

SSRO

Single Source
Regulations Office

Assuring value, building confidence

Cost risk and incentives in qualifying
defence contracts: Responses to draft
discussion paper

November 2017

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1. Introduction

- 1.1. The Single Source Procurement Framework (the Framework) was introduced by the Defence Reform Act 2014 (the Act) and Single Source Contract Regulations 2014 (the Regulations). It put in place measures to ensure that, when the government does not secure the benefits of competition,¹ contracts for military goods, works and services are priced such that:
 - a. the government obtains good value for money in its expenditure; and
 - b. contractors are paid a fair and reasonable price under those contracts.
- 1.2. The SSRO has a statutory duty to keep Part 2 of the Act and the Regulations under review to ensure that good value for money and fair and reasonable prices are being achieved in contracts regulated under the Framework. The Secretary of State for Defence is expected to complete his first periodic review of the Framework in December 2017.
- 1.3. In response to issues raised by the Ministry of Defence (MOD) and a number of its defence contractors, the SSRO undertook work in 2017 to examine the treatment of cost risk and incentives in the pricing of qualifying defence contracts (QDCs). This included: analysis of data provided by QDC contractors in statutory reports; engagement with the MOD and contractors through workshops held in April, June, July and October; analysis of cost estimate data provided by the MOD for a sample of ten procurement projects; a review of literature on risk management and approaches to pricing in international single source procurement regimes; a review of issues identified by the SSRO during its consideration of referrals; a round table discussion with representatives of government departments and UK regulatory bodies on risk transfer; and engagement with relevant professional bodies.
- 1.4. Prior to finalising a report to inform the Secretary of State's review, the SSRO developed a draft discussion paper that was shared privately with the MOD, selected other government departments/agencies and a number of its single source contractors. The discussion paper aimed to describe the evidence available to the SSRO on cost risk and incentives. In each section of the paper there was an outline agenda for further discussion with stakeholders, including questions that the SSRO believed merited consideration before any decision was taken by the Secretary of State to modify the formula for pricing QDCs set out in the Framework. The SSRO invited comments and further evidence from stakeholders by the 30 October 2017. We are grateful to all those who responded.

¹ The MOD may enter into a contract without competition in cases where there is only one supplier; where it has an urgent requirement; where it is deemed desirable to maintain sovereign capability; or where there are national security considerations.

- 1.5. This document provides a summary of:
- a. the draft discussion paper;
 - b. stakeholders' responses to it; and
 - c. how the SSRO addressed the feedback provided by stakeholders in finalising a report on the issues for the Secretary of State.
- 1.6. A number of respondents provided comments on the discussion paper that related specifically to the methodology used by the SSRO to determine its annual recommendation to the Secretary of State on the baseline profit rate, which provides the starting point for determining the profit rate for a QDC. The SSRO has responded separately to stakeholders on these points.
- 1.7. Table 1 gives a breakdown of the written responses made to the SSRO in relation to its draft discussion paper.

Table 1: Responses to SSRO discussion paper on cost risk and incentives in QDCs

	Government departments/ agencies	Industry
Number of organisations invited to comment	4	31
Number of written responses	1	12
Response rate	25%	39%

2. Summary of the discussion paper

2.1. We provide below a summary of the topics covered in the discussion paper and the areas where the SSRO sought stakeholders' views and evidence.

Section 1: Introduction

2.2. This section set out the rationale and scope for the work and its context within the SSRO's wider review of the Regulations in performance of its statutory duties. It set out the evidence base available to the SSRO and the forward timetable by which the SSRO would complete a report for the Secretary of State and consult publicly on any proposed guidance changes.

Section 2: Stakeholders' proposals for change

2.3. This section considered what changes the MOD and contractors think should be made in relation to risk and incentives. It described:

- a. the current scope and purpose of the cost risk adjustment and incentive adjustment in the process to calculate a contract profit rate for a QDC;
- b. the process by which the Regulations concerning these might be amended; and
- c. the MOD's and contractors' views on how the adjustments might desirably be changed and the reasons for doing so.

2.4. We sought input on:

- a. how the changes proposed would deliver benefit to both the MOD and contractors;
- b. the circumstances in which the use of larger adjustments to the baseline profit rate may be appropriate; and
- c. what risk there was for the MOD in allowing larger adjustments to the baseline profit rate and how this could be mitigated.

Section 3: Risk

2.5. This section considered how risk is commonly defined, the types of risk affecting QDCs and how risk affects prices and profits. It provided:

- a. a definition of 'risk' based on that used by the International Organization for Standardization;
- b. a description of the risks affecting QDCs based on information provided to us by the MOD and contractors during our study, noting that:
 - some were specific to the activities undertaken or contracting with the MOD, while others were more general risks faced by businesses;
 - some were more easily quantifiable than others at contract inception; and

- some, due to their nature or magnitude, would of necessity be retained by the MOD;
- c. the definition of 'cost risk' provided in the Regulations;
- d. information on the MOD's use of standard contract terms and conditions and how these may both give rise to cost risks for contractors and limit contractors' exposure to cost risk;
- e. an explanation of how the materialisation of risk might result in higher- or lower-than expected prices for the MOD and higher- or lower-than-expected profits for contractors depending on contract terms and conditions, the pricing method for the contract, and the final price adjustment specified in the Regulations; and
- f. a description of work undertaken by the SSRO to examine the risk-related disclosures in the financial statements of a sample of the MOD's prime contractors.

2.6. We sought input on:

- a. whether the discussion of cost risk should recognise the implications for the MOD as well as contractors;
- b. what determines whether risk becomes cost risk; and
- c. how important contract terms and conditions are in allocating cost risk.

Section 4: Cost risk

2.7. This section considered evidence on the estimated scale of cost risk. It described:

- a. the importance of good cost estimation;
- b. our analysis of the estimated risk present in a sample of ten equipment projects for which data had been provided by the MOD;
- c. the level of cost variation observed at 31 March 2017 in QDCs that were agreed in 2015/16 and 2016/17;
- d. the SSRO's attempts to quantify risk contingency in QDCs agreed in 2015/16 and 2016/17 and how this was made difficult by the absence of an agreed definition of contingency and how it should be quantified; and
- e. publicly available information about the scale of cost risk and contingency in the MOD's Equipment Plan.

2.8. We sought input on:

- a. whether it was possible to use the historic data on the range of cost forecasts to quantify the extent of cost risk in QDCs in monetary terms; and
- b. how the relationship between cost risk and risk contingency in QDCs should be interpreted.

Section 5: Regulated pricing methods

2.9. This section considered how the choice of regulated pricing method and contractor performance affect contract profits. It described:

- a. the way that contract pricing method affects QDC price risk borne by the MOD and QDC profit risk borne by contractors;
- b. the operation of the final price adjustment;
- c. the application of the contract pricing methods in QDCs and qualifying sub-contracts agreed in 2015/16 and 2016/17;
- d. the application and financial impact of the cost risk adjustment in groups of contracts priced using different pricing methods;
- e. the incentives created by the contract pricing method; and
- f. the relationship observed in QDCs in 2015/16 and 2016/17 between contract pricing method and the contracted activity.

2.10. We sought input on:

- a. factors influencing the choice of pricing method;
- b. determinants of cost risk at an individual contract level; and
- c. the extent to which the risk profile of the wider equipment programme was a relevant consideration in the pricing of individual contracts.

Section 6: Contract profit rates

2.11. This section considered how contract profit rates address risk and incentives and the potential impact of changes to the contract pricing formula. It described:

- a. the effect of reductions in the baseline profit rate from 2015/16 to 2016/17 on the range of the cost risk adjustment;
- b. application of the cost risk and incentive adjustments in QDCs in 2015/16 and 2016/17;
- c. the actual profits earned by companies in the comparator group that informed the SSRO's 2017/18 baseline profit rate recommendation, including a set of the MOD's prime contractors;
- d. the results of three simulation exercises designed to examine how variation between estimated and actual costs resulting from contractors' management of cost risk impacts on potential profits (or losses) for contracts using different pricing methods and cost risk adjustments;
- e. challenges that need to be addressed in order to integrate the concept of a risk-free rate of return into the contract profit rate methodology.

2.12. We sought input on:

- a. what opportunity there is for contractors in QDCs to exceed the profits observed in the baseline profit rate comparator group companies;
- b. whether the MOD should be concerned about the possibility of a contractor making a loss in a firm price contract;
- c. the safeguards that would be needed if higher cost risk adjustments were permitted by the Regulations; and
- d. the evidence that could be used to examine the effectiveness of the incentive adjustment.

Section 7: Potential roadmap to adapt statutory guidance

2.13. This section set out the SSRO's thoughts on how its statutory guidance on Allowable Costs and adjustments to the baseline profit rate might be developed, and where improvements in the reporting for QDCs might be useful. It set out:

- a. the aims of any changes to the guidance;
- b. outline proposals for guidance changes related to the existing Regulations; and
- c. the need for any changes to the cost risk and incentive adjustments to be reflected in the SSRO's statutory guidance.

2.14. We sought input on:

- a. the difficulties stakeholders experience applying the principles in the current guidance;
- b. whether the SSRO's views with respect to reporting, Allowable Costs and the application of step 2 and step 5 in determining the contract profit rate for a QDC were appropriate;
- c. what increases in the ranges of the step 2 and step 5 adjustments might mean for the SSRO's guidance on adjustments to the BPR; and
- d. what increases in the ranges of the step 2 and step 5 adjustments might mean for the SSRO's reporting guidance.

Appendices

2.15. The discussion paper included a number of appendices of supporting information.

Appendix 1: Developing the SSRO's guidance on risk and incentives in Allowable Costs and the profit rate adjustments

2.16. This appendix provided further detail on the SSRO's outline proposals for changes to its statutory guidance on Allowable Costs and adjustments to the baseline profit rate with respect to cost risk and incentives. It included a summary of the feedback previously provided to the SSRO by stakeholders on these aspects of its statutory guidance.

Appendix 2: Existing SSRO guidance

2.17. This appendix replicated the elements of the SSRO's extant statutory guidance on Allowable Costs and adjustments to the baseline profit rate with respect to cost risk and incentives.

Appendix 3: Pricing of QDCs

2.18. This appendix summarised key elements of the Regulations related to the pricing of QDCs.

Appendix 4: Key concepts of risk management

2.19. This appendix summarised aspects of organisational risk assessment and response.

Appendix 5: MOD approaches to evaluating risk

2.20. This appendix provided an overview of approaches that may be taken to evaluating risk described in the MOD's guidance for its commercial teams.

Appendix 6: Review of public disclosures about risk

2.21. This appendix described the findings from the SSRO's review of the annual reports and financial statements of the MOD and a sample of prime contractors to ascertain what publicly available information can reveal about the risk held by the parties to qualifying defence contracts, risk management, and the capacity to alter the approach to risk transfer.

2.22. We sought input on:

- a. how differences in reporting requirements between the public and private sector affect our ability to compare the risk held by the MOD with that held by its contractors;
- b. how decisions about what is material to the MOD's or contractors' financial statements affect what is reported about provisions and contingent liabilities; and
- c. the information that would be needed to understand contractors' appetite for taking on risk.

Appendix 7: The Yellow Book Risk/Reward Matrix

2.23. This appendix presented the approach used to adjusting for risk in the profit allowance for non-competitive government contracts prior to the introduction of the Single Source Procurement Framework.

Appendix 8: Cost risk in the baseline profit rate

2.24. This appendix described a framework for considering the sources of uncertainty which give rise to risk in commercial or financial transactions provided by the OECD in its transfer pricing guidelines.²

² OECD (2017) *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*.

2.25. We sought input on differences, if any, in the profile of risk between the activities of the baseline profit rate comparator group companies and QDCs, with reference to the following categories of risk identified by the OECD:

- a. strategic risk or marketplace risk;
- b. infrastructure or operational risk;
- c. financial risk;
- d. transactional risk; and
- e. hazard risk.

Appendix 9: The risk-free rate of return on capital

2.26. This appendix considered approaches to quantifying the risk-free rate of return on capital.

3. Stakeholder responses

3.1. The SSRO reviewed the responses received from stakeholders and the issues raised. A summary of the key points made by stakeholders related to each section of the draft discussion paper is provided below together with our commentary on how this informed the final report to the Secretary of State. The points set out below reproduce, in full or in part, statements made by respondents and do not reflect the views of the SSRO.

Section 1: Introduction

3.2. No specific comments were made on this section.

Section 2: Stakeholders' proposals for change

3.3. Stakeholders responded as follows.

Risk and profits

- a. Defence contracting is complex and increasingly risky. Industry respondents made specific reference to integration and business/site risks; risks associated with output/availability contracts; and the risks of long-term contracting.
- b. The current profit methodology stifles innovation and investment and restricts the debate on risk transfer.
- c. Evidence suggests that some single source contracts provide marginal incentives which makes it harder to justify entering into a single source contract when better returns are available elsewhere.
- d. Contractors may forego the riskier UK single source defence contracts as other government procurement regimes allow a greater adjustment for risk than that in the Framework. The reduction in the Baseline Profit Rate (BPR) would inform decisions on the sectors in which industry invests and expands, particularly given shareholders' expectations on profitability.
- e. Lower profits in qualifying defence contracts (QDCs) would impact on contractor investment in research and development and, consequently, on defence capability. Profits should cover the contractor's weighted average cost of capital.
- f. A risk-adjusted profit rate should provide sufficient reward to encourage contractors to accept risk, provide an adequate rate of return to shareholders, and have sufficient headroom to cover disallowed costs, retain appropriate skills and capabilities and invest in more efficient processes and management techniques.
- g. The contractor has to generate sufficient surplus to create funds for investment in future capability, particularly in defence where the MOD's funding in research and development has halved in the last three years.
- h. The MOD noted that the current pricing constraints had resulted in a series of protracted contract negotiations. It believed there was too much focus on profit and more focus was needed on Allowable Costs.

Cost risk adjustment

- i. The current range of the cost risk adjustment did not anticipate a reduction in the BPR, which has reduced the range of profits available in QDCs.
- j. The current cost risk adjustment range was an arbitrary figure, not based on empirical evidence.
- k. One contractor suggested a widening of the cost risk adjustment range: from ± 25 per cent to -25 per cent and +50 per cent of the BPR. As the BPR was expected to fall to 6 per cent, a larger negative adjustment could discourage contractors from taking contracts.
- l. There should be a trigger for going outside 'the standard range' [unspecified], rather than it being available routinely.
- m. Risk should be assessed at contract and site/business analysis stage and not at the baseline profit rate stage.
- n. Widening the cost risk adjustment would facilitate risk transfer to contractors, reducing the MOD's exposure to cost risk and increasing certainty for the government that it would receive value for money.
- o. There needs to be an appropriate and practical method to set the cost risk adjustment such that agreement could be reached between the MOD and contractors without recourse to specialists.
- p. Existing reporting requirements are adequate to provide the level of transparency needed for larger adjustments to the baseline profit rate, if permitted.
- q. The approach taken by the United States government to determining a risk allowance for non-competitive contracts using its Weighted Profit Guidelines was viewed as a more proportionate approach to agreeing a risk allowance than that provided for by the UK Framework. Industry respondents suggested that consideration be given to developing a UK version of the accepted US Guidelines.
- r. The MOD provided a more detailed outline of its proposals for navigating between a 'floor' ('capability') and 'ceiling' risk-adjusted profit rate using a mechanism based on quantifying the variation between the expected Allowable Costs and the associated 90th percentile (P90) estimate of Allowable Costs.

SSRO comments/action

3.4. The final report was amended to note:

- a. the arbitrary origin of the present ± 25 per cent range and the failure to consider the effect a lower baseline profit rate would have on the range of profits available to differentiate contracts with varying risk profiles (2.7);
- b. the importance for contractors of the cost risk adjustment to correct for a perceived lack of comparability in the profile of risk faced by QDC contractors and the baseline profit rate comparator group companies (2.7);
- c. the benefits for the MOD of a wider adjustment, as perceived by contractors (2.8);
- d. the desire for a mechanism for agreeing the adjustment that did not require recourse to third parties (2.11);
- e. that one of the ways contractors push cost risk back to the MOD is through only accepting cost reimbursement contracts (2.12);
- f. that when potential QDC profits are lower than those available elsewhere it may be hard for contractors to justify contract acceptance to investors and shareholders (2.13);
- g. that low profits may stifle innovation and investment in research and development (2.13);
- h. that the SSRO has previously considered the question of investors' and shareholders' expectations for returns on investment in its discussion paper on calibrating profit rates in QDCs (2.13);³
- i. contractors' preference for a US Weighted Profit Guidelines approach to determining a risk allowance for non-competitive contracts (2.14);
- j. the impact of pricing constraints on contract negotiations (2.16); and
- k. the more-detailed MOD proposals (2.17-2.19) and the issues raised by these (2.20).

Section 3: Risk

3.5. Stakeholders responded as follows:

Quantification of risks

- a. Risk is defined as 'cost risk'. A cost risk is when there is an impact on the actual costs incurred.
- b. In defining risk, the quantifiable elements (as defined within a risk register and accepted as Allowable Costs) should be separated from unquantifiable risks (which should be covered primarily through the cost risk adjustment).

³ SSRO (2017) *Developing the SSRO's Approach to Calibrating Profit Rates in Single Source Contracts: Discussion Paper*.

- c. Industry respondents agreed with the MOD's assertion that the cost base to which profit is applied should represent the expected cost of performing a contract and [therefore] include the cost of risk.
- d. Variability in Allowable Costs should influence the cost risk adjustment.
- e. The risks of subcontractors may not be fully assessed and compensated for.
- f. Some elements of risk can be quantified on a mechanistic basis but some elements are experiential. It is useful to have common terminology and a risk reporting structure to record and capture risk considerations.
- g. The aim should be to have standardised, simplified and repeatable processes that meet the intent of the Act and Regulations which can be implemented at the working level across all contractors, large and small. A set of principles should flow down to the internal and external supply chain (including SMEs).
- h. Training in the assessment of risk and risk attribution would be useful to avoid artificial constraints on the cost risk adjustment value. Training should identify the types of arguments that underpin the adjustments.
- i. Smaller-value contracts may have less extensive risk articulation and assessment processes. Guidance needs to reflect this.

Risk inside and outside costs

- j. The current Single Source Cost Standards and cost risk adjustment methodology only consider and allow for risks that are inside costs. Many risks lie outside costs and should be allowed for within contract pricing. These include: risks between the P90⁴ and P100 percentiles and the 'unknown' risks of long-term contracting; risks in contract terms and conditions (for example, uncapped liabilities and indemnities, damages and parent company guarantees); disallowed costs; site and enterprise risks, such as business continuity, latent defects, employee liabilities; business risk, such as labour availability and obsolescence; and market risks, such as commercial terms and supply chain sustainment.
- k. Adjustments to the BPR should account for project risks that exist beyond confidence level and for non-project risks set out in the risk register.
- l. Cost risk should also include unquantifiable risks and account for revenue, business, post-delivery and performance risks. Other unquantifiable risks include a parent company guarantee, which is a liability on the balance sheet and has an impact on the financial health and viability of a company.

Financial reporting of risk

- m. The treatment in financial reporting of long-term defence contracts means it is difficult to assess the exposure to risk from a review of provisions reported in financial statements. Other indicators, like the company's weighted average of cost of capital (WACC), may be useful.

4 One respondent highlighted risks between P70 and P100.

Risk management

- n. Consideration should be given to managing risk through clear work instructions, not just guidance, to ensure consistency for the MOD and contractors across projects, business units and over time.
- o. Training should focus on active risk management and opportunities for the parties to reduce the total cost of acquisition.

Other

- p. Contract terms should be clear on how risk is allocated between the contractor and MOD.
- q. If the contract profit is applied across the whole contract it could ease incorporation of amendments.
- r. Cost that are disallowed from a rate claim do not 'disappear' but manifest themselves against other work or drive the internal profit rate to a low level which may be unsustainable or no longer approved at a group level. Contractors drive out costs in the delivery of projects rather than skim the mark-up applied.

SSRO comments/action

3.6. The final report was amended to note:

- a. the desire for risk outside of Allowable Costs to be considered in the cost risk adjustment and the risks contractors highlighted as being outside costs (2.9);
- b. the SSRO's understanding of risk outside cost (2.9);
- c. the desire for training in the assessment of risk and risk attribution and to improve the management of risk to reduce the total cost of acquisition (2.11);
- d. that industry supports the MOD's assertion that the Allowable Costs for a QDC should be the expected cost of delivery taking account of risk (2.19);
- e. that a parent company guarantee was an example of an unquantifiable risk (3.11);
- f. the view that risks which were easier or harder to quantify should be treated differently in the pricing of QDCs (3.11); and
- g. the difficulty of assessing contractors' risk exposure from a review of provisions reported in financial statements and the potential use of the WACC for this purpose (3.28).

Section 4: Cost risk

3.7. Stakeholders responded as follows:

- a. The current +25 per cent maximum cost risk adjustment when applied to the BPR has a limited effect on encouraging risk transfer and accommodating the economic realities of the defence industry. It would not be appropriate to have a negative risk adjustment to the BPR.
- b. A widened cost risk adjustment would allow the MOD flexibility to enter contracts for projects which include a wide range of risks inside and outside of the project risk register. These includes risks related to: contract type; pricing methodology; specific terms and conditions, including liquidated damages and key performance indicators; type of work; project requirements; project timing/duration; and interdependencies on others.
- c. A cost risk adjustment that was not tied to the BPR, but which was an absolute value of the contract costs, would, it was suggested, more adequately reflect the potential unpriced risk in QDCs, irrespective of variation in the BPR.
- d. QDCs tend to be long-term, complex and large contracts. The cost forecasts in contract reports available for analysis by the SSRO can only be considered as illustrative of the extent of cost risk in QDCs at this stage. They will be more accurate as QDCs near completion.
- e. One respondent referred to a report by the National Audit Office [no citation given] which found that 50 per cent of the risks that occurred in a contract were unknown at contract inception. This was felt to provide a reflection of the experience of defence contractors undertaking long-term contracts.
- f. Contractors estimate cost and risk in different ways. As a result, no consensus exists on how the link between cost risk and risk contingency should be interpreted.

SSRO comments/action

3.8. The final report was amended to note:

- a. views on the limited encouragement for risk transfer given by the existing cost risk adjustment range and the view that greater flexibility would allow different types of risk to be accommodated (2.8);
- b. the proposal to remove the link between the cost risk adjustment rate and the baseline profit rate in preference for a risk adjustment that would be an absolute value of the contract costs (2.8);
- c. that estimates of cost variation will be more accurate as QDCs near completion (4.7); and
- d. that there are different ways to estimate cost and that there is no standard approach linking cost risk to risk contingency (4.8).

Section 5: Regulated pricing methods

3.9. Stakeholders responded as follows:

- a. The SSRO's summary in Figure 5 of the cost risk borne by the MOD and the contractor in a volume-driven contract did not reflect the risks to the contractor of higher- or lower-than-expected demand by the MOD at fixed unit prices.
- b. The contract pricing method is determined by the level of uncertainty of the cost estimate. Contracts that relate to activities in the early stages of the CADMID cycle⁵ tend to have greater uncertainty and risk, and will use a pricing method that allocates risk to the MOD. There are times when the MOD will choose the contract pricing method prior to the determination of cost estimates.
- c. Cost risk is low when the contract is certain, known, understood, has been produced or performed previously or can be estimated by reference to previous work.
- d. Risks beyond the contractor's control include obsolescence, supply chain uncertainty, economic stability, relationship with other existing and prospective work, availability of skills and other resources.
- e. The MOD incurs a positive benefit in transferring risk. If it did not, the MOD would opt to retain risk in-house.
- f. The final price adjustment is a suitable mechanism for the MOD to address unexpected profits.

SSRO comments/action

3.10. The final report was amended to note:

- a. that risk allocation in volume-driven contracts also depends on the MOD's ability to estimate volume requirements (Fig 5);
- b. that the final price adjustment is perceived as a suitable mechanism for the MOD to address unexpected profits (5.7); and
- c. comments on factors determining the choice of contract pricing method (5.21).

Section 6: Contract profit rates

3.11. Stakeholders responded as follows:

- a. The government's focus is on the contract profit rate but profit is small compared with the broader cost base for QDCs. The reduction in the baseline profit rate has led to small savings across the defence budget.
- b. While profit rates make up only a small element of contract price it may disproportionately influence the health of a business. Significant damage may have been done to the underlying sustainability of the defence industrial base, on which the MOD increasingly relies to make up for its own resource shortfall.

⁵ Concept, Assessment, Demonstration, Manufacture, In-service and Disposal.

- c. There will be opportunities to exceed benchmark profit rates in QDCs when contractors are competent in identifying and managing risk to minimise the impact on cost, there is efficient performance, step changes in technology, changed economic conditions and competition in the supply chain.
- d. Companies often take on a few, large contracts, and should be compensated for the risk transfer.
- e. The potential to secure high profits by low levels of outperformance for contracts with high cost risk adjustments reflects the high level of risk contractors bear and the potential losses if the risk were to materialise.
- f. The MOD can minimise cost erosion by working in an efficient and timely manner. One contractor said that 10 to 15 per cent of cost can be eroded through delays in decision making or the provision of approvals and a general lack of response in the day-to-day activity associated with executing the contract.
- g. The costs of reporting and bureaucracy in the defence sector results in costs for contractors which are not reimbursed.
- h. Contractors will always pursue maximum performance and returns and higher cost risk adjustments will not reduce their incentive to avoid risk.
- i. The MOD's defence contractors are engaged in long-term commitments. They are not easily able to leave the market or enter new markets as a remedy to low profits or to alleviate a high-risk profile, in the same way that some companies in the BPR comparator group operating in other markets are able to.
- j. The MOD should be concerned about the possibility of a contractor making a loss in a firm price contract. There should not be a risk of serious contractor failure due to onerous contract terms. If the contracting process for Allowable Costs and profit is reasonable, the supplier can decide to accept or reject a contract. The contractor should be responsible for its losses but MOD may step in for exceptional cases.
- k. In the event of loss a contractor can opt to terminate the contract or apply for insolvency. A large company may absorb some of the loss as they have a strong financial position provided there is appropriate, fair and reasonable returns on its costs. Smaller companies may not be able to absorb the loss. This is a difference between companies that operate as prime contractors to the MOD with an annual turnover exceeding £500 million and the majority of the BPR comparator group companies with turnover of less than £50 million annually.
- l. Contractors identified the following safeguards related to the current cost risk adjustment: risks will be evidenced and demonstrated; the MOD will review the contractor's cost submission for risk inclusion and the balance between cost and cost risk adjustment; risks will be monitored through reporting; and either party can seek an opinion or a determination. These safeguards were deemed adequate by respondents.

Incentive adjustment

- m. In the past, lump sums might have been available for achieving an incentive objective; under the current regime, only profit is available though it was never intended to make up for poor returns.
- n. The current incentive adjustment bandwidth was considered too small to provide a meaningful incentive and should be widened. This adjustment did not affect cost and was purely a pricing matter. Some consideration should be given to taking the incentive adjustment outside of the six-step process for determining the contract profit rate. There was limited support for the adjustment continuing to be made on a percentage point addition basis.
- o. Incentives will encourage performance the MOD values which is good for all parties. The incentive objective must be outside the normal contract requirements, should be applied consistently and should not be discretionary.
- p. While a proposal to increase the incentive adjustment range was welcome, the guidance around what it should be used for should be clearly defined so that industry can claim the adjustment.
- q. It may be more efficient in some contracts if a simpler KPI structure was permitted within the pricing structure as this would allow a rational approach to pain/gain for under/over performance.

SSRO comments/action

3.12. The SSRO responded separately to stakeholders on the comments made concerning comparability and the BPR methodology.

3.13. The final report was amended to note:

- a. industry comments on the relative importance of profit and Allowable Costs in QDC prices and the potential impact of lower profit rates on the financial health of contractors (2.13);
- b. the proposal that the incentive adjustment be separated from the six-step process to calculate the contract profit rate for a QDC (2.22);
- c. the desire for clearer guidance on the incentive adjustment to ensure that it is applied consistently and that it is not discretionary (2.23);
- d. that schedule risks may result from delays in MOD decision-making or the provision of funding approvals (3.9); and
- e. the presumption of higher exposure to cost risk in contracts with higher cost risk adjustments (6.18).

Section 7: Potential roadmap to adapt statutory guidance

3.14. Stakeholders responded as follows:

- a. The SSRO Guidance conflates contingency, risk, cost risk and the cost risk adjustment.
- b. One contractor stated that the current guidance is useful, but not prescriptive enough as it does not adequately identify and allocate risk as an Allowable Cost as well as within the cost risk adjustment.
- c. The requirement to include risks that can be controlled in Allowable Costs and those that cannot be controlled in the cost risk adjustment is illogical. Currently, if the contractor defined indirect risk, due to its nature, it would likely not be an Allowable Cost as it would be difficult to quantify it in the business cost base.
- d. The cost risk adjustment should be applied more broadly. A financial assessment of factors associated with the risk of a contract, such as confidence levels, long-term contract risks, uncertainty of outcomes and residual risks associated with prime contractors (to name but a few) would be part of the cost risk adjustment assessment.
- e. A much broader range of adjustment would help to accommodate these elements and allow for a more representative adjustment than is currently provided.
- f. The current range of 25 per cent is too narrow to properly accommodate all the parameters that such an adjustment should factor. The US system allocates specific ranges of adjustment for different elements of the profit calculation. Each theme of risk is represented in the final adjustment. A base adjustment and adjustment for each element allows for anything up to 15 per cent rate of return on the high end of risk with a cap at 10 per cent on the lower end. This sustains defence capability and encourages contractors to remain in the sector. This is a very different approach, with a focus on the long-term objectives, to the one applied in the UK.
- g. If the ranges were increased then the basis for their application should be clarified, together with some parameters around some of the influencing factors that inform the adjustment figures.
- h. The reporting system is a burdensome method to record risk. Additional reporting is unnecessary and would not provide additional benefit in estimating cost or calculating the cost risk adjustment.
- i. The standardised reporting of risk in percentiles [from the cost model] is appropriate where projects are data rich, for instance those supported by Monte Carlo analysis. However, most projects will be data poor and will have to rely on a business case approach.
- j. Reporting should reflect the risk assessment methodology and a standardised approach is not likely to be successful in these circumstances.
- k. The guidance will require updating to reflect the outcome of proposed changes. It should be principles-based rather than prescriptive and allow for the wide variety of contracts performed and the availability of data.

SSRO comments/action

3.15. The final report was amended to note:

- a. contractors' preference for a US Weighted Profit Guidelines approach to determine a risk allowance (2.14); and
- b. recognition that contractors welcome fewer reporting requirements and that data availability will make standardised risk reporting harder (7.5).

Appendices***Appendix 1: Developing the SSRO's guidance on risk and incentives in Allowable Costs and the profit rate adjustments***

3.16. Stakeholders responded as follows:

- a. The current guidance should remove inconsistencies, and provide greater explanation and clarification in some areas.
- b. At this stage, any assessment of the guidance will reflect the outcomes from legacy contracts under the previous regime as a limited number of QDCs and qualifying sub-contracts have reached their conclusion.
- c. Industry will provide comment on the appropriateness of Allowable Costs, and step 2 and 5 for price determination of a QDC when details are provided.

SSRO comments/action

3.17. The final report was amended to note:

- a. that, subject to the outcome of the Secretary of State's review of legislation, the SSRO will consider what changes are needed to guidance and consult publicly on any proposed changes (7.1); and
- b. contractors' desire for consistency and clarity in the guidance (7.2).

Appendix 2: Existing SSRO guidance

3.18. No comments were provided.

Appendix 3: Pricing of QDCs

3.19. No comments were provided.

Appendix 4: Key concepts of risk management

3.20. No comments were provided.

Appendix 5: MOD approaches to evaluating risk

3.21. No comments were provided.

Appendix 6: Review of public disclosures about risk

3.22. Stakeholders made the following comments:

- a. In looking at provision for risk and contingent liabilities in financial statements, the SSRO is likely to only have a partial view of risk. Most risks were not disclosed in financial statements but are held within the long-term contract accounting margins (for example, within stock/inventory). When viewed in isolation, many risks were unlikely to be material, and would only be accounted for if they matured.
- b. Reputational risk, performance risk, revenue risk, investment risk and cash flow risk are all potentially material to the health of a company but are not represented on the balance sheet or the statutory accounts.
- c. Contractors manage a multitude of risks at any time. It is a core part of the role for programme managers in system integrators and reflects how such primes earn their returns and build shareholder value.
- d. A contractor's historic appetite for risk may be a misleading indicator of its future willingness to take it on. The appetite for risk can only be assessed in contract discussions.
- e. The risk industry accepts in taking on contracts is the only element that is relevant to constructing a price. An adequate balance sheet to support the risks the MOD is seeking to transfer is all that is required by the MOD.

SSRO comments/action

3.23. The final report was amended to note:

- a. that a contractor's financial statements provide only a partial view of its risk exposure (3.28);
- b. types of risk that may not appear on the balance sheet (3.29); and
- c. that a historic appetite for risk does not indicate a future capacity to take on risk (3.29).

Appendix 7: The Yellow Book Risk/Reward Matrix

3.24. No comments were provided.

Appendix 8: Cost risk in the baseline profit rate

3.25. Stakeholders made the following comments:

Comparability: General

- a. Companies performing single source contracts are susceptible to the risks cited in the discussion paper.

- b. Contractors face a number of specific risks not evident to the same extent for comparator group companies: regulatory risk (for example, related to the Office for Nuclear Regulation); a highly unionised specialist workforce (with employment terms and conditions retained following transfer under the TUPE regulations); large programmes with difficult load management (both under and overloads, at the macro and individual specialist skill level); aging sites (transferred from the MOD, often in poor condition); security risks; obsolescence; MOD-required transformation and restructuring; pension risks; etc.
- c. The contractors recognise that some companies may be dominated by single source contracts, others may have a mix of competitive and non-competitive contracts and others have mainly commercial contracts. Success in commercial markets demonstrates that QDC contractors' cost baselines are competitive.
- d. Defence companies plan for the long term and build up capability over years with the need to "market" even though they are in a single source environment. This is not fully accounted for by cost risk.
- e. Many comparator companies in the baseline profit methodology have more protection from consumer demand because they can enter and leave a market sector almost at will. This provides protection for risks associated with their business model. This would lower their need for profit. Some companies in the comparator group rely more on cash flow and turnover.
- f. The top 16 suppliers to the MOD make up 76 per cent of the MOD's total annual expenditure. These suppliers have turnover exceeding £500 million with significant balance sheet strength. Companies of similar standing should be used as a comparator set of companies for the assessment of a baseline profit rate. The companies selected by the SSRO are focused on smaller scale, commodity supply/service activity, rather than the more complex systems and platform integration activity provided by suppliers to the MOD with turnover greater than £500 million.
- g. The websites for comparator group companies suggest that they perform significantly less risky projects than QDCs. There is no indication that comparator group companies perform the riskier long-term, technically complex contracts with demanding systems integration and long-term support requirements often found in contracts subject to the regulatory framework. Also, comparator group companies do not perform riskier availability or output-based contracts or having to 'sell forward' savings in the contract price, as is common when contracting with MOD.
- h. The majority of companies in the BPR comparator group operate in the fast-manufactured (sic) consumer goods and services (FMCGS) industry. These companies are not subject to the same risks and profit erosion that would be present in a market dominated by long-term commitments, complex requirements, multiple interdependencies and long-term residual obligations and liabilities. In a FMCGS sector, a company can enter and leave a market segment which reduces the commercial imperatives to generate sufficient return in one specific area to encourage shareholder investment and maintain shareholder value.

- i. It is important to consider what risk incidence and impacts companies involved in FMCGS would encounter other than public liability for any damage caused by the premises or products. Large defence contractors face specific site risks and are often large regional employers.
- j. A parent company guarantee (PCG) from a large defence prime contractor is worth significantly more to the MOD than a PCG from a company with less than £50 million of turnover in the comparator group of companies. Such guarantees remain a liability on the balance sheet and so have a significant effect on the financial standing of said parent company.
- k. The unquantifiable risks are different from those experienced by the comparator group.

Comparability: Working with the MOD

- l. Long-term plans for defence frequently change, and are at the whim of political decisions, government funding, international relations, and public opinion.
- m. Industrial capability decisions are influenced by long-term government spending plans. But the MOD also has urgent operational requirement (UORs) which highlights that requirements change and are not long term. The MOD had, it was said, assured contractors that it would be more accurate in its long-term aspirations to allow industry to create a cost base designed around upcoming requirements, but examples existed of short notice cancellation or delay of equipment programmes.
- n. There are unique challenges to contracting with the MOD: no single decision maker; adversarial relationships; procurers are separate from end users; customer who may not fully understand the specification and prone to changing the requirement; risk of agreed price being amended under the Act; high cost of management due to the MOD's 'man-marking' and reporting requirements; frequency of personnel churn in the MOD with loss of corporate knowledge and expertise; and over-optimistic expectations.
- o. Although the MOD may step in *in extremis* when a risk matures, this is offset by the risks of single source MOD work. In addition, the MOD also has contract termination provisions in its contracts and can end a contract if the contractor fails to perform.
- p. The MOD suppliers are appointed on their ability to perform prime contracts and insulate the MOD from risk. The MOD is therefore selecting the strong credit risk companies. The MOD will only place critical contracts with companies able to manage them and having appropriate financial strength. The MOD seeks parent company guarantees for this reason.
- q. The only benefit that defence companies have which is not applicable to the comparator group is from a credit risk position.

- r. Unlike single source contractors, comparator group companies seek advance payments from their customers and maintain a positive cash flow throughout the project duration. The government does not allow pre-payments or suppliers to have positive cash positions: payments can only be made against delivery or achievement. Commercial contracts are of shorter duration, less complex and less prone to change. The MOD prime contracts are of longer duration, highly complex and more likely to change in part due to the political environment and the availability of funding.
- s. Contractors are under continuous pressure from the MOD to achieve cost savings and reduce prices on grounds of affordability. Contractors 'sell forward' guaranteed savings on current baselines leaving them with all the downside risk without the corresponding upside benefits. They are placed at more risk than companies in the comparator group.

Comparability: Hazard risk

- t. Compared to companies in the comparator groups, contractors are often on large, complex, diverse sites which are susceptible to hazard risk. It is difficult for contractors to insure against such specific and diverse risks. Some contracts involve either the use of hazardous materials in manufacturing processes or the delivery of products containing hazardous materials, for example, munitions and nuclear materials.
- u. The contractor will normally be first liable for hazard risk. Some very large risks, for example, nuclear risks, may be shared, with the contractor liable for the first £X billion and the MOD accepting liability above this threshold. Unless sale agreements or contracts shift hazard risk to the MOD the contractor's business must be at risk.
- v. If a significant risk occurs, it is likely that the contractor will have lost their site, balance sheet, the site's future earnings and possibly a loss on the parent's resources through a parent company guarantee even though the government owns the ultimate 'risk'.

BPR methodology: Benchmarking corporate profits

- w. Industry stakeholders challenged the approach of using company profits as a benchmark to derive the BPR for QDCs in the SSRO's BPR methodology. Company performance should not be approximated with project performance.

BPR methodology: adjusting for disallowed costs

- x. To make a meaningful comparison, allowances should be made for costs that are currently disallowed when pricing QDCs and QSCs and risks that are not considered via the current cost risk adjustment methodology.
- y. An unintended consequence of the regime is that it can drive up the cost of a single source contract. This occurs when companies cannot share costs across the whole business due to the need for costs which are not allowed in QDCs to be managed separately. Contractors may have to transfer disallowed costs to other parts of the business or create a standalone rate structure for single source contracts, which can have a disproportionate impact on the competitive side of their business.

BPR methodology: mean versus median

- z. The current BPR methodology uses a median profit rate and does not differentiate between the market sectors.
- aa. The Currie report recommended maintaining the 'Yellow Book' which would include maintaining the weighted average to calculate the profit rate methodology.

BPR methodology: turnover threshold

- ab. The baseline profit rate methodology should set a higher turnover threshold for companies in the comparator groups, to better reflect the types of companies that operate in the defence industry.
- ac. There is a difference between the mean profit rate of companies in the comparator group and the mean profit rate for companies in the group with a higher turnover threshold, that better represent the defence industry. The cost risk adjustment would have to accommodate the difference: c.2 per cent.
- ad. If the threshold for comparator companies was lifted to £50 million then the evidence of those companies would suggest a difference (c.3-4 per cent) between the two comparator lists. If the median was set against a modified list of comparators based on a bottom line of £50 million then scope to conclude a small adjustment for cost reimbursable contracts could be set at 3 or 4 per cent. But using the median in its current form already takes account of risk-free contracts and the range of returns that the list represents is sufficiently broad to discount any negative adjustment meaning the BPR should be the baseline against which all adjustments should be calculated.
- ae. The cost risk adjustment should reflect a fair return for the defence sector given that a weighted average is not used and the threshold is open to companies at the lower end of the risk profile (that is, those below £500 million annual turnover) which are unrepresentative of the defence sector.

SSRO comments/action

- 3.26. The SSRO responded separately to stakeholders on the comments made concerning comparability and the BPR methodology.

Appendix 9: The risk-free rate of return on capital

- 3.27. No comments were provided.

4. Next steps

- 4.1. The responses from stakeholders on the draft discussion paper have informed the development of the SSRO's report and recommendations to the Secretary of State on the pricing of QDCs in relation to cost risk and incentives. We await with interest the outcome of the Secretary of State's review of the Framework in December to learn what, if any, changes will be made and in what timescale.
- 4.2. In the interim, the SSRO has considered what changes to its current guidance on Allowable Costs and adjustments to the baseline profit rate might be desirable to facilitate stakeholders' understanding and application of the current Regulations.
- 4.3. Subject to the outcome of the Secretary of State's review of the legislation, the SSRO will consider what, if any, changes are required to its guidance and will consult publicly, in due course, on any proposed changes.

