding priority should be to minimise the effects of climate change, the UK Government must also be prepared for the likelihood that navigation via these routes will gradually become more possible in the future. Increased maritime traffic presents economic and trade opportunities but also has practical and strategic implications, such as the increased risk of accidents and the probability that navigation rights will be asserted and challenged. It is highly likely that increasing maritime activity in the High North will create new responsibilities for the Royal Navy, and Scotland's geography means it would be likely to play a role in fulfilling those duties. (Paragraph 43)
7. *The UK Government should consider how the effects of climate change might create new defence and security responsibilities in the future, in particular for naval policing and search and rescue. The UK should also seek to promote and uphold the principles of the UN Convention on the Law of the Sea (UNCLOS) such as the right of innocent passage, and we believe that the MOD's paper, The UK's Defence Contribution in the High North, is right to make this a priority. (Paragraph 44)*
8. Events like the sabotage of the Nord Stream pipeline have shown that Critical National Infrastructure that is based offshore or beneath the sea can be vulnerable to interference. This is a concern in the North Atlantic, where transatlantic cables are critical lines of communication, as well as in the UK's own Exclusive Economic Zone. Investment in subsea surveillance like the Multi-Role Ocean Support Ships is welcome, but vulnerabilities remain. We heard that weaknesses in the legal regime governing subsea cables makes them a tempting target for malign actors. The UK Government told us that repair of subsea cables was a matter for the cables' commercial owners; we are concerned that the UK Government did not have more to say about how such important infrastructure could be repaired in the event of sabotage or failure. (Paragraph 45)
9. *The UK Government should produce and publish a strategy for protecting offshore infrastructure. This should include a plan for how attempts by malign actors to interfere with Critical National Infrastructure can be deterred or prevented, and how damaged infrastructure can be repaired quickly by their commercial owners. (Paragraph 46)*
10. *The UK Government should set out the timeline for the refitted Multi-Role Ocean Surveillance Ship, RFA Proteus, and the future purpose-built Multi-Role Ocean Surveillance Ship to come into service. It should state whether it is still the intention, as set out in the 2021 Integrated Review, for the purpose-built MROSS to be built in Scotland. (Paragraph 47)*
11. The UK's role and responsibilities in NATO may evolve in response to changing geopolitics, including increasing tensions with Russia and the consequent accession of Finland and (as seems likely) Sweden to the alliance. This may entail new or changed responsibilities in the North Atlantic and the High North. The same is true of the Joint Expeditionary Force, which may need to respond to new challenges in

the North Atlantic and the High North. It is highly likely that UK capabilities based in Scotland will be an important part of the contribution to NATO and JEF in the region. (Paragraph 54)

12. *We recommend that the UK Government convene discussions with its NATO and Joint Expeditionary Force allies about how these alliances should respond to new challenges in the North Atlantic and the High North, and be prepared to take an expanded role in the region if required.* (Paragraph 55)
13. The UK's relationships with its Arctic allies are essential to meeting common security objectives in the North Atlantic and the High North. These relationships will become more important should the challenges in the region become more prominent. (Paragraph 59)
14. *The UK should continue considering how it can best contribute to diplomacy and collaborative problem-solving in the North Atlantic and the High North. Actions it could take include stepping up its participation in existing fora where appropriate and considering the appointment of a dedicated ambassador or envoy to the Arctic region.* (Paragraph 60)
15. Cooperation around the P-8A Poseidon Maritime Patrol Aircraft, which has enabled Norwegian aircraft to be maintained at RAF Lossiemouth, and RAF aircraft to be supported in Norway, has been a success, and provides a model for similar defence cooperation in the future. (Paragraph 62)
16. *Alongside its efforts to develop defence and security cooperation in the North Atlantic and the High North through multilateral institutions, the UK Government should pursue further opportunities for direct bilateral cooperation with Arctic allies, including new NATO members Finland and Sweden.* (Paragraph 63)

Scotland's contribution to defence in the North Atlantic and the High North

17. Scotland's geography means it will continue to play an important role in meeting UK and NATO defence and security objectives in the North Atlantic and the High North. This means that, should the situation in the region change, Scotland could become home to a larger defence presence. We heard that the naval base at Faslane plays a critical role in UK and NATO defence strategy, because of its location close to the strategically critical Greenland-Iceland UK (GIUK) gap and the role it plays in hosting and protecting the Continuous At-Sea Deterrent. We also heard that the RAF base at Lossiemouth provides vital surveillance and threat response capabilities, including Quick Reaction Alert (QRA). (Paragraph 86)
18. The UK's ability to project assets into the North Atlantic and High North if required must be maintained, as this is key to both the UK and NATO's defence strategy. Currently this capability is based primarily at HMNB Clyde and RAF Lossiemouth. NATO views the continued presence of a nuclear deterrent as essential to its defence policy, and Scottish bases are important to the deployment and protection of that deterrent. (Paragraph 87)

19. The committee heard evidence during this inquiry of the need to maintain HM Naval Base Clyde as home to the Royal Navy's nuclear-armed Vanguard 15 class submarines that form the UK's Continuous At-Sea Deterrent, as well as the Astute Class of attack submarines. Whilst not all Members of the Committee support this view, we do recognise the serious implications for the UK and NATO should the nuclear fleet ever be removed from Faslane. (Paragraph 88)
20. *In its response to this report, the UK Government should set out what scope it considers for the defence presence in Scotland to be sufficiently scaled up to respond to a scenario where the UK has greater obligations in the North Atlantic and the High North. In particular, its response should consider how rapidly capacity for basing and operating assets from Scottish bases could be increased if required.* (Paragraph 89)
21. RAF assets based in Scotland contribute to defence in the North Atlantic and the High North in a number of important ways, including surveillance, anti-submarine warfare and threat response by way of the Quick Reaction Alert jets stationed at RAF Lossiemouth. Several witnesses expressed doubts as to whether the UK has sufficient aircraft to maintain the necessary presence in the North Atlantic and the High North without withdrawing resources from elsewhere. (Paragraph 90)
22. *In its response to this report, the UK Government should address the concerns raised in evidence both to this inquiry and to the Defence Committee over whether the number of P-8A, E7 and Typhoon aircraft is sufficient to provide the coverage required in the North Atlantic and the High North, and whether any increase in activity required in the region will require resources to be diverted from objectives elsewhere. The MOD must review whether the complement of aircraft it has available is sufficient to meet the increasing security demands in the North Atlantic and the High North.* (Paragraph 91)
23. The UK needs a clear sense of what kind of specialised cold weather capability it will need to meet its objectives in the High North. We heard that the UK currently has limited capability for operating in extremely cold environments. Where there are gaps, and these cannot be filled by complementary capabilities operated by our NATO allies, this will need to be addressed. (Paragraph 97)
24. *The UK Government must review, and report to the House, the extent to which, now and in the future, what capability is needed to operate in extremely cold environments at the scale required to meet evolving defence and security objectives in the High North. The review should consider what equipment and technology might be needed, and whether there are sufficient numbers of appropriately trained personnel to operate in such environments. Because of Scotland's Arctic-facing geography, Scotland-based capabilities must be a focus of this review. The UK Government should report its findings to the House before Parliament dissolves for the next general election.* (Paragraph 98)
25. We heard that space-based capabilities provide numerous advantages for surveillance at high latitudes. Scotland, with its burgeoning space sector and a northerly location that is suitable for launch into polar orbits, is well-placed to take advantage of this opportunity. We were encouraged to hear that the Ministry of Defence and the Department for Science, Innovation and Technology will be publishing a space

sector policy before the end of the year. We plan to explore UK Government support for the space sector in greater detail in our upcoming inquiry on Scotland's space sector. (Paragraph 108)

26. We heard that drones can provide an advantage in cold weather environments, but that not all drones were suited to operating in the extreme cold and that specialised systems might be needed to operate in the High North. (Paragraph 109)
27. *As part of the review into cold-weather capability recommended above, the UK Government should consider what contribution a) drones and b) space technology should make to meeting defence and security objectives in the North Atlantic and the High North. Its conclusions should be published as part of that report, before Parliament is dissolved for the next general election.* (Paragraph 110)
28. *When developing and deploying new space-based technologies in support of defence objectives in the High North, the UK Government should make the most of Scotland's innovative and rapidly growing space sector, and its geographical advantages as a base for launching satellites into polar orbits. The Ministry of Defence and Department for Science, Innovation and Technology's upcoming space sector policy should clearly identify how to harness the potential of Scotland's burgeoning space sector to support defence objectives, and set clear and measurable targets against which the success of the policy can be measured.* (Paragraph 111)

Formal minutes

Monday 10 July 2023

Members present

Pete Wishart, in the Chair

Deidre Brock

David Duguid

Mark Menzies

Douglas Ross

Andrew Western

Philippa Whitford

Draft Report (*Defence in Scotland: the North Atlantic and the High North*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 112 read and agreed to.

Resolved, That the Report be the Seventh Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Adjournment

Adjourned till Tuesday 11 July at 2.45 p.m.

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Monday 31 January 2022

Professor Trevor Taylor, Director of the Defence, Industries and Society Programme, Royal United Services Institute; **Professor Phillips O'Brien**, Professor of Strategic Studies, University of St Andrews

[Q1–37](#)

Maria Lyle, Director, Royal Air Force Families Federation; **Lieutenant General (ret'd) Sir Andrew Gregory KBE CB DL**, Chief Executive, SSAFA, the Armed Forces charity; **Collette Musgrave**, Chief Executive, Army Families Federation; **Sarah Clewes**, Chief Executive Officer, Naval Families Federation

[Q38–66](#)

Monday 21 February 2022

John Howie MBE, Chief Corporate Affairs Officer, Babcock; **Oliver Waghorn**, Head of Government Relations, BAE Systems; **Stephen McCann**, Managing Director, Optronics, Thales

[Q67–105](#)

Kevin Craven, Chief Executive Officer, ADS Group; **Dr Hina Khan**, Senior Project Manager, Spire Global UK Limited; **Dr Suzanne Costello**, Chief Operating Officer, MCS Limited; **Jamie Mincher**, Chief Executive Officer, Glenalmond Group

[Q106–134](#)

Monday 7 March 2022

Councillor Rod Cavanagh, Armed Forces and Veterans Community Champion, Fife Council; **Provost Peter Smaill**, Midlothian Councillor and Her Majesty's Forces Champion, Midlothian Council; **Fergus Murray**, Head of Economic Development, Argyll and Bute Council; **Rhona Gunn**, Depute Chief Exec (Economy, Environment and Finance), Moray Council

[Q135–178](#)

Keith Brown MSP, Cabinet Secretary for Justice and Veterans, Scottish Government; **Kevin McGowan**, Head of Defence Policy Unit, Scottish Government; **Rory McGregor**, Manufacturing Policy Advisor, Scottish Government

[Q179–212](#)

Monday 21 March 2022

The Baroness Goldie DL, Minister of State, Ministry of Defence; **Damian Parmenter CBE**, Director General Strategy and International, Ministry of Defence; **Sherin Aminossehe**, Director of Infrastructure, Ministry of Defence; **David Brewer**, Chief Operating Officer, Defence Infrastructure Organisation, Ministry of Defence

[Q213–256](#)

Monday 13 June 2022

Ian Waddell, General Secretary, Confederation of Shipbuilding and Engineering Unions; **Kevin Craven**, Chief Executive Officer, ADS Group; **Richard Powell OBE**, Chairman of the Maritime Defence and Security Group Council, Society of Maritime Industries

[Q1–52](#)

Monday 5 September 2022

Sir Simon Lister, Managing Director, BAE Systems Naval Ships; **John Howie MBE**, Chief Corporate Affairs Officer, Babcock; **Ben Carpenter Merritt**, Head of UK Government Relations, Babcock

[Q53–100](#)

Ivan McKee MSP, Minister for Business, Trade, Tourism and Enterprise, Scottish Government; **Rory McGregor**, Manufacturing Policy Advisor – Space, Aerospace, Defence & Marine, Scottish Government; **Scott McClelland**, Policy Manager - Space and Aerospace, Defence and Marine, Scottish Government; **Gordon McGuinness**, Director, Industry and Enterprise Networks, Skills Development Scotland

[Q101–128](#)**Monday 14 November 2022**

Hans Pung, President, RAND Europe; **Professor Keith Hartley**, Emeritus Professor of Economics, University of York

[Q129–165](#)**Tuesday 6 December 2022**

Rt Hon Ben Wallace MP, Secretary of State for Defence, Ministry of Defence; **Vice Admiral Paul Marshall CBE**, Director General, Ships, Defence Equipment and Support, Ministry of Defence; **Rear Admiral Rex Cox**, CEO, National Shipbuilding Office

[Q166–257](#)**Monday 6 March 2023**

Dr Rowan Allport, Deputy Director, Human Security Centre; **Dr Marc DeVore**, Senior Lecturer, School of International Relations, University of St Andrews; **Dr Duncan Depledge**, Lecturer in Geopolitics and Security, Loughborough University

[Q1–62](#)**Monday 27 March 2023**

His Excellency Sturla Sigurjónsson, Icelandic Ambassador to the United Kingdom, Icelandic Embassy; **His Excellency Wegger Christian Strømmen**, Norwegian Ambassador to the United Kingdom, Norwegian Embassy

[Q63–118](#)**Monday 24 April 2023**

Professor Jacques Hartmann, Professor in Law, Dundee Law School, University of Dundee

[Q119–158](#)

Dr Adam Bower, Senior Lecturer in International Relations, University of St Andrews; **Professor Iain Woodhouse**, Professor of Applied Earth Observation, School of Geosciences, University of Edinburgh

[Q159–182](#)**Monday 5 June 2023**

Rt Hon James Heappey MP, Minister of State (Minister for Armed Forces), Ministry of Defence; **Clare Cameron**, Director, Euro-Atlantic Security, Ministry of Defence; **Brigadier Chris Ordway**, Head (Military), Euro-Atlantic Security, Ministry of Defence

[Q183–258](#)

Published written evidence

The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

DIS numbers are generated by the evidence processing system and so may not be complete.

- 1 ADS Group Ltd ([DIS0024](#))
- 2 ADS Group Ltd ([DIS0018](#))
- 3 ADS Group Ltd ([DIS0002](#))
- 4 Argyll and Bute Council ([DIS0013](#))
- 5 Army Families Federation ([DIS0016](#))
- 6 BAE Systems ([DIS0030](#))
- 7 BAE Systems plc ([DIS0007](#))
- 8 Babcock International ([DIS0029](#))
- 9 Babcock International Group ([DIS0008](#))
- 10 Boeing ([DIS0019](#))
- 11 Bower, Dr Adam (Senior Lecturer in International Relations, University of St Andrews) ([DIS0043](#))
- 12 City of Glasgow College ([DIS0035](#))
- 13 Dorman, Professor Andrew (Editor, International Affairs, Chatham House) ([DIS0044](#))
- 14 Embassy of the Kingdom of Denmark ([DIS0050](#))
- 15 Fife Council ([DIS0009](#))
- 16 Forces in Mind Trust ([DIS0001](#))
- 17 Germond, Professor Basil (Professor of International Security, Lancaster University) ([DIS0042](#))
- 18 Hartley, Professor Keith ([DIS0021](#))
- 19 Heron, Mr Anthony ([DIS0036](#))
- 20 Hough, Dr Peter (Associate Professor, Middlesex University) ([DIS0041](#))
- 21 Human Security Centre ([DIS0046](#))
- 22 James, Testimony of Professor (J. C. Wylie Chair of Maritime Strategy, US Naval War College) ([DIS0020](#))
- 23 Kennedy-Pipe, Professor Caroline (Professor of War Studies, Loughborough University) ([DIS0047](#))
- 24 Louth, Professor John ([DIS0028](#))
- 25 Midlothian Council ([DIS0011](#))
- 26 Ministry of Defence ([DIS0051](#))
- 27 Ministry of Defence ([DIS0048](#))
- 28 Ministry of Defence ([DIS0034](#))
- 29 Ministry of Defence ([DIS0032](#))
- 30 Ministry of Defence ([DIS0031](#))
- 31 Ministry of Defence ([DIS0014](#))

- 32 Mitchell, Mr Hamish (Air Traffic Controller, Employed by NATS Ltd (Commenting as a private individual and not as a NATS spokesperson)) ([DIS0006](#))
- 33 Patel, Jag ([DIS0023](#))
- 34 RAF Families Federation ([DIS0017](#))
- 35 RAND Europe ([DIS0049](#))
- 36 SSAFA, the Armed Forces charity ([DIS0012](#))
- 37 Scottish Government ([DIS0026](#))
- 38 Scottish Government ([DIS0015](#))
- 39 Society of Maritime Industries ([DIS0027](#))
- 40 Taylor, Professor Trevor ([DIS0010](#))
- 41 Taylor, Professor Trevor (Director of the Defence, Industries and Society Programme, Royal United Services Institute (RUSI)) ([DIS0033](#))
- 42 Thales ([DIS0005](#))
- 43 The Confederation of Shipbuilding and Engineering Unions (CSEU); Unite the Union; GMB Union; and Prospect ([DIS0025](#))
- 44 UK Defence Journal ([DIS0022](#))

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website.

Session 2022–23

Number	Title	Reference
1st	Defence in Scotland: military landscape	HC 82
2nd	Access to cash in Scotland	HC 80
3rd	Firearms licensing regulations in Scotland	HC 710
4th	Defence in Scotland: military shipbuilding	HC 1096
5th	Public Broadcasting in Scotland	HC 1048
6th	Hydrogen and carbon capture in Scotland	HC 83
1st Special	Immigration and Scotland: Government Response to the Committee's Fourth Report of Session 2017–19	HC 84
2nd Special	Airports in Scotland: Government Response to the Committee's Fifth Report of Session 2021–22	HC 303
3rd Special	Defence in Scotland: military landscape: Government Response to the Committee's First Report	HC 674
4th Special	Access to cash in Scotland: Government Response to the Committee's Second Report	HC 695
5th Special	Defence in Scotland: military shipbuilding: Government Response to the Committee's Fourth Report	HC 1267
6th Special	Public broadcasting in Scotland: Government Response to the Committee's Fifth Report	HC 1305
7th Special	Hydrogen and carbon capture in Scotland: Government Response to the Committee's Sixth Report	HC 1421
8th Special	Firearms licensing regulations in Scotland: Government response to the Committee's Third Report	HC 1701

Session 2021–22

Number	Title	Reference
1st	Universities and Scotland	HC 54
2nd	Welfare policy in Scotland	HC 55
3rd	The UK Shared Prosperity Fund and Scotland	HC 52
4th	Renewable energy in Scotland	HC 51
5th	Airports in Scotland	HC 601
1st Special	Welfare policy in Scotland: UK and Scottish Government Responses to the Committee's Second Report	HC 790

Number	Title	Reference
2nd Special	The UK Shared Prosperity Fund and Scotland: Government Response to the Committee's Third Report	HC 791
3rd Special	Renewable energy in Scotland: Government Response to the Committee's Fourth Report	HC 901
4th Special	Universities and Scotland: Government Response to the Committee's First Report	HC 1252

Session 2019–21

Number	Title	Reference
1st	Coronavirus and Scotland: Interim Report on Intergovernmental Working	HC 314
2nd	Coronavirus and Scotland	HC 895
1st Special	Problem drug use in Scotland: Government Response to the Committee's First Report of Session 2019	HC 698
2nd Special	Coronavirus and Scotland: Government Response to the Committee's First and Second Reports	HC 1118