

**Strategic Defence and Security Review 2015 Public Engagement –  
Prospect Response**

Submission by Prospect to the NSS SDSR Government Public  
Engagement

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## **Introduction**

Prospect is the union for 11,000 professionals in the Ministry of Defence and the UK defence industry. Our response focuses on decisions affecting the defence sector and civilian employees working for government.

The review provides an opportunity to create certainty for those working in the sector. Prospect welcomes the government's announcement to adhere to NATO's defence spending commitment of 2% of GDP throughout the lifetime of this parliament. This provides a spending underpin for the review that was absent five years ago.

Prospect's response is broken up into two sections. In Section 1 we focus on the development of UK sovereign capability in defence equipment design and manufacturing. In Section 2 we highlight the need to retain an intelligent customer role for civilian personnel in the Ministry of Defence and how department the adapts to new and emerging threats.

## **Executive Summary**

- The SDSR should prioritise work that will safeguard UK sovereign capabilities and secure jobs in the defence sector.
- Maintaining sovereign capability is crucial to being a credible player in the defence export market.
- Sustainable investment in research and development work will ensure that the UK retains its position as a key defence manufacturer.
- The SDSR should plug the capability gaps left from the last review, particularly maritime patrol, and commit to building thirteen Type 26 vessels as a one for one replacement of the current ships.
- On completion of the carriers the government needs to ensure that a secure docking for refit and maintenance will be required to help service these vessels to ensure that they remain fit and available to effectively perform their duties.
- An early main gate decision is needed on the Successor programme to secure the UK's nuclear deterrence capability.
- The SDSR should safeguard and invest in the specialist skills of the MoD civilian workforce so that the department has in-house capability to act as an intelligent customer in the delivery of defence procurement.
- Future defence requirements will require new specialist skills in emerging technologies such as data analytics and cyber defence.
- The SDSR should recognise the relative cost efficiency of MoD civilian personnel when compared with military personnel when carrying out civilian roles.

## **Section 1 - SAFEGUARDING UK SOVEREIGN CAPABILITY IN DEFENCE**

1. Prospect strongly urges the government to take decisions on the equipment plan that secures the jobs of those working in the UK defence sector. The defence industrial base will be shaped by the procurement decisions made by the government. Clear

signals to industry are needed so that companies invest in high value engineering jobs in the future. The workforce has an aging demographic profile and the sector faces fierce competition from other high value science and engineering sectors. To attract and retain the most gifted and able young workers and graduates defence contractors need to be able to provide a career path for those in the industry.

2. The preference for 'off-the-shelf' procurement has meant that UK companies lost key defence contracts in the last spending review period. As a result there is no longer a UK sovereign capability in the development and design of some military platforms. Even where contracts were awarded to UK based companies, such as the Scout SV vehicle built by General Dynamics UK, only a fraction of the manufacturing jobs remained in the UK. The government needs to ensure that commitments to UK jobs materialise into real employment. The decision not to award the FRES contract to BAE Systems has meant the UK no longer has design and manufacture capability in land vehicles. The SDSR should consider a significant investment in Land vehicles after 2020 to encourage UK based manufacturing. A reliance on off the shelf will mean that the government has less leverage with contractors on UK based jobs.

### **Defence Research and Development**

3. Investment in research and development (R&D) has sharply declined since the height of the cold war. In relative terms Britain's spending on R&D has maintained a capability in equipment quality on a par with France. However there is great uncertainty about whether there is sufficient funding to maintain this position. The government's emphasis has been to encourage the private sector to increase its proportion of R&D spending in applied research, development and demonstration. Under this proposal, MoD would retain responsibility for developing cutting edge research but then expect industry to develop projects into viable commercial products. However this exposes future R&D spending to several risks.
4. The government has claimed a great deal of credibility for improvements in the reliability of major projects. The maturity of the equipment programme has meant that these are less likely to experience cost increases. This provides some space for new contracts. The industry is always challenged to programme work to manage peaks and troughs of production. Given the budget underspend on the equipment programme there is scope to look at those sectors of industry that would benefit from additional work. The 20% cut in the research and development budget has meant that product design has been limited. As the current equipment programme moves into the manufacturing phase it is important that new design work begins to come on stream. New equipment helps to secure the industrial base and provides products that will help boost export sales. The Defence Growth Partnership can provide valuable insights into developments within the sector.
5. By its nature the pattern for R&D spending is long-term. The benefits of research may take up to 20 years to develop into products that return on an initial investment. The MoD will need to maintain domestic capability in key areas of research if they are to maintain their relative position in cutting edge research. That means there is a need to retain and develop scientists in the public sector.
6. The Defence Science and Technology Laboratory have recognised the problem by establishing a graduate programme that aims to encourage young scientists to stay in the public sector. But it is inevitable that there will be a brain drain if there is not enough investment in public science. If industry is expected to take on a greater

responsibility for developing MoD platforms then it is likely that private sector companies will try and attract the brightest and the best. Sustainable investment in public science will be needed to maintain a critical core of expertise in the public sector for research. In addition the government should provide the private sector with opportunities to boost spending on research and development.

### **Plugging the capability gaps**

7. The 2010 SDSR left some important capability gaps which we would expect the government to rectify in the 2015 SDSR review. The decision to cancel the Nimrod air surveillance aircraft weakened the UK's deterrence posture. This was clearly underlined when a suspected Russian submarine was spotted near Faslane nuclear submarine base, which led to the scrambling of aircraft from NATO countries to fill the gap left by Nimrod. Prospect would welcome a decision to award a contract for a marine patrol vessel and we would expect the government will be open to bids from contracts which will include a significant component of UK manufacturing.
8. In recent years there has been huge government funded investment in terms of civil works, infrastructure and equipment at the Rosyth assembly yard for the Queen Elizabeth Class (QEC) Aircraft Carriers which has allowed for effective utilisation of the entire UK shipbuilding industry resource. This has taken place under the Aircraft Carrier Alliance governance arrangements. The QEC is, and will remain for decades to come, a key national strategic asset. During the service life of these flagships there needs to be a joint approach to supporting, maintaining and re-fitting the carriers not dissimilar to the carrier alliance that built the ships to secure work across the UK workforce. It has been established that the Carriers will operate out of their base port at Portsmouth, which can guarantee easy access and essential maintenance. Given the investment in the state-of-the-art facility at the No.1 Dock and its associated facilities at the Babcock Rosyth these should be declared as national strategic defence asset. These will provide security of the docking, refit and maintenance facilities that will be required to help service these vessels to ensure that they remain fit and available to effectively perform their duties.
9. The defence and security industry relies on a private and public sector talent pipelines within which long term visibility of employment is absolutely key to delivering the UK Government strategy. Loss of key professions through rapidly changing workloads arising from cancelled major projects and poorly thought out [platform] design changes, including reduction in platform numbers in favour of short term cost savings do nothing to smooth this already constrained pipeline. There are particular pressures in the shipbuilding and repair industry; 60% of the management and technical workforce are above 40 years old. This places a pressure on the industry to take on the next generation of engineers. Commissioning engineers can typically take 10 to 20 years working in the industry to become fully proficient with the knowledge of naval shipbuilding rules and standards as these workers retire. Therefore the SDSR 2015 should not reduce, either by build cancellation or through earlier decommissioning, the currently planned number of warships or associated support vessels. There is also a need to find a long-term use for the ship-hall and adjacent facilities in Portsmouth Naval Base that have lain dormant since the ending of shipbuilding in Portsmouth. There has been a commitment to use the site for the maintenance and refitting of minesweepers but this needs to be followed through in order to ensure that the facility in Portsmouth is not moribund.

### **Delivering jobs for the defence industry**

10. The decision to commit to the demonstration phase of the Type 26 frigate earlier this year is welcome, paving the way for a move to manufacturing in 2016. However Prospect is concerned that the start of manufacturing is being further deferred and the impact this will have on workflow and ultimately maintaining current levels of employment. Furthermore, the announcement by the Chancellor earlier this year that the Type 26 frigates would be built to a two-year drumbeat does cause significant concern about future capability, given the age of the Type 23 ships they are replacing. So far contracts have been tendered by the main contractor BAE Systems for seven ships; this still leaves a shortfall in the commitment of one-for-one replacement for the Type 23 frigate which it replaced. Commitments to jobs on the Clyde will only be fully realised if production facilities are fully utilised. The opportunities to realise the export potential for the Type 26 will be enhanced by a firm commitment to the full order of 13 ships. Manufacturing costs are reduced with each boat constructed making the sale of additional Type 26 orders more attractive to potential buyers. The contract will also provide job opportunities along the UK supply chain. We would strongly urge the government to make a favourable announcement on the final order as part of the SDSR 2015 review to support ship building on the Clyde.
11. The recent announcement of redundancies at BAE Systems munitions factories has confirmed concerns that jobs were under threat. The 15 year MASS contract was designed to ensure that frontline forces have a secure supply of bullets and that the UK retains its sovereign capability in munitions manufacturing. The contract provided the security needed to modernise the facilities. However a slowdown of munitions orders from BAE System's main customer, the Ministry of Defence, has meant that the company has sought to reduce costs. This has an impact throughout the supply chain as work delivered as part of the MASS contract is sent offshore to reduce costs. A reliable supplier of munitions for the frontline forces was vital during conflicts in Afghanistan and Iraq. As these conflicts ended then it was inevitable that the munitions factories would be affected unless a suitable volume of export orders could not be secured. It is now a matter of urgency that MoD secures the manufacturing capability in munitions. There are opportunities in the procurement process to secure UK jobs in munitions to fulfil the commitments made in the MASS contract.
12. The government has still to make a final decision on the number of F35 planes that will be ordered. It is vital for the credibility of the UK's carriers that there are a suitable number of planes in the construction phase. This will safeguard the manufacturing facilities in UK aerospace.

### **Successor Programme**

13. An early decision will be needed in this parliament if the UK is to replace the existing submarine fleet that carry the UK's nuclear deterrent by 2028. A decision to delay or cancel Successor would imply a significant change of policy. Prospect is in favour of multilateral nuclear disarmament and moves towards a safer, more peaceful world. But we believe that until we can be sure there is no serious threat to the UK over an extended period, we should maintain an effective nuclear deterrent.
14. There has been some debate about moving away from a continuous at sea deterrence (CASD) or reducing the size of the Successor fleet from four to three. Any savings derived from moving away from CASD would not be realised until the early 2030s. These do not take account of the higher unit costs that suppliers are likely to

charge because of a smaller order. For this reason a firm commitment to replace the existing fleet with four submarines would be welcome.

15. More importantly a reduction in the size of the fleet would mean that Successor would require greater resilience if CASD is to be retained. Demands on maintenance and training would become even more critical and the credibility of the UK's deterrence posture would be vulnerable to strategic shocks, such as an accident on one of the submarines. Extending the life of the Vanguard class of submarines is high risk. The maintenance of current submarines has given the government some extra time, but the rate of deterioration is unknown. The costs of further maintenance are likely to rise as the ships get older, which will push up the cost overall. For all these reasons a delay in the decision risks being mired in bottlenecks and cost overruns that may ultimately undermine the security that deterrence is intended to provide.
16. The Successor programme gives security to the UK's sovereign capability for the submarine construction. A decision to delay or cancel on Successor will result in a significant loss of jobs. Any uncertainty introduced into the main gate decision will have a knock on effect on the design work that is already underway. Delays in procurement decisions are one of the main reasons that costs rise in the Equipment Programme. So a clear commitment to the Successor programme, including the financing of the procurement, is a key decision of the SDSR.

## **Section 2 - SAFEGUARDING THE 'INTELLIGENT CUSTOMER' ROLE OF MOD**

17. Prospect is the trade union representing the thousands of professional and specialist civil servants working for the Ministry of Defence, including associated bodies such as DE&S, UK Hydrographic Office, DSTL and DECA. Our members play a vital role in securing and supporting the UK's defence capabilities.
18. The unique nature of MoD's civilian workforce is not well understood outside the Department. Civil servants within MoD carry out a huge range of professional and specialist functions that directly impact operational capability and are indispensable to the UK's strategic defences. Prospect is concerned that headcount cuts resulting from past constraints on the MoD budget and decisions in the last SDSR in 2010 have left MoD's civilian workforce seriously depleted and demoralised. To this extent, Prospect welcomes the current approach to the Defence budget, under which efficiency savings can be recycled into enhancing MoD operational capability. The union is convinced that it is not viable to make further ad hoc reductions in MoD's civilian workforce without a serious negative effect on both national defences and the UK's standing in the international community.
19. The civilian workforce in MoD and associated employers has drastically reduced since the 2010 SDSR. The official MoD Quarterly Civilian Personnel Statistics Report show that the 2015 civilian workforce for the MoD main department and DE&S combined is less than 75% of the 2010 equivalent figure. These staff savings have partially been made by privatisation or outsourcing of certain activities, but a substantial element is the result of simply pruning of budget lines, cutting back on future-oriented projects, and doing the same work with fewer staff.
20. A continuation of 'salami-slicing' of MoD civilian personnel and cutting expenditure across budget lines is unsustainable. It has the effect of eroding existing operational capabilities; it has also undermined MoD's ability to explore options for improving future defence effectiveness through better utilisation of existing resources and harnessing emerging technologies. Feedback from Prospect's MoD branches indicates

that in critical functions supporting the front-line commands there is barely sufficient capacity within the current workforce to meet requirements. In other words, the marginal cuts strategy has reached the point where it is liable to put the UK's current and future defence capability at risk.

21. Defence industry experts have also warned against MoD replicating historic defence errors by 'fighting the last war', i.e. assuming that future defence challenges will be similar to those faced in the recent past. As highlighted by the House of Commons Defence Select Committee inquiry into the potential threats posed by international societal change, the challenges posed by diffuse, transient adversaries, asymmetric engagement, cyber attacks and widespread socio-political instability are at least as relevant for today's defence requirements as potential involvement in conventional conflict scenarios. The known strategic landscape of 2015 is radically altered from that of 2010, when the defence priority was Operation Herrick and the conclusion of the UK's engagement in Afghanistan. The operational and tactical lessons learnt in that context are of at best partial relevance to the challenges in the years ahead. The 2015 SDSR must therefore adjust its focus to a changed context and requirement for UK defence.
22. The 2015 SDSR confronts a changed world in which the UK's operational model for defence is facing ever more complex and variable demands, some of whose implications are still emerging and uncertain. The SDSR needs to position the UK's defences and deterrence strategy to address arguably the most diverse threat spectrum in history. It needs to consider how the UK's defences can reconcile the agility required to secure effective defence in this emerging world with the lengthy procurement and deployment cycles associated with sophisticated new methods and equipment. A critical part of the SDSR must be to fully understand the relative contributions of the armed forces and other MoD capabilities to defending the UK in the twenty-first century. Prospect's contention is that this means putting development of the MoD specialist civilian workforce at the centre of the review.

### **Future defence requirements**

23. The changing nature and increased diversity of the potential threats facing the UK mean a shift in the very concept of defence. While everyday ideas of defence continue to focus on platform-based capabilities and deployment of troops, defence in the twenty-first century is increasingly grounded in information technology and remote systems. The following considerations must have a pivotal place in reorienting the UK's defences to the threats of today and the emerging future:
24. New and emerging technologies in data capture, capacity and connectivity have the potential to deliver operational and tactical advantages to the armed forces and to increase MoD efficiency and effectiveness.
25. Strengthened cyber defence is critical, especially as traditional perimeter defences become compromised by more sophisticated attacks and threats. Cyber defence systems must be able to distinguish among and assign appropriate priorities to different sources of cyber attack and phishing. Further, the most effective use of cyber defence systems is to improve systems resilience by intelligent use of the learning from such attacks.

### **Deterrence through intelligence**

26. The new defence scene requires different forms of deterrence from state-on-state conflict, seeking to avert threat action by potential opponents and to influence key allies. Enhanced intelligence, surveillance and reconnaissance capability forms an essential part of such deterrence. A sufficiently rich picture of the UK's adversaries and their world could act as a deterrent in itself, by rendering events increasingly predictable. It would also deliver the evidence base for exposing threat behaviour and for decisions concerning international economic or military interventions.
27. Advanced technology offers the potential for unmanned high-precision systems, for both surveillance and combat, and monitoring facilities such as networked sensors.
28. The growing sophistication of such technology requires a stable civilian workforce of skilled specialists, both to operate the new systems and, increasingly, to make use of their outputs. For example, it is estimated by RUSI that 95% of data collected in remotely-piloted Reaper drone flights is never viewed by analysts, much less assessed for strategic or tactical advantage. This reflects the dilution of MoD's intelligence resources: under-staffing in key functions compromises the MoD's ability to undertake strategic work oriented towards longer-term objectives. Should this state of affairs continue, the UK will not see the proper returns on its investment in new systems.
29. Procurement of leading-edge hardware and information systems is a poor use of government spending unless there is commensurate investment in the staff required to make full use of the technology. The SDSR should ensure that the UK's defence strategy takes cognisance of the staffing levels and training required to optimise use of current systems and equipment, as well as building staffing requirements into the assessment of and planning for future investment in defence hardware and software.

### **The case for an enhanced civilian workforce in defence**

30. As the threats to the UK's security become ever more complex, the importance of the specialist civilian workforce for the effective operation of the UK's defences increases. Indeed, the continuing diversification of the UK's defence requirements and capabilities is generating a shift in the balance of the operational workforce requirements: increasingly, the work that constitutes the UK's defences will be work that can be carried out by specialist civilians, rather than by military personnel. The UK's Whole Force Concept reflects this change in the defence scene and reinforces the significance of the civilian workforce, both in defence operational provision and for the coordination of a diversified overall capability.
31. Research into and development of future-facing technologies, the integrity of the procurement process, technical support for the maintenance and deployment of equipment, operating information-based systems and interrogating and analysing their outputs all rely on the expertise and know-how of skilled and experienced defence specialists within MoD's civilian workforce.
32. In this context, political commitments to maintaining military numbers are a hostage to fortune. As the balance of defence activity shifts towards the effective use of data and the development and deployment of advanced systems, the MoD needs to be able to recalibrate its workforce accordingly. Numeric targets for military personnel inhibit this by pre-empting a proportion of the Department's budget without regard to operational impact and effect.

33. It might be argued that military staff could undertake at least some of the specialist and skilled activities that are required to meet the UK's defence requirements. However, this would not constitute a good use of the MoD's budget. The Grimstone report of 2010 highlighted the relative cost-efficiency of civilian staff, calculating that, on average, a military person costs almost twice as much as a civilian. It concluded that, other than in exceptional circumstances, there would be no case for putting military personnel into roles that could be carried out by civilians. The 2015 SDSR must recognise, where a function can be properly executed by either civilian or military personnel, that deployment of MoD civilian staff is the most cost effective approach in all cases.
34. Further, the MoD specialist civilian workforce cannot simply be substituted by putting work out to the private sector. Over the years, the potential for defence privatisation and outsourcing has been thoroughly explored and executed in successive changes of ownership or contracts. Even privatised and outsourced activities remain significantly dependent on ex-MoD employees, whether transferred or recruited from the department. Likewise, although the MoD makes use of contractors to supplement its civilian workforce, the requirements of deep security mean that there are roles and functions where contractors cannot be fully deployed even as a stopgap, meaning that permanent civilian employees must pick up the slack when short-to-medium staffing shortfalls arise.
35. Whilst not as costly in money terms as military staff, the deployment of contractors is significantly less efficient than employing permanent staff, entailing higher costs and the lesser resilience unavoidably associated with using temporary labour. The SDSR needs to take account in its recommendations of the fact that specialist skills in the MoD civilian workforce are a significant and cost-effective asset for the Department, now and in the future.

### **Investing in specialist civilian capability in MoD**

36. The preceding sections of this submission make clear both that the specialist civilian workforce is vital to the delivery of the UK's defences and that the skills requirements of those defences are evolving with new situations and emerging technologies. In this context, the MoD's training and workforce planning activities are critical to its ability to develop a civilian workforce with the right skills and capabilities. It is of particular concern, therefore, that recent commentaries have speculated that these activities will be put at risk by the budgetary impact of 'red line' commitments relating to army numbers, headline capabilities and major equipment programmes. The 2015 SDSR must recognise the value to MoD and to the UK of professional and future-proofed training and workforce development.
37. The acute need for recruitment into the civilian workforce, and investment in the staff constituting that workforce, cannot be overlooked. The age profile of the current civilian workforce is heavily skewed to late-career age groups, even taking into account prolonged working life. In order to develop its future capabilities, MoD needs to be able both to retrain and upskill existing staff and to recruit the staff who will constitute the agile and flexible workforce required for the future. In this context, the SDSR needs to give careful consideration to how best to protect the MoD's training and education functions and the funding of staff development.
38. One contributory factor to the age profile of the civilian workforce is the fact that length of service for new entrants into MoD has decreased significantly in recent

years. Although it is true that trends in the wider workforce also point to a move away from 'lifelong careers', in which individuals remain with an employer for most of their working lives, this is particularly marked in MoD. The Department is still able to recruit strong candidates for graduate development programmes, but has far less success in retaining these individuals once they have gained MoD training and experience. Further, while MoD has not historically had difficulties with retaining staff, this is changing rapidly in the face of demand from major infrastructure projects for professional and specialist skills such as procurement, surveying, engineering and technical project management, not to mention likely future requirements from the nuclear power industry.

39. Feedback from Prospect members indicates that, in general, civil servants working in specialist roles in MoD and its associated employer would prefer to stay in the public sector. They feel that using their professional skills and knowledge as civil servants gives an important degree of additional job satisfaction and credibility to what they do. This attachment that MoD civilians have to their work, however, is undermined not only by the erosion of the terms and conditions that have historically gone with public service, but also by a persistently negative Government narrative around civil servants and their contribution to society. The political scene over the next five years will make it more, rather than less, difficult for MoD to attract and retain the civilian specialists so necessary to the UK's future defences.
40. In an increasingly competitive labour market, with public service careers no longer perceived as valuable in themselves, it is essential that MoD is able to match market pay rates. Historically, the pay of civil servants has been lower than their private sector equivalents, but the differential has been presumed to be offset by high-value pensions and job security. This is no longer the perception of either existing civil servants or new entrants, given increased pension contributions and the prevailing threat of privatisation and government spending cuts. Further, pay differentials between the civil service and the private sector have widened over the course of years of pay freezes and the 1% pay cap; and private sector salaries are often supplemented by substantial non-pay benefits. The valuable skills of MoD specialist civilian staff mean that non-competitive remuneration is potentially a threat to the development and resilience of a twenty-first century defence capability for the UK. The SDSR must give consideration to the impact of its recommendations on the MoD's ability to offer the career paths and rewards that will attract and retain the specialist staff who are key to the UK's defences, now and in the future.