TRIDENT & JOBS

The case for a Scottish Defence Diversification Agency
In 2007 the Scottish Trades Union Congress and Scottish CND published a study entitled ‘Cancelling Trident: the economic and employment consequences for Scotland’. The report exposed the exaggerated claims of job losses among defence workers in the event of scrapping the Trident programme. Much has happened in the past seven years to make the case for defence diversification more important and more urgent. This new report from the STUC and Scottish CND draws attention to the shift in the balance of global power from a uni-polar to a multi-polar world making Britain's nuclear weapons system seem increasingly irrelevant, the lack of a credible ‘target’ or military rationale for Britain's nuclear weapons system and growing support from the nations and peoples of the world for a global ban on these weapons.

In particular, the new study highlights:

- the Government’s four year long austerity programme which has squeezed defence budgets and pursued the replacement of Trident at the expense of spending on conventional defence and conventional defence manufacturing jobs
- case studies from the United States which show that with early planning, adequate resources, workforce involvement and the political will, local communities can prosper after the closure of large military installations
- a detailed breakdown of the skills involved in Trident-related work shows that many of these skills could be transferred to other non-Trident submarine, surface warship work or alternative economic development
- the case for a Scottish Defence Diversification Agency which is adequately staffed and resourced to engage with trade union representatives to develop and implement realistic plans for defence diversification that have the confidence of the workforce.
1. The International Context

The international context for our study has changed dramatically from that of a decade ago. A prolonged recession and burgeoning debt have plagued the economies of Europe and the United States and both face growing competition from several developing economies, particularly China. All this has significantly changed the global balance of economic power.

Our study will concentrate, however, on the aspects of this changing balance of power that have a direct impact on British nuclear weapons policy. Specifically it will ask what threats these weapons are supposed to counter, how effective or credible is the policy of nuclear ‘deterrence’ and how is the global campaign against these weapons developing?

1.1 What are the true threats to Britain and Scotland?

The UK government’s National Security Strategy of 2010 stated that a nuclear attack on Britain by another state ‘was judged to be low likelihood’. The report went on to identify ‘tier one’ threats to Britain as being terrorism, cyber attack, natural hazards (like coastal flooding or an influenza pandemic) and international military crisis drawing in Britain¹. Nuclear weapons would be of no military use against any of the ‘tier one’ threats. Military threats to Scotland would be even lower, and mainly centre around security for Scotland’s fisheries and North Sea oil installations. The current events in Ukraine and the territorial dispute between China and Japan in the East China Sea do pose new threats to world peace. But both are far away and the threat to Scotland or Britain remains small. And both require a negotiated settlement, not a return to the Cold War.

1.2 Does Trident ‘deter’?

Underpinning the possession of nuclear weapons is the argument that nuclear weapons are ‘defensive’ and offer protection against external threats, especially nuclear. Indeed, the possession of such weapons, it is argued, will ‘deter’ another state from attacking. But since the end of the Cold War this strategy of ‘nuclear deterrence’ has become increasingly discredited². The threat to use nuclear weapons will only deter if a potential adversary believes it will be used. In the days of US-Soviet Mutually Assured Destruction (MAD) this had little

1.3 The UK is blocking a global ban on nuclear weapons

In his Prague speech of 5 April 2009, President Obama pledged that he would lead the world to a nuclear-free future but, apart from the US-Russia New START agreement later that year which limited the number of deployed strategic nuclear warheads and launchers on each side, there has been little progress towards nuclear disarmament.

Indeed, the United States, Britain, France and Russia have consistently blocked proposals to negotiate a global ban on these weapons at the United Nations and the Non-Proliferation Treaty and have refused to attend either the recent Oslo or Mexico Conferences on the Humanitarian Impact of Nuclear Weapons. The United States and Britain did, in response to international pressure, finally attend the follow-up conference in Austria in December 2014. The last decade has seen a major shift in international opinion towards support for nuclear disarmament - 151 nations have now declared in favour of

2 See Green, Robert. Security without Nuclear Deterrence, Astron Media and DSC, Christchurch, 2010 for a fuller discussion of these arguments.
a global ban, supported by a host of campaigning organisations including the International Campaign to Abolish Nuclear Weapons (ICAN), Global Zero and Mayors for Peace.

But instead of a global ban we now have a situation where every nuclear weapons state is believed to have plans to upgrade its nuclear forces. The United States is leading the charge. President Obama has agreed to a programme of nuclear weapons ‘modernisation’ - spending $88bn on bombs, warheads and supporting infrastructure and about $125 billion for delivery systems over a ten year period. In other words, the US government is committed to upgrading its nuclear bombs and warheads, the submarines, missiles, and aircraft that carry them, and the laboratories and plants that design, maintain, and manufacture them. There has been some delay in implementing these plans.

1.4 Nuclear weapons have no defence role

This, therefore, is the international context in which our discussion on Trident and Defence Diversification takes place. The challenge of our era is to manage the relative economic decline of the world’s sole superpower without resort to war while it retains overwhelming military superiority over its rivals. Above all, nuclear weapons have no military rationale, do not deter and hugely increase the costs of miscalculation. Recent research shows that even a very limited nuclear exchange would cause massive loss of life and precipitate catastrophic climate change threatening the very existence of human life on the planet. These weapons are opposed by the overwhelming majority of humanity in almost every country and now need to be banned.

In particular, Britain faces no conceivable threat that nuclear weapons could answer. They are an expensive status symbol that drain resources away from spending on conventional weapons and socially useful employment.

The crucial ‘Main Gate’ decision on the replacement of Britain’s Trident system will be taken in 2016. The key task in Scotland and across Britain is to work with the existing anti-Trident opposition in the military establishment, within political parties, the trade unions, the faith communities and the anti-austerity movement to build a broad and powerful alliance of political forces that can kill off the project once and for all.

2. The Economic Context

Despite GDP growth and employment growing faster than anticipated in 2014, the recovery post 2008/09 recession has been very slow by international and historical standards. Scotland only recovered pre-recession levels of total output in the first quarter of 2014 but manufacturing, construction and exports still lag significantly behind services. The employment rate in Scotland is still over a percentage point lower than its peak in summer 2008 and the unemployment rate 2.4% higher. The headline labour market indicators only start to convey the full extent of changes over the recent period: higher underemployment, a rapid increase in insecure forms of working and a historically unprecedented fall in real wages.

As predicted by the STUC and many others, austerity has not led to a rapid recovery in the public finances. The UK deficit in 2013-2014 was £120bn compared to the £67bn forecast by the OBR in 2010 and the stock of debt will peak later.

It is reasonable to assume that any efforts to develop new and effective diversification strategies in the post referendum Scotland are unlikely to benefit from sustained above trend growth, a durably strong labour market or higher levels of public spending.

2.1 Public finances

The OBR currently forecasts that the UK Budget will be in balance by 2019. However this relies on spending cuts of a scale that many prominent commentators believe are unachievable. With the current — and most likely future administrations — ‘protecting’ the NHS and schools budgets along with other smaller areas of spend such as international development, other public services will have to bear the brunt of cuts.

Spending is very likely to remain under serious pres-
sure at least in the medium term and it is difficult to envisage this not being the case in an independent Scotland or under enhanced devolution. It is unwise to try to be specific about the extent to which public finances will be constrained under different constitutional scenarios given the range of factors which will influence both revenues and spending requirements. The choice of currency under independence and the constraints which will inevitably follow from a formal currency union pact or market pressures is only one such factor.

The Scottish Government is committed to reducing defence spending under independence reducing from £3.3bn (Scotland’s share of current UK defence spending) to £2.5bn. It is unclear whether this defence dividend would be available to spend on diversification given the range of other policy commitments in the White Paper which will require additional spend.

2.2. Local economic context

Faslane and Coulport are situated in Argyll and Bute but given their proximity it is reasonable to consider the bases part of the West Dunbartonshire local labour market. West Dunbartonshire has the highest rate of claimant count of any of Scotland’s local authority areas and the sixth highest rate of ILO unemployment. Although Argyll and Bute performs well on headline measures this performance is somewhat offset by one of Scotland’s lowest median wages (see Figure 1).

2.3 Institutional factors

In developing plans for a Scottish Defence Diversification Agency it is necessary to be cognisant of the current policy and institutional infrastructure.

The Scottish Government set out its Government Economic Strategy (GES) in 2011 (a ‘refresh’ of the 2007 strategy). The GES is built around key industry ‘growth sectors’ including energy and financial services. The strategy also acknowledges that there are ‘significant opportunities from Scotland’s science, technology and advanced engineering

<table>
<thead>
<tr>
<th>West Dunbartonshire</th>
<th>Employment rate %</th>
<th>Unemployment rate %</th>
<th>Claimant count %</th>
<th>Median wage £</th>
<th>Claiming out of work benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>65.2</td>
<td>10.4</td>
<td>4.9</td>
<td>394.0</td>
<td>17.8</td>
<td></td>
</tr>
<tr>
<td>Argyll &amp; Bute</td>
<td>75.1</td>
<td>4.7</td>
<td>2.5</td>
<td>370.2</td>
<td>10.4</td>
</tr>
<tr>
<td>Scotland</td>
<td>71.0</td>
<td>7.9</td>
<td>3.6</td>
<td>410.8</td>
<td>12.2</td>
</tr>
</tbody>
</table>

assets across sectors. Other sectors currently account for significant proportions of the Scottish economy and provide - and will continue to provide - considerable employment and growth opportunities. Many also underpin and form an essential part of the supply chain in the growth sectors listed above, such as enabling and digital technologies. It is vital that we provide all businesses across Scotland with the necessary support and opportunity to succeed’.

Aerospace, Defence and Marine (ADM) is one such sector. Scottish Enterprise provides support through its industry team which helps companies ‘explore new and innovative products and processes, as well as make current ones more efficient’. Industry demand is formulated and articulated through the Industry Leadership Group (ILG). The STUC is currently represented on the ADM ILG.

An effective Scottish Defence Diversification Agency would have to effectively replace or at least complement the work currently being undertaken by the industry team at Scottish Enterprise. It would also have to develop an effective working relationship with private sector firms and build delivery mechanisms in partnership with a range of other bodies including the Scottish Government, the relevant local authorities, Skills Development Scotland and the Scottish Environmental Protection Agency.

3. UK Budget Cuts and Defence Spending

In 2010 the Chancellor of the Exchequer announced that the costs of Trident renewal would have to come out of the defence budget rather than general government spending\(^8\). Since 2010-11 defence spending has been subject to an unprecedented reduction which has already resulted in major cuts in defence jobs. This reduction is scheduled to intensify over the five years to 2019.

In 2010 CND published a study, presented at a meeting in the House of Commons on 18 October 2010, which examined the increasing cost base for Trident replacement and its consequences for jobs elsewhere in the defence sector. The study identified a doubling of likely costs for the US manufac-

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8 Guardian 30 July 2010
tured missile systems as particularly problematic. It warned that, combined with general cuts in the defence budget, this was likely to lead to significant cuts in orders for aircraft and surface ships. Over the following two years BAE announced 3,000 job losses at its aircraft plants in Lancashire and Yorkshire and 600 workers were also laid off from the Agusta Westland helicopter plant in Yeovil. In 2013, 1,700 shipyard jobs were lost at Portsmouth and on the Clyde. The RAF base at Leuchars was closed in 2014 and transferred to army use.

The situation today is still more threatening. ‘Non-protected’ budgets, including Defence, are scheduled for a 30 per cent reduction by 2018-19. At the same time annual spending on ‘submarine and deterrent’ will increase from approximately £2 billion a year in 2013-14 to £4 billion a year by 2023. In February 2014 the National Audit Office expressed concern at the budget projections of the Ministry of Defence to 2023. It queried in particular the sufficiency of its 5 per cent ‘unallocated’ margin within committed spending of £160 billion to 2023:

The funding agreed with HM Treasury for the Equipment Plan is not protected and the Department is free to move funding between the Equipment Plan and other elements of its budget as it chooses, within the confines of the parliamentary budget allocation process. The proportion of departmental funding allocated to the Equipment Plan depends on the Department’s forecast of its overall funding. As with all government departments, the Department’s funding can change. The Department’s funding has been reduced twice since the 2010 Spending Review and, like other departments, it cannot confidently predict its future funding situation. In 2015 the government is due to publish its Strategic Defence and Security Review, and this could identify changes in what the government expects the department to achieve. It is possible that the basis for the Equipment Plan’s funding may also change.

The NAO note of warning was in the context of projections by the Treasury in the 2013 Autumn Statement for additional and far more drastic cuts in public expenditure by 2018 in order to achieve an elimination of the budget deficit. The estimate of the Institute of Fiscal Studies in February 2014 was that these cuts would require an additional 30 per cent cut in the budgets of all unprotected departments – which include the Ministry of Defence. The 2014 Autumn Statement tightened the vice still further and extended the cuts for a further year to 2019-20. The Office of Budget Responsibility commented that ‘between 2009-10 and 2019-20, spending on public services, administration and grants by central government is projected to fall from 21.2 per cent to 12.6 per cent of GDP … Around 40 per cent of these cuts would have been delivered during this Parliament, with around 60 per cent to come during the next.’ The Institute of Fiscal Studies estimate was that of the £90 billion cuts in departmental budgets £55 billion had yet to be made.

The Ministry of Defence capital budget for the final year of the current parliament, 2015-2016, is £6.9 billion. A reduction of just 25 per cent by 2019-2020 would reduce it to £5.1 billion at a time when the annual cost of Trident will be approaching £4 billion. Any redeployment of funds from current expenditure, which is being similarly cut, would have very serious implications. Regular forces have already been reduced from 191,000 in 2010 to 159,000 in 2014 - at a time when international developments are raising concerns about their adequacy.

House of Commons Defence Committee hearings in November 2014 revealed the concern of service chiefs at the cost implications of the government’s commitment to two aircraft carriers, as well as Trident, for all other aspects of military equipment. Earlier in October the Financial Times carried a feature reviewing the crisis of MoD capital expenditure and noting the possible consequences of defence cuts for the Type 26 Frigates due to be built on the Clyde.

11 NAO, 2014 Report, para 44 and 45
17 House of Commons Defence Committee 5 November 2014 HC 512 Questions 168-17
The new Type-26 frigates are expected to be the workhorses of the Royal Navy. They are due to replace the 13 Type-23 frigates and will perform a huge number of functions. While 13 new ships were envisaged, an initial order of only eight is expected this year. The next government may decide that at a cost of up to £350m each, it cannot justify buying five more.18

In current financial circumstances it is clear that there will be major employment consequences for Scotland if Trident is not cancelled.

The rest of this report will focus on the employment consequences of cancelling Trident, what steps will be required to ensure a just and equitable transfer of employment and what lessons we can learn from elsewhere on arms conversion.

4. Arms Conversion: Learning from Elsewhere

The past two decades have seen major programmes of arms conversion in both Europe and the United States.

In Europe the end of the Cold War resulted in a radical reduction in the numbers of US and British troops and a consequent closure of bases in Germany and to a lesser extent in Italy. In the United States over a hundred military bases have been closed. Defence manufacturing was also, for a period at least, sharply cut back. In both Europe and the United States these closures and cuts backs threatened major adverse consequences for employment and for the viability of local communities.

Studies of the effectiveness of resulting programmes to avert unemployment and to ensure a speedy transition to civilian uses demonstrate that such programmes can be fully effective – though by no means all have.19 The key factors appear to have been:

- adequate advance planning
- sufficient resources
- the strength of political direction at both national and local level.

Where these have been fully applied, conversion away from military use or defence employment has resulted in long-term net benefits to local economies with minimal transitional unemployment.

In general the level of success has been higher in the United States than in Europe. In the United States the process of Congressional decision-making, and the impact of regional lobbies within it, resulted in legislation that requires long-term, focused and fully resourced intervention at Federal level.

The key law was the Base Realignment and Closure Act of 1988. This Act requires five years advance warning of any closure, closure itself to be agreed by an independent commission and action by the Federal government to ensure that early measures are taken which ensure that local employment is maintained at least at previous levels. Implementation is delegated to one agency within the Department of Defense, the Office of Economic Adjustment (OEA). This has two sections. One deals with base closure and realignment. The other, Defense Industry Adjustment, is tasked to redress the impact of reduced defence orders on manufacturing communities and the creation of alternative employment locally.

In Europe processes of defence conversion have been less focused. The decisions on closures have been taken by external governments – often with...
out much advanced warning. No mandatory political process has existed at national or, in Germany, at federal level. Although the EU established its Konvers programmes in the 1990s, access to funds depended on initiatives taken regionally or locally. The effectiveness of these responses has largely depended on the levels of cooperation between local, city and national governments and the readiness of private enterprise to make investments. In some cases such cooperation has been high; in others not.\textsuperscript{20}

In the United States the Office of Economic Adjustment claims that in a majority of cases its intervention has ensured that ‘communities have been able to absorb the economic loss and show positive economic growth at or above national averages’. It provides the following examples from bases closed in the 1990s and levels of alternative employment achieved by 2004:

One of several case studies provided by the OEA relates to Grissom Air Force Base in Miami County, Indiana. The BRAC 1991 round targeted the base and an estimated 792 civilian jobs were lost when it closed five years later. In 1991 when the realignment of Grissom Air Force Base was officially determined, a community planning effort began. A Grissom Community Development Authority was established comprised of 32 members from the three counties around the base. By state law, a successor planning agency was formed, the Grissom Redevelopment Authority (GRA). The GRA was accorded recognition by the Department of Defense (DoD) as the Local Redevelopment Authority. A seven member volunteer board directs GRA’s work, which has been responsible for the creation and development of the Grissom-Aeroplex business and industrial park. Strong partnerships with utilities, developers, other neighboring economic development authorities, and state and federal agencies such as DoD’s Office of Economic Adjustment and the Department of Commerce Economic Development Administration (EDA) were, and continue to be, vital. Funding from EDA has been especially helpful in property reclamation and development and expanding GRA’s marketing efforts.

To date, 36 businesses are located in Grissom-Aeroplex, employing almost 1,000 employees, approximately 25 percent above civilian employment at the former Air Force base. Among the businesses attracted to the new park are a locomotive engine parts rebuilder, a nursing home, electronic component manufacturing, heating and air conditioning service, banquet hall, industrial robotics, and golf course. The designation of Grissom-Aeroplex as a state enterprise zone along with additional tax and other benefits has served to assist in business recruitment.\textsuperscript{21}

Similar case studies are provided by the OEA division dealing with job losses in defence manufacturing.\textsuperscript{22} The case study for the McDonnell Douglas (today Boeing) plant in St Louis, Missouri follows:

In 1989 McDonnell Douglas employed over 42,000 in St Louis with 720 contractor firms an additional 117,000. By 1997 defence-related employment had been cut to 99,000 – a loss of 60,000 jobs. In 1990 the St. Louis Defense Adjustment program was created with the assistance of OEA to provide coordinated and comprehensive regional response to the downsizing.

The plan focused on:

- Public/private investment and partnership through the Department of Labor Business Diversification Pilot project
- Employee retention through both the Cornerstone partnership (a regional training center) and the McDonnell Douglas Worker Retraining Center
- Small business growth through St. Louis Enterprise Centers and Center for Emerging Technologies
- A Regional Revolving Loan Program to help develop business in the area
- Increased focus on exports through the World Trade Center in St. Louis
- Diversification of the regional industry and business base by focusing on advanced manufacturing, biotechnology and life sciences, and the environment.

By 1994, 75 percent of all workers laid off earlier were re-employed and working in the greater St. Louis region. Two-thirds of those workers earned as much or more money than they did while working at their previous job, including 10 percent that own their own businesses.


\textsuperscript{21} http://www.oea.gov/programs/brac/stories

\textsuperscript{22} http://www.oea.gov/programs/dia/stories
The success of this city can be best summed up by this New York Times quote: “As one of the first regions to confront weapons cutbacks and develop plans for dealing with them, the St. Louis area is emerging as a national laboratory for the post-cold war economy. St. Louis responded quickly with government and private sector efforts to help laid off workers and further the diversification of the region’s economy” (New York Times, August 8, 1991).

In the St Louis case-study it is important to note that 75 per cent of locally-re-employed workers earned as much or more than previously. As these would have been mainly skilled manufacturing workers, their pay would have been relatively high – and probably higher than those involved in base maintenance and servicing. However, further study is required of these US case studies to ascertain how far they fully met objectives of maintaining the wages and skill development of workers as well as their subsequent job security.

But our main conclusion remains. Given adequate preparation and financial resources, detrimental consequences for workers and communities can be more or less fully avoided and in light of the less effective responses in Europe, it would seem particularly important that commitment to such action at governmental level is embedded in law.

5. The Employment Impact of Scrapping Trident

The SCND/STUC study “Cancelling Trident: The economic and employment consequences for Scotland” (2007) established that Trident is not an efficient job creation scheme. More jobs would be created if the same amounts of money were invested in other areas of public spending. If the funds were put into sustainable economic development the impact on employment would be even greater. The study noted the need to address the issue of redeployment of staff at Faslane and Coulport whose current work was directly related to Trident. It also considered the local geographical impact, particularly in West Dunbartonshire and Argyll and Bute.

5.1 Posts at HMNB Clyde that directly rely on Trident

In response to a Freedom of Information request, the MOD wrote to Scottish CND on 22 October 2012 saying that there were 520 civilian jobs at HMNB Clyde which were “directly reliant on Trident”. 23 254 were employed by Babcock Marine and 107 by Lockheed Martin. The remaining 159 were employed by the MOD. In 2013 most of the latter group were moved into the private sector and taken on by ABL Alliance.

ABL Alliance

ABL Alliance is a joint initiative by the Atomic Weapons Establishment plc (AWE), Babcock and Lockheed Martin Strategic Systems UK. It manages RNAD Coulport and the Strategic Weapon System Building (SWSB) at Faslane. ABL is responsible for:

- processing, handling and storage of Trident nuclear warheads and missiles in the Trident Special Area
- processing and handling of Launcher and Missile Ordnance in the Small Ordnance Processing and Storage Buildings
- dockside Handling Building and Explosives Handling Jetty (EHJ) including Trident warhead and missile handling activities
- operations at the EHJ in support of the Tactical Weapon System, excluding the Torpedo Loading Party
- processing and storage of Missile Guidance units, maintenance and storage of Surface Support Equipment and engineering support to Trident sub-systems on submarines
- radiological and explosives safety and general management.

149 MOD civilian posts were due to be transferred to ABL Alliance in January 2013. In addition the plan was that 10 MOD personnel would act as the Intelligent Customer supervising the work of ABL. 39 Naval posts were to be seconded to ABL.

**Figure 3 - Skills Breakdown**

<table>
<thead>
<tr>
<th>Skill</th>
<th>MOD</th>
<th>Babcock</th>
<th>Lockheed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering &amp; Science</td>
<td>92</td>
<td>191</td>
<td>60</td>
<td>343</td>
</tr>
<tr>
<td>Logistics</td>
<td>24</td>
<td>29</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>Health &amp; Safety</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Outfitting &amp; Steel Work</td>
<td>0</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Other areas</td>
<td>43</td>
<td>29</td>
<td>45</td>
<td>117</td>
</tr>
<tr>
<td><strong>Total civilian jobs reliant on Trident</strong></td>
<td>159</td>
<td>254</td>
<td>107</td>
<td>520</td>
</tr>
</tbody>
</table>

Lockheed Martin manufacture the Trident missile system. Their staff at Faslane are responsible for maintaining and supporting the sub-systems of Trident – Navigation, Fire Control, Launcher and Performance Assessment. Their main site at Faslane is the SWSB. They also maintain the Trident Training Facility at the submarine base. One description of their work says "The majority of our employees are engineering staff who are qualified in either the disciplines of the different SWS sub-systems, IT or Project Planning". The expertise required in the engineering posts is such that many of these posts are likely to be filled by ex-service personnel. Other posts are for general administrative work.

Babcock Marine

Babcock are responsible for a wide range of facilities-management tasks at RNAD Coulport. This includes warehousing, transport, power supply and submarine berthing. They operate facilities on the site including the Explosives Handling Jetty. Babcock maintain "vehicles, erection bridges, loading tubes, hoisting equipment and transporters that support missile and weapon storage and movements." They also maintain the storage containers for Trident nuclear warheads.

Skills breakdown and home location

In October 2012 the MOD supplied breakdowns of skills (figure 3) and home location (figure 4) for Trident-related posts. The current breakdown for ABL Alliance staff is likely to be close to that shown for MOD personnel.


Figure 4: Home Location

<table>
<thead>
<tr>
<th>Location</th>
<th>MOD</th>
<th>Babcock</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argyll &amp; Bute</td>
<td>80</td>
<td>52</td>
<td>132</td>
</tr>
<tr>
<td>West Dumbartonshire</td>
<td>52</td>
<td>126</td>
<td>178</td>
</tr>
<tr>
<td>Elsewhere in Scotland</td>
<td>27</td>
<td>76</td>
<td>103</td>
</tr>
<tr>
<td>Outside Scotland</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>159</td>
<td>254</td>
<td>413</td>
</tr>
<tr>
<td>Lockheed (breakdown N/A)</td>
<td></td>
<td></td>
<td>107</td>
</tr>
<tr>
<td>Total civilian jobs</td>
<td></td>
<td></td>
<td>520</td>
</tr>
</tbody>
</table>

Figure 5: breakdown of total Clyde naval base workforce by employer

<table>
<thead>
<tr>
<th>Employer</th>
<th>Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Defence</td>
<td>1,285</td>
</tr>
<tr>
<td>Babcock Marine</td>
<td>1,400</td>
</tr>
<tr>
<td>ABL Alliance</td>
<td>149</td>
</tr>
<tr>
<td>Lockheed Martin</td>
<td>107</td>
</tr>
<tr>
<td>Other contractors</td>
<td>244</td>
</tr>
<tr>
<td>Total</td>
<td>3,185</td>
</tr>
</tbody>
</table>

Figure 6: Skills breakdown of total MOD Clyde naval base workforce.

<table>
<thead>
<tr>
<th>Job family</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management &amp; Improvement</td>
<td>17</td>
</tr>
<tr>
<td>Commercial</td>
<td>6</td>
</tr>
<tr>
<td>Internal Communications/Media Relations</td>
<td>6</td>
</tr>
<tr>
<td>Corporate Support</td>
<td>59</td>
</tr>
<tr>
<td>Engineering and Science</td>
<td>97</td>
</tr>
<tr>
<td>Estates</td>
<td>13</td>
</tr>
<tr>
<td>Health Professionals</td>
<td>11</td>
</tr>
<tr>
<td>Human Resources</td>
<td>2</td>
</tr>
<tr>
<td>Information</td>
<td>26</td>
</tr>
<tr>
<td>Logistics</td>
<td>67</td>
</tr>
<tr>
<td>Programme and Project Management</td>
<td>26</td>
</tr>
<tr>
<td>Security, Health &amp; Safety</td>
<td>931</td>
</tr>
<tr>
<td>Training and Education</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>1,285</td>
</tr>
</tbody>
</table>

Figure 7: Home location of MoD employees at Clyde Naval Base

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argyll and Bute</td>
<td>423</td>
</tr>
<tr>
<td>West Dumbartonshire</td>
<td>457</td>
</tr>
<tr>
<td>Other parts of Scotland</td>
<td>385</td>
</tr>
<tr>
<td>Other parts of the UK</td>
<td>15</td>
</tr>
<tr>
<td>Not known</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>1285</td>
</tr>
</tbody>
</table>

The 60 Lockheed personnel who work in engineering and science have posts which are closely related to specific components of the Trident missile system. Some of the 92 Engineering and Science staff who were employed by MOD, and now work for ABL, have specific skills related to the Trident nuclear warhead. Together these two groups contain 152 workers. Many of these positions are specific to Trident, but they are in disciplines, such as me-
The 191 engineering and science workers employed by Babcock carry out tasks related to the facilities and systems at Coulport. Their tasks are less specific to Trident than the work of Lockheed and ABL staff. They could carry out similar tasks at other facilities, including naval and civil ports.

The 53 logistics staff could be re-employed in a similar role, unrelated to Trident. Many of those in “other areas” carry out administrative functions which are not unique to Trident.

5.2 Total workforce at Clyde Naval Base

A total of 3,185 civilian workers are employed at HMNB Clyde (figure 5). The number employed by the MOD is 465 lower than in 2007. This is only partially explained by the transfer of 149 posts to ABL Alliance.

The MOD has published breakdowns of skills (figure 6) and home location (figure 7) for the 1,285 employed directly by the MOD. It should be noted that a larger proportion of these workers are employed in “Security, Health and Safety”. In 2007 54% of the workers in this category were employed at Faslane and 46% at Coulport.

The home location of these MOD employees has also been published (Figure 7).28

27 A written answer by Philip Dunne to question from Katy Clark, 23 June 2014, showed that 1285 were employed by the MOD and 1900 by contractors. The 1,400 figure for those employed by Babcock Marine is from http://www.babcockinternational.com/media/205608/glb168368_-_case_study_-_partnering_-_print_file.pdf

28 Written answer by Adam Ingram to question from Katy Clark 8 June 2007.

29 Written answer by Philip Dunne to question from Katy Clark, 23 June 2014. http://www.publications.parliament.uk/pa/cm201415/cmhansrd/cm140623/text/140623w0004.htm#1406246000066

30 Written answer by Adam Ingram to question from Katy Clark 8 June 2007.

31 Written answer by Philip Dunne to question from Katy Clark, 23 June 2014. http://www.publications.parliament.uk/pa/cm201415/cmhansrd/cm140623/text/140623w0004.htm#1406246000066
5.3 Maintenance of Vanguard Class Trident submarines

A presentation from Babcock on Resources and Infrastructure at HMNB Clyde provides an insight into the number of people who are employed in the Fleet Maintenance programme for Trident submarines.32 The presentation includes a breakdown of the hours required to carry out maintenance packages on a range of vessels, broken down into skills areas and job families.

With regard to Trident submarines, two packages are detailed. One is a Base Maintenance Period (BMP). This is an 18 day package of work which is carried out between Trident patrols. The estimates are based on an average from 12 examples. Additional repairs carried out as Operational Defects (OPDEFs) are included in the BMP figures. The second package is a Revalidation and Assisted Maintenance Period (RAMP). The figures provided are based on the 130 day RAMP carried out on HMS Vengeance in 2006.

For the purpose of this report, these figures have been combined to provide an annual estimate (total column), based on the assumption that 6 BMPs and 1 RAMP are carried out during an average year. An indication of the number of Full Time Equivalent jobs (posts column) was then calculated based on the total number of hours (Figure 8).

The Babcock presentation shows that the same skill groups are involved in maintenance packages on Trident and other nuclear-powered submarines. Most of the skill groups required for Trident are also needed for work on surface ships at Faslane, albeit in smaller numbers. In addition, recruitment adverts for positions at Babcocks at Faslane show that some workers are employed both on maintaining vessels (nuclear and non-nuclear) and on looking after the shore-based infrastructure.

5.4 Two Future Options

Option 1: conversion to a surface ship and headquarters facility

During the referendum campaign the Scottish Government argued that Faslane could be converted to a surface ship and headquarters facility, in the event of independence. They argued that nuclear weapons would be removed within 4 years and nuclear-powered submarines within 10 years.

The Babcock presentation shows that there would be scope to transfer personnel currently working on nuclear submarines to work on surface ships. The number of Fleet Maintenance positions might be lower than currently required.

A significant proportion of both the Babcock and MOD workforces are employed in logistical and support work at Faslane. For example, Babcock employ hotel and catering staff to provide support for the large number of people at Faslane. Transition to being a surface ship and headquarters facility would involve a change in some of the support tasks carried out on the site.

The Scottish Government proposed that Faslane would become the main Scottish naval base and also the headquarters of Scottish defence forces. The proposed surface fleet might require a smaller workforce, but this would be partially offset by staff associated with the headquarters facility. Transition to this new role would take ten years.

The Babcock presentation shows that there would be an indication of the number of Full Time Equivalent jobs (posts column) was then calculated based on the total number of hours (Figure 8).

Option 2: Removal of Trident and retention of other nuclear-powered submarines

The 2007 SCND/STUC study noted that the total number of submarines could be retained at the current level.

5.3.1 Conversion of Faslane to a surface ship and headquarters facility

The 2007 SCND/STUC study noted that the total number of submarines could be retained at the current level.
rent number if Vanguard class Trident submarines were decommissioned as new Astute class submarines were brought into service at Faslane. The Babcock presentation suggests that this is correct. It estimates that the staffing requirements for initial RAMPs and BMPs on the Astute class will be higher than for Vanguard class.

5.5 Age profile of workforce

The average age in the Ministry of Defence Police in 2013 was 50. The age profile of civilian MOD personnel at Faslane and ABL personnel at Coulport is likely to reflect that across the MOD as a whole. Recent data shows that a significant proportion of the MOD civilian workforce is in the older age brackets. This is most obvious amongst those identified as industrial workers (figure 9).

Figure 10 shows an estimate of the proportion of the current MOD civilian workforce who will be over 64 by a given year.

This is only an approximate guide to future retirements. Legislation and changes to pensions conditions of MOD personnel make detailed projections difficult. These figures suggest that a significant reduction in the size of the civilian workforce at Faslane might be achieved over a period of a decade as a result of retirements, if there is very little recruitment. However, this would not address the impact of the loss of these jobs on the local economy. New work would need to be found for the younger population, particularly in West Dunbartonshire, which is an area of high youth unemployment.

Attention should be paid to identifying economic developments which are best suited to sustaining employment within the Faslane area, as well as to specific developments which are most appropriate to the skills of the existing workforce.

Babcock currently take on a number of Modern Apprentices. An important part of any alternative long-term plan should be sustaining a programme of apprenticeships at HMNB Clyde and in the surrounding area.

5.6 Sites

It is assumed that Faslane would continue as a major naval facility. The removal of Trident would release several large buildings, including the Strategic Weapons Systems Building and the Trident Training Facility. The shiplift could be used for civil purposes. For example, renewable energy manufacturing could take place on shore in the Northern area of Faslane with the shiplift then being used to move components to sea.

The removal of nuclear weapons would open up a range of alternative uses for Coulport. The Explosives Handling Jetty is a covered facility with overhead cranes. In the past this has only been used for loading munitions, including nuclear weapons. In future the MOD plan to also carry out submarine maintenance in the facility. The old Polaris jetty will be reactivated as a conventional munitions loading facility.

Coulport could be retained as a conventional military facility. Civil options should also be explored. The site may be suitable for marine renewable construction or support. Other options are tourism or residential development. The total site has an area of 364 hectares and 32 kilometres of internal roads. There is potential for a range of different developments within parts of the overall site.

6. Local Economic Alternatives to Trident

The 2007 SCND/STUC study identified renewables, including marine renewables, as a potential alternative source of employment. The renewable sector has significant long-term potential. This is despite recent setbacks such as Scottish and Southern Energy’s decision to reduce their support for a number of off-shore wind developments.

There are signs of potential in Ayrshire. Maritime Craft Services Clyde, based in Largs, operate a fleet of 24 vessels and have developed expertise in providing support vessels for offshore wind farms near East Anglia and Belgium. Hunterston has been identified as the site for a substantial renewable energy development, including tests of new offshore wind turbines. A significant proportion of staff employed in the off-shore wind industry have been recruited from the services and there are training programmes to facilitate this. Work in off-shore wind and other marine renewable sectors may be particularly suitable for some of the current staff at

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34 http://www.eveningtimes.co.uk/news/babcocks-boost-for-clyde-base.17764758
35 http://www.scottishrenewables.com/
37 http://guide.offshorewind.biz/profiles/view/maritime_craft_services_clyde_ltd
38 http://www.scottish-enterprise.presscentre.com/
39 http://offshorewind.biz/2012/10/18/uk-ex-service-personnel-seek-careers-in-energy-industry/
Faslane and Coulport, for example personnel who serve in the Clyde Marine Unit of the Ministry of Defence Police.

Part of the Clyde estuary has been identified as a potential off-shore wind farm.\textsuperscript{40} If this proceeds, the main support site is more likely to be located in Ayrshire. However, additional support might be provided from the Faslane/Coulport area.

A second potential growth area is tourism. This has considerable potential for the current workforce at Faslane/Coulport and for others in the area, due to the proximity of Loch Lomond National Park and the importance of tourism for Argyll and Bute. Many staff at HMNB Clyde work in logistics. Babcock employ a Hotel and Catering team. Some personnel have skills which are well suited to the marine tourism sector. The development of this potential should be consistent with the current Scottish focus on sustainable tourism.\textsuperscript{41}

The West Dunbartonshire Economic Development Strategy 2011-16 identifies both tourism and renewable as potential growth areas.\textsuperscript{42} It refers to “Promoting West Dunbartonshire and Loch Lomond as a key destination for tourism businesses” and “Exploring new sectors such as Renewables to assess their suitability for exploitation from a West Dunbartonshire base”. Other potential growth sectors in the local plan are Professional and Business Services, Creative Industries, Software and IT, Construction, Retail and Care.

The strategy aims to increase the employment rate in West Dunbartonshire from 66.6% in 2010 to 71% by 2016. It calls for better intelligence on the skills needs of growth industries, tailored skills development to support growing sectors, mechanisms to help recruitment and training linked to major capital projects.

The Argyll and Bute Economic Development Plan 2010 recognises the “wide range of sources of renewable energy that can create jobs and enterprises and attract investment”\textsuperscript{43}. It identifies tourism as a key sector and stresses the opportunities for “high value tourism based around golf, marine leisure, ancestry and heritage, cultural events and festivals” and “access to world-class wildlife and landscapes; a wide range of outdoor pursuits for all abilities”. Their plan is for Argyll and Bute to become a key destination of choice within Europe, “in recognition of its wealth of culture, natural heritage and key sustainable assets such as high quality local food and drink”.

If Faslane ceases to be a nuclear base, there will be an opportunity to develop the potential of the area in a way that is consistent with this approach to tourism. The nuclear presence on the Clyde is a potential threat to the reputation of the local food and drinks industries. The continuation of submarine activity poses is likely to block the off-shore wind development in the Clyde estuary.\textsuperscript{44}

The SCND/STUC study “Cancelling Trident: The economic and employment consequences for Scotland” (2007) established that Trident is not an efficient job creation scheme. More jobs would be created if the same amounts of money were invested in other areas of public spending. If the funds were put into sustainable economic development the impact on employment would be even greater. The study noted the need to address the issue of redeployment of staff at Faslane and Coulport whose current work was directly related to Trident. It also considered the local geographical impact, particularly in West Dunbartonshire and Argyll and Bute.

7. The Case for a Scottish Defence Diversification Agency

The studies of Grissom Air Base and St Louis show that unemployment and economic blight are not the inevitable local consequences of moving from military to civilian use. Success clearly depends on early planning, adequate resources and strong political leadership. But perhaps most important of all is the active involvement of the workforce and local community.

Thirty eight years ago the workers at Lucas Aerospace formulated an ‘alternative corporate plan’ to convert military production to socially useful and environmentally desirable production. Workers and technicians from 13 factories were actively involved in the process. Within a few weeks 150 ideas emerged for products which could be made with existing machine tools and skills or with some workforce retraining. They included products which addressed medical needs and alternative and renewable energy generation. Although this took place at a high point in trade union organisation and with

\textsuperscript{40} http://www.sdi.co.uk/~/media/SE/Resources/Documents/STUV/SDI-west-coast-clusters.pdf
\textsuperscript{42} https://www.west-dunbarton.gov.uk/media/1297398/delivering_a_brighter_future.pdf
\textsuperscript{44} http://www.scotsman.com/news/environment/offshore-turbines-will-pose-a-threat-to-nuclear-subsfleet-1-2099457
the support of the then industry minister, Tony Benn, it shows the creative potential of defence workers which could be unlocked by a process of defence diversification.

An equally telling example is provided by workers at the BAE shipyard at Barrow. In 1988-89 trade union representatives put forward plans for a reallocation to civilian production at a time when the yard employed 13,000. Their proposal called for focused R&D expenditure on wind and marine energy technologies to create a centre of excellence in industrial fabrication. Had these proposals been adopted and implemented they would have been initiated ahead of similar programmes by the Danish and German governments which have now given these countries a world lead in wind-related technologies. This did not happen. Subsequent cuts in UK naval budgets led to a loss of thousands of jobs over the following decade - reducing employment to 5,000 today.

An example not to follow would be the UK Defence Diversification Agency which was set up in 1999 within the Ministry of Defence as a subsection of the Defence Evaluation and Research Agency (DERA). Its remit was principally to find private sector purchasers for military technology - not to undertake planning for the conversion of military facilities to civilian use. In 2001 DERA, along with the DDA, was privatised as QinetiQ. The major shareholder was the US private equity firm, Carlyle group. It has since become a major international player in high-technology arms production and trading.

That’s why Scotland needs a Defence Diversification Agency of a different type, committed to arms conversion and able to take a lead in the process of transitioning away from Trident and other defence-related employment. At its April 2014 Conference the STUC called for the establishment of such an agency, ‘whose main focus will be planning and resourcing the diversification of jobs away from defence projects, such as Trident, and promoting the greening of the Scottish economy’[^45]. It would need to be established and funded by the Scottish Government and must be independent of the Ministry of Defence (MoD) and its agencies. It could be modelled on the US Base Realignment and Closure (BRAC) Act of 1988.

Any partial or complete closure of a defence base, installation or factory would require 5 years advance warning and would mandate the Agency to ensure that employment is maintained at least at previous levels. A state enterprise zone would be established. The Agency would be charged with the responsibility for drawing up and implementing plans, in conjunction with the relevant trade unions, representatives of the local community and other bodies, which were feasible, realistic and had the confidence of the workforce. The agency would have access to adequate funds to carry out land reclamation, infrastructure development and marketing to attract new investment and jobs to the area.

All this is consistent with the British Trade Union Congress policy of ‘Just Transition’ adopted at its 2009 Congress. Just Transition is a framework for a fair and sustainable shift to a low carbon economy to ensure active involvement of employees and their trade unions in decision making and the implementation of change, green and decent jobs of equivalent pay and conditions and, where necessary, training for new green skills. In this way ‘the move to a low carbon economy does not damage livelihoods and working lives but actually enhances them.’[^46]

This need for a ‘Just Transition’ applies with equal force to the defence industry which now faces a period of major contraction. A Scottish Defence Diversification Agency, therefore, could not only intervene in a planned and targeted way to shift employment away from defence dependency to socially useful employment, but could also go a long way to help meet the Scottish Government’s own ambitious plans for carbon reduction and greening the Scottish economy.
