# Securing the Nation



## Defending an independent Scotland

\_\_\_\_\_

Dr John MacDonald Lt-Col (Retd) Andrew Parrott



Scottish Global Forum

## Securing the Nation:

## Defending an independent Scotland

A report by the Scottish Global Forum

Published: 12<sup>th</sup> November 2013

**Report Authors:** 

Dr John MacDonald and Lt-Col (Retd) Andrew Parrott



\_\_\_\_\_

Visit Scottish Global Forum at:

http://www.scottishglobalforum.net

Like us on Facebook



## **Contents**

	Section	Page
	Author information	p.4
	Abbreviations	p.5
	Overview	p.6
1.	The Security Focus of an Independent Scotland	p.9
	Task 1: Defend the Sovereignty of Scotland	p.10
	Task 2: Assistance to the Civil Authorities	p.17
	Task 3: Contribute Forces to International Operations	p.18
2.	The Structure and Provision of a Scottish Defence Force	p.21
	Scottish Air Forces	p.22
	Scottish Naval Forces	p.25
	Scottish Army	p.28
	Training the SDF	p.31
	Transition to full operating capability	p.33
	Overview of personnel numbers	p.35
3.	Costing	p.36
4.	Conclusion	p.42
	Sources	p.44
	Appendix 1: Force Structure Summary for a Scottish Air Force	p.48
	Appendix 2: Force Structure Summary for a Scottish Navy	p.49
	Appendix 2: Force Structure Summary for a Scottish Army	n 50

### About the authors \*

John MacDonald holds a Master's Degree in European Politics from the University of Dundee and a PhD from the same institution. He has lectured extensively in Scotland, the United States and in Switzerland. The bulk of his lecturing in recent years has been at the University of Dundee where he lectured on transatlantic security, the politics of war and military intervention and American politics. He was instrumental in developing the University of Dundee's MLitt in *International Politics and Security*; he was subsequently the Convenor of this programme. John is currently an Associate Lecturer at the University of Glasgow.

Beyond the academy, John has been involved in security policy consultancy and his writing appears regularly in the media, typically on issues relating to security and democracy. He is currently engaged in a variety of collaborative projects examining UK security and defence, and Scotland's constitutional future. John is the Director of the Scottish Global Forum.

-----

Andrew Parrott joined the British Army in 1975. Commissioned into the Royal Corps of Transport (RCT) he attended Aberdeen University as a University Cadetship Officer and graduated in 1979. In the early part of his career he served in Hong Kong, South Korea, Germany, Northern Ireland, Scotland and Belize. He served in Scotland as Adjutant of the then 154 (Lowland) Transport Regiment RCT (V) based in Glasgow. He attended the Army Command and Staff Course at the then Army Staff College in Camberley in 1989.

After Staff College he took over command of an RCT Squadron in Germany and deployed on operations to the Gulf in Autumn of 1990. Further postings followed in Germany, when the RCT became a part of the Royal Logistic Corps (RLC), and England before, on promotion in 1997 to Lieutenant-Colonel, he took over command of the Scottish Transport Regiment RLC (V) headquartered in Dunfermline.

In Autumn 1999 he was posted on loan service to Estonia as the British staff member at the newly created Baltic Defence College, the internationally supported staff college for the Armed Forces of Estonia, Latvia and Lithuania. He was four years in this posting and witnessed at first hand the development of Baltic States' armed forces following their renewed independence.

His final posting, before he retired in 2012, was to the Defence Support Chain Operations and Movements staff based at MoD Abbeywood, where he was involved in global movements planning for the UK Armed Forces. He was particularly involved in planning and establishing military freight transit through Latvia, Russia and the Central Asian Republics for the support of the UK forces deployed in Afghanistan.

<sup>\*</sup> The views expressed in this report are those of the authors. They do not represent the views of the Scottish Global Forum.

### **Abbreviations**

European Union EU

Exclusive Economic Zone EEZ

Maritime Patrol Aircraft MPA

Ministry of Defence (UK) MoD

National Defence Academy NDA

North Atlantic Treaty Organisation NATO

Northern Sea Route NSR

Remainder of the UK rUK

Scottish Air Force SAF

Scottish Coastguard Service SCS

Scottish Customs Agency SCA

Scottish Defence Force SDF

Scottish Navy SN

UK inherited assets UKIA

United Kingdom UK

United Nations UN

Unmanned Aerial Vehicles UAVs

### Overview

In September 2014, the people of Scotland will be asked to vote on whether Scotland should be an independent nation state. If the majority of voters respond 'Yes' to this question, Scotland will quickly need to meet the challenge which is a fundamental concern of all independent states: protecting and securing its sovereignty and national interests.

The current Scottish Government has declared its intention to meet this challenge. It maintains that an independent Scotland will be a militarily capable state, one which is provisioned not only to protect its national interests but also to engage with a wider range of transnational security agendas, including those befitting a member of the United Nations (UN), the European Union (EU) and the North Atlantic Treaty Organisation (NATO).

The remit of this report is to consider the Scottish Government's aspirations and to paint an informed picture of how they might best be met. By way of meeting this challenge, we dedicate ourselves to two key tasks: we seek firstly to paint a picture of what the security priorities should be for the government of a newly independent Scotland; we then seek to illustrate what a Scottish Defence Force (SDF) should look like in order to meet those priorities.

Some previous reports on Scottish security and defence have tied their focus to the question of whether or not Scotland should be an independent state. This report does no such thing. This project is driven solely by the acknowledgement that Scotland may vote for independence in 2014 and that if it does, it would be remiss of Scotland's intellectual community not to have given serious thought to what should follow. Envisioning Scotland's defence provision in the light of a 'Yes' vote is just one of many issues which should currently be under strenuous consideration.

A similar impartiality is extended towards the issue of NATO membership for an independent Scotland. We acknowledge that the Scottish Government's expressed preference for Scottish membership of NATO has not been roundly embraced by Scotland's citizens. However, whilst this is clearly a sensitive issue for some, the task of this report is not to enter the debates over the merits and demerits of how an independent Scotland might align itself within the international arena, but to interrogate how the Scottish Government's NATO aspirations might best be met. The frequent reference to NATO throughout this report, and our depiction of force structures which we think would meet with the requirements for NATO membership, should not be seen as any reflection of the authors' views on Scottish NATO membership.

We acknowledge also that the Scottish Government's current stance *vis-à-vis* the UK nuclear deterrent may add an element of intricacy to a newly independent Scotland's membership dialogue with NATO; however, we do not address that issue here and confine ourselves merely to considering the force structure that an independent Scotland would have to develop in order to meet NATO membership requirements.

This report comprises four sections:

**Section one** acknowledges that the configuration of any military force should reflect clearly what that force is being configured for. This section details a series of security concerns which we think the government of a newly independent Scotland should prioritise. Those concerns are expressed as a series of broadly defined 'tasks' for the various armed services of an independent Scotland. Some of those tasks, we contend, are not currently being attended to as best they might by the UK Government.

**Section two** proceeds to outline the structure of the military force required to meet the various tasks highlighted in the previous section. This section details how an SDF should be configured, in terms of both personnel and equipment, and this configuration is broken down into air forces, naval forces and land forces. In this section, we also attend to key issues in relation to the development of the SDF, including transition, personnel issues, and training. Given the present Scottish Government's NATO aspirations, this section also considers how those aspirations might influence the way in which an SDF should be configured.

**Section three** examines costing. We approach this issue by looking first at how Scotland is currently served by the UK military budgeting model, both in terms of Scotland's tax contribution towards its defence, and how Scotland fares in defence terms from this contribution. We then examine the budgetary parameters put forward by the current Scottish Government and consider whether an SDF could be effectively provisioned and tasked within those parameters. In emphasising a leaner military model for an independent Scotland, we draw upon an array of examples from other nations in order to highlight areas in which efficiencies could be made in sustaining an SDF, with no obvious detriment to capacity and quality.

**Section four** draws broad conclusions from what has been examined in the previous three sections.

In analysing how an independent Scotland should contemplate its defence, we contend that Scottish military planners should prioritise an approach that we term 'securing the perimeter'. This is an approach which gives primacy to patrolling and defending Scotland's sizeable coastline, sea and airspace. Such a commitment would require a proficient Scottish Navy, Air Force, Coastguard Service and Customs Agency whose efforts would be directed principally towards surveillance and patrol – both aerial and maritime – and customs and anti-smuggling operations.

The force structure we propose for a Scottish Defence Force is, we acknowledge, just one of several models which might be deemed 'appropriate' for the defence needs of an independent Scotland. It is a force structure that is proportionate to the scale difference between the UK and Scotland but we are confident that it would allow an independent Scotland to defend its sovereign interests and also to contribute meaningfully to international alliances, in keeping with the aspirations expressed by the current Scottish Government.

On the all-important issue of costing, we contend that an independent Scotland would face no greater challenge than any other comparable state in funding its defence. Assuming that the defence resource of a newly independent Scotland would initially be based upon an inherited 8.4% 'population share' of the UK's sizeable defence assets, we contend that Scottish military planners would have an ample 'start-up fund' from which to develop an SDF.

In terms of subsequent annual running costs, we draw attention to how Scotland already makes a substantial financial contribution to its defence each year as part of the UK and that even a substantial reduction in this contribution would allow an independent Scotland to maintain an annual defence budget akin to that of Denmark. Ultimately, our analysis leads us to conclude that an independent Scotland could develop an effective, and economically sustainable, defence model along the lines envisioned by the current Scottish Government.

We acknowledge that the results of a possible dialogue between a newly independent Scotland and NATO clearly cannot be known. However, we contend that in prioritising its military force structure around aerial and maritime capability, and in developing a land force which is capable of deploying on an array of transnational operations, an independent Scotland would not only be provisioning itself to best protect its national interests; it would also be developing a military focus and capacity that NATO would value. Developing the SDF with an eye on NATO's capability and interoperability standards would ensure that an independent Scotland's military forces would be proficient on the land, on the sea and in the air.

It is important to acknowledge that an independent Scotland's security and defence priorities would be very different from the UK's. It would make no sense for Scotland to try to recreate what the UK currently has and does. However, this should not be viewed in negative terms.

In developing a military force with an eye upon its own needs and on the needs of the NATO alliance it wishes to join, an independent Scotland would have the opportunity to develop an effective military force which might better defend its own interests, and which would allow it to contribute to international humanitarian and military operations on a similar scale to other comparable states.

#### Section One

## The Security Focus of an Independent Scotland

#### **Introduction**

In assuming that an independent Scotland would indeed look to 'defend its national interests', we might reasonably ask: How should those 'interests' be defined? Where exactly should Scotland's security priorities lie?

The significance of these questions extends well beyond their intellectual appeal since the earmarking of security priorities must precede any attempt by an independent Scottish Government to configure and equip Scotland's armed forces. In this section, we attempt to highlight which areas and activities should be earmarked, and why. The issues we raise should, we assert, be taken seriously by the government of a newly independent Scotland. Attending to them would be crucial to protecting the wellbeing of Scotland's people and its economic and natural resources. It would also be central to the current Scottish Government's aspirations to see an independent Scotland incorporated into the security architecture of the transatlantic area.

#### What would be the requirements for a Scottish Defence Force?

It is fair to assume that the force structure and provision of an SDF would be tied to the requirements that would emerge from the defence and security policy determined by an independent Scottish Government. It is not the remit of this paper to detail a possible Scottish defence and security policy but it would be reasonable to assume that the requirements which would emerge from such a policy would be along the lines of the following:

- The defence force structure must provide the basis for responding to any major change in Scotland's strategic circumstances in the medium to long-term future. It is the first duty of a state to protect its citizens and its territory; this responsibility must be considered in respect of all eventualities over an indefinite period of time.
- The defence force structure must be capable of responding to requests for domestic assistance from the civil authorities and of undertaking any specific tasks in relation to non-military emergencies. *Police Scotland* should have primacy with regard to issues of law and order but the SDF should be able to assist in situations where law and order might be threatened, or where the general well-being and stability of civil life is endangered. In addition, in a small state it makes sense for the armed forces to embrace a number of quasi-military and non-military tasks (such as coastguard and

search-and-rescue) in co-operation with other agencies in order to maximise effectiveness and to avoid the duplication of resources.

 The defence force structure must demonstrate an appropriate level of commitment to national defence and security. Scotland aspires to membership of international and regional collective security arrangements and it cannot expect to be welcomed into these arrangements without making reasonable provision for its own national defence, commensurate with its geo-political situation, population and resources.

These requirements might be expressed as 'tasks' for an independent Scotland's armed forces and those tasks can be summarised as follows. We assume that an SDF would be prepared to:

- 1. Defend the sovereignty of Scotland and its maritime zone against both present and developing medium and long-term threats.
- **2.** Undertake specific tasks in support of Scotland's civil authorities and in co-operation with appropriate domestic agencies.
- **3.** Contribute forces for deployment on international operations military or humanitarian led by the UN, NATO or the EU.

These three broad 'tasks', and their significance to the security of an independent Scotland, will be considered in greater detail below.

#### Task 1:

Be prepared to defend the sovereignty of Scotland and its maritime zone against both present and developing medium and long-term threats.

The defence of sovereignty is heavily tied not just to a state's capacity to secure its interior and its boundaries but also to have an adequate 'over-the-horizon' capability which will allow it to maintain surveillance of – and, if necessary, engage with – the broader environs beyond its borders. This need may be especially pronounced for a country like Scotland which has vast expanses of sea extending away from its north and north-west, and in which Scotland has clear interests.

We contend that military planners in an independent Scotland should prioritise an approach that we term 'securing the perimeter'. This approach would see an SDF tasked and equipped primarily to patrol and defend Scotland's sizeable coastline, sea and airspace; it would require a proficient Scottish Navy and Air Force, incorporating a coastguard service and working closely with a dedicated Scottish customs agency.

There is much to commend the wisdom of this approach. Scotland is a maritime nation whose sea area is more than five times larger than its land area. It has over 11,000 km of highly indented coastline – amounting to approximately 61% of the total UK coastline – and over 800 islands. Scotland's seas extend outwards 200 nautical miles – the seas within this boundary being Scotland's recognised fishing limits – giving it a total sea area of 468, 994 square km.¹ By contrast, very narrow bodies of water – in the form of the North Sea and the North Channel of the Irish Sea – are all that separate Scotland from continental Europe and Ireland respectively

While Scotland's physical structure and location affords great opportunities, it also carries risks. In recent years, Scotland has suffered encroachment in many forms. For example, its sea and airspace has frequently been subject to uninvited incursions from Russian military aircraft and naval vessels.<sup>2</sup> Scotland's close proximity to continental Europe and Ireland has also resulted in a host of smuggling activities around and through Scotland. Those activities have seen the transportation of – amongst other things – contraband cigarettes and alcohol, people trafficked for labour and the sex industry, and weapons arriving in or passing through Scotland, with predictable accompanying damage to government revenues and to human wellbeing.<sup>3</sup>

Scotland's economic interests in its surrounding seas are certain to increase in the coming decades, perhaps most notably across the various energy fields. Those interests will need to be monitored and secured. Important also, is the ecological integrity of the seas which surround Scotland and on which so much of its economic strength depends.

Scotland's waters are likely to come under increasing threat in years to come as the opening up of the Northern Sea Route (NSR) – facilitated by the rapid melting of key areas of Arctic sea ice – sees greater volumes of shipping passing along Scotland's western and eastern seaboards. A lack of understanding of, and careless engagement with, these developments could have devastating consequences for Scotland's fisheries industry, for Scotlish tourism, and for the wellbeing of Scotland's people and wildlife.

It merits repeating that Scotland's economy is hugely reliant upon the purity of its natural environment. Whilst precise figures vary, a 2010 study by *Deloitte* found that tourism was worth £11 billion each year to the Scottish economy. Scotland's landscape is an immense part of the 'tourist draw' and recent years have seen an upsurge in niche tourism activities which are intimately linked to landscape appeal.<sup>4</sup> Upholding one of the nation's key assets should be seen as a vital economic interest and it should be attended to with the same rigour as other security concerns.

We feel that these issues should inform how an independent Scotland thinks about – and prioritises – its security. Whilst the UK appears to place great value in its expeditionary capabilities and its ability to 'project power', it might be argued that it has not demonstrated a similar commitment to securing more immediate domestic interests. This relative neglect of the 'home front' has facilitated vast losses to the domestic revenue base and various harms to people and to the physical environment. We contend here that an independent Scotland should orientate its security focus by prioritising – first and foremost – the security of

Scotland's land, sea and people. It should be noted that this emphasis need not blunt in any way an independent Scotland's willingness and ability to contribute to international military or humanitarian operations.

#### **Securing the perimeter**

By way of trying to secure its interests, the government of a newly independent Scotland should prioritise the development of an array of assets. These should certainly include an aerial maritime reconnaissance capability, a coastguard service, and an effective customs agency which would operate both within Scotland and in its surrounding sea and air-space. A consideration of those assets, and the rationales for their requirement, is set out in more detail below.

#### (i) Full-time aerial and maritime surveillance capability:

It may have been 'the most difficult decision' of the UK Government's 2010 Strategic Defence and Security Review (SDSR), but the withdrawal from service of the Nimrod aircraft fleet has diminished greatly the UK's aerial surveillance capability. This decision was widely criticized.<sup>5</sup> The House of Commons Defence Committee, having examined the implications of the decision, declared that it was 'unconvinced' that the UK now had the capacity to respond to any sudden risk in its maritime surveillance arena. It concluded that:

"...we believe the risk is likely to worsen in the medium term as further maritime surveillance capabilities are withdrawn or not yet filled. The UK's maritime flank is likely to be increasingly exposed."

An independent Scotland should ensure that it faces no such exposure. Developing a widearea aerial surveillance capability makes perfect sense for Scotland and would be a hugely important element of any credible Scottish defence posture. It would allow the Scottish Government to:

- (i) Maintain a constant 'over-the-horizon' view of what is happening in the air and sea-space beyond Scotland. This would allow forewarning of any possible infringements of its sovereignty, whether from the air, sea or sub-sea;
- (ii) Maintain vigilance over the many assets that Scotland has in its surrounding seas, including oil rigs, natural energy platforms and fisheries traffic;
- (iii) Stay informed of incidents and activities which may result in damage to the physical environment or to human lives within Scotland's geographical sphere.

(iv) Have at hand an effective aerial platform with great outreach capacity, one which can coordinate any rescue, monitoring or inspection activities that may be required in response to activities occurring beyond Scotland's coasts.

In terms of the current Scottish Government's NATO aspirations, it is also pertinent to note that the development of a full-time maritime aerial surveillance capability would be a clear indicator of Scotland's value to NATO. Possessing a fleet of Maritime Patrol Aircraft (MPA) would represent a 'niche capability' on Scotland's part, one which the UK currently does not possess. It would demonstrate amply Scotland's credentials as a state which takes its security seriously, sitting as it does in an area of great strategic significance within the transatlantic area.

In thinking about how best to conduct aerial maritime patrol, Scottish military planners might also contemplate the possibility of deploying Unmanned Aerial Vehicles (UAVs), more commonly known as 'drones'. These platforms could be useful – and less costly – in carrying out a variety of surveillance tasks and they might prove to be effective in coastguard and customs operations as well.<sup>7</sup>

A decision on whether or not to develop a Scottish UAV capability should be made with care; there is a discernible scepticism about UAVs amongst some sections of the public-political arena. There is also a lack of consensus as to the oft-cited assumption that UAVs represent a cheaper aerial platform to run than piloted aircraft. Statistics gathered by the United States (US) military in recent years have suggested that UAVs often demonstrate a far higher 'mishap rate per 100,00 hours of flight-time' than do manned aircraft, something which has led to questions over just how cost-effective unmanned platforms actually are.<sup>8</sup> However, these statistics may well be particular to offensive UAVs carrying sophisticated weapons payloads and this is almost certainly not the kind of task for which an independent Scotland would be looking to employ UAVs.

Whilst the possibility of deploying UAVs for aerial surveillance tasks may have some appeal, care would have to be taken in committing to those platforms. UAVs are not seen as an adequate all-round substitute for piloted aircraft due the unsuitability of unmanned aircraft for some of the key MPA roles. It should be assumed that if surveillance UAVs were to be used by Scottish forces, they would be deployed to supplement – and not to replace – manned MPA. Our discussions with RAF personnel have found that whilst the value of UAVs is certainly recognised, there is also a cynicism over the assumption that these platforms can effectively replace dedicated MPA piloted by experienced air crews.

#### (ii) A Scottish Coastguard Service

In keeping with our contention that the defence of an independent Scotland should be based upon the principle of 'securing the perimeter', it is our view that a coastguard service would be of key importance. Prioritising the development of a Scottish Coastguard Service (SCS) would

demonstrate a far greater commitment than currently exists, both to Scotland's seas and coastline and to the people whose livelihoods are dependent upon them.

Scotland's maritime sector has been poorly served by UK Government cuts and it continues to experience decline on a number of fronts. Despite open criticism of its proposals from both the House of Commons Transport Committee and the Scottish Affairs Committee, the UK Government went ahead with a maritime 'modernisation' programme which saw (amongst other things) the closure in 2012 of the HM Coastguard stations in the Forth (Crail) and the Clyde (Greenock). This decision has left Scotland's densely populated Central Belt without a coastguard station; coastguard protection for this area is now delivered from Belfast and Aberdeen.<sup>9</sup>

Critics contend that these cuts have seriously compromised maritime safety, not only due to the decreased coastguard cover around Scotland's coasts but also due to the loss of crucial local knowledge amongst remaining coastguard crews. In a subsequent review of the cuts, the House of Commons Transport Committee concluded that coastguard personnel have been left 'disillusioned and confused' by the changes. For its part, the Public and Commercial Services Union (PCS) continues to attack the 'ill-thought through' cutbacks and insists that they have led to Coastguard Officers 'leaving in droves'. It is widely considered that Scotland's Coastguard service now suffers from an acute staffing problem.<sup>10</sup>

Scotland's maritime safety has been jeopardized in other ways. Before the UK Government's cuts, two emergency tug-boats patrolled Scotland's waters, one covering the Western Isles, the other covering the Northern Isles. However, in 2011 the UK Government decided to cut the funding for all four of the UK's emergency tug vessels and whilst this decision was briefly overturned for the two Scottish tugs, UK Ministers (this is a reserved matter) finally decided to cut funding for the Western Isles tug. This vessel stopped operating in March 2012. After an outcry, it was agreed that government funding for the remaining Northern Isles tug would continue until 2015.<sup>11</sup>

Amidst great uncertainty and anger about what would happen once Westminster's funding commitment to this remaining tug expired, it was announced in February 2013 that a deal had finally been brokered between the UK Government and British Petroleum (BP) which will see BP charter a vessel to take over emergency tug duties for the Northern Isles beyond 2015.<sup>12</sup>

This agreement is undoubtedly to be welcomed but it is hard to avoid the sense that the UK Government takes a negligent view of maritime safety and maritime environmental protection. Twenty years after the *MV Braer* ran aground off Shetland spilling 85,000 tonnes of crude oil into the sea, we question whether the limited provision currently provided by the UK Government is adequate to provide effective emergency coverage of Scotland's vast sea area. Its unwillingness to fund even this limited capacity, opting instead for letting the private sector 'take care of things', also reflects a worryingly dismissive view of the risks that maritime accidents pose to fragile marine environments.

It is our view that a greater priority should be given to the protection of Scotland's vital marine environment. We feel that, at the very least, one full-time state-funded tug-boat should be on 24-hr call for each of the Western and Northern Isles. With *World Wildlife Fund Scotland* estimating that the oil and gas industry is responsible for almost one thousand oil and chemical spills each year in the North Sea alone, one can only conclude that there is considerable scope for a greater commitment to Scotland's marine environment.<sup>13</sup>

A Scottish Coastguard Service would be tasked with addressing these and other concerns. It should be a single agency run by the Scottish Navy – in a similar fashion to Norwegian practice – and would be tasked primarily with maritime search and rescue, fisheries protection, shipping safety, environmental monitoring, customs enforcement work, and also support for education and research.

The presence of such an agency may be increasingly important in the years to come. As noted above, the shipping lanes around Scotland are already busy and the number of fixed installations in Scotland's seas is only going to increase. The inevitability of increased traffic through the NSR should also, in particular, heighten considerations of how Scotland's seas and coasts can best be protected. Those who are sceptical about the need for action should note that recent developments on this front do not necessarily inspire a sense of optimism.

Russia has quickly moved to dominate the NSR, principally in order to exploit and transport its vast northern energy reserves. By way of demonstrating its authority, the Russian Government has set up a new state agency called the *Northern Sea Route Administration* (NSRA), a body tasked with deciding tariffs and regulations for the passage of ships through the NSR, considering applications from ship owners for such passage, and giving or refusing permission for passage. The NSRA has, in recent times, greatly increased the permissions it has granted for passage through the NSR, overwhelmingly to Russian ships.<sup>14</sup> This year, around 1.5 million tonnes of traffic will be carried through the NSR; the Russian Government predicts that by 2015, this figure will reach 4 million tonnes.<sup>15</sup>

Given that Russia is frequently criticised for its poor environmental record in both the maritime and the energy extraction fields, these developments should be watched keenly from Scotland, regardless what its constitutional future looks like. Preparation for an intensification of NSR traffic has to be made and this should certainly be a priority for the government of a newly independent Scotland.

The SCS would also play a leading role in addressing the various smuggling and trafficking issues which currently beset Britain and Ireland. It would work closely with a Scottish Customs Agency (see below) in addressing these concerns.

#### (iii) A Scottish Customs Agency

A commitment to 'securing Scotland's perimeter' should, we argue, prompt other commitments which are currently lacking. A newly independent Scottish Government should prioritise the development of a proficient Scottish Customs Agency (SCA). Doing so would not only help to protect the Scottish Government's revenue base but would also work to stifle the myriad activities of criminal groups working in and around Scotland.

The problem to be addressed is acute. The UK and Ireland currently face an array of difficulties associated with the smuggling of illicit contraband. Tobacco smuggling provides a significant example. With both countries levying the highest levels of excise duty on tobacco in the EU, the UK and Ireland are inundated with smuggled tobacco products. Customs officials believe that as many as 1 in 7 cigarettes smoked in Ireland is illicit; that figure rises to 1 in 10 for the UK. The National Audit Office estimates that the trade in illicit tobacco alone cost the UK Exchequer £1.9 billion in 2010-11.<sup>16</sup>

These activities result not only in vast economic loss to the Exchequer. They are also intimately linked to a variety of criminal endeavours which invariably result in damage to human wellbeing. In the UK, tobacco smuggling is closely associated with organised criminal gangs and their various endeavours in fields such as people trafficking and weapons procurement. Human trafficking to the UK rose by one-quarter last year.<sup>17</sup> The Irish authorities contend that the illegal tobacco trade channels tens of millions of pounds each year towards dissident republican groups.<sup>18</sup> In Scotland, the illicit tobacco trade is rising and it has been widely reported that 'Triad gangs' operating between China and Scotland make over £10 million per year in Scotland through the illicit sales of rolling tobacco alone.<sup>19</sup>

This is clearly a significant issue but it is one that the UK continues to struggle to address. Margaret Hodge, Chairwoman of the Commons Public Accounts Committee, has recently admitted that Her Majesty's Revenues and Customs (HMRC) had 'not got a grip' on smuggling and that they were 'falling short' in their efforts to address the problem.<sup>20</sup>

An independent Scotland should seek to address these acknowledged deficiencies. A properly provisioned SCA would make great strides towards securing the integrity of Scotland's borders by detecting and deterring the unlawful movement of goods and people into and around the country. The SCA would work closely with other agencies, in particular *Police Scotland*, the Scottish Coastguard Service and the Scottish Air Force. It would also liaise closely with partner agencies in rUK and Ireland, as well as in continental Europe.

Whilst some may question the economic outlay required to set in place a more rigorous antismuggling capability, concerns on this front can be allayed by pointing to the revenues lost to the taxpayer each year due to the inadequacy of current customs provision. If those lost annual revenues can be counted in the billions of pounds, then it seems clear that the work of an effective professional customs service – even if it were only moderately successful – could more than pay for itself and could go a long way towards protecting not only Scotland's revenue base but also the many vulnerable people who are victimised by organised crime.<sup>21</sup>

#### Task 2:

## Be prepared to undertake specific tasks in support of Scotland's civil authorities and in co-operation with appropriate domestic agencies.

The second 'task' for the SDF – as noted on page 10 – would be to assist the civil authorities in dealing with situations which may be beyond the capabilities of the civil emergency services alone. This assistance may be required in various situations in which specialised transport, rescue or engineering work is required, or in situations in which the need for able personnel is pressing.

Situations which might merit the SDF being asked to provide civil assistance may range from relatively commonplace ones such as flood-response to rare situations such as when the British Army was called upon in 2001 to oversee slaughter and disposal activities as the UK Government fought to contain the foot-and-mouth crisis.<sup>22</sup>

In situations where the SDF would assist the civil authorities, *Police Scotland* would have primacy with regard to the rule of law. Whilst the SDF would be under the jurisdiction of the Department of Defence, operational control would be directed by whatever local authority the SDF was tasked with assisting.

In keeping with our advocacy of a security model which places a greater emphasis upon domestic security, we envision the Scottish military being relatively more involved in Scottish civic life than is the case presently in the UK, principally in terms of its ability to assist local authorities.

To this end, we would advocate a situation in an independent Scotland which improves substantially upon current UK practice in which local authorities have responsibility for meeting the costs of Armed Forces assistance from their own budgets unless they have secured prior agreement from central government for meeting those costs. We would encourage instead the initiation of a system in which a local authority could immediately, on their own judgement, call for assistance from the Armed Forces – up to a certain cost level and in relation to a specified array of tasks – in the certain knowledge that the costs of this request will be met by central government. This arrangement would avoid situations where crises continue to develop – and possibly deteriorate – while local authorities go through the 'correct channels' in their efforts to secure funding for Armed Forces assistance.

In terms of day-to-day responsibilities, the Scottish Air Force and Navy would be tasked with much of the Scottish Government's air and maritime activities. The coastguard function – a civilian agency in some states – should best be provided by the Navy. Land-based search and rescue functions – for example, mountain rescue – would continue to be carried out through the deployment of designated Scottish Mountain Rescue helicopters flown by Scottish Air Force pilots. These arrangements should not be seen as jeopardising but as complementing the vital work undertaken by bodies such as the Royal National Lifeboat Institution (RNLI) and Mountain Rescue Scotland.

#### Task 3:

Be prepared to contribute forces for deployment on international operations – military or humanitarian – led by the UN, NATO or the EU.

Scotland has a rich military history and if becomes an independent state, many – although not all – Scottish citizens would want to see this legacy continue. The present Scottish Government has asserted its wish to see an SDF participating meaningfully in a range of international operations. It is important to highlight that if an independent Scotland were to contribute meaningfully to humanitarian, peacekeeping or military operations under the EU, NATO or UN banners, then its forces would have to be equipped and trained with an eye on integrating into already-existing arrangements and structures.

In terms of what an SDF might do with respect to overseas activities, the government of an independent Scotland might well seek to forge a reputation for proficiency in fields such as peacekeeping and humanitarian operations. This approach would probably fit well with the vision that many Scots have of how Scottish forces would 'act in the world' if Scotland were an independent state. This type of commitment would potentially see Scottish forces deployed widely around the world. If the government of an independent Scotland were to desire such a role for the SDF, it might look to the example set by states such as Canada, Ireland and Norway, all of which are renowned for their proficiency in such operations.

The citizens of an independent Scotland could expect to see their forces involved in a variety of other commitments as well. For example, the Royal Norwegian Air Force has two of its F-16 jets 'on 15 minute standby for NATO duties'; a Scottish Air Force (SAF) might be expected to maintain a similar state of readiness.<sup>23</sup> Whilst it would be heavily employed in the waters around Scotland, the Scottish Navy might also have a significant expeditionary role to play. Denmark is currently committed six months out of each year to NATO's *Ocean Shield* mission, a multinational operation aimed at combatting piracy off the Horn of Africa.<sup>24</sup> It is entirely possible that an independent Scotland – whether a NATO member or not – could look to contribute its own frigates to this and similar endeavors, so vital to maintaining the integrity of international shipping lanes.

More controversial perhaps, would be an independent Scotland's participation in activities which may see the SDF operating in conflict-zones. Since this possibility cannot be ruled out, it might be prudent to discuss the conditions under which such deployments might be sanctioned. This consideration may be especially relevant if an independent Scotland were to be a member of transnational alliances which may sometimes solicit member states to contribute to an 'alliance response' to an international crisis. If an independent Scotland were a member of the EU, NATO and the UN, any one of those organisations might make force deployment requests to the Scottish Government. Such requests may, on occasion, require Scottish forces to deploy into situations which may involve conflict.

Membership of transnational alliances can present member states with requests to deploy their forces as part of an alliance mission. It is widely known that NATO has the potential to

make such requests of its member states through its mutual defence clause, enshrined in Article 5 of the North Atlantic Treaty.<sup>25</sup> However, it is perhaps less well known that mutual defence obligations are also enshrined in EU membership. The Treaty of Lisbon (which came into force on 1<sup>st</sup> December 2009) contains a mutual defence clause which asserts that 'if a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power...' <sup>26</sup>

This is not to assume, of course, that EU membership and NATO membership are the same. They are not and Scottish citizens will certainly differentiate between the two. The EU is not a military alliance and whilst it is a modest military actor, it is an organization which allows its member states to adopt a formal stance of military neutrality if they so wish. NATO on the other hand is a military alliance and whilst Iceland – a member of NATO – has no standing army, it would be inconceivable that an independent Scotland could expect NATO membership without showing itself to be militarily provisioned to a level comparable with other similarly-sized NATO member states.

In terms of the 'military demands' that NATO membership might make of an independent Scotland, a few points might be addressed at this juncture. It should not be automatically assumed – as is often asserted by NATO critics – that if it remains in NATO, Scotland would somehow be 'dragged into wars' against its will. Nor should it be assumed that every NATO operation actually involves war-fighting.

On the first issue, we should bear in mind that it is not NATO who decides its members' participation in NATO operations but the members themselves. Whether in or out of NATO, the gatekeeper to any SDF deployment under the NATO banner (as would be the case if the SDF were deploying under the EU or UN banner) would always be the Scottish Government and its willingness – or not – to say 'Yes' to any request for Scottish forces. NATO member states can choose exactly what they wish to contribute to any NATO operation; indeed, they can refuse to contribute at all if they so wish. A refusal to become involved in an operation – as was the case with Germany's refusal to participate in the 2011 NATO air campaign over Libya, for example – does not threaten that state's membership of NATO and it retains all of its voting and veto privileges within NATO.<sup>27</sup> As a NATO member, the government of an independent Scotland would thus have a choice as to whether it assented to Scottish involvement in any imminent NATO operation.

On the second issue, that of the nature of NATO activities themselves, NATO cynics should note that NATO continues to undertake a necessary peacekeeping role in Kosovo, is a key actor in anti-piracy operations in the Indian Ocean, and is assisting the African Union in its many peacekeeping activities across continental Africa.<sup>28</sup>

It is thus important to remember that – regardless of the transnational alliances that an independent Scotland may be a member of – the burden of responsibility for deploying the SDF would always ultimately lie with the Scottish Government itself and not with any transnational alliances it might choose to align Scotland with. Indeed, the actions of so-called 'coalitions of the willing' during the post-9/11 period should offer a stark reminder to 'alliance

cynics' that an independent Scotland could well be presented with force deployment requests even if it were to eschew membership of transnational alliances altogether.

Given that Scottish Government would be the gatekeeper to any deployment of the SDF, it might be prudent to consider the kinds of checks which might be placed upon force deployment decision in an independent Scotland. This is an important consideration since there is no more serious an action for a government to take than to send its service personnel to foreign conflict-zones where they might kill and be killed, and where service personnel run the risk of having to live with the long-term consequences of serious injury and psychological damage.

Thought might thus be given to what kind of prerequisites should have to be in place before the SDF were to participate in any overseas military activity. More specifically, what would the Scottish Government have to do in order to be seen by Scotland's citizens to have 'acted appropriately' in sending the SDF overseas?

It must be said that the current Scottish Government has – in its rhetoric at least – demonstrated a responsible approach to this issue. The First Minister has suggested on several occasions the desire to have a written constitution for an independent Scotland, one which – amongst other things – would contain articles detailing the conditions which must be met before the SDF could legally be deployed to overseas operations. If the current Scottish Government really is committed to this outcome, thought might be given as to what those articles might be.<sup>29</sup>

Should, for example, a written Scottish constitution contain an article insisting that UN authorisation has to be present before the Scottish Government can deploy the SDF to foreign crises? Whilst the UN continues to be regarded – rightly – as the recognised 'legitimate authority' in international politics, the self-interested politicking which often characterises the voting (and vetoing) behaviour of the Permanent-5 members within the UN Security Council continues to raise questions over whether a UN Resolution should be regarded as the only legitimate spur to military action. Some commentators – for example Dorcha Lee – have recently advised that if Scotland becomes an independent state, it should not look to base its deployment decisions solely upon the attainment of UN authorisation.<sup>30</sup>

Given the controversy which invariably surrounds force deployments – even deployments which are unlikely to see force used – this is an issue which should be clarified. Precisely what a Scottish constitution would have to say *vis-à-vis* the use of the SDF should be clearly thought through if this document is to act as an effective check on the government's capacity to utilise the nation's military forces.

#### Section Two

## The Structure and Provision of a Scottish Defence Force

Setting policy goals – and assigning military tasks in order to attain those goals – is one thing, but what force structures would an independent Scotland require in order to effectively carry out these tasks?

It is worth re-emphasizing that whilst the first task of the SDF would be to defend Scotland and its people, the current Scottish Government has also articulated its desire to see an SDF working effectively with a variety of international and regional collective security organizations. In order for this to happen, an SDF would have to be trained and equipped adequately in order to allow it to work effectively – and in a broad range of operations – with an array of alliance partners. Operations that an SDF should be structured, trained and provisioned to address should extend from such tasks as human or natural disaster relief operations up to, and including, war-fighting operations.

In terms of NATO membership, this would mean that the SDF would have to be trained and equipped in accordance with NATO standards and requirements for interoperability.<sup>31</sup> If an independent Scotland were to remain within NATO, successive Scottish Governments would have to ensure that the SDF was sufficiently provisioned and trained to enable it to make meaningful contributions to NATO operations, those contributions consistent with Scotland's size and resources.

The speed with which an SDF could assume this full spectrum of roles would clearly be tied to force generation. The initial development of the SDF will be influenced significantly by post-referendum secession negotiations between Edinburgh and London; specifically, what equipment and monies Scotland would secure as part of its share of 'inherited UK assets'. We address this issue in more detail below.

This report now proceeds to consider the force structure which might best fulfil the defence and security needs of an independent Scottish state. In doing so, we examine the configuration of the Scottish Air Force, Scottish Navy and Scottish Army, in turn. We draw the reader's attention to the fact that the three sections below demonstrate something of an imbalance in length and detail. This is due to the fact that in detailing the provision and structure of SDF air, sea and land forces, a different kind of breakdown is required for the land forces. Whilst air and naval forces are typically measured in terms of the major equipments they have at their disposal (typically we make reference to aircraft and ships respectively), land forces are measured in terms of personnel. What this means is that whilst the air and naval forces are amenable to a relatively simple breakdown of 'tasks-to-number-of craft', our 'task-numbers' breakdown of an SDF's land forces is a little more complicated since it is done with an eye on the numbers of personnel required to populate various units, those units assigned to various tasks.

#### **SCOTTISH AIR FORCES**

Scotland's geographical position means that its Exclusive Economic Zone (EEZ) extends fully 200 nautical miles from its northern and western coasts. This clearly entails a very large air space which an independent Scotland would have to protect if it were to fully exercise sovereignty and guard its interests. Scotland sits in a geo-strategically significant position between continental Europe and North America and at what might be considered the far southern edge of the Arctic zone, an area which is going to be increasingly significant in decades to come.<sup>32</sup>

Scotland would need to take responsibility for its own backyard and would have to equip itself appropriately so that it had the capability to patrol the air, in concert with its naval forces on the waters that lie below.

The current Scottish Government's NATO aspirations come into play when we think about air capability. It bears repeating that Scotland is, and would be seen by other NATO members as, a small but relatively wealthy state. If it were to remain within NATO, an independent Scotland would almost certainly not be afforded the support that, for example, the Baltic States have enjoyed since they joined NATO. The NATO allies agreed to assume an air policing and air defence role over the Baltic States due initially to the inability of these states to resource these roles themselves. The proximity of Russia was also, most probably, a key factor in cementing NATO's commitment on this issue.<sup>33</sup>

Scotland is not in this position and it should assume no such assistance if it becomes independent. Aside from the fact that it sits in a very different geostrategic position, Scotland's relative affluence and its intimate familiarity with 'what NATO expects' – by virtue of it already being in NATO through being part of the UK – means that an independent Scotland would not get away with 'freeloading' and would have to make a meaningful contribution. We detail below what a Scottish Air Force would need in order to meet various task commitments, including those which might arise from NATO membership.

#### A fast jet aircraft capability

A Scottish Air Force (SAF) should have a squadron of fast jet multi-role aircraft, tasked principally with the air defence of Scotland, including Quick Reaction Alert (QRA) flights. These craft should be versatile in scope so that they can also be tasked, if required, to deploy in support of NATO operations. This squadron should number between 15 and 20 aircraft, including a flight operating normally in the operational conversion unit role.<sup>34</sup>

In terms of preferred type, a newly independent Scotland might well be offered a 'proportional share' of the UK's fleet of Typhoon jets as part of its share of UK inherited assets (UKIA).<sup>35</sup> However, this may not necessarily be the most appropriate option for Scotland and Scottish planners should be careful not to be seduced by the appeal of equipment which may well be 'high-end' but which is also expensive and whose capabilities might be considered superfluous

to what Scotland actually needs. The government of a newly independent Scotland should also be wary of entering into military agreements with rUK which may give the impression of continued Scottish 'dependency', or which have the potential to push Scotland towards solutions which are not in its best interests.

A newly independent Scotland might be best advised to reject the Typhoon as an option for its air defence as they are costly to buy (around £70 million per aircraft) and maintain. A more prudent choice might lie in an alternative multirole fighter jet such as the Saab Gripen which can cost around half of what a Typhoon costs and is nonetheless a highly regarded aircraft which is currently favoured by, amongst others, the Swedish, Czech and Swiss Governments. <sup>36</sup>

An independent Scotland's fast jet force would perhaps be smaller than the fast jet forces currently maintained by states such as Denmark but it should be noted that many states are currently reviewing their future requirements for fast jets with a view to downsizing fleets.

Scotland's squadron should be supported by a 15-aircraft squadron of jet aircraft of the Hawk 200 type, or similar. These aircraft could carry out some air-policing and other similar tasks most cost-effectively and they would also act as an advanced jet trainer for SAF pilots. Whilst we disagree with the contention that Hawk could meet all of an independent Scotland's requirements, we do agree that as part of the SAF's development, Hawk could provide an effective early component of a newly independent Scotland's air policing capability.<sup>37</sup>

#### **Maritime Patrol Capability**

The requirement for Maritime Patrol Aircraft (MPA) has never been more obvious than since the UK Government's 2010 decision to withdraw Nimrod. The preceding section of this report outlined a variety of reasons as to why a newly independent Scotland should procure an aerial patrol capability. The government of a newly independent Scotland should look to secure such a capability in order to ensure that the SAF was able to exercise surveillance over Scotland's EEZ as well as carrying out the widest range of other patrol tasks.

In terms of the type of MPA which might be suitable for an SAF, the Lockheed P<sub>3</sub>-Orion might be considered. It is an old aircraft but its continued use by 21 governments across the world testifies to its enduring reliability. Regardless of which platform is chosen, we think that four MPA would initially satisfy the requirements of an independent Scotland.

#### Air transport capability

An SAF would also require a limited tactical air transport capability for moving personnel and air freight, as well as being available for other government transport tasks. This requirement might be met initially by four C-130 aircraft. It is unlikely that an SAF would permanently require any heavier transport aircraft such as the C-17 but if there is a limited requirement, then access would be available to Scotland for such craft.

An independent Scotland might see fit to participate in a collaborative project such as NATO's *Heavy Airlift Wing*, based in Hungary, to gain access to such airlift capability if required.<sup>38</sup> It might also wish to participate in the *European Air Transport Command* programme in which air transport resources are pooled between participating countries to allow for their most effective use.<sup>39</sup>

#### Other aircraft

An SAF would also require a small number of other aircraft – perhaps four – to operate in the multi-engined training role, as well as the passenger-carrying role. These aircraft might also be capable of undertaking a limited Airborne Early Warning (AEW) role as the Saab 340 has done in Swedish service.<sup>40</sup> It may be possible in future for one aircraft type such as C-295 to be flexibly tasked to cover tactical air transport, maritime patrol and passenger transport requirements with a probable saving in the total number of aircraft required.

#### **Helicopter capability**

As alluded to earlier, in order to simplify structures for maximum cost and task efficiency, we recommend that the SAF would operate all the helicopters required by the SDF. The Danish Air Force operates all helicopters required by the Danish Army and Danish Navy. We would recommend that in an independent Scotland, the same practice be adopted.

There is a requirement for a Naval Helicopter Squadron of eight helicopters, probably of the Lynx type, to support the Frigates and Ocean Patrol Vessels of the Scottish Navy. There is a requirement for two Army Support Helicopter Squadrons. One squadron should be equipped with about eight Merlin helicopters, or similar, to carry out the medium-lift utility role. The other squadron should be equipped with about eight helicopters, probably of the Lynx type, and would carry out the reconnaissance, liaison and armed helicopter role. A number of additional helicopters, no more than eight, would be required for a dedicated Special Forces flight and an operational conversion unit.

#### Support to civilian agencies

Again we reiterate that in order to avoid costly agency-overlap and for maximum efficiency, the SAF should pilot and maintain aircraft for a number of civilian agencies. The appropriate civilian agencies would provide the relevant functional specialists for the roles carried out. It is envisaged that the Search and Rescue, Environmental Protection, Air Ambulance and Police Support roles would be supported, involving about four aircraft and twelve helicopters in total.

Whilst the UK has chosen to privatize some of these functions or relies on charities for their provision, we advocate that in an independent Scotland, those services should be managed

and operated more cost-effectively (and task effectively) through publicly-funded provision working – where appropriate – in tandem with volunteers.

#### **Total training fleet size**

A total of about 24 aircraft and 8 helicopters are considered to be required by a Scottish Air Force to cover all aspects of Basic Flying, Advanced Fixed Wing, Helicopter and Instructor training, as well as providing for flying training for Air Force reservists.

#### **Bases**

A Scottish Air Force would require two main operating bases to minimise risk and for operational efficiency and flexibility. We suggest Lossiemouth as the most appropriate base for the Air Defence and Air Policing roles. Leuchars might be used for all other roles but consideration might also be given to the use of Prestwick as a military base alongside the civil airport. Support to civilian agencies will require small detachments to be based in other locations in order to optimize the support provided.

For a summary of the aircraft we propose for a Scottish Air Force, please see **Appendix 1** (page 48).

#### **SCOTTISH NAVAL FORCES**

Scotland has responsibility for a large area of the Atlantic Ocean and North Sea, and its asset interests and security concerns are very much tied to its maritime zone. Furthermore, as a NATO member, an independent Scotland would be expected to make an appropriate maritime force contribution to meeting NATO force goals and standing forces, whilst at the same time having the appropriate resources for tasks in its own territorial waters.

#### The Scottish Navy

What would a Scottish Navy (SN) require, in order to carry out its various tasks effectively? By way of comparison, we might look to other similarly-sized nations to look at the fleets they have operated in recent years:

- Royal Danish Navy five frigates and a variety of smaller vessels
- Royal Norwegian Navy five frigates, a number of smaller vessels and six submarines
- Irish Naval Service has eight large patrol vessels 41

For an independent Scotland, it seems reasonable to assume that a force of four frigates (or modern multi-purpose combat vessels) each of about 6,500 tons would provide for routine national tasks and would also allow a meaningful contribution to NATO task-force commitments. Vessels of the Danish *Absalon* and *Iver Huitfeldt* Classes – built under licence on the Clyde – might be most suitable for this role. The Scottish Affairs Committee in Westminster has recently acknowledged this possibility by speculating that:

'…If Scotland inherited assets from the Royal Navy that matched its needs, then it would not have to build warships. If the division of assets did not meet Scotland's needs, then a separate Scotland would need to acquire additional vessels, which could include building them and thus provide work for Scottish yards'.<sup>42</sup>

Fishing and the off-shore oil and gas industries have a major – and lucrative – presence in Scottish waters. Increasingly in the future they will be joined by off-shore wind and wave-power installations. Scotland needs to be able to protect and police these activities and installations without incurring the expense of misemploying overly large and disproportionately capable vessels.

There is a requirement therefore for four large helicopter-capable ocean-going patrol vessels, each of about 2,000 tons. These vessels might be similar to the New Zealand *Otago* Class, an updated version of the Irish *Eithne* Class, or the new vessels just ordered by the UK MoD, to be built on the Clyde. If these vessels also had a mine countermeasures capability, it would limit the requirement for dedicated vessels for that task. These vessels would also be available for coastguard tasks.

Surface vessels are ideal for overt patrol tasks. However, if they wanted to truly strengthen the Scottish Navy's surveillance capability, Scottish military planners might wish to consider the procurement of two advanced diesel submarines, each of about 1,500 tonnes, to provide Scotland with a more limited capability of the type operated by the Norwegian Navy. These vessels might be of the German 212 Class or 214 Class. The Royal Navy's 7,000 ton *Astute* Class submarines are very definitely not the type of capability that a Scottish Navy would need since they would be – from a Scottish perspective – overly expensive and overly capable. As we have stated before, there would be no need for an independent Scotland to procure military equipment which is beyond its requirements.

Questions might be raised over both the requirement and the cost of the 'submersible option' for Scotland. However, if an independent Scottish Government were truly convinced by the benefits of fielding a submarine capability, then it might be worth considering the procurement of submarines at some expense to the Scottish Navy's surface vessel capability. Those charged with taking this decision might bear in mind that submarines are capable of doing much that a surface vessel can do but are significantly less visible and significantly less vulnerable to attack. Given that the cost of a new submarine of the type we specify would be between £210 and £330 million each, the cost of one – or even two – of these boats is a financial commitment that is manageable when one considers the 'start-up fund' that Scottish military

planners would have to draw from in the light of a negotiated settlement agreement between Edinburgh and London.<sup>43</sup>

Given the importance of Scotland's many offshore installations, the SN should be supported in its roles by a Marine Unit. This should have one Regular Company and be able to call on two Reserve Companies. In addition there should be a small Marine Special Forces Unit to provide appropriate expertise to the Army Special Forces. The Marines should be equipped with the Swedish *Combat Boat 90* or similar.

Certain additional vessels are required to complete the establishment of the SN. If the large ocean-going patrol vessels have a secondary Mine Countermeasures (MCM) capability, there is a requirement for just two specialist MCM vessels to contribute to NATO standing forces and to carry out other national tasks. Alongside the MCM vessels there is a requirement for a specialist diving support vessel and a maritime survey vessel. These would be available for any national task requiring the specialist functions they offer.

To support Scottish and other nations' assets deployed on multinational operations, there is a requirement for two all-purpose fleet auxiliary vessels, each of about 10,000 tonnes. These vessels, whilst not part of the actual combat force, represent a significant asset to any deployed naval force. If a Scottish Navy did not have such assets, any Scottish involvement in a multinational naval task-force might risk placing a logistic burden on other nations' resources ahead of making a positive Scottish contribution. The possession of these relatively lower cost assets would considerably enhance the perception of Scotland as a NATO member prepared to contribute and to pull its full weight. In post-referendum negotiations with rUK, Scottish negotiators might wish to secure appropriate Royal Fleet Auxiliary (RFA) vessels.

#### Coastguard, customs and policing

As we have repeatedly advised, efficient states should look to guard against the establishment of multiple agencies. This situation can see agencies with overlapping missions and this can often lead to inter-agency competition and a consequent blunting of task-efficiency. More agencies also – unsurprisingly – means more cost to the taxpayer.

As noted earlier in this report, an independent Scotland should look to the Norwegian example by ensuring that its coastguard and maritime customs function is carried out by the Scottish Navy. The Scottish Coastguard Service would require four coastal patrol vessels of around 500 tonnes. These would be tasked with working up to 24 miles from the Scottish coast and would remain at sea normally not longer than 48 hours at a time. These vessels might be similar to the small New Zealand *Protector* Class or the smaller vessels of the Irish Naval Service.

There is also a requirement for eight small inshore patrol craft of the UK *Archer* Class type. These vessels would serve a variety of tasks. Six would be allocated to providing training for the Naval Reserves. Since only the equivalent of two vessels would be allocated to training at

any one time, this means that the equivalent of four vessels can be available for coastguard and customs tasking. These vessels can be armed if required. The final two of those craft would be crewed largely by the Navy but work in support of *Police Scotland* in the Clyde and Forth estuaries. Other craft of this class could be made available to support *Police Scotland* elsewhere in Scottish waters, as required.

As noted in the preceding section, Scotland's security concerns will be very much focused upon the physical environment, both within and beyond its borders. The SN should take the lead for Scotland in marine environmental protection and there is a requirement for two ocean-going tugs and two pollution control vessels to carry out this role.

#### **Bases**

A Scottish Navy would require both an east coast and a west coast base. Reliance on one base carries too high an element of risk; neither an east coast base on its own, nor a similar west coast base, can efficiently or effectively serve Scottish naval basing requirements. A small number of base vessels would be required and these are liable to include two harbour tugs and four general workboats.

For a summary of the vessels we propose for a Scottish Navy, please see **Appendix 2** (page 49).

#### A SCOTTISH ARMY

An independent Scotland would aspire to be an economically successful state making sensible use of the resources with which it is endowed. It would certainly be seen as such outwith Scotland and a pre-condition of Scottish NATO membership would be confirmation that the SDF was able to contribute appropriately to NATO force goals. Consistent with other similarly-sized states in NATO, an independent Scotland would have to ensure that it could contribute to multinational operations an All Arms Battle Group of about 1250 personnel. This would be based on an Infantry Battalion, supported by force elements from other arms and services and commanded by a national headquarters and support element. Experience has shown that in order to maintain an enduring commitment without overstretch, a roulement cycle of five units is required.

Force components are given greater attention below; they are broken into higher readiness forces (HRF) – tasked with meeting immediate national and NATO tasks and commitments – and lower readiness forces (LRF) which are tasked with supporting the HRF, augmenting the HRF if circumstances require it, and acting as the basis for future expansion if strategic circumstances require.

#### **Higher readiness forces**

A five-unit roulement cycle by itself leaves no reserve for unplanned contingencies that might arise. Without a reserve, the roulement cycle might be disrupted and an SDF would have difficulty meeting its commitments. A sixth similarly-sized Battle Group provides that essential reserve to address any additional short term task that might arise, without affecting the roulement cycle of an existing operation. This short term task might be part of another multinational military operation, an international relief operation or a national task. In the event that unplanned contingencies covered by this reserve become longer term commitments, then the mobilization of reserves might need to be considered if overstretch were to be avoided in the longer term.

The regular land force should therefore have as its core six Infantry Battalions. Four of these battalions would be light role battalions equipped with protected mobility vehicles if required. Two of the battalions, however, should be armoured Infantry Battalions, equipped with armoured fighting vehicles so that any deployed Battle Group might include an armoured infantry company. We might draw comparison here with Denmark which has until recently deployed an Infantry Battle Group in support of operations in Afghanistan. We propose that an SDF should be similarly capable.

An Infantry Battalion would probably be the core component for any deployed task of the SDF, with additional supporting arms and services making up the Battle Group according to the demands of the task. Such tasks might include protecting convoys in a famine relief task, manning observation posts in a peace support operation, or deploying as part of a coalition force to deter aggressors.

Each deployed Battle Group should, if necessary, be supported by a Tank Troop, an Armoured Reconnaissance Troop, a Field Artillery Troop and an Engineer Troop. The regular land force would therefore require two Tank Squadrons, two Armoured Reconnaissance Squadrons, two 105mm Artillery Batteries and two Engineer Squadrons.

The Battle Group Headquarters should be left free to focus on the command of operations and should therefore be subordinated in theatre to a small deployed national force headquarters and support element concerned with wider command and logistic issues. This force headquarters should be supported by Signal, Logistic, Equipment and Medical Support Troops. The regular land force therefore requires two Signals Squadrons, two Logistic Support Squadrons, two Equipment Support Companies and two Medical Support Squadrons.

The requirement to provide the roulement national force headquarters is probably best covered by the regular land forces having three regional brigade headquarters that can each deploy half their staff in turn. The requirement also for smaller detachments of Military Police, Intelligence Staff and Administrative Staff should not be overlooked.

A regular Special Forces Squadron and an Explosive Ordnance Disposal Squadron are required primarily for support to civil society but also for appropriate specialist military tasks. A

reserve Special Forces Squadron would extend the utility of the Special Forces by enabling a pool of appropriately trained specialists to be made available to the Special Forces when required.

The components described above provide for immediate requirements but they do not provide a firm basis for meeting possible longer-term strategic requirements. However the additional capability required does not need to be kept at a higher level of readiness and might be found largely by establishing reserve part-time units instead of regular units with full-time personnel. Certain units might mix regular and reserve personnel.

#### Lower readiness forces

Four additional reserve Infantry Battalions and troops for a fourth Rifle Company in each of the six regular Infantry Battalions would allow for the generation of additional forces to meet a variety of circumstances in a flexible way. Call-up of reserves, in varying degrees, would allow two Battle Groups to be employed on enduring tasks simultaneously, or a brigade-sized unit to be deployed for up to eighteen months. Full mobilization would permit, *in extremis*, the deployment of an infantry division-sized force. Unless reservist training was maintained at a high level, it is very likely that additional collective training would be required, following the mobilization of reserves before they were ready for deployment. In order to provide a basis for capability development, one regular Infantry Company and possibly two reserve Infantry Companies might be parachute trained.

The additional infantry units would require to be matched with additional support arms capability that added balance to the force structure and a focus for training reserves. A third Tank Squadron and a third Armoured Reconnaissance Squadron would provide the basis for Reserve training in these functions. As a basis for capability development a Heavy (155m) Field Artillery Battery, a small point Air Defence Battery and a small area Air Defence Battery with a mix of regular and reserve personnel would be required. A third Field Engineer Squadron and a third Signals Squadron would provide the focus for reserve training in these arms. An Engineer Field Support Squadron would be required to provide Plant, Bridging and other Engineer Resources and specializations and a Force Signals Squadron would be required to provide Trunk Communications and a limited EW (electronic warfare) capability. Those two last units would have both regular and reserve personnel.

Similarly a third Logistic Support Squadron, a third Equipment Support Company and a third Medical Squadron would be required to provide for reservist training in these combat services. A Force Logistics Support Squadron would provide heavier transport lift and supply handling capability as well as other specialist logistic support functions. A Force Equipment Support Company would provide heavier workshop capacity and recovery capability. A Force Medical Squadron would be a focus for providing additional surgical capability, treatment capacity and casevac (casualty evacuation) resources. These last three units would have both regular and reserve personnel.

The required personnel strength of the Scottish Army should be around 9,000 regular personnel and 8,000 reserve personnel. The figure of 9,000 regulars is similar to that of Denmark and ensures a sustainable roulement cycle of 5 x 1250-strong Battle Groups, a complement which would allow the SDF to meet various commitments, including those to NATO.

For a summary of the units we propose for a Scottish Army, please see Appendix 3 (page 50).

#### **Training the Scottish Defence Force**

Currently, Scotland has a number of military bases for UK forces but in fact very little of the UK armed forces training infrastructure is located in Scotland. The provision of an adequate training infrastructure will be a hugely important consideration for the government of a newly independent Scotland.

We advocate – as a high priority – the early establishment of a National Defence Academy (NDA). The principal aim of such an institution would be to train and educate the officers, civil servants, diplomats and other agencies' officials tasked with defending Scotland and conducting its international relations. We see a Scottish NDA as being a key factor in the early years of an independent Scotland in terms of the role it could play in developing Scottish military thinking, and in providing crucial support for military and diplomatic development. Such an institution would, we assert, continue to act as the intellectual and doctrinal hub for Scotland's security approach. It would be crucial both in optimising the proficiency of the commands and institutions of the SDF, and also in enhancing the ability of an independent Scotland's armed forces to carry out various national and international missions.

The remit of the NDA should be widely drawn to include such things as, for example, the teaching of languages to meet the requirements of Scotland's international engagement. The importance of an NDA cannot be overstated: it would be fundamental to developing and maintaining Scotland's security culture and its military posture.

A variety of other training units and schools will be needed to cater for all aspects of the training required by the SDF. Individual training for personnel will include: basic training for all non-commissioned and commissioned personnel; trade or special-to-role training; career progression training; and a variety of types of specialist training. Collective training for Army units and sub-units, and for Air Force and Navy elements, must also be considered.

It is beyond the remit of this report to detail each and every training facility that might be required by an SDF. However, consistent with statements above about the importance of avoiding duplication and of creating efficient lean structures, it is important that in looking to establish a training structure, Scottish military planners would seek to undertake as much

training as possible on a joint basis while making proper provision for single-service requirements.

As with most comparable states, an independent Scotland may wish to resource much of its own military training. However it may be sensible to enter into agreements with other states with regard to the provision of certain aspects of training in order to, firstly, avoid the establishment of training facilities for which there is only limited demand and, secondly, to benefit from the opportunities of working together that international training develops and fosters.

Care must be taken though to ensure that where training is provided by agreement with other states, it is appropriate to Scottish requirements and is cost-effective. The role of the private sector in delivering training must also be considered. For example, basic driver training might be delivered by contractors but tactical driver training might best be delivered by military personnel.

For a state such as Scotland, multinational or alliance-level exercises might provide the best opportunities for collective training at the larger scale. This is also very relevant training as it is very likely that all operational deployments of SDF units and force elements will be made in a multinational or alliance context.

It might also be noted that an independent Scotland could continue to offer valued training opportunities for allies if the Scottish Government were of a mind to offer the many components of its Defence Training Estate (DTE) for this use.

An independent Scotland could offer rUK – and other allies – the continued use of those DTE components which currently play an important role in the military training of the UK and other allied forces. <sup>44</sup> For example, allies might be offered the continued use of the Cape Wrath training facility for military manoeuvres, an offer which might be welcomed by the UK Armed Forces given that this 25,000 acre facility is, according to the UK Government, 'the only range in Europe where land, sea and air training activities can be conducted simultaneously and where the Royal Air Force can train using live 1000lb bombs.'<sup>45</sup>

Equally attractive to Scottish allies would be the chance to continue using the Hebrides Range for a variety of critical training and development activities, such as weapons testing, low flying and drone testing. This series of facilities is, according to the Ministry of Defence, 'the largest facility of its kind in the UK and provides a vital testing capability for the UK's air defence weapons systems'.<sup>46</sup> The loss of this facility might be keenly felt by the UK MoD and continued UK use of it might be arranged by agreement with the Scottish Government.

An independent Scotland could, in short, continue to offer crucial training facilities for its allies and it may well offer at least as much as it would take from any training arrangements it might make with other states.

#### SDF transition: from initial establishment to full operating capability

The establishment of a fully operational SDF with appropriate base infrastructure, necessary equipment and vehicles, and a full complement of fully-trained regular and reserve personnel will take time. There will be a degree of transitional risk and this is probably best mitigated by prioritizing capabilities and units and developing them in sequence where conditions allow, rather than seeking to develop all required capabilities together simultaneously.

The key starting points for an SDF will be:

- The limited base infrastructure on Scottish territory taken over from the UK Armed Forces:
- The military equipment and vehicles secured by Scotland as a result of independence negotiations between Edinburgh and London;
- Those personnel from the UK Regular and Reserve Forces who choose, as part of Scottish independence negotiations, to transfer from UK to Scottish service.

If Scotland votes for independence, there might be a temptation to prioritise the development of force structures over the more fundamental development of base and training infrastructure. As a broad guiding principle, we recommend that the highest priority should be given to the development of the logistic base and training infrastructure of the SDF. In short, a state cannot have capable, well-trained, well-equipped forces without first making provision for the delivery of training, and for the procurement and maintenance of equipment.

Scottish military planners should bear this in mind when contemplating the development of the SDF. A prudent approach on this issue will reap dividends further downstream by the creation of conditions that facilitate the generation of the full range of capabilities and force structures that the SDF requires.

#### **Personnel**

In considering the development of a Scottish military posture, the issue of military employment merits attention. The creation of an SDF based in Scotland would undoubtedly mean far more personnel – military and civilian – working for defence in Scotland than is presently the case. As things stand, Scotland hosts relatively few personnel working in a limited range of specialisations and the numbers of UK service personnel in Scotland continues to fall as UK Government austerity measures continue to bite.

According to the MoD's own figures, in 2012 there were around 15,880 UK service personnel based in Scotland, a 7.5% reduction from 2011, a percentage decline which represents more than twice the UK average. No other area of the UK has seen a more marked decline. Scotland is second only to Wales in the declining numbers of its civilian personnel during this period.<sup>47</sup>

By utilising simple logic, then, it seems incontrovertible that an SDF based in Scotland, backed by its civilian apparatus and steered by a National Defence Academy, would significantly elevate employment levels within the security and defence sector in Scotland. There would also be employment benefits if an independent Scotland were to build its own military equipment, such as naval vessels. A newly independent Scotland would almost certainly need to do this and in the current climate, there can be little doubt that Scottish Government contracts for Scottish Navy vessels to be built in Scotland would be hugely welcomed.

In terms of personnel levels within the SDF, it is difficult to assess how many individuals presently employed within the UK Armed Forces might transfer to an SDF. There might be a higher rate of transfer for military reservists and civilian defence workers presently based in Scotland. There might be a lower rate of transfer for regular personnel already committed to a career in the UK Armed Forces, particularly older personnel with families and more senior personnel.

It seems fairly certain that an SDF would initially have shortfalls of personnel. This would necessitate the prioritisation of recruiting and training in the early years of Scottish independence. However, there would also be considerable scope during this period for the government of a newly independent Scotland to maximize transfers into the SDF by offering attractive transfer packages to currently-serving regular UK Armed Forces personnel.

As a general rule of thumb – and in keeping with defence budgets generally – we can expect personnel costs for an SDF to account for around half of the normal annual defence budget. Shortfalls of personnel in the early years would usefully permit – unless the defence budget is constrained below what is seen as its long term level – the spending of higher-than-normal sums on the capital development of base infrastructure and the procurement of appropriate equipment. As noted above, high priority must be given to the development of base infrastructure if personnel and equipment are to be appropriately quartered and supported logistically.

#### **Equipment**

If Scotland votes for independence, subsequent negotiations between Edinburgh and London would result in the transfer from the UK Armed Forces to the SDF of an appropriate share of equipment and vehicles. Care must be taken to ensure that only equipment and vehicles actually required by the SDF are transferred.

In any negotiations, the value set against that equipment must be carefully calculated. For example, if it is equipment that would otherwise have been disposed of by the UK Armed Forces in the near future, it would not be appropriate to over-value that equipment. In any event, all equipment being considered during negotiations must be valued at its current, depreciated cost and not its original 'shelf' cost. This is most important: depreciation – of original cost as well as original technological novelty and utility – must be acknowledged and incorporated into all valuations. Scottish negotiators should be extremely attentive to this.

Care must also be taken to ensure that only equipment and vehicles that can be maintained properly by an SDF are transferred. In many cases it might be better, if possible, to transfer value (i.e. cash equivalent) rather than equipment and vehicles that are not appropriate for the SDF and which cannot initially be properly maintained. The transfer of value would – along with the likely early years' shortfall of personnel – contribute to the availability of funding for the procurement of required base infrastructure as well as equipment and vehicles suitable for the tasks and roles of an SDF.

#### Overview of overall SDF personnel numbers

We do not seek to detail a precise inventory of the exact personnel numbers required to populate the force structures outlined above. However in terms of overall numbers, it is considered that requirements can be met within the following totals:

Army: 9,000 Regular Personnel and 8,000 Reserve Personnel

Navy: 3,000 Regular Personnel and 1,000 Reserve Personnel

Air Force: 3,000 Regular Personnel and 1,000 Reserve Personnel

Civilian Personnel: up to 7,000

The above totals all include personnel in training. We feel that these figures are adequate to meet the various needs highlighted earlier in this report. They reflect our view that an independent Scotland should prioritise the capacity to monitor and secure Scottish interests from sea and from the air. The numbers we have designated for SDF Army personnel are, we contend, realistic for a state of Scotland's size which seeks to have the capability to make a meaningful contribution to a variety of international tasks.

The current Scottish Government's aspirations for NATO membership may require an independent Scotland to develop heavier land structures than it might otherwise have. However we do not think that the force structure we specify here is 'troop-heavy'.

It is interesting to note that the total number of Scottish Army personnel specified above – 17,000 troops – is in fact smaller than the current strength of the Irish Army, which has around 8,500 regular and around 14,000 reservists, making a total of around 22,500 personnel.<sup>48</sup>

#### Section Three

#### Costing

What would this cost Scotland and would it be sustainable? A sensible starting point in considering these questions might be to look at the military budgeting model which currently serves Scotland. This might prove to be a useful exercise since the UK defence budget model may offer critical insights into how an independent Scotland might best control and spend its military budget.

#### UK defence budgeting: lessons for an independent Scotland?

The UK is the largest defence spender in the EU but it is reducing its spending because the cost of maintaining its current military footprint exceeds what it can afford. Critics argue that speedy reductions to military budgets have prompted efficiency-led proposals which have been poorly conceived and which may be unworkable. For example, the MoD itself has recently admitted that plans to reduce the size of the Army and make up the shortfall with Reservists have led to a 'hostile recruiting environment' and are 'failing'.<sup>49</sup>

Peter Quentin of the *Royal United Services Institute* has described the provision of affordable defence as 'one of the UK's thorniest issues' and when one casts an eye across what *The Telegraph* has recently described as a 'famously chaotic' UK defence budget, one is given a sharp sense of how military planners in an independent Scotland might seek to do things differently.<sup>50</sup>

The UK military budget is controlled by a large and inefficient bureaucracy, one which adds substantially to the defence spend. Investigations carried out by the *House of Commons Defence Committee* revealed in 2011 that the UK MoD had 'mislaid' £6.3 billion worth of assets and that MoD officials were not even able to confirm whether some of the inventoried equipment still existed.<sup>51</sup> The MoD is currently sitting on over £6 billion of military materiel which has either been over-ordered or simply cannot be used, including 54 years' worth of spare parts for an aircraft – the Nimrod MR2 – which was mothballed in 2009.<sup>52</sup>

It is perhaps unsurprising that those familiar with the UK experience often depict a newly independent Scotland as having a perilous mountain to climb in funding its own defence. Budgeting deficiencies are – necessarily – being addressed in London but as the Treasury and the MoD continue to snipe publicly at one another over 'spending black holes', accusations of 'financial illiteracy' and 'overzealous' austerity cuts, it is clear that the UK model does not necessarily instill a sense of optimism that sensible parsimony can be brought to bear on military budgeting. <sup>53</sup>

An independent Scotland could learn greatly from the UK experience. Certainly, a newly independent Scottish Government could not be complacent and it would have to act judiciously in terms of how it developed – and looked to maintain – the nation's military capability. Edinburgh might look not only to London but also to other European capitals (notably, Athens, Lisbon, Madrid and Rome) for a reminder of how imprudent military spending can have spiralling negative consequences.<sup>54</sup>

There is every reason to suspect that an independent Scotland could configure and sustain its military forces in a cost-effective manner. Scottish military planners should look to spend wisely and to do so on a force-structure that Scotland actually needs. They might, for example, look to how other nations provision and support their military personnel. UK military personnel are some of the most expensive in the world; in recent years they have cost, on a per capita basis, more than double their German and Danish counterparts. Given that expenditure on personnel typically accounts for around 50% of annual military budgets, Scottish planners might look to Germany and to Denmark to find a training and support model which is both efficient and effective.

In terms of equipment, Scotland would not need aircraft carriers or nuclear-powered submarines; nor should it insist upon buying 'bespoke' equipment that has been specially designed – at great added expense – as the UK often does. An independent Scotland should look to procure the most suitable equipment for itself and would look to do so 'off the shelf', as many other nations do.

As noted earlier, caution should prevail in any negotiated transfer of equipment from the UK Armed Forces to the Scottish Defence Force. Only equipment and vehicles actually required by the SDF should be considered for transfer and the value of this equipment should be calculated very carefully, with astute consideration given to the 'current depreciated value' of every piece being considered for transfer. Depreciation should be evaluated not only in terms of decline from 'original shelf cost' but also the decline of the equipment's original technological novelty and utility.

As we have already noted, in cases where there is doubt over the functionality or maintainability of military vehicles and equipment, it would be better for a newly independent Scotland to transfer value (i.e. cash equivalent) so that the SDF's base infrastructure can be developed through the procurement of precisely what is required.

#### Scotland - already a sizeable military spender

Before getting into a more detailed consideration of costing for an SDF, it might first be useful to contemplate broadly the question of whether an independent Scotland could afford to defend itself.

We contend that there is a perfectly simple response to this and it is that Scotland is already a sizeable military spender. Its 2011-12 contribution to UK defence spending was thought to be

around £3.3 billion, an outlay which exceeds the annual expenditures of both Denmark and Finland, although less than Norway which has recently proposed a 3% increase in defence expenditure due to the high petroleum profits it has lately enjoyed.<sup>55</sup>

It is important to note that Scotland has managed to sustain this level of expenditure at little detriment to its broader economic performance. This summer saw UK Government officials describing how 'Scotland is performing well in both UK and international terms'.<sup>56</sup> The accountancy firm *EY* (formerly *Ernst and Young*) has recently praised Scotland's international economic performance and has forecast that Scottish exports – across the chemicals, technologies, and food and drinks sectors – are set to grow faster than those of the UK across the next four years.<sup>57</sup> Whisky sales alone earn Scotland around £3 billion annually and this figure looks likely to rise in the coming years as inroads continue to be made into emerging markets.<sup>58</sup>

It seems clear that Scotland already contributes amply to its defence and this contribution appears to be manageable within a broader Scottish economic model which has performed well in recent years.

#### **Start-up costs for the SDF**

It would be naïve to think that there would not be challenges in the early years of setting up the SDF. Funding the development of the SDF should not be one of those challenges.<sup>59</sup> Scottish military planners would begin configuring the SDF from a position of relative strength, drawing as they would upon Scotland's 8.4% 'population share' of UK defence assets. Precisely what this 'share' would comprise would emerge from post-referendum negotiations between Edinburgh and London.

Assets to be included in the 'total defence assets inventory' should extend well beyond military equipment and should extend to things such as the value attached to overseas UK military bases. Proportional Scottish contributions to current UK security programmes such as the UK Government's £86om cyber-security programme should also be taken into account. Lastly, assets currently under construction, or future assets to which monies have already been dedicated, should also be included.

All in all, it is not unrealistic to propose that a newly independent Scotland might find itself securing value, equipment or infrastructure based upon an agreed settlement sum of around £10 billion.<sup>61</sup> This would represent a significant starting point from which to develop the SDF.

Other factors come into play which could enhance the size of the initial SDF start-up fund. It must be accepted that the SDF will start with only trained personnel who transfer from their current service in the UK Armed Forces. Realistically, an independent Scotland will have to manage a period of transition during which its numbers of trained military personnel are gradually built up and the SDF will likely begin with a modest proportion of its overall

required force strength. The experience of the Baltic states suggests that it might take at least ten years for the SDF to build up to its desired personnel complement.

However from a budgetary perspective, there are positives to be taken from this situation. Given that salaries typically account for around half of any annual military budget, any personnel shortfall experienced in the early years of the SDF would leave a surplus from within the salary budget which could be reallocated and used to develop the key infrastructure and equipment needs of the SDF. Alternatively, those monies could be banked in order to reserve funding for future development. Whilst this surplus would clearly diminish incrementally with each year it took to reach full personnel strength, each of those 'short' years would leave a surplus from the salary budget which could supplement spending elsewhere.

#### **Annual running costs of an SDF**

The present Scottish Government contends that the annual defence budget for an independent Scotland would amount to £2.5bn, or approximately 1.7% of Scottish GDP. <sup>62</sup> Is this a realistic annual budget for effectively defending Scotland? We contend here that there is every reason to think that this figure would cover the SDF structures and activities outlined in the preceding sections.

Significantly, the annual level of defence expenditure posited by the Scottish Government would align an independent Scotland's annual defence spending with that of Denmark, a nation which has frequently been praised not only for its contribution to regional and international security, but also as one of a select number of smaller nations which has 'managed to punch well above their weight because of the way they use the resources they have'.<sup>63</sup>

The strength of the Danish model strongly suggests that the annual defence budget being proposed by the current Scottish Government is realistic for a state of Scotland's size, geography and aspirations. There is every reason to think that if Scotland becomes an independent state, it could develop a Danish-scale military force structure for itself, albeit one tailored specifically to Scotland's own requirements.

It bears repeating that if Scottish taxpayers were contributing £2.5 billion per year to the defence of an independent Scotland, they would be paying around £800 million per year less than they currently do on their defence. And whilst it might seem somewhat counterintuitive, it is also reasonable to suggest that whilst they would be making a lesser tax contribution to defence, more money would be being spent on their defence. As noted above, Scotland's contribution to defence amounts to around £3.3 billion annually but recent figures suggest that UK Government spending on defence in Scotland has fallen significantly below what it receives from Scottish taxpayers – figures suggest that in recent years, this shortfall has amounted to around £1.9 billion.  $^{64}$ 

If, as *The Scotsman* has recently reported, UK defence spending on Scotland 'sells Scots short', we can point to ways in which paying for the defence of an independent Scotland might bring greater economic returns for Scotland.<sup>65</sup> We know that an annual defence spend of £2.5 billion in an independent Scotland would mean that Scottish citizens would be contributing close to £1 billion per year less than they currently do in the name of defence. However, the 'annual government spending figure' does not necessarily tell the whole story. What should not be overlooked is that if Scotland were to be an independent state, a significant amount of this £2.5 billion would be spent within Scotland, something which does not happen under the current UK system

When considering the 'affordability' of defence in an independent Scotland, one should not overlook the economic implications of having a Scottish defence infrastructure based in Scotland, and peopled by salaried personnel who are overwhelmingly resident (and spending) in Scotland. In contemplating this scenario, it is hard not to see the positive economic ripple-effect that this might produce.

#### A leaner military model

It is possible to point to an array of ways in which an independent Scotland could ensure major efficiencies within military spending without necessarily blunting capacity or quality. Whilst it is difficult to say with certainty, it is very likely that an independent Scotland would be more cautious in its defence and security approach than the UK currently is, with a lower tempo of activity. When compared to the current UK model, it is thus likely that across the areas of personnel, equipment, infrastructure, administration and actual defence activity, an independent Scotland's military footprint would place lesser demands on Scottish taxpayers.

Efficiencies might certainly be made on the equipment budget. For example, rather than actually purchasing expensive items of equipment, those in charge of a Scottish military budget might look instead to agree negotiated leases with suppliers. In procuring a fleet of Gripen jets, for example, the Scottish Government might negotiate a leasing deal with Saab similar to that which the Czech Government has arranged for its own fleet of JAS 39 Gripens. Whilst there are demerits as well as merits to leasing rather than buying outright, leasing can often yield a better package for customer states, not only in terms of cost (Saab was able to offer the Czech Government a deal in which annual payments for the new 14-year contract work out at one-third less than those for the previous contract) but also in attractive add-ons which can be negotiated into the lease contract. The Czech Government has renewed its existing lease with Saab for its Gripen fleet not only, it says, because of its great satisfaction with the aircraft itself and with the 'significantly lower cost' of procuring them through lease, but also because the lease agreement guarantees the 'ongoing modernization of the aircraft [by Saab] for the duration of the contract'. <sup>66</sup>

This is just one way in which Scottish military planners could avoid spending large one-off sums of money which might be better utilized elsewhere. This type of arrangement could, of course, be extended to other pieces of equipment as well.

It should be borne in mind that the SDF would not need to purchase or lease everything that it might need. As noted earlier, for example, if there is a requirement for heavy transport aircraft (such as the C-17), provision is in place for NATO and EU member states to use such craft. Being in the 'pool' for this service does carry cost but it is cost-effective since it allows participating states to procure capacity – for an agreed timeframe decided by the states themselves – without having to buy and maintain expensive equipment.

As well as making efficiencies through leasing, an independent Scotland would most likely – as was noted earlier – look to procure the most suitable equipment for itself 'off the shelf rather than looking to develop and procure 'bespoke' equipments whose price tag can mount hugely. By way of example, we can look to the UK's fleet of Apache attack helicopters. The MoD's many specified requirements for its Apaches means that each UK Apache comes in at more than four times the cost of its US equivalent.<sup>67</sup> It is commonly accepted that UK Apaches are more capable than those of the US but it could be argued that the price paid for this advantage is hugely disproportionate to any advantages that might realistically be accrued.

An independent Scotland's military budget could be supported in a variety of other ways. The government of an independent Scotland might agree basing arrangements with the rUK Government (and other allies) in order to allow rUK ships and aircraft to continue using Scottish facilities. Rather than looking to develop new facilities out-with Scotland, the rUK Government might find it more convenient to pay Edinburgh to continue using the Faslane Naval Base or the Cape Wrath military training facility.

The point to bear in mind here is that an independent Scotland would have certain military assets which would remain desirable to rUK and which may bring a cost benefit to Scotland. Any revenues which were to accrue from such arrangements should not, however, be considered a staple income to be relied upon.

Lastly, it should be noted that our drawing attention to the many ways in which an independent Scotland could make smart efficiencies should not be taken as an assumption that it would have to scrimp and scrape in order to develop and maintain its defence. As Bailes, Thorhallsson and Johnstone have recently observed, in terms of its size and GDP, an independent Scotland 'would fit well' into the ranks of the Nordic states, most of which are highly regarded across a range of benchmarks.<sup>68</sup> There is, in short, every reason to support the view of the *Royal United Services Institute* that an 'SDF would be necessary, feasible and affordable'.<sup>69</sup>

# Section Four Conclusion

In this report, we have detailed an array of 'national security priorities' for an independent Scotland and we have provided an overview of how a Scottish Defence Force should be structured in order to best address those priorities. This task was executed with an eye on the current Scottish Government's stated desire that an independent Scotland should be a militarily capable state, one which is equipped to protect its 'local' interests but also to engage in a wider range of international security relationships, including membership of NATO.

The force structure we have outlined here will, we acknowledge, come under great scrutiny and we acknowledge that it represents just one of a wide variety of 'models' which might be deemed 'most suitable' to serve the priorities, ambitions, and likely budget of an independent Scotland. Aerial and maritime capability would be, we feel, the most important competencies for an SDF to develop. However, we have also tried to designate a land force structure which is adequate to Scotland's size, aspirations, and likely budget.

We feel confident that the model we have outlined would provide well for the security and defence of an independent Scotland. We feel also that this model is economically manageable for Scotland. Whilst lacking any supernatural capacity for foresight, we feel that there are several indicators which support this latter contention.

For example, we know that the defence resource of a newly independent Scotland would initially be based upon its 8.4% 'population share' of UK defence assets, an arrangement which would see Scottish military planners presiding over a multi-billion pound kitty from which to initially develop an SDF.

We know also that Scotland currently makes a substantial annual tax contribution to defence – a contribution which exceeds that of comparable European states such as Denmark and Finland – and that it continues to perform well economically, despite its ample expenditure in this area. It would thus seem that Scotland is more than capable of sustaining an ample military budget at no detriment to its broader economic performance.

We can acknowledge also that the £2.5 billion annual defence expenditure proposed by the current Scottish Government would align an independent Scotland's defence spending with that of Denmark, a state whose military appears to provide effective national defence but which also manages to participate meaningfully in a variety of international operations. In reflecting upon the potential of an independent Scotland to defend itself effectively on the projected budget designated by the Scottish Government, we might reasonably assume that if Denmark can sustain an appropriate, modern and highly-regarded military force on such a budget, then an independent Scotland could as well.

We know also that it would be possible for an independent Scotland to run its military far more efficiently than the UK currently does. Whilst a number of likely efficiencies have been

considered in the preceding pages, we might also point out that (although we have not addressed it in this report) if Scotland were to vote for its independence, Scottish taxpayers could not be asked to contribute towards the £100 billion that it might take to sustain the UK nuclear deterrent over the next few decades.<sup>70</sup>

On the balance of available evidence, there thus seems to be no question that an independent Scotland would be able to pay for, and sustain, a meaningful defence posture of the kind envisaged by the present Scottish Government. With this question answered, the question of what an SDF would actually do has also focused our attention.

We have acknowledged here that an independent Scotland would be a different military actor to the UK. Whilst that fact will please a great many Scots, it will also concern others. We have pointed to a variety of reasons why an independent Scottish Government should exert a greater focus than the UK currently does on 'non-military' security issues such as environmental protection and anti-smuggling activities. We reject utterly the assumption – voiced by some – that such a commitment would represent a 'soft option' for an SDF. These commitments are of grave importance and their neglect can bring substantial and measurable harm to a nation's finances, people and natural environment.

Far from 'growing soft', it is in fact very likely that the military forces of an independent Scotland would maintain a 'hard military edge'. We can assert this with confidence simply because an SDF would *need* to maintain this 'edge' if it were to contribute meaningfully to EU, NATO and UN missions. The Scottish Government has repeatedly voiced its desire that an SDF would indeed be committed thus. We can safely assume, then, that in the event of Scotland's independence, the SDF would be developed in order to ensure proficiency on the land, in the air and on the sea. An SDF would not be 'confined to domestic duties' but would regularly see action overseas across a wide range of transnational operations.

Considering 'defence in an independent Scotland' in somewhat broader terms, we might also observe that whilst an SDF would clearly play a vital role in safeguarding the defence of an independent Scotland, it would also serve another key function. Whilst it may be unpalatable to some, we cannot escape the fact that 'defence' is a lucrative business and is also a major employer across the full spectrum of society. When contemplating what an SDF might 'do' for Scotland, we might also bear in mind the economic implications of having a Scotlish defence infrastructure based in Scotland, and peopled by salaried personnel who are overwhelmingly resident in Scotland.

The development of a Scottish defence establishment would require investment in various infrastructures. It is very likely that this would be a significant employment-driver across various key Scottish sectors. Given the emphasis that Scottish military planners would likely place on the SDF's maritime capabilities, it is possible that the Scottish shipbuilding industry would be given a major boost as the Scottish Government looked to build vessels for the Scottish Navy. These factors should not be overlooked as we contemplate the implications of defence in an independent Scotland.

However, whilst it is appropriate to acknowledge the likely accrual of economic and employment benefits from having a domestically-based defence establishment, it is important also to sound a cautionary note. A national defence industry must be there to respond to the *genuine* military requirements of the state. Taxpayers' money should not be spent by the government on anything which does not fall into this category. In short, when 'paying for defence', the state should be spending money with its eye firmly on national defence and not on merely sustaining defence industry jobs.

The issue of defence in an independent Scotland is an important one but it should probably not be decisive in swaying voters' opinions behind either a 'Yes' or a 'No' vote in September of 2014. However, having immersed ourselves in an area which has proven so ripe for partisan political wrangling across the past few years, we feel that we are able to draw rational, objective conclusions from the work we have undertaken.

It seems clear to us that if Scotland's citizens do vote for independence in September 2014, Scotland will be presented with the opportunity to develop a security and defence posture which might better serve Scotland's needs. We conclude that this is eminently possible and that the military model envisaged by the current Scottish Government may well deliver a better defence for the citizens of Scotland, one which could be delivered for less than Scottish taxpayers currently pay.

\_\_\_\_\_

#### **SOURCES**

Scottish Global Forum Page 44

\_

<sup>&</sup>lt;sup>1</sup> Scotland's sea area statistics drawn from calculations made from the Scottish Government's website at: <a href="http://www.scotland.gov.uk/Publications/2011/03/16182005/21">http://www.scotland.gov.uk/Publications/2011/03/16182005/21</a> See also:

<sup>&</sup>lt;sup>2</sup> Barry Neild, 'Russian bombers "intercepted in British airspace". *CNN News*, 25<sup>th</sup> March 2010 at: <a href="http://edition.cnn.com/2010/WORLD/europe/03/25/russia.uk.intercepts/index.html">http://edition.cnn.com/2010/WORLD/europe/03/25/russia.uk.intercepts/index.html</a>

<sup>&</sup>lt;sup>3</sup> Author interview with a military source with extensive experience on cross-border and anti-smuggling operations, both in the UK and overseas. This individual is still serving and expressed the desire to remain anonymous. August 2013.

<sup>&</sup>lt;sup>4</sup> See for example 'Tourism Delivering for Scotland' at the *Visit Scotland* website at: <a href="http://www.visitscotland.org/what\_we\_do/deliveringforscotland.aspx">http://www.visitscotland.org/what\_we\_do/deliveringforscotland.aspx</a> See also, 'Scotland should be '"must visit" for cycle tourism says report'. *BBC News*, 11<sup>th</sup> June 2013 at: <a href="http://www.bbc.co.uk/news/uk-scotland-22840212">http://www.bbc.co.uk/news/uk-scotland-22840212</a>

<sup>&</sup>lt;sup>5</sup> Craig Hoyle, 'UK left exposed by Nimrod Cancellation, report says'. *Flight Global*, 27<sup>th</sup> September 2012, at: <a href="http://www.flightglobal.com/news/articles/in-focus-uk-left-exposed-by-nimrod-cancellation-report-says-376998/">http://www.flightglobal.com/news/articles/in-focus-uk-left-exposed-by-nimrod-cancellation-report-says-376998/</a>

<sup>&</sup>lt;sup>6</sup> House of Commons Defence Committee, Fifth Report. 'Future Maritime Surveillance.' Published 5<sup>th</sup> September 2012. Quotes taken from Section 6, Conclusion. Available to view at: <a href="http://www.publications.parliament.uk/pa/cm201213/cmselect/cmdfence/110/11002.htm">http://www.publications.parliament.uk/pa/cm201213/cmselect/cmdfence/110/11002.htm</a>

<sup>&</sup>lt;sup>7</sup> Jeremy Sutton-Hibbert, 'Salmond "must rethink his defence strategy for independent Scotland". *The Times*, 20<sup>th</sup> July 2013.

<sup>&</sup>lt;sup>8</sup> John T. Bennett, 'Report: Military Drones Only 'Slightly Cheaper' Than Piloted Jets'. *US News and World Report*, 21<sup>st</sup> August 2012 at: <a href="http://www.usnews.com/news/blogs/dotmil/2012/08/21/report-military-drones-only-slightly-cheaper-than-piloted-jets">http://www.usnews.com/news/blogs/dotmil/2012/08/21/report-military-drones-only-slightly-cheaper-than-piloted-jets</a>

<sup>&</sup>lt;sup>9</sup> See the House of Commons Scottish Affairs Committee's report 'The Future of HM Coastguard in Scotland'. Fifth Report of Session 2012-13. Also, 'Follow up report on Coastguard, Emergency Towing Vessels and the

Maritime Incident Response Group'. House of Commons Transport Committee, 11<sup>th</sup> December 2012 at: http://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-

committee/news/coastguard-fu---report/

10 Ibid. Also, 'PCS Concern at Coastguard Staffing Levels'. BBC News, 19<sup>th</sup> August 2013 at:

- http://www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-23759050

  11 Julia Horton, 'After 20 years, Scotland 'still risks another Braer disaster'. *The Scotsman*, 5<sup>th</sup> January 2013 at: http://www.scotsman.com/news/environment/after-20-years-scotland-still-risks-another-braer-disaster-1-
- 2719723

  12 'BP agrees to emergency tug deal'. BBC News, 19<sup>th</sup> February 2013 at: http://www.bbc.co.uk/news/uk-
- <sup>13</sup> Julia Horton, 'After 20 years, Scotland 'still risks another Braer disaster'. *The Scotsman*, 5<sup>th</sup> January 2013 at: http://www.scotsman.com/news/environment/after-20-years-scotland-still-risks-another-braer-disaster-1-
- <sup>14</sup> Arvind Gupta, 'Northern Sea Route: Humming with Activity'. *Institute for Defence Studies and Analyses*, 27<sup>th</sup> August 2013 at: http://www.idsa.in/idsacomments/NorthernSeaRoute agupta 270513
- <sup>15</sup> Tom Revell, 'Plans for development of Northern Sea Route on Ice'. *Blue & Green Tomorrow*, 9<sup>th</sup> October 2013 at: <a href="http://blueandgreentomorrow.com/features/plans-for-development-of-northern-sea-route-on-ice/">http://blueandgreentomorrow.com/features/plans-for-development-of-northern-sea-route-on-ice/</a> <sup>16</sup> 'Progress in tackling tobacco smuggling'. HM Revenue and Customs, HC226, 6<sup>th</sup> June 2013. Available at the website of the National Audit Office at: http://www.nao.org.uk/wp-content/uploads/2013/06/10120-001-
- <u>Tobacco-smuggling-Full-report.pdf</u>

  17 News feature on *BBC Radio 5 Live News*, 1 pm, 18<sup>th</sup> October 2013.
- <sup>18</sup> Jamie Smyth, 'Security: smoking out the smugglers'. *Financial Times* online, 1<sup>st</sup> September 2013 at: http://www.ft.com/cms/s/0/5d7b8b00-0fe3-11e3-a258-00144feabdc0.html#axzz2gTqzL9Vq
- <sup>19</sup> Paul O'Hare, 'Revealed: Triads raking in £10 million as they flood Scotland with counterfeit tobacco'. Daily Record, 17<sup>th</sup> October 2012.
- <sup>20</sup> HM Revenues and Customs 'missing cigarette smuggling targets'. BBC News, 6<sup>th</sup> June 2013 at: http://www.bbc.co.uk/news/uk-22786085
- <sup>21</sup> Author interview with an anonymous military source (see endnote 3).
- <sup>22</sup> Angelique Chrisafis, 'How the Brigadier has mopped up chaos and won farmers' support'. *The Guardian*, 30<sup>th</sup> March 2001 at: http://www.theguardian.com/uk/2001/mar/30/footandmouth.angeliquechrisafis
- <sup>23</sup> See the website of the Norwegian Armed Forces at:

http://mil.no/organisation/equipmentfacts/air/Pages/default.aspx

- <sup>24</sup> Edward Lundquist, 'Absalon Class Littoral Support Ships. "LCS on Steroids is a Paradigm Shift for the Danish Navy'. Defence Media Network, 22<sup>nd</sup> October 2012 at:
- http://www.defensemedianetwork.com/stories/absalon-class-littoral-support-ships-lcs-on-steroids/
- <sup>5</sup> The text of the North Atlantic Treaty (including Article 5) can be read on the NATO website at: http://www.nato.int/cps/en/natolive/official texts 17120.htm
- <sup>26</sup> See the EU's website at: http://eeas.europa.eu/csdp/about-csdp/lisbon/index\_en.htm
- <sup>27</sup> E-mail interview with NATO officials, 25<sup>th</sup> October 2012.
- <sup>28</sup> For a more detailed list of current NATO activities, see the NATO website at:

http://www.nato.int/cps/en/natolive/topics 52060.htm

- <sup>29</sup> Alex Salmond, 'Why we can ban nuclear weapons and stay in NATO'. *The Herald*, 13<sup>th</sup> October 2012.
- <sup>30</sup> Dorcha Lee, *Reflections on Defending an Independent Scotland. A View from Ireland*. An IIEA publication, August 2013, p. 5.
- <sup>31</sup> See NATO's emphasis on 'Interoperability' on the NATO website at: <a href="http://natolibguides.info/smartdefence">http://natolibguides.info/smartdefence</a>
- <sup>32</sup> See, for example, Zachary Fillingham's report 'Arctic Ownership Claims' for the *Geopolitical Monitor* 21<sup>st</sup> April 2012 at: http://www.geopoliticalmonitor.com/arctic-ownership-claims
- <sup>33</sup> See for example, the Lithuanian Armed Force website at:

- http://kariuomene.kam.lt/en/structure 1469/air force/nato air policing mission.html

  34 'Operational Conversion Unit' refers to aircraft which are primarily used for training pilots to fly that particular type of aircraft and to use the weapon systems and sensors with which that aircraft is equipped.

  35 See for example *The Defence Implications of Possible Scottish Independence*. House of Commons Defence
- Committee, 6<sup>th</sup> Report of session 2013-2014, p. 25.
- <sup>36</sup> Ibid. Also, Carola Hoyos, 'Saab chief says low price tag makes Gripen jets stand out from rivals'. FT.com, 29<sup>th</sup> September 2013 at: http://www.ft.com/cms/s/0/81c5eae6-25ff-11e3-8ef6-00144feab7de.html#axzz2gr0nT100

http://www.bbc.co.uk/news/uk-scotland-highlands-islands-14247538

<sup>&</sup>lt;sup>37</sup> Stuart Crawford & Richard Marchs, A' The Blue Bonnets. Defending an Independent Scotland. RUSI, Whitehall Report 3-12, October 2012.

<sup>&</sup>lt;sup>38</sup> For information on the Heavy Airlift Wing see: <a href="http://www.nato.int/cps/en/natolive/topics">http://www.nato.int/cps/en/natolive/topics</a> 50105.htm

<sup>&</sup>lt;sup>39</sup> For information on European Air Transport Command, see: http://eatc-mil.com/

<sup>&</sup>lt;sup>40</sup> See: <a href="http://www.airforce-technology.com/projects/s100b">http://www.airforce-technology.com/projects/s100b</a> argus/

<sup>&</sup>lt;sup>41</sup> The Scottish Affairs Committee 7<sup>th</sup> Report. 'The Referendum on Separation for Scotland: Separation Shuts Shipyards'. 20<sup>th</sup> January 2013. Section 4, 'Options for the Scottish yards', available at: http://www.publications.parliament.uk/pa/cm201213/cmselect/cmscotaf/892/89207.htm#note94 lbid.

<sup>43</sup> Ibid.

<sup>&</sup>lt;sup>44</sup> For details of the UK's Defence Training Estate (DTE), see the UK Government's website at: https://www.gov.uk/defence-infrastructure-organisation-and-the-defence-training-estate

<sup>&</sup>lt;sup>45</sup> Ibid: https://www.gov.uk/defence-infrastructure-organisation-and-the-defence-training-estate#dte-scotland The Scottish Government might, of course, wish to reconsider whether it wishes to continue offering the 'special' provision of allowing 1,000lb munitions to be dropped in the Cape Wrath facility.

<sup>46 &#</sup>x27;Future of UK's largest missile range secure says MoD'. *BBC News*, 22<sup>nd</sup> July 2011 at:

For the MoD's personnel figures, see: 'United Kingdom Defence Statistic 2012'. Chapter 2, 'Personnel', Table 2.2, 'Location of Service and civilian personnel in the United Kingdom at 1 April each year'. Available to view at: http://www.dasa.mod.uk/publications/UK-defence-statistics-compendium/2012/chapter-2-personnel/2012chapter-2-personnel.pdf

<sup>48</sup> On Irish Defence Force structures, see the Irish Defence Force website at: http://www.military.ie/infocentre/ See also, the 'European Defence Forces' section on the armedforces.co.uk website at: http://www.armedforces.co.uk/Europeandefence/edcountries/countryireland.htm

<sup>49</sup> Christopher Hope & James Kirkup, 'Reforms have left the Army in chaos'. *The Telegraph,* 16<sup>th</sup> October 2013.

<sup>&</sup>lt;sup>50</sup> Peter Quentin, 'The British Army Reserves Judgement'. RUSI Newsbrief, 13<sup>th</sup> March, 2013 at: http://www.rusi.org/publications/newsbrief/ref:A514077C33D4E6/#.Ul jgFCkpsU On The Telegraph's criticism of the MoD, see Con Coughlin & James Kirkup, 'Ministry of Defence '£2bn "cash pile" scandal as thousands of troops sacked'. The Telegraph, 11<sup>th</sup> October 2013.

<sup>&</sup>lt;sup>51</sup> Richard Norton-Taylor, Ministry of Defence loses £6.3 billion of assets'. *The Guardian*, 5<sup>th</sup> July 2011.

<sup>&</sup>lt;sup>52</sup> Ian Drury, 'MoD wastes £6.6 bn on kit and supplies it doesn't need as it tries to save money by cutting troops'. Daily Mail online, 28<sup>th</sup> February 2013, at: http://www.dailymail.co.uk/news/article-2285673/MoDwastes-6-6bn-kit-supplies-does-need-tries-save-money-cutting-troops.html

<sup>&</sup>lt;sup>53</sup> Con Coughlin & James Kirkup, 'Ministry of Defence '£2bn "cash pile" scandal as thousands of troops sacked'. The Telegraph, 11<sup>th</sup> October 2013.

<sup>&</sup>lt;sup>54</sup> Frank Slijper, 'Guns, Debt and Corruption. Military Spending and the EU Crisis'. A report published by the Transnational Institute, April 2013. Available to download at the Transnational Institute's website at: http://www.tni.org/sites/www.tni.org/files/download/eu milspending crisis.pdf

<sup>55</sup> See 'Government Expenditure & Revenue Scotland 2011-2012'. The Scottish Government, March 2013 at: http://www.scotland.gov.uk/Resource/0041/00415871.pdf Section 2, Table 2.5.

See also Crawford & March (2012). For Scandinavian spending patterns, see Gerard O'Dwyer, 'Norway Bucks Trend as Neighbors Curb Spending'. *Defence News*, 24<sup>th</sup> October 2012 at:

http://www.defensenews.com/article/20121024/DEFREG01/310240001/Norway-Bucks-Trend-Neighbors-Curb-Spending On Norway's defence spending increase, see Gerard O'Dwyer, 'Strong Norway Economy Allows \$100m Defense Budget Boost'. Defence News, 16<sup>th</sup> October 2012 at:

http://www.defensenews.com/article/20121016/DEFREG01/310160007/Strong-Norway-Economy-Allows-100M-Defense-Budget-Boost

<sup>&</sup>lt;sup>56</sup> 'Senior UK Government Ministers to Tour Scotland Making Case for Union'. STV News, 26<sup>th</sup> August 2013 at: http://news.stv.tv/politics/237319-senior-uk-government-ministers-to-tour-scotland-making-case-for-union/
57 See for example, 'Scottish export growth to outstrip UK'. *BBC News*, 14<sup>th</sup> August 2013 at:

http://www.bbc.co.uk/news/uk-scotland-scotland-business-23691965 For details of export growth in whisky, see 'Scotch whisky industry reports export growth'. BBC News, 4<sup>th</sup> September 2013 at: http://www.bbc.co.uk/news/uk-scotland-scotland-business-23958060

<sup>&</sup>lt;sup>58</sup> "We won't back your whisky if you break away", Hague tells Scotland'. *The Mail*, 22<sup>nd</sup> January 2012 at: http://www.dailymail.co.uk/news/article-2090020/William-Hague-tells-Scotland-We-wont-whisky-breakaway.html

<sup>63</sup> On Denmark's spending, see, for example,

http://www.defensenews.com/article/20121024/DEFREG01/310240001/Norway-Bucks-Trend-Neighbors-Curb-Spending The comments on Denmark are those of former US Defence Secretary Robert Gates, quoted on NATO Source, at: http://natosource.tumblr.com/post/6385226580/gates-praises-some-allies-with-limited-resources-for

resources-for

64 David Maddox, 'Scottish independence: Spending on defence "sells Scots short" by £1.9bn'. *The Scotsman*, 21<sup>st</sup> January 2013 at: http://www.scotsman.com/news/politics/top-stories/scottish-independence-spending-on-defence-sells-scots-short-by-1-9bn-1-2748605

65 Ibid.

Nicholas de Larrinaga, 'Czech government approves Gripen lease renewal'. IHS Janes Defence Weekly, 12<sup>th</sup> September 2013 at: <a href="http://www.janes.com/article/26956/czech-government-approves-gripen-lease-renewal">http://www.janes.com/article/26956/czech-government-approves-gripen-lease-renewal</a>
 William Forbes, 'There's Money for Defence: There Always Was. Part Two'. Daily Mail blog, 11<sup>th</sup> September 2012 at: <a href="http://forbesblog.dailymail.co.uk/2012/09/theres-money-for-defence-there-always-was-part-2.html">http://forbesblog.dailymail.co.uk/2012/09/theres-money-for-defence-there-always-was-part-2.html</a>
 Alvson JK Bailes, Baldur Thorhallsson & Rachael L. Johnstone, 'Scotland as an Independent Small State:

Where would it seek shelter?' *Icelandic Review of Politics and Administration*, Vol. 9, Issue 1, 2013, page 3. <sup>69</sup> Stuart Crawford & Richard Marchs, *A' The Blue Bonnets. Defending an Independent Scotland*. RUSI, Whitehall Report 3-12, October 2012.

See also, Richard Norton-Taylor, 'Ending "cold war" nuclear sub patrols would save money Lib Dems say'. *The Guardian*, 16<sup>th</sup> July 2013.

<sup>&</sup>lt;sup>59</sup> Severin Carrell, 'Scottish independence: armed forces would be under-funded, says MoD'. *The Guardian*, 7<sup>th</sup> October 2013.

<sup>&</sup>lt;sup>60</sup> See for example, Severin Carrell, 'Independent Scotland Would Face Greater Security Risk, says Theresa May.' *The Guardian*, 29<sup>th</sup> October 2013.

<sup>&</sup>lt;sup>61</sup> For UK defence asset figures, see Channel 4 News, 'Could Selling off Britain's Assets Cut the Debt?' 7<sup>th</sup> March 2011 at: <a href="http://www.channel4.com/news/could-selling-off-britains-assets-cut-the-debt">http://www.channel4.com/news/could-selling-off-britains-assets-cut-the-debt</a>

<sup>&</sup>lt;sup>62</sup> David Maddox, 'Scottish independence: Spending on defence "sells Scots short" by £1.9bn'. *The Scotsman*, 21<sup>st</sup> January 2013 at: <a href="http://www.scotsman.com/news/politics/top-stories/scottish-independence-spending-on-defence-sells-scots-short-by-1-9bn-1-2748605">http://www.scotsman.com/news/politics/top-stories/scottish-independence-spending-on-defence-sells-scots-short-by-1-9bn-1-2748605</a>

<sup>&</sup>lt;sup>70</sup> The Real Alternative. What the government's Trident Alternative Review isn't telling you. A report published by the Campaign for Nuclear Disarmament, June 2013, available at: <a href="http://www.cnduk.org/images/stories/briefings/trident/CND-Real-Alternative-FULL.pdf">http://www.cnduk.org/images/stories/briefings/trident/CND-Real-Alternative-FULL.pdf</a>

# Appendix 1

## Force structure summary for a Scottish Air Force

#### **Air Combat Wing**

15 x Air Defence Fighter Aircraft15 x Air Policing / Advanced Jet Trainer Aircraft

#### **Air Support Wing**

- 4 x Tactical Air Transport Aircraft
- 4 x Maritime Patrol Aircraft
- 4 x Passenger Air Transport / Multi-Engined Trainer Aircraft

#### **Helicopter Wing**

- 8 x Naval Helicopters
- 8 x Army Utility Helicopters
- 8 x Army Armed Helicopters
- 2 x Special Forces Helicopters

#### **Civilian Agencies Support Wing**

Police Support Flight – 4 x Helicopters Search and Rescue Flight – 4 x Helicopters Environmental Surveillance Flight – 2 x Aircraft Air Ambulance Flight – 2 x Aircraft and 4 x Helicopters

#### Flying Training Wing

12 x Basic Flying Training Aircraft8 x Advanced Flying Training Aircraft8 x Rotary Wing Training Helicopters

Total Air Force Personnel: 3,000 Full Time and 1,000 Reserve Personnel

## Appendix 2

## Force structure summary for a Scottish Navy

#### **Naval Combat Force**

- 4 x Multi-purpose Combat Vessels (Frigates) each about 6,500 tonnes
- 2 x Advanced Diesel Submarines each about 1,500 tonnes

#### **Naval Patrol Force**

- 4 x Ocean Patrol Vessels each about 2,000 tonnes
- 4 x Coastal Patrol Vessels each about 500 tonnes
- 8 x Inshore Patrol Craft each about 50 tonnes

#### **Naval Support Force**

- 2 x Mine Counter Measures Vessels each about 750 tonnes
- 2 x Fleet Auxiliary Vessels each about 10,000 tonnes
- 1 x Diving Support Vessel
- 1 x Survey Vessel

#### <u>Civil Agencies Support Force</u>

- 2 x Ocean Going Tugs
- 2 x Pollution Control Vessels

#### **Marine Services Craft**

- 2 x Harbour Tugs
- 4 x Workboats

#### **Marine Units**

- 1 x Marine Special Forces Unit
- 1 x Marine Company
- 3 x Marine Reserve Companies

Total Naval Personnel: 3,000 Full Time and 1,000 Reserve Personnel

# Appendix 3

## Force structure summary for a Scottish Army

#### **Combat Arms**

- 4 x Infantry Battalions (Full Time)
- 2 x Armoured Infantry Battalions (Full Time)
- 4 x Infantry Battalions (Reserve)
- 1 x Armoured Regiment (Mixed Full Time and Reserve)
- 1 x Armoured Reconnaissance Regiment (Mixed Full Time and Reserve)
- 1 x Special Forces Squadron (Full Time)
- 1 x Special Forces Squadron (Reserve)
- 4,000 Full Time and 4,900 Reserve Personnel

#### **Support Arms**

- 1 x Artillery Group including
  - 2 x Field Batteries (Full Time)
  - 1 x Heavy Battery (Mixed Full Time and Reserve)
  - 1 x Point Air Defence Battery (Mixed Full Time and Reserve)
  - 1 x Area Air Defence Battery (Mixed Full Time and Reserve)
- 1 x Engineer Group including
  - 2 x Field Squadrons (Full Time)
  - 1 x Field Squadron (Reserve)
  - 1 x Field Support Squadron (Mixed Full Time and Reserve)
- 1 x Signals Group including
  - 2 x Signals Squadrons (Full Time)
  - 1 x Signals Squadron (Reserve)
  - 1 x Force Signal Squadron (Mixed Full Time and Reserve)
- 1 x Intelligence Company (Mixed Full Time and Reserve)

#### 1,600 Full Time and 1,400 Reserve Personnel

#### **Combat Services**

- 1 x Logistics Group including
  - 2 x Logistics Squadrons (Full Time)
  - 1 x Logistics Squadron (Reserve)
  - 1 x Force Logistics Squadron (Mixed Full Time and Reserve)
  - 1 x Explosive Ordnance Disposal Squadron (Mixed Full Time and Reserve)
- 1 x Maintenance Group including
  - 2 x Maintenance Companies (Full Time)
  - 1 x Maintenance Company (Reserve)
  - 1 x Force Maintenance Company (Mixed Full Time and Reserve)
- 1 x Medical Group including
  - 2 x Medical Squadrons (Full Time)
  - 1 x Medical Squadron (Reserve)
  - 1 x Force Medical Squadron (Mixed Full Time and Reserve)

#### 1,600 Full Time and 1,300 Reserve Personnel

#### **Support Services**

1 x MP Company (Mixed Full Time and Reserve)Other Support Specialists (Mixed Full Time and Reserve)200 Full Time and 400 Reserve Personnel

#### Total Army Personnel: 9,000 Full Time and 8,000 Reserve Personnel

#### Note:

- These totals allow for 1,600 Regular Personnel in Headquarters and Training Units and Personnel undergoing training
- A Battalion or Regiment might have between 500 and 900 Personnel
- A Company, Squadron or Battery might have between 100 and 250 Personnel

END/