

From: [REDACTED]
To: [REDACTED]
Cc: [Enquiries](#)
Subject: Re information request
Date: 09 April 2020 16:00:58 [20190902-](#)
Attachments: [RoRR working paper.pdf](#)

Dear [REDACTED],

Thank you for your enquiry received on 8 April 2020, which we are treating as a request under the Freedom of Information Act. This has been allocated reference RFI 033.

Paragraph 10.4 of our consultation on the 2020 review of the procurement framework for single source defence contracts references the SSRO working paper on the review of reporting requirements, released to key stakeholders on 2 September 2019. I confirm that the SSRO holds this information and I have attached a copy of the working paper to this email.

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date of receipt of the response to your original request and should be addressed to: Neil Swift, c/o Enquiries, enquiries@ssro.gov.uk.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Best wishes,

[REDACTED]
Senior Regulatory Policy Manager
Single Source Regulations Office

15-17 Furnival Street, London EC4A 1AB
[\[REDACTED\]](#)

From: [REDACTED]
Sent: 08 April 2020 09:22
To: Enquiries <enquiries@ssro.gov.uk>
Subject: Re information request

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CAUTION: External Email

Dear Sir/Madam,

My name is Dr Luke Butler. I am currently an Associate Professor in Law at the University of Nottingham. I am preparing a substantial monograph on the single source procurement regulatory framework. The SSRO has previously very generously provided documents to me on request.

I write to enquire as to whether the SSRO could provide a document referenced in the 2020 review of the procurement framework for the single source defence contracts consultation. The document is identified at p.72 under the heading "Segmented contract profit rates" at para.10.4. You state that, as part of the current review of legislation, "the SSRO issued a working paper in September 2019". This working paper appears to pertain to a discussion of the merits of adopting more than one contract profit rate. Typically, the SSRO specifies the title of a working paper in the main text or a footnote. However, there appear to be few if any other mentions of this working paper in other SSRO documents. Therefore, I hope the above provides sufficient information to identify that document.

I have carefully followed every SSRO document on review of the methodology from 2015 up until the present and am acutely aware how important this issue is.

I would therefore politely request you to provide this document. If you could kindly facilitate this request, I should be most grateful. As ever, I will duly credit the SSRO for responding to the request in my work.

I look forward to hearing from you in due course.

Best regards,

[REDACTED]

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SSRO

Single Source
Regulations Office

Working paper

Review of reporting requirements
2 September 2019

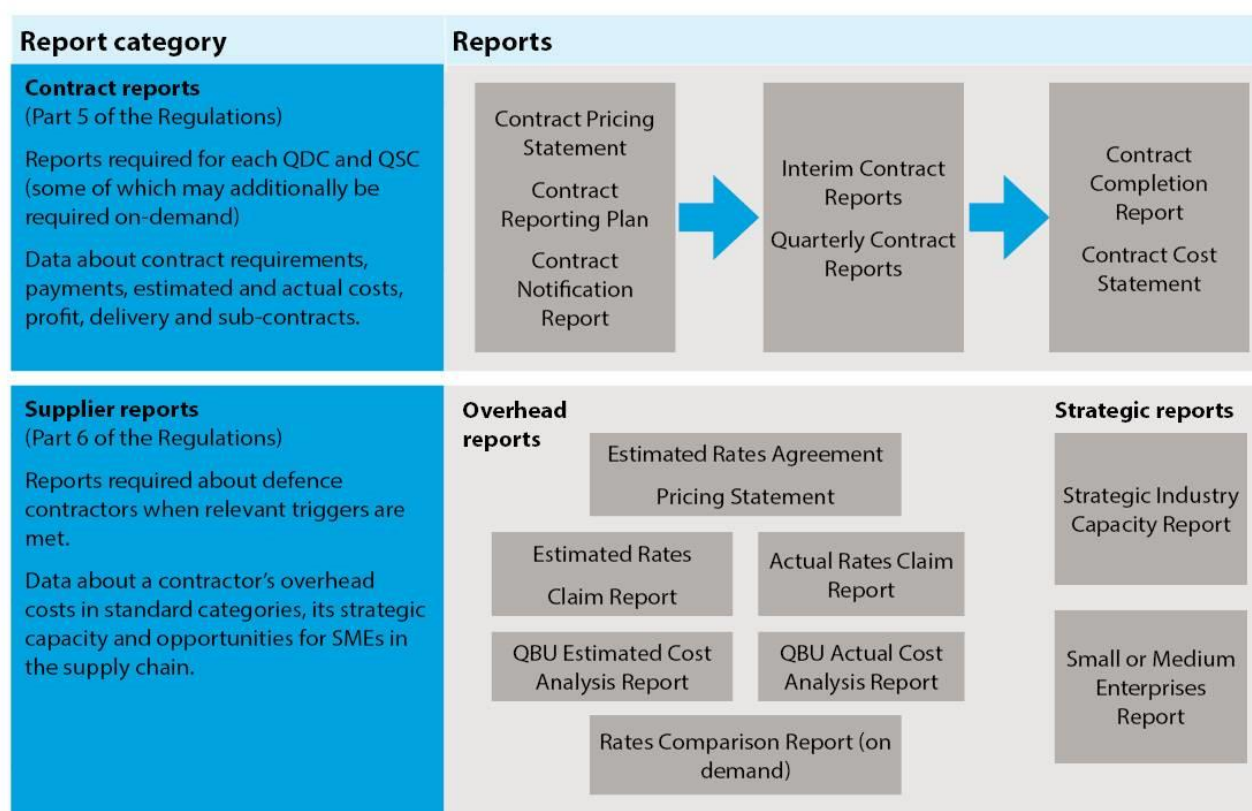
1. Introduction

- 1.1 The Defence Reform Act 2014 (DRA) creates a regulatory framework for single source defence contracts. The SSRO is required to keep under review the provision of Part 2 of the DRA and the associated Single Source Contract Regulations 2014 (the Regulations) and may recommend appropriate changes to the Secretary of State.
- 1.2 The regulatory framework requires greater transparency on the part of defence contractors who must submit reports to the SSRO and the MOD about qualifying contracts. These reports are a fundamental component of the regime, providing details of prices that can be used to support the MOD's procurement decisions and contract management to achieve value for money and fair and reasonable prices. There is a growing body of data held in the SSRO's Defence Contract Analysis and Reporting System (DefCARS) as a result of reports submitted since 2014.
- 1.3 The SSRO is carrying out a review of reporting requirements which looks at the intended purpose of reported information, how it is being submitted and used, and whether requirements are proportionate. The review is a priority under the **SSRO Data Strategy** and is expected to remain an important part of our work in the coming years. In 2019/20, our review is focusing on:
 - the defined pricing structure used in some of the contract reports in Part 5 of the Regulations;
 - the reporting of amendments and variance in contract reports; and
 - the overhead reports in Part 6 of the Regulations.
- 1.4 These themes have been prioritised following engagement with stakeholders in March and April 2019, who generally supported both the review and the three themes. Stakeholders agreed the importance of establishing a shared understanding of the purpose of the reports and the value that the data adds to the procurement and management of qualifying contracts.
- 1.5 We are seeking input from stakeholders to inform the review. We held workshops in May 2019 and a range of bilateral meetings between June and August 2019. Stakeholders are now invited to comment on this working paper, which was issued on 2 September 2019. Written feedback should be sent to **consultations@ssro.gov.uk** by 27 September 2019.
- 1.6 We have scheduled a workshop on 12 September 2019 to discuss the proposals. If you wish to attend, please contact us at **consultations@ssro.gov.uk**.
- 1.7 The SSRO will consider the responses and decide on any further action. There is a range of action we may take, following the review, to promote the efficient collection of good quality data and minimise any burden associated with reporting. We may, for example, change how data is standardised in DefCARS to increase comparability, or produce revised reporting guidance. We may also recommend that the Secretary of State changes the reporting requirements in the Regulations. Any proposed changes to legislation will be the subject of consultation in early 2020.

2. Legislative background

- 2.1 The regulatory framework for single source defence contracts was introduced by Part 2 of the DRA and the Regulations and came fully into effect in December 2014. It establishes a scheme of regulation that provides for the pricing of single source contracts and for increased transparency from contractors.
- 2.2 Defence contractors are required to provide reports to the SSRO and the MOD if they hold qualifying contracts under the regulatory framework. The reporting requirements are established by sections 24 and 25 of the DRA and Parts 5 and 6 of the Regulations, which together prescribe the types of reports, their contents and the circumstances in which they must be provided. The reports fall into two broad categories, as summarised in Figure 1. A summary of the contents of each report can be viewed in Appendix 1 of the **SSRO's Annual Compliance Report 2018**.

Figure 1: Reports under the regulatory framework



*In this table, and in the Regulations, "QBU" refers to a qualifying business unit.

The defined pricing structure (DPS)

- 2.3 Three of the contract reports require costs to be split by the DPS:
- the Contract Notification Report (CNR) requires an annual profile of the estimated costs at the time of agreement and the total amount of those costs that are non-recurring (regulation 25(2)(d) and (e));
 - the Interim Contract Report (ICR) requires an annual profile of the estimated costs at the time of agreement, the total amount of those costs that are non-recurring and an annual profile of the costs already incurred and the forecast costs which are expected to be incurred (regulation 27(4)(d), (e) and (h));

- the Contract Completion Report (CCR) requires an annual profile of the estimated costs at the time of agreement, the total amount of those costs that are non-recurring and an annual profile of the actual costs (regulation 28(2)(d), (e) and (g)).
- 2.4 A breakdown of costs by DPS must be presented as a list of cost categories describing key components of the deliverables to be provided under the relevant contract (regulation 22(7)).
- 2.5 The Contract Reporting Plan (CRP) must include a description of the DPS that the contractor will use in providing the reports (regulation 24). It must also list the output metrics that will be used to describe deliverables in the contract reports. The MOD or the contractor may seek a determination from the SSRO of the DPS and output metrics that the contractor must use in contract reports (section 35(1)(b) of the Act and regulation 52).
- 2.6 The reports in which costs must be split by the DPS are also required to list and describe the key contract deliverables and express the quantum of those deliverables using the output metrics specified in the CRP (regulations 25(2)(a) and (b), 27(4)(a) and (b) and 28(2)(a) and (b)). A deliverable is defined as any goods, works or services provided under a qualifying contract that can be described using an output metric. An output metric is a quantifiable description of any goods, works or services, including a number, weight, dimension, time or physical capability but not including a monetary value (regulation 2(1)).

Amendments and variance

- 2.7 The contractor under a qualifying defence contract (QDC) (or the sub-contractor under a qualifying sub-contract (QSC)) is required to submit up to seven types of contract report over the life of a contract, as shown in Figure 1. The reports provide details of the contract price at the initial reporting date, at interim dates, and after the contract completion date.
- 2.8 If the contract price changes from that which is reported at the outset, then this will be reflected in the contract reports:
- An initial understanding of the contract price is provided in the Contract Pricing Statement (CPS) and the CNR. The CPS sets out the allowable costs and the contract profit rate used to determine the price at the time of agreement (regulation 23). The CNR provides an annual profile of planned amounts of profit and any estimated costs at the initial reporting date (regulation 25(2)(c) and (d)).
 - Subsequent updates to the price are provided in any ICRs or Quarterly Contract Reports (QCRs) required to be submitted and in the CCR. Any ICRs and QCRs provide annual profiles of profit and costs and must reflect in those profiles costs already incurred and forecast costs expected to be incurred (regulations 26(6)(c) and (d) and 27(4)(g) and (h)). The CCR, delivered within six months after the contract completion date, provides an annual profile of estimated and actual allowable costs and planned and actual profit (regulation 28(2)(c), (d) and (g)).
 - The CCS, which is due within 12 months after the contract completion date, provides an annual profile of the actual allowable costs and total costs (regulation 29).
- 2.9 The MOD may, additionally, direct a contractor to submit the information in the CPS, CRP, ICR or CCS at specified times (regulation 30). These additional reports are referred to as “on demand” reports.

- 2.10 In a QCR, an ICR, and in the CCR, the contractor is required to provide an annual profile of any estimated costs at the time of agreement. The time of agreement is:
- the date the contract is entered into, or
 - if the contract becomes a QDC by amendment, the date of the relevant amendment, or
 - if a QDC or QSC is amended in such a way that the price is re-determined under regulation 14, the date of that re-determination (regulation 2(1)).
- 2.11 In every contract report that is submitted, the contractor is required to report the date and reference number of the most recent amendment which affects the price payable under the contract, if there has been such an amendment (regulation 22(2)(j)). If a contract is amended, then some of the estimated costs used to determine the contract price may change. This change in costs should be reflected in the annual profile of estimated costs provided in any subsequent QCR, ICR or CCR. If a contract is amended in a way that affects the price, then planned amounts of profit would be expected to change and this would also be reflected in a subsequent QCR, ICR or CCR.
- 2.12 In a QCR, an ICR, and in the CCR, the contractor is required to provide a quantified analysis of the causes of variance between any estimated costs used to determine the contract price and the total actual and forecast costs. This analysis is required to explain not less than 90 per cent of the total variance. In the CCS, the contractor is required to explain any variance between the total actual costs which the contractor claims are allowable costs and the direct and indirect actual allowable costs (regulation 29(2)(d)). If there has been a variance in the actual allowable costs between the CCS and the most recent on-demand CCS, then that variance must also be explained (regulation 29(2)(e)).
- 2.13 A contractor is required in a QCR, ICR or CCR to provide a description of any event that has occurred, or circumstances which have arisen, since the contract was entered into, that have had or are likely to have a material effect in relation to the contract (regulations 26(6)(h), 27(5)(b) and 28(2)(j)). These events or circumstances may relate to an amendment or variance to the contract price.

Overhead reports

- 2.14 Some defence contractors are required to submit reports related to rates claimed by their qualifying business units (QBUs). There are up to six reports which may be required, referred to collectively in this paper as overhead reports, as shown in Figure 1.
- 2.15 The ongoing contract condition is met if a contractor is party to at least one QDC or QSC valued at £50 million or more and there remain obligations outstanding for the supply of goods, works or services under one or more of those contracts at any time in a relevant financial year (section 25 of the DRA and regulation 31). If the ongoing contract condition is met, the designated person will be the contractor's ultimate parent undertaking, if the contractor is part of a group, but otherwise will be the contractor (regulation 32(6)(b)). A designated person must submit reports for its QBUs if the ongoing contract condition is met in a relevant financial year. A QBU is a unit, undertaking or group which provides a total value of at least £10 million of goods, works or services for one or more QDCs or QSCs in a financial year (regulation 32).
- 2.16 There are three overhead reports that a designated person must submit for a QBU if the ongoing contract condition is met:
- the Actual Rates Claim Report (ARCR), which provides the rates claim for a QBU (regulation 34);

Working paper: Review of reporting requirements

- the QBU Actual Cost Analysis Report (QBUACAR), which provides the costs of the QBU (regulation 35); and
- the Estimated Rates Agreement Pricing Statement (ERAPS), which provides facts and assumptions related to the allocation of costs for the rates claim (regulation 38).

2.17 If a QBU was also a QBU in the previous financial year, then the designated person must also provide the following two overhead reports:

- Estimated Rates Claim Report (ERCR), which provides a list of all cost recovery rates which will be calculated for that QBU and for which it is anticipated that a claim will be made during a future relevant accounting period (regulation 36); and
- QBU Estimated Cost Analysis Report (QBUECAR), which provides the estimated costs of the QBU, relevant to the estimated rates claim (regulation 37).

2.18 If the QBU remains a QBU in the next financial year, the MOD will be able to compare the information from the ERCR and QBUECAR with the subsequently submitted ARCR and QBUACAR. The ERCR requires information to be reported in respect of the “accounting period immediately following the relevant accounting period” (regulation 36(3)), while the QBUECAR is to contain information relating to the “relevant accounting period” (regulation 37(7)).

2.19 There is a sixth overhead report, the Rates Claim Report (RCR), which may be required by the MOD on demand. There are few instances of the RCR having been submitted and, in the circumstances, the RCR is not a principal focus of this working paper.

3. Current guidance

- 3.1 The SSRO issues guidance to assist defence contractors with preparing reports required under the DRA and the Regulations. The reporting guidance can be viewed [here](#). Contractors must have regard to the guidance when preparing reports (regulations 22(9) and 33(8)).
- 3.2 The SSRO maintains DefCARS to enable contractors to comply with the requirement to submit reports electronically to the SSRO and the Secretary of State (regulations 22(4) and 33(6)).¹ It has incorporated DefCARS user guidance into its reporting guidance, as the two are so closely related.

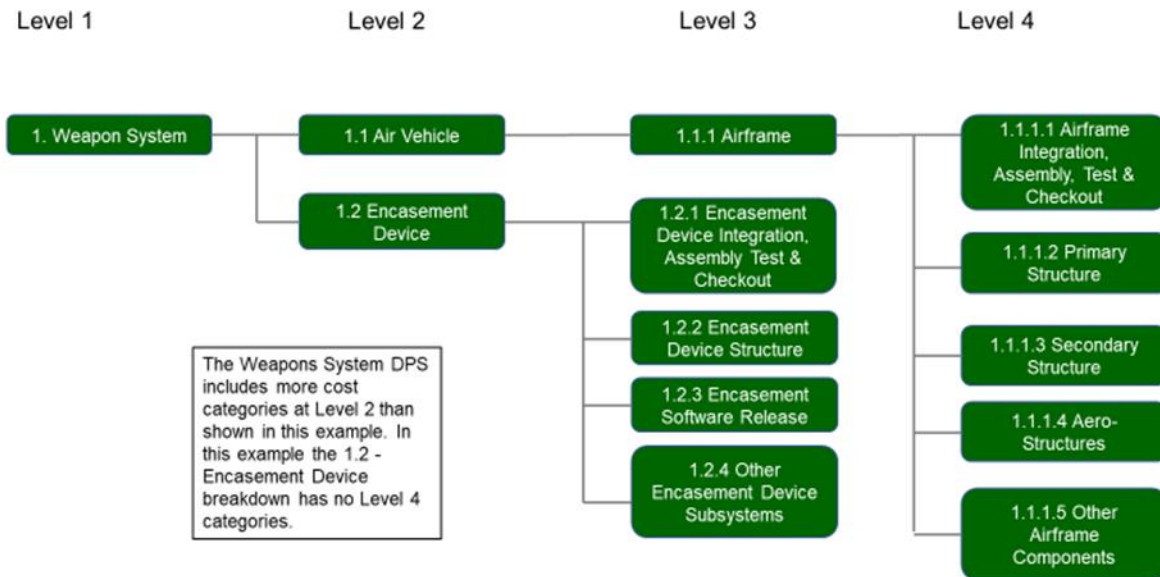
DPS

- 3.3 The Regulations provide limited detail on the form and content of a DPS. The SSRO has incorporated 16 DPS templates into DefCARS, and its reporting guidance assists contractors and the MOD to use the most appropriate DPS and provide the right level of detail. These templates were originally based on work breakdown structures used in the United States (Military Standard 811c) and have been updated by the SSRO.
- 3.4 The principal guidance on the DPS can be found at paragraphs 5.20 – 5.39 of the SSRO's reporting guidance. The 16 DPS templates are listed at paragraph 5.24 of the guidance and definitions of each DPS are included at Appendix 2 of the same guidance. Some key elements of the reporting guidance are set out below.
- 3.5 The SSRO's reporting guidance provides that the contractor should agree the appropriate DPS structure with the MOD from the 16 provided. If an amendment to a contract results in changes to the DPS, the SSRO recommends that the changes are also agreed between the contractor and the MOD (guidance, paragraph 5.32).
- 3.6 Contractors can report a non-standard DPS structure (not one of the 16) if such has been agreed with the MOD. The use of 'other' categories also allows the contractor to tailor the DPS for outputs which might not appear in the standard structure, but the reporting guidance states that this should only be used for a small proportion of costs.
- 3.7 The reporting of costs against the DPS provides for four levels:
 - Level 1 is the entire system or programme, or a programme element, project, sub programme or service;
 - Level 2 consists of the major elements subordinate to the Level 1 system or programme. These major elements include hardware and software elements or key services;
 - Level 3 contains elements subordinate to Level 2 and include hardware, software and services; and
 - Level 4 elements provide a breakdown, subordinate to Level 3, and represent a further definition of the hardware, software and services (guidance, paragraph 5.26).
- 3.8 An example of the four-level breakdown is shown in Figure 2.

¹ Only the Strategic Industry Capacity Report may be submitted in hard copy.

Figure 2 – DPS example

Defined Pricing Structure Example – Weapons System



3.9 The DPS has been constructed so that each level contains a breakdown of the cost at the parent level. Table 13 in the reporting guidance illustrates how costs can be broken down within a DPS.

3.10 A contractor will need to apportion costs to a DPS and should use a consistent approach for this (guidance, paragraph 5.31). The reporting guidance recognises that some form of estimation may be required. Contractors are asked to report their approach to apportioning costs to the DPS, including its mapping from the work breakdown structure (WBS) to programme management costs (if applicable) and to the DPS.

3.11 The SSRO’s reporting guidance provides that the level of detail provided in a DPS should relate to the total contract value (guidance, paragraph 5.30). The greater the value of a contract, the more detail expected. The reporting guidance predicts the level of detail as follows:

- Under £10m: 10 – 20 rows.
- Under £100m: 30 – 60 rows.
- Over £100m: 60 – 100 rows.

3.12 The SSRO’s reporting guidance also covers the requirements to report a list of the key deliverables specified in the contract with a brief description of each and a list of the output metrics that will be used to describe deliverables (guidance, paragraphs 5.66 - 5.72). DefCARS has been developed to link deliverables to metrics to the DPS lines which the contractor is reporting.

Amendments and variance

- 3.13 The SSRO's reporting guidance deals with amendments and variance in relation to the various contract reports which provide updates to the initially reported price (QCRs, ICRs and the CCR). The reporting guidance in relation to QCRs, ICRs and the CCR is substantially the same and can be found in sections 6, 7 and 8 of the reporting guidance. Attention is drawn to paragraphs 6.22 to 6.24 and 6.41 to 6.44 of the guidance (QCRs), paragraphs 7.25 to 7.27 and 7.35 to 7.39 (ICRs), and paragraph 8.1 (CCRs).
- 3.14 The SSRO's reporting guidance recognises that if there has been an amendment, then the time of agreement will have changed to the date of the latest amendment. This means that the required annual profile of estimated costs at the time of agreement may be different in a QCR, ICR or the CCR from that reported in a previous CNR, QCR or ICR (guidance, paragraphs 6.22 to 6.24 and 7.25 to 7.29).
- 3.15 In relation to amendments, the contractor is asked to indicate whether there has been a new agreement since the previous report that has had a material effect and led to a re-determination of the price (guidance, paragraphs 6.41 to 6.44 and 7.35 to 7.39). If so, the contractor is asked to confirm the costs, profit rate and pricing method relating to the new agreement. The contractor is also asked to indicate whether the contract completion date has changed.
- 3.16 The SSRO's reporting guidance deals with the data required when reporting variances in a QCR, ICR or CCR (for example, Table 30). The guidance provides the following in relation to the data required from contractors:
- Title: The contractor should provide a short title to describe the variance it is reporting;
 - Brief description of the cause of variance; and
 - Amount of Variance (£m) for each cause of variance. This can be auto-populated if the "calculate" button is selected or can be overwritten.
- 3.17 The SSRO's reporting guidance indicates that the total per centage of variance explained will be shown in DefCARS and must be not less than 90 per cent. For each cause of variance, the per centage of total planned cost is calculated by DefCARS. In addition, the guidance indicates that where a contractor reports both a variance and an event or circumstance, the contractor can include the following information:
- the effect the cause of variance has had on costs already incurred;
 - the forecast effect the cause of variance will have on forecast costs; and
 - whether the variance has caused a variance between any estimated costs used to determine the contract price and total and actual forecast costs.

Overhead reports

- 3.18 The SSRO provides guidance on the preparation of overhead reports in sections 11 to 16 of its reporting guidance. It clarifies a number of practical aspects related to determining whether reporting obligations have been met. The SSRO's reporting guidance defines terms and addresses the reports that need to be submitted, who needs to submit them, their content and when they are due. It includes a range of scenarios to illustrate the circumstances in which the reporting requirements arise. Appendix 5 to the SSRO's reporting guidance provides a comprehensive list of definitions of terms used in the compilation of the QBUACAR and QBUECAR.

4. Stakeholder views

- 4.1 The SSRO has received previous feedback from industry stakeholders and the MOD about reporting requirements. This has come from a variety of sources, including comments on the SSRO's reporting guidance, discussions at the Reporting and IT Sub-Group, the SSRO's reporting helpdesk and workshops held on 8, 15 and 20 May 2019.
- 4.2 The key points that have been raised in relation to the three areas covered by the review are set out below. In general, industry representatives have expressed concerns about duplication in data requirements, both within DefCARS and between the MOD and DefCARS. They have also questioned the burden associated with reporting and the extent to which the MOD is using the data reported in DefCARS.
- 4.3 The SSRO is seeking evidence about purpose, use and proportionality as part of its review of reporting requirements. The views expressed have been considered when shaping the working paper but the SSRO is yet to reach any conclusions on the matters raised.

DPS

- 4.4 Contractors have raised several queries about application of the DPS templates when submitting reports. The issues raised include which structure is applicable, how to combine elements of different structures and how the DPS can be amended during a contract. Contractors have queried how many cost categories to use and how accurate the breakdown needs to be.
- 4.5 Some industry representatives have questioned the purpose of the DPS and how it is being used by the MOD. There has been a challenge as to whether meaningful comparisons can be made using the DPS. To enable meaningful comparisons, it has also been argued that contextual information is required to explain the data in the DPS, such as whether there was a reason the contractor offered a lower or higher price in the circumstances.
- 4.6 An argument has been made by some industry representatives that the DPS is costly to implement, burdensome and requires too much detail. Contractors have queried whether elements of a US system are transferable to the UK, given the difference in scale. Some contractors find it more difficult than others to link the DPS to their accounting systems and reporting structures. It has also been suggested that mapping to the DPS from the contractor's records involves a loss of detail.
- 4.7 Reference has been made to types of contract that are managed by unit and not by component where completing the DPS requires separating component costs from an overall unit cost. A view expressed by several contractors is that the DPS may be more relevant to development programmes than to support contracts or commercial off the shelf purchases.
- 4.8 Industry representatives have queried the frequency of interim contract reports (ICRs) on the basis that the purpose of the DPS was to inform budgeting and long-term strategic planning including cost forecasting. Some contractors suggested that they could instead provide the MOD with the relevant data on demand. Contractors have suggested the MOD should identify programmes on which the ICRs are value-adding and review the frequency of reporting for specific project(s).
- 4.9 Most contractors felt that there is a need to establish what is meant by parametric analysis and what the relevant metrics are. Some stakeholders argued that the current link between metrics and contract deliverables is erroneous. It was also suggested that parametric analysis is not always relevant to support contracts.

- 4.10 Counter to such views, it has been suggested that the DPS is intended to support independent estimates by the MOD. It was said that parametric estimation was intended to be used to provide an approximate cost on larger equipment and that recording of standardised metrics (such as weight and speed) is required for future benchmarking.

Amendments and variance

- 4.11 Contractors have questioned how to report prices and changes in price in some instances. For example, issues have been raised in relation to an availability contract when assumptions on the level of required availability have changed. Several queries have been raised about tasking orders and how to report the estimated price, the actual and forecast costs, and profit.
- 4.12 There have been issues raised by contractors about reporting changes in price following an amendment. A contractor queried how to report when provisional rates in a contract change to actuals. A contractor sought advice when the MOD asked that it report costs associated with an amendment separately to those under the original contract.
- 4.13 There has been some confusion about when an amendment has taken place and views have been offered about the difference between an amendment and a variance. Stakeholders have queried whether all amendments should be reported, how promptly, and whether materiality applies. An amendment may have a different profit rate from that which was previously agreed, and this has led to queries as to how this should be captured when reporting.

Overhead reports

- 4.14 A concern has been raised that the requirement to submit overhead reports is duplicated or expanded upon by further requests for information from the MOD connected with the rates programme. It has been suggested that the same data is required in different formats. A further issue has been raised about annual completion of the overhead reports in circumstances where there is minimal change in the estimates or the allocation methodology from one year to the next.
- 4.15 The timing of overhead report submissions has been raised as an issue. It has been suggested that overhead reports may ideally be required prior to the end of a contractor's accounting period, to support agreement of rates, but the due date for rate reports is three months after the contractor's accounting period. A concern was raised that bringing the due date forward may be difficult due to the apparent reliance on actual rates that are required to go through the internal sign-off process. It has been asserted that agreeing rates between the MOD and the contractor takes longer than is ideal, which is an issue indirectly related to reporting requirements.
- 4.16 Industry representatives have questioned whether the overhead reports can be used for benchmarking. It has been argued that the current cost categories may not support benchmarking, as companies have different structures and interpret the reporting guidance differently.
- 4.17 The application of the ongoing contract condition appears to have caused problems to some contractors. For example, the ultimate parent undertaking may not be aware that a group company has entered into a qualifying contract valued at £50 million or more. In some cases, there was a misunderstanding of whether outstanding obligations under a contract and the contract value interact with each other to satisfy the ongoing contract condition.

5. Defined pricing structure (DPS)

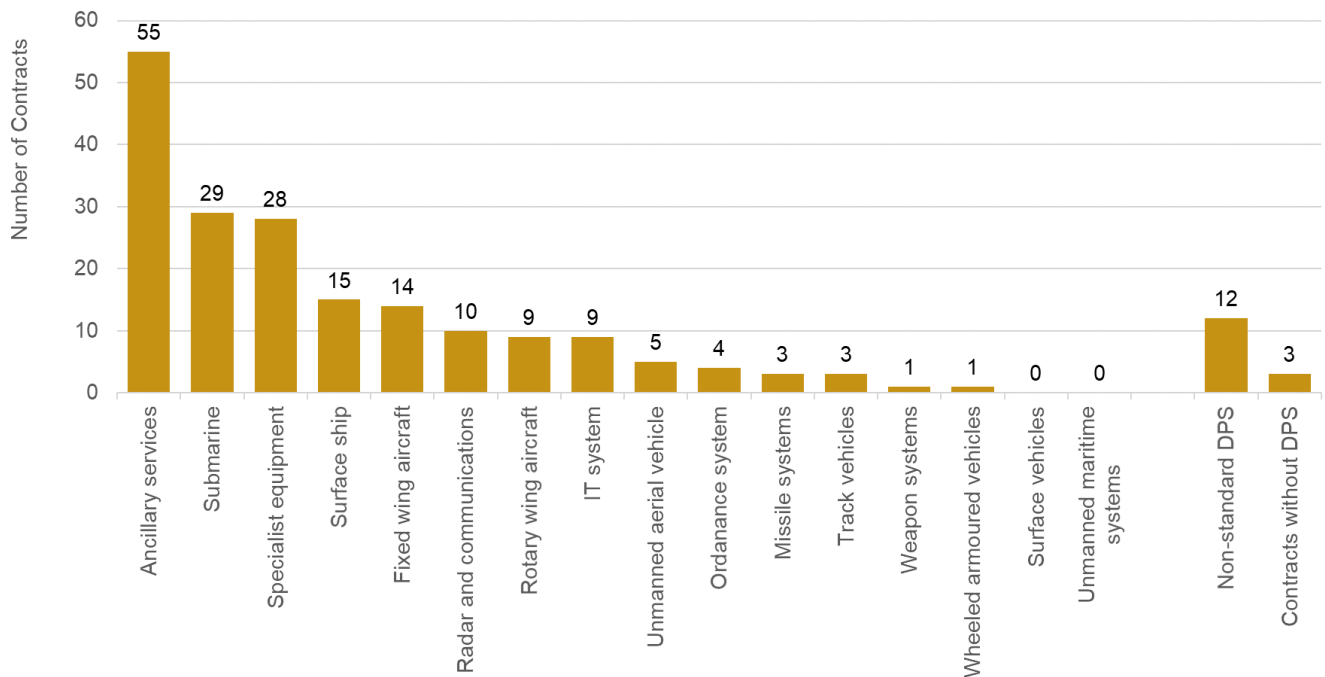
Purpose

- 5.1 The Regulations do not explicitly address the purpose of DPS data. The requirement for contractors to split costs by the DPS, in each case providing a breakdown of costs into defined categories, suggests that the MOD will use the data for comparison or benchmarking, supporting the aims of value for money and fair and reasonable prices. In each of the reports where the DPS is used, the contractors must also list and describe the contract deliverables and express the quantum of those deliverables using a set of output metrics. The metrics may be used to supplement the cost categories in the DPS and enable parametric estimating.
- 5.2 The view that DPS data supports benchmarking and parametric estimating is supported by the explanatory notes to the DRA. The explanatory notes indicate that the three reports are designed to enable the MOD to compare the costs of comparable projects over time and improve its independent estimates, both for budgeting and to challenge contractor cost estimates. By requiring contractors to report costs split into a standardised DPS format, the MOD will build up information for cost comparison purposes. This benchmarking information, used appropriately, may form a part of analogous and parametric estimating or other estimating methods, as shown in Figure 4.
- 5.3 ***The SSRO would like feedback from stakeholders as to whether the purpose of the DPS is to support independent estimating by the MOD for budgeting and to challenge contractor cost estimates. It may still be too early, but it would be helpful if examples could be provided of any instances in which the DPS data has been used by the MOD to prepare independent estimates.***

Taxonomy

- 5.4 The SSRO proposed 16 DPS templates, based on US Military Standard 881c and prior development work by the MOD. The SSRO introduced the DPS templates following stakeholder engagement and subsequently developed them and built them into DefCARS. Figure 3 shows the 16 structures and how they have been applied to 201 qualifying contracts.

Figure 3: Number of contracts reporting by DPS structure²



- 5.5 Within each DPS template, there is a breakdown into four levels of cost categories and definitions are provided, together making up the taxonomy of the DPS. The taxonomy is crucial, as it provides the standard set of cost categories that will be used for the MOD's independent estimating.
- 5.6 The taxonomy departs from the US Military Standard 881c, and its work breakdown structure, in three key ways. It uses four levels rather than seven, is principles based and is not US military specific. We are aware that the US Military Standard 881c, was updated in 2017 to 881d, primarily to reflect changes in the defence procurement landscape, with an increased focus on technology products.
- 5.7 The suitability of the DPS taxonomy is considered in this working paper by reference to selection, mapping, granularity, and the division between equipment and support. **The SSRO would be interested to hear general views from stakeholders on the extent to which the current DPS taxonomy will support independent estimating by the MOD and any suggestions for change.**

Selecting a DPS

- 5.8 Figure 3 shows that, since introduction of the DPS, 93 per cent of contracts have adopted one of the 16 standard cost templates within their reporting. Those which have not are typically contracts which used the initial excel-report based version of DefCARS, where contractors had the flexibility to adapt the DPS input lines and codes that would be used. Since the web-based version of DefCARS was introduced in March 2017, 98 per cent of contracts have adopted the standard reporting templates.

² As of 30 April 2019 the SSRO had received contract reports for 201 contracts that became QDCs/QSCs by 31 March 2019. The analysis has included making a number of adjustments to the data to correct for possible data quality issues.

- 5.9 Figure 3 shows that around 40 per cent of contracts have used the generic ancillary services and specialist equipment DPS structures, which may not be the best representation of what is being procured. In practice, we have found that the ancillary services template is often used for support contracts where the focus of the contract is not an ancillary service, but rather providing support for a piece of defence equipment. Where cost data for support is provided in these generic categories it is more difficult to consider the whole-life cost of an item of defence equipment and use that data for cost estimation purposes.
- 5.10 ***The SSRO invites feedback from stakeholders as to circumstances in which parties have been unclear as to the appropriate DPS to apply, particularly contracts that were considered unsuited to any DPS.***
- 5.11 We understand that MOD commercial policy provides for commercial officers to agree with the contractor the DPS that will be used for contract reporting, and to seek input from an estimating professional within the Cost Assurance and Analysis Service (CAAS) where possible. There would seem to be merit in this approach, as it provides for a cost estimator, accountant or engineer to provide insight into the data required to support future cost estimates. This should provide a feedback loop between the contracting, cost estimation and reporting processes. It would help estimators to confirm whether any recommendations made for data requirements have been actioned in the contract. Where this is followed it should ensure the information is helpful for future estimating, reflects what is being bought by the MOD and avoids wasted effort on the part of the contractor. The SSRO has received some feedback, however, that for some contracts the parties have not agreed either the DPS template or the level of granularity to be used.
- 5.12 ***The SSRO is interested in better understanding the process for deciding the DPS template for a contract, its application and associated metrics. We would welcome input on the extent to which the DPS reporting is discussed and agreed between parties, any barriers to this, and any suggestions for improvement.***

Support contracts

- 5.13 The explanatory notes to the DRA envisage that the DPS will be applied to at least some support contracts, referring to a “standard set of cost categories which will vary by the type of equipment being procured or maintained”.³ The DPS templates recognise the connection between developing and making equipment and providing and maintaining equipment, by providing additional lines for support within each equipment template. This enables an appropriate reporting structure to be identified for support, where it relates to equipment covered by one of the DPS templates (e.g. supporting a fixed-wing aircraft). This should help MOD analysts to consider the whole-life cost of a piece of equipment rather than the capital cost to procure it.
- 5.14 Stakeholders have suggested there is additional complexity when applying a DPS to a provide and maintain contract. Part of this complexity is said to arise because of the product orientated nature of the DPS and its taxonomy. The argument is that this is more suited to the delivery of finished goods and services, rather than the continuous activities that characterise support contracts. There are said to be fundamental differences between how these contracts are planned, executed and managed.
- 5.15 ***The SSRO invites feedback from stakeholders as to any issues experienced in applying the DPS to support contracts.***

³ Defence Reform Act 2014, explanatory notes, paragraph 86.

- 5.16 If there are difficulties in applying the DPS to support contracts, one option may be to develop an alternative approach for support elements within the DPS, for example by focusing on a cost-by-type orientated taxonomy (e.g. labour, overheads, materials) to provide a breakdown of the continuous costs that occur in support contracts, which could then feed into future estimates. It would seem preferable, however, to focus on the taxonomy for the support lines within each structure to ensure these capture the optimum dataset, rather than develop a support focused DPS that is separate from the equipment type structure. Such an approach may allow for an appropriate balance between equipment specific and generic activities and would better provide whole-life costs to feed into future estimation processes.
- 5.17 **Stakeholder input is sought on issues identified with applying the DPS to support contracts, and proposals for how the DPS might be better adapted in such cases. If there are other types of contract where it has been difficult to apply the DPS, then feedback would also be welcomed on those contract types and the issues experienced.**

Distinguishing contract types in DefCARS

- 5.18 The use of DPS data for estimating may be enhanced by information about the contract to which the data relates. It may, for example, be helpful for an analyst to understand whether costs were incurred to develop or make equipment, or to provide and maintain equipment. This is information which may be accessible to the MOD in some form, but is not necessarily readily accessible in DefCARS, as there is no data field in which the type of activity is clearly stated. A manual categorisation of contracts by activity, identified that 93 per cent of contracts could be classified by these two categories, comprising 99 per cent of the total contract price of reported contracts. The categorisation was not straightforward and required a judgment to be made, relying on the contract title, description, contract deliverables, DPS and definitions in the **SSRO's methodology for the baseline profit rate, capital servicing rates and funding adjustment**. This sort of categorisation could be facilitated by structuring DefCARS so that contractors can easily provide additional contextual data, for example by selecting from pre-defined categories.
- 5.19 If information on contract type would promote the analytical potential of DPS data, and this could be required in a proportionate way, consideration would still need to be given to the optimal way to distinguish between contract types, for example the distinction between equipment and support contracts. Potential approaches to differentiating between types of contracts for DPS purposes include:
- (1) the activity type definitions set out in the SSRO's Contract Profit Rate methodology, which split out activities undertaken by defence contractors as develop and make, provide and maintain, ancillary services and construction;
 - (2) the contract's impact on MOD's accounts, for example whether a contract would be considered as capital expenditure (equipment) or revenue expenditure (support); or
 - (3) the CADMID⁴ cycle, which distinguishes between different activities throughout the defence equipment life cycle and may, for example, allow the analyst to separate design phase costs from build phase costs.
- 5.20 **Stakeholder views are sought on whether a facility should be included in DefCARS to distinguish between types of contracts to enable better analysis of cost data within the DPS and on the most useful categorisation of contract types.**

⁴ CADMID stands for Concept Assessment Development Manufacturing In-Service Disposal.

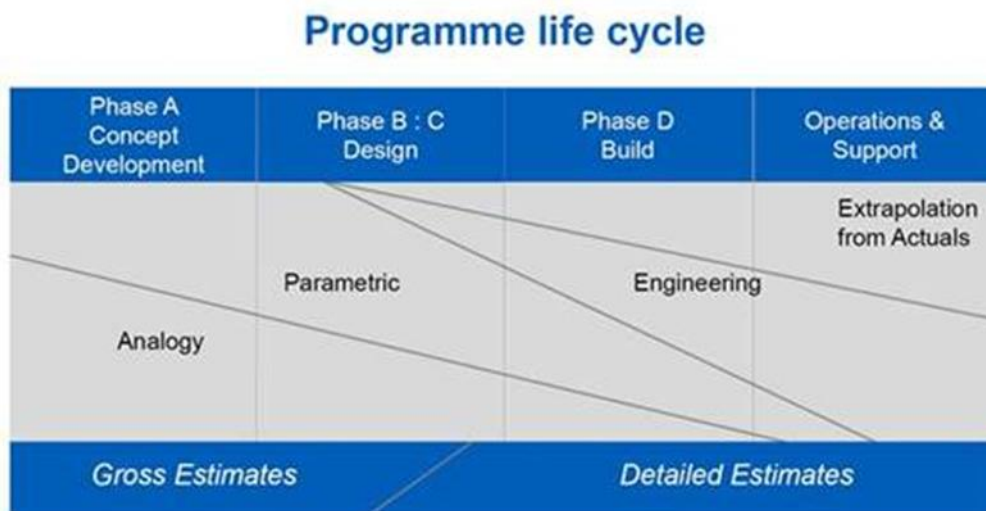
Mapping

- 5.21 Some industry stakeholders have expressed the view that cost data by DPS would not be as helpful to the MOD as receiving cost breakdown data that more closely aligns with the WBS that contractors use to manage their own delivery and accounting. As currently framed, the Regulations clearly require a QCR to provide a cost breakdown split by the contractor's reporting structure, in contrast to the CNR, ICRs and the CCR, which all require costs to be split by the DPS. If contractors employ a WBS which allocates costs to individual activities undertaken to deliver the contract, this may be helpful to commercial officers due to its relevance to the contract. By contrast, the DPS is standardised to support comparisons. It is more focused on the outputs being delivered than the tasks that need to be undertaken although there is clearly a relationship between the two. For example, the costs of the activities and the materials that go into producing a helicopter engine would be aggregated to total the costs of that component in the DPS. MOD analysts may find greater analytical value in DPS data due to the standardisation imposed by common cost categories.
- 5.22 If the contractor's WBS is not the same as the DPS, the contractor will have to translate the WBS cost breakdown into a DPS for statutory reporting. Some contractors may find this translation easier than others depending on how familiar they are with the DPS and whether it is used within their company for internal reporting purposes. There are 45 contracts in DefCARS for which both QCRs and ICRs have been provided. A comparison of the breakdown structures used in the QCRs and ICRs for these contracts show:
- 4 contracts (9 per cent) with complete alignment between the DPS and the WBS.
 - 22 contracts (49 per cent) with substantial alignment.
 - 19 contracts (42 per cent) with little or no alignment.
- 5.23 Where the WBS and DPS are aligned, this may facilitate reporting across the statutory contract reports which require costs to be broken down by either the DPS or WBS. This may provide an opportunity for efficiencies, for example by rationalising QCR and ICR reports, reducing duplication and encouraging a single dataset for cost data across contract reports. Care must be taken, however, as the Regulations clearly envisaged that a WBS would be used for QCRs and the DPS for the CNR, ICRs and the CCR. In cases where there is an alignment between the breakdown structures used, it is not clear whether this is because the contractor's reporting structure genuinely is the same as the DPS, although it appears that in some instances this may be the case, and whether it is helpful to the MOD to have the same breakdown structure in all reports.
- 5.24 Contractors have highlighted that where the MOD challenges costs based on DPS data, there may be a need to 'unwind' the mapping to the DPS to identify the cost driver within their own accounting system. One feature of the US approach to cost reporting is that the WBS codes, structure and names are fixed, but contractors are able to provide their own definitions to support their treatment of costs when assigning costs to the standard categories. The SSRO's reporting guidance also recommends such an approach, and DefCARS enables contractors to attach a supporting file. This data cannot be analysed easily and the SSRO is interested in supporting contractors to supplement DPS element descriptions in DefCARS in an easier, more intuitive way that would gather better cost data through the DPS that can be more easily analysed.
- 5.25 ***The SSRO would welcome views from stakeholders on issues raised by differences, or alternatively, similarities, between the WBS and DPS, and whether it would be helpful to provide contractors with more flexibility within DefCARS to explain the approach they have adopted to mapping when reporting against the DPS.***

Granularity

5.26 The level of granularity required by the MOD for independent cost estimating is expected to differ, depending on the exercise being undertaken. Figure 4 relates different estimation methods to the programme life cycle. The gross estimates required for the purposes of budget forecasting at the concept stage may require a lower level of granularity than a bottom-up method used when estimating the allowable costs for a contract.

Figure 4: Cost estimation methods⁵



5.27 The extent to which data can support both ‘top down’ or ‘bottom up’ estimates depends on the level of granularity which is included within the costing structure. That level of granularity will depend on two factors. First, at the maximum of four levels, the SSRO’s DPS templates will support component costs to a high level of specificity but will not support further breakdown of these costs into the lowest level or other cost categories. For example, the individual armament systems on a submarine may be costed but the costs associated with the components that make them up will not be, nor will the activities that go into producing them (for example, labour or materials). Secondly, a DPS breakdown that employs more lines (e.g. 100 lines) will provide more detail than one which has fewer lines (e.g. 10 lines).

5.28 We would expect that the more granular the breakdown, the more valuable and meaningful the information will be for the contractor and the MOD. Increasing the level of detail required in the standard DPS templates may empower the MOD to independently estimate costs in a wider range of circumstances, but the potential benefit must be weighed against the increased costs of providing this information. At this stage, the SSRO considers it may be appropriate to first achieve consistency of reporting at the current level before steps are considered to move to a more granular level of information collection.

5.29 ***We would welcome views on the extent to which the four-level DPS breakdown provides the MOD with sufficient detail to support the different types of independent estimates and cost comparisons it requires.***

⁵ PMI (2004) *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*.

Guidance on detail

- 5.30 The SSRO's reporting guidance provides that the larger a contract, the more detail is expected in a DPS. It predicts the number of rows that should be used in a DPS by reference to three bands of contract value. The reporting guidance was designed to produce a proportionate level of detail, recognising a relationship between the price of a contract and the granularity that would be beneficial for DPS reporting to support estimation. The approach has attracted some criticism from stakeholders on the basis that:
- the relationship between contract value and the number of DPS lines is arbitrary and overly prescriptive;
 - in some instances, the level of granularity required is unnecessary and does not justify the related regulatory burden; and
 - there are other considerations relevant to the detail required, such as the risk and complexity, whether the contract is equipment or support, and the military specificity of the procurement.
- 5.31 The SSRO's reporting guidance currently recommends that the contractor and the MOD should agree the DPS, and also explains that the required length of the DPS will vary depending on the contract value. An alternative approach would be for the reporting guidance to require consideration of a range of relevant factors to arrive at a suitable level of detail in the DPS. Contract size would be a relevant consideration, as would risk, complexity, type of contract and military specificity. If the MOD's estimating experts are sufficiently involved in the commercial team's agreement of the DPS, it is more likely that the optimum granularity would be arrived at for each DPS applied to a contract.
- 5.32 ***The SSRO is interested in stakeholder views on how the SSRO's reporting guidance on the level of detail required may be developed to support contractors to meet their DPS reporting requirements.***

Metrics

- 5.33 DPS cost data may be used to support gross estimates for budgeting and, to a lesser extent, more detailed estimates to challenge contractors. To carry out parametric analysis for these purposes, relevant metrics are required to supplement cost data split by the DPS. For example, the cost of an engine which allows a ship to travel at 20 knots may be different from one which travels at 25 knots. Before estimating the cost of an engine based on cost information in DefCARS, it would be useful to understand key features of the platform for which the cost data has been split by DPS.
- 5.34 The Regulations require metrics used for parametric analysis to be reported alongside cost data split by the DPS. The SSRO has sought to enable reported metrics to be linked to DPS data, to facilitate parametric analysis. In DefCARS, contractors can link output metrics to the DPS. The related DPS Code and DPS Element Description can be entered in DefCARS for each output metric. This is done as a free text selection rather than a selection linked to the DPS structure.
- 5.35 Metrics have not been well-reported to date. The SSRO's Annual Compliance Report 2018 highlighted metrics as a key theme where amendments were required to contract reports following submission. Contractors may state that there are no metrics associated with the contract, choose not to report metrics for security reasons, or struggle to identify the DPS element to which the metric relates. As the SSRO does not see details of contracts agreed between the MOD and the contractor we cannot identify whether metrics have been agreed but not included in reports.

5.36 A sample of 14 contracts from DefCARS was considered to identify the types of metrics used and compared against the suggested metrics provided in the SSRO’s DPS templates and the results are shown in Table 1. Output metrics that related to a characteristic of the equipment were used in two contracts and metrics that were consistent with the relevant DPS template were used in only one of those contracts. The remaining metrics related to KPIs, delivery of a milestone or financial measures and did not describe features of the equipment.

Table 1: Sample of reported metrics, split by type of metric and type of contract

Type of metric	Equipment	Support
KPI/ Milestone Delivery	6	5
Equipment Characteristic	2	0
Financial	1	0

5.37 The metrics in contract reports may not be consistently providing information needed to support parametric estimating. One issue seems to be that deliverables tend to reflect contract performance rather than equipment characteristics. A coherent list of standardised metrics may help to encourage appropriate specification of metrics in contracts and reports. In 2015, the SSRO published a set of DPS templates to be used along with the DPS principles guidance (which has now been superseded by the SSRO’s reporting guidance). The taxonomy of the DPS templates has now been replicated in DefCARS for reporting purposes. The 2015 templates included equipment specific metrics and supported parametric analysis as they described the characteristics of the equipment being procured. Metrics for support contracts were also provided. These metrics are not included in the current reporting guidance.

5.38 ***The SSRO invites views from stakeholders on any difficulties experienced in identifying suitable metrics and aligning them to the DPS. Suggestions are welcomed on areas where better reporting requirements or guidance may produce metrics that enable DPS data to be used for analysis.***

Frequency

5.39 The DPS breakdown is required at the start and end of a contract. It is also required in any ICRs required to be submitted under the contract.

5.40 The Regulations currently provide the MOD with significant flexibility to obtain the DPS breakdown at the intervals it requires. ICRs will be required at a frequency agreed between the Secretary of State and the contractor and, failing agreement, will be required at intervals prescribed by the Regulations. The agreed dates must be such that reports are provided at least once every three years for a contract valued at £50 million or more, and every five years for a contract valued below £50 million. In default of agreement, the interim reports are required at least annually for a contract valued at £50 million or more and every three years for a contract valued below £50 million. The MOD may additionally require on-demand ICRs.

Table 2: Number of QDCs and QSCs with ICR reporting dates provided in the Contract Reporting Plan split by contract duration⁶

Contract length	Contract price less than £50m		Contract price is £50m or above	
	No of QDCs with ICRs	No of QDCs	No of QDCs with ICRs	No of QDCs
0 to ≤ 2 years	9	36	0	0
> 2 to ≤ 4 years	17	51	9	14
> 4 to ≤ 6 years	32	47	17	17
> 6 years	11	15	19	21
Total	69	149	45	52

- 5.41 Table 2 shows that there are significant numbers of shorter duration contracts for which no ICRs are expected. For these contracts, provided that reporting is consistent with the reporting plan and no on-demand reports are requested, the first DPS breakdown after the initial reports will be in the CCR, up to six months after the contract has completed.
- 5.42 The frequency at which the DPS is required should relate to the MOD's need to generate independent estimates for budgeting purposes and to challenge contractor cost estimates. Users of the data may be expected to want the latest available data to inform analysis and decision making. However, the frequency at which information is submitted needs to be proportionate, having regard to the purposes for which it is required. When carrying out long-term budgeting, the impact of not having the latest available actuals and estimates may be less significant, given the uncertainty inherent in forecasting far into the future. Recent information could be more valuable for shorter-term budgeting or when challenging a contractor's cost estimates.
- 5.43 ***The SSRO is interested in views from stakeholders on the frequency with which the DPS breakdown is being provided and whether it is sufficient for budgeting and estimation purposes.***

⁶ Data as at 30 April 2019. The analysis has included making a number of adjustments to the data to correct for possible data quality issues.

6. Amendments and variance

Purpose

- 6.1 The contract reports provide details of costs and profit over the life of a qualifying contract, as set out in paragraph 2.7, providing a basis on which to observe how contract costs and profit vary from the start to the end of the contract. This price tracking is accompanied by requirements for contractors to explain cost variances in a QCR, ICR or CCR, and in the CCS. The information about changes in costs may be used to trigger appropriate management of contract costs and identify causes of variation to inform future estimates.
- 6.2 The explanatory notes to the DRA confirm that the final contract report will include a variance analysis to help improve estimating capability and understanding of the causes of cost growth.⁷ Improved estimating capability should help the MOD challenge estimates and deliver value for money. Understanding the causes of cost growth should also benefit industry by helping to identify whether the causes of cost growth have been addressed when determining allowable costs. To improve estimating capability, it would be helpful to understand the key drivers of change in past contracts and to identify the key drivers across contracts.
- 6.3 The QCR is referred to in the explanatory notes as being intended to improve contract management and identify project issues, such as cost growth, in a timely manner. For the purposes of contract management, the MOD should be made aware, in a sufficiently timely way, that costs have changed, or are expected to change, so that the causes can be further investigated with the contractor. From this perspective, the timing and content of the notification are likely to be important.
- 6.4 The SSRO considers that the purposes of the contract reports include identifying causes of cost growth or reduction, which may be due to amendments or variances, to improve estimating capability, and identifying project issues associated with cost growth to improve contract management. ***The SSRO would welcome input from stakeholders on whether it has correctly understood the intent behind seeking information about variances and amendments. It would be helpful to have information on how the information has been used and any issues encountered.***

Definitions

- 6.5 Contractors are required in a QCR, ICR or CCR to analyse the causes of variance between estimated costs and the total actual and forecast costs. In each case, the SSRO understands variance to mean a difference between one cost and the other. If the contract is priced using a pricing method that uses estimated costs, then the difference will be between the agreed costs and the actual or forecast costs.
- 6.6 A reference to actual costs for the purposes of a variance analysis in a QCR, ICR or CCR is taken to mean costs incurred by the contractor. The forecast costs are those expected to be incurred at a later point in time.
- 6.7 An amendment is an agreed change to a contract. It involves some formality in contract law, consisting of an agreement, reached by the process of offer and acceptance, an exchange of consideration (something of value) and an intention by the parties that the agreement be legally binding. If an amendment affects the contract price, it will almost certainly involve a change in the costs, but is different from a variance, because it is agreed.

⁷ Defence Reform Act 2014, explanatory notes, paragraph 86.

- 6.8 There are several changes to the contract price that may or may not involve a contract amendment. Examples are shown in Table 3. Whether an amendment is required will depend on the terms of the contract itself.

Table 3: Price changes that may or may not require an amendment

<ul style="list-style-type: none"> • Tasking orders • Additional volume in a volume-based contract • New work under a framework or enabling contract • Exercise of options • Increase in fixed price based on an index, e.g. inflation • Changing provisional rates to final • Changes in availability under an availability contract
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- 6.9 ***Feedback is sought on the definitions of variance and amendment and related concepts. It may also assist to receive views on how price changes in Table 3 have been treated, for example whether they involved amendments to the contract.***

Understanding the causes of cost growth (or reduction)

- 6.10 To understand the causes of cost growth, there need to be adequate explanations provided for changes in costs from the agreed price. Based on the reporting requirements for a QCR, ICR or CCR, DefCARS will collect analyses of causes of variance between estimated costs used to determine the price and total actual and forecast costs.
- 6.11 If a contract is amended in a way that affects the contract price, and the allowable costs change, future cost variances will be identified by reference to the amended costs. This is in line with the Regulations, but it means there is a risk that DefCARS will not capture explanations for any changes in costs that are captured in amendments. There is thus potential for the costs to change significantly from the start to the end of a contract, with explanations provided only in respect of a limited set of variances. The SSRO assumes that the MOD could assemble a complete picture about the causes of cost growth from changes it has agreed through amendments and explanations of variance provided in DefCARS. There is a question, however, whether it would further the intention of understanding the causes of cost growth to collect information about those causes in one place, whether due to amendments or variance.
- 6.12 ***The SSRO seeks stakeholder views on whether fully understanding cost growth requires changes in costs to be explained from the date the contract became a qualifying contract, whether due to an amendment or some other variance, and whether there may be merit in capturing this information in DefCARS.***

Amendments

- 6.13 Contractors are not required to identify all pricing amendments. There is a requirement to report the date and reference number of the latest pricing amendment in each contract report, and to profile the costs at the latest time of agreement, but the frequency of the reports may be insufficient to capture each amendment. If the contract is valued at £50 million or more, it is more likely that pricing amendments will be recorded, as QCRs will be required. If a contract is valued at less than £50 million, it is less likely that a pricing amendment will be recorded, as ICRs are less frequent and sometimes not required at all (see Table 2).

- 6.14 If there has been an amendment, a subsequent ICR, QCR or CCR will show a change in the costs and profit for the contract. The Regulations do not require the contractor to detail the costs associated with the amendment, the profit rate, or pricing method, nor to explain whether a revised contract completion date relates to the amendment or an explanation for why the amendment occurred. Should a contractor wish to provide such information, DefCARS includes fields in which it can be provided (and supplementary files may be uploaded), but such information has rarely been provided.
- 6.15 The SSRO has looked at the data held on DefCARS for QDCs and QSCs entered into in the period between 1 April 2015 and 31 March 2019.⁸ The analysis identified that of the 201 QDCs and QSCs received in the period, 105 had submitted a report following the initial CPS, CRP and CNR (which could include a new CPS or CRP, or a QCR, ICR or CCR), and of these 105 contracts:
- 52 contracts reported one or more changes to the date of latest pricing amendment field, indicating that there had been one or more amendments to that contract;
 - 41 contracts reported one or more changes in the annual profile of price greater than ± 1 per cent⁹ at the latest time of agreement field, also indicating there had been one or more amendments to that contract (35 of these 41 also had a change to the date of the latest pricing amendment, but the others did not); and
 - 17 contracts reported one or more changes to the date of latest pricing amendment field, but no change in the annual profile of price at the latest time of agreement.
- 6.16 It is not possible to identify the actual number of amendments made from the reported data. The Regulations do not require contract reports to capture the number of pricing amendments which occur on a contract, nor is it possible to identify the change in price resulting from each pricing amendment arising in a reporting period. No explanation is provided of the cause of the change in cost, such as an amendment requiring new work.
- 6.17 Update reports (QCR, ICR and CCR), do not require contractors to provide an analysis of the cost to show amendments, or where different profit rates are used to show these separately to the original part of the contract. However, it may be relevant for the MOD to understand the extent to which, over time, the costs associated with an amendment grow or reduce, as compared to how the costs in the original part of the contract grow or reduce. Some information about changes in costs or profit at the level of individual amendments might be obtained if the MOD requires an on-demand CPS. An on-demand CPS report allows greater granularity by requiring the contractor to set out facts and assumptions to underpin the new contract price. There are issues, however, with on-demand CPS reports as a mechanism for recording amendments, as the MOD may not always require an on-demand report and there is a risk of undue burden if the mechanism were used too frequently. As currently structured in DefCARS, an on-demand CPS would not capture the elements of cost and profit associated with an amendment separately from the previously agreed price but rather would set out the price post-amendment. It also would not require the reason for an amendment to be reported.

⁸ Data as at 30 April 2019. The analysis has included making a number of adjustments to the data to correct for possible data quality issues.

⁹ The analysis only included changes of over ± 1 per cent, as smaller changes may more likely to be caused by data quality issues, for example minor changes in rounding.

- 6.18 As set out in paragraphs 6.10 to 6.12, the SSRO is interested in whether there is a need to capture information about amendments in DefCARS to facilitate analysis of the causes of cost growth. For reasons given in paragraph 6.17, the on-demand reporting mechanism will not necessarily ensure the required information is available. An alternative approach to improving the data would be to expand the information required to be reported about amendments in the standard contract reports. This may require regulatory change and consideration would have to be given to any increased burden on contractors. For example, a contractor could be required to provide an explanation of how and why the price has changed, either from the original baseline, or from the price in the previous report. DefCARS could facilitate such reporting, for example by enabling a cause of change in cost linked to each amendment or group of amendments to be selected from a standardised dropdown menu. The key difference between this approach and on-demand reporting is that the information about amendments would be required routinely, rather than depending on a direction from the MOD.
- 6.19 ***The SSRO invites input from stakeholders on whether the reporting should require information on causes of change in cost linked to amendments, and if so, whether on-demand reports are the appropriate mechanism for capturing information about amendments, or whether this should be built into the contract reports as a standard requirement. If on-demand reports are used, the SSRO would appreciate input on whether the CPS can be structured to require price information about amendments.***

Variations

- 6.20 To fully understand cost variance, it would be necessary to identify each change in cost and ascribe a detailed explanation. It may not be proportionate to require that level of detail for the intended use of the data to inform future estimates. Use of standardised categories would enable the MOD to extract comparable information from across reports, which provide greater understanding of the main drivers of cost growth. This may allow assumptions to be challenged and help to avoid bias.
- 6.21 DefCARS supports the requirement to analyse the causes of variance by providing for a title, a brief description of the cause of variance and the amount. The title and description are entered as free text. This means there is a wide variety in the level of detail provided by industry. Some, for example, use terms specific to the contract which means a variance can be easily understood in terms of contract management. However, for a high-level understanding of the causes of cost growth across contract, it is not easy to interpret what the underlying cause is. This in turn hinders use of DefCARS to identify the main causes of cost growth across contracts.
- 6.22 Contractors are asked to provide an explanation of 90 per cent of variance. No materiality parameters are set, meaning that any attempt at analysis of causes of cost growth may include insignificant variances.

- 6.23 Contractors are reporting explanations of variances. Of the 201 QDCs/QSCs entered into in the period 1 April 2015 to 31 March 2019¹⁰, 77 have submitted at least one QCR, ICR or CCR. 45 of these contracts had submitted information about a cause of variance in the latest QCR, ICR or CCR, and those reports contained data explaining the causes of variance, provided in a free text field in DefCARS. Having reviewed the explanations provided, the SSRO was not able to categorise causes of variance from all the free text explanations. In some instances, it is possible to identify overarching categories, such as scope change, or rate changes due to causes such as inflation. Other stated causes were too specific to the particular contract to enable a clear understanding of what had driven the variance in order to categorise it. For example, in one report the stated cause was given by referring to a contract item of work.
- 6.24 If the reported causes or explanations of variance are intended to help identify causes of variance across contracts, some standardised fields are required. The SSRO could facilitate this in DefCARS by having some standard categories for contractors to use, alongside free text, to explain the causes of variance. A dropdown menu for standardised categories could be inserted in DefCARS to facilitate provision of the information. It would require both DefCARS development and updated reporting guidance. There may be a range of suitable classifications, such as the MOD system reported in the Gray report¹¹ and shown in Figure 5. This system in Figure 5 is provided for illustrative purposes. It should be noted that Figure 5 includes all types of causes of cost growth or reduction, not just variances.

Figure 5: Extract from the Gray Report on drivers of variation categorised by MOD MI system

	Category	Variations due to changes:	Impact
Technical	Technical factors	Technical ability to deliver the project	Time and cost
Customer requirement	Changed requirement	Customer's requirement for the equipment, flowing from operational reassessment rather than budgetary priority	Time and cost
	Changed budgetary priorities	Customer's requirement for equipment, flowing from changed budgetary priorities	Time and cost
Economic conditions	Inflation	Inflation assumptions	Cost
	Exchange rate	Exchange rate assumptions	Cost
Management	Receipts	Expectations of receipts, e.g., liquidated damages, commercial exploitation levy	Cost
	Contracting process	Includes time taken in contract negotiations and placing contracts, international contract negotiations and effect of contractor bids compared to estimates	Time and cost
	Procurement strategy	Impact of overall procurement strategy (e.g., change to collaborative options), or from competitive to single source	Time and cost
Reporting conventions	Accounting adjustments	Reflecting no substantive change, including imported or exported costs arising from changes to accounting rules and adjustments to reflect changes in the definition of terms	Time and cost
	Risk differential	Amount of risk allowed for in the approval - difference between the 50% 'most likely' estimate and the 90% 'not to exceed' estimate at the point of Main Gate approval	Time and cost
Associated projects	Change in associated projects	Associated project changes, e.g., availability of equipment from another project for trials	Time and cost

Table F-1: CMIS forecast variations categories

¹⁰ Data as at 30 April 2019. The analysis has included making a number of adjustments to the data to correct for possible data quality issues.

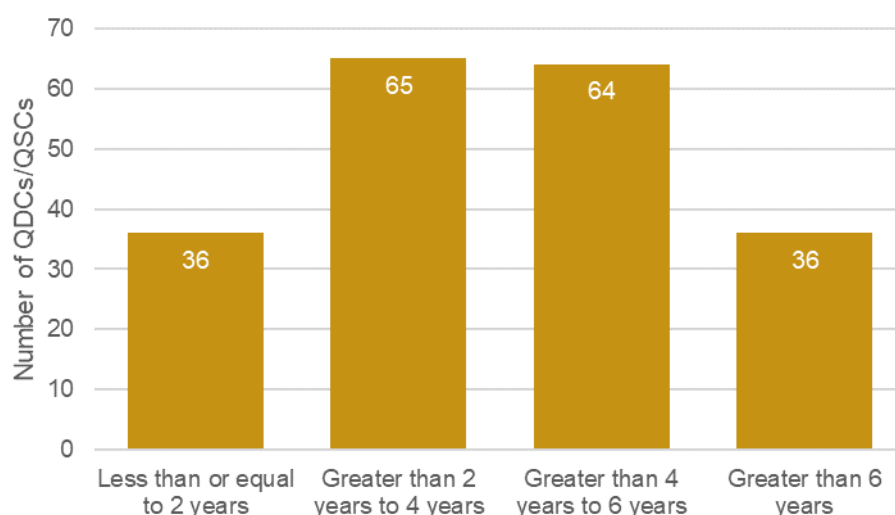
¹¹ <https://www.bipsolutions.com/docstore/ReviewAcquisitionGrayreport.pdf>

- 6.25 The categories would need to be sufficient to cover a majority of the variance and would be subject to further work and consultation with stakeholders. Examples could include change in inflation assumptions or change in expected workload assumptions.
- 6.26 ***We would welcome input from stakeholders on whether causes of cost growth should be categorised at a high level and, if so, the appropriate categories and the best way to collect this information.***

How frequently should causes of cost growth (or reduction) data be reported?

- 6.27 In general, the causes of cost growth are best understood at the end of a contract, after the contract completion date. It is clear, however, that some QDCs and QSCs are of longer duration, as shown in Figure 6.

Figure 6: Duration of QDCs and QSCs reported in the period 1 April 2015 – 31 March 2019¹²



- 6.28 If the causes of cost growth (or reduction) were collected only at the end of each contract, there may be unacceptable delay in adding to the understanding of the causes of changes in costs to inform future contracts. To avoid this, it would be necessary to continue to gather standardised data on causes of cost growth from both amendments and variances across multiple contracts and to collect this from the most recent QCR, ICR or CCR available at the time of analysis.
- 6.29 ***We propose that information about causes of cost growth should continue to be provided in each QCR, ICR or CCR, but we would welcome stakeholder input on this point.***

¹² As of 30 April 2019, the SSRO had received contract reports for 201 contracts that became QDCs/QSCs by 31 March 2019.

Contract management

- 6.30 Contract management will benefit from timely, detailed information about variance in the price, to identify potential issues at an early stage and enable action to control costs. If the reports are to support contract management, they should assist the MOD to recognise, understand and challenge specific causes of change. Action may be identified and taken to limit any variance, discuss changed assumptions and ensure costs are borne appropriately.
- 6.31 The data on variances collected through QCRs, ICRs and CCRs will provide a summary analysis of the contract price, a summary of actual and forecast price, and a quantified analysis of 90 per cent of variance between any estimated costs used to determine the contract price and the total actual and forecast costs. For reasons given previously, this information will not provide complete information about amendments and variance. It should, however, clearly identify that a variance has occurred and provide a free text description. If delivered at the right time, this may provoke appropriate contract management action.
- 6.32 The frequency of reporting between entry into contract and the contract completion date is dependent upon contract value. QCRs are required for contracts valued at £50 million or more. For contracts valued below £50 million, reliance would have to be placed on ICRs, which are required at reporting dates agreed between the MOD and the contractor. The agreed dates must be at least every five years for a contract valued below £50 million. Failing such agreement, ICRs are required at least every three years for a contract valued below £50 million. There is facility for the MOD to require ICRs to be provided on-demand. For a contract valued at less than £50 million, with a duration of three years or less, there is potential for no ICRs to be required and for the first report of any variances to be provided in the CCR submitted six months after the completion of the contract date (see Table 2).
- 6.33 ***The SSRO is interested in feedback as to whether the current arrangements for reporting causes of cost growth in QCRs and ICRs support contract management by the MOD as intended.***

Duplication

- 6.34 The MOD collects information about amendments and variance in a variety of ways, for example through its Earned Value Management (EVM) tool and its Contracting, Purchasing and Finance (CP&F) database. The SSRO understands there are key differences between DefCARS, EVM and CP&F related to the circumstances in which they are used, who completes them, and the information obtained. For example, the MOD uses EVM for management of its largest contracts, representing only a subset of contracts covered by the DRA. CP&F is completed by the MOD rather than the contractor. It provides a list of amendments using contract requisition numbers but does not appear to capture variances in cost or price.
- 6.35 The proposals to standardise information in DefCARS about the causes of cost growth would facilitate data collection and may provide a more consistent basis than other databases for understanding the causes of cost growth. There is potential, however, for data to be reported more than once, in different formats, to the MOD.
- 6.36 ***The SSRO would be interested in any examples of duplication in the collection of data on amendments and variance that could be avoided and whether there are any information requirements that could be better captured.***

7. Overhead reports

7.1 There are six overhead reports that a contractor may be required to submit, as summarised in section 2.¹³ The principal focus of this section is on the alignment between these reporting requirements and the MOD's rates programme. The Rates Comparison Report is only required on demand, has rarely been submitted, and is not a principal focus of this working paper.

Purpose

7.2 The Regulations require contractors who have Qualifying Business Units (QBUs) to submit a rates claim, a statement of claimed costs, and related assumptions. If the QBU was also a QBU in the previous year, then an estimated rates claim and an estimated costs claim are required. The estimated rates and costs can be used for comparison if an actual rates claim is submitted the following year. The apparent intention is that the MOD can use the submitted information to consider and evaluate the rates claimed for a QBU.

7.3 The explanatory notes to the DRA describe the reports that are expected and identify three purposes:

- capturing actual and estimated costs, split by standard categories, for contractor's business units;
- benchmarking comparable business units; and
- identifying systemic over- or under-recovery of overhead costs.

7.4 The explanatory notes explain there will be reports providing actual and estimated costs, which will be required twice, once reflecting a contractor's claim and then again once costs have been agreed. The Regulations do not, however, require contractors to report either agreed rates or the associated costs.

7.5 The MOD operates a rates programme, which is concerned with agreeing the rates that contractors will use when pricing single source contracts. Selected contractors are required to submit the rates they claim for a given period together with supporting information. The MOD reviews the rates, checks the underlying costs and application of the contractor's allocation methodology, and requests additional information as necessary. The MOD may challenge aspects of a rates claim before attempting to agree the rates with the contractor.

7.6 The MOD's rates programme is not referred to in either the Regulations or the explanatory notes to the DRA. It seems clear, however, that the rates reports collected through DefCARS are intended to be used in connection with reviewing rates claims. The reports provide a statement of each rates claim and information that can support the review of the claim. The reports also provide a body of information which, used appropriately, may be used to benchmark other claims.

¹³ The actual rates claim report (ARCR), QBU actual cost analysis report (QBUACAR), estimated rates agreement pricing statement (ERAPS), estimated rates claim report (ERCR), QBU estimated cost analysis report (QBUECAR) and rates comparison report (RCR). These reports contain information on all cost recovery rates. We refer to these collectively as 'overhead reports'.

- 7.7 ***The SSRO would welcome input from stakeholders on the SSRO's understanding that the overhead reports are intended to support the MOD's rates programme and to capture costs in standard categories, enable benchmarking and identify systematic over- and under-recovery. Feedback is also sought on how the data is actually being used.***

Alignment of reporting periods

- 7.8 Paragraph 7.2 refers to the requirement for actual and estimated rates claims (ARCR and ERCR) and the related cost reports (QBUACAR and QBUECAR). If these reports are to be used by the MOD to assess claims, the SSRO would expect the reports on actual and estimated claims to relate to accounting periods that follow each other. Consistent with this understanding, regulation 36(3) provides that the ERCR is to contain information for "the accounting period immediately following the relevant accounting period". Regulation 37(7), however, provides that the QBUECAR is to contain information for the "relevant accounting period", which mirrors the period already covered by the QBUACAR (regulation 35(7)), rather than the period to which the ERCR relates.
- 7.9 ***Feedback is sought on whether the reporting periods for the estimated cost analysis report and the estimated rates claim report should be aligned to both cover the same period, being the accounting period immediately following the relevant accounting period.***

MOD information requests

- 7.10 The MOD requests a range of information in support of its rates programme:
- A data request is sent to business units in the rates programme to capture assumptions, cost recovery bases, estimates and actual claims (the rates programme data request). This data is intended to enable the MOD to assess and agree the rates.
 - The MOD may request additional data for the purpose of investigating costs and may visit sites to capture and analyse further information.
- 7.11 It seems reasonable that a standard data set, such as provided through the overhead reports, may need to be supplemented by additional information to inform an investigation. However, if there is some consistent deficiency in the information provided in the overheads reports, then there may be a question whether the Regulations should be revised to require the information, or whether more needs to be done within the scope of the Regulations to support contractors to provide it. The SSRO has made an initial comparison of the rates programme data request with the reporting requirements but considers further evidence and analysis is needed to understand the points of difference and whether there is merit in further standardisation in DefCARs and reporting guidance so that required data is provided.
- 7.12 It is understood that one reason why the MOD issues the rates programme data request is that it does not receive overhead reports at the right times to commence its assessments. In this context it is noted that:
- The rates programme data request is made in the autumn, with the intention that responses will be provided within two months. The aim is to support investigation and agreement of rates soon after the contractor's financial accounting period ends. It is understood, however, that responses are not always received, and that investigation and agreement of rates may take considerable time.

- It is complex to identify when overhead reports are due, and this is a subject on which the SSRO has given detailed reporting guidance.¹⁴ There are 29 QBUs recorded in DefCARS, of which 26 QBUs have a financial year end of 31 December, with overhead reports due by 31 March. The remaining three QBUs have a financial year end of 31 March, with overhead reports due by 30 June.
- The MOD may require the provision of further QBUACAR and QBUECAR reports for a relevant financial year, which are due within one month of receiving written notice.

7.13 It is not clear to what extent there is a serious issue with the timing of overhead report due dates and whether there is a matter that needs to be explored further.

7.14 ***The SSRO is interested in stakeholder feedback on two matters. First, whether there is merit in developing DefCARS and guidance to further standardise rates and cost data submitted through the overhead reports. If so, suggestions would be welcomed on priority areas of focus. Secondly, whether there are issues regarding the times at which overhead reports are due that need to be addressed.***

Reporting agreed rates

7.15 The explanatory notes to the DRA indicate an intention that overhead reports should be submitted again once costs have been agreed by the MOD. This has not been reflected in the Regulations, and there is no requirement to submit agreed rates and costs.

7.16 The agreed rates and costs would be required if the MOD is to have information to support future rates agreements, and to benchmark costs for comparison of business units. That information may be held by the MOD in some form as it agrees the costs and rates. There is a question whether there is added benefit in having that information available in DefCARS. Some reasons why that may be beneficial include:

- creating a single data set that includes both claimed and agreed data;
- monitoring by the SSRO, so that the data set is more likely to be complete; and
- holding the data in DefCARS, where it will be more readily available for analysis.

7.17 To require the submission of agreed figures, the Regulations would need to be amended to require an additional report or reports from contractors. One option would be to require submission of an agreed rates report and an agreed cost analysis report within a specified time after rates are agreed.

7.18 ***The SSRO invites feedback on whether there is benefit in collecting information on agreed rates and costs. Suggestions for how this might best be achieved are also welcomed.***

Business units covered by reporting requirements

7.19 Overhead reports are required to be submitted for a QBU if a contractor has at least one qualifying contract valued at £50 million with outstanding obligations in a financial year (the ongoing contract condition). To be a QBU, a business unit must contribute a value of at least £10 million to qualifying contracts in a financial year. Reports are required to be submitted by the designated person, which will be the ultimate parent undertaking (UPU) if a contractor with a contract above the threshold value is part of a group, but otherwise will be the contractor.

¹⁴ The SSRO's reporting guidance, section 11.

7.20 The designated persons recorded in DefCARS have reported on a total of 29 QBUs. By contrast, the MOD rates programme includes a wider set of 97 business units involved in single source contracts. Some possible reasons for the different coverage could be that:

- it may be that not all designated persons are submitting reports for QBUs;
- not all single source contracts are QDCs or QSCs; and
- the MOD uses selection criteria different from the QBU definition.

7.21 Additionally, there may be a small number of QBUs that are not included in the MOD rates programme from year to year.

7.22 ***The SSRO would be interested in hearing stakeholder views on the reasons for different coverage between QBUs for which overhead reports must be submitted and the business units in the rates programme. Input is also sought on whether there are efficiencies that may be gained from greater alignment between these sets.***

QBU definition and compliance monitoring

7.23 If the ongoing contract condition is satisfied, the designated person is required to submit overhead reports for its QBUs. A business unit is a QBU if it provides goods, works or services for qualifying contracts in a financial year valued at £10 million or more.

7.24 The SSRO's duty is to keep under review the extent to which persons subject to reporting requirements are complying with them. The discharge of the SSRO's duty is impeded, however, as there is no requirement for contractors to report details of the contribution made by each business unit to qualifying contracts in a financial year. The SSRO may have some visibility through the Strategic Industry Capacity Report, but cannot reliably determine from DefCARS whether a business unit qualifies as a QBU in any given year.

7.25 The SSRO is concerned about this lack of ability to determine whether all QBUs are being identified and reported. One option for dealing with this would be to require contractors to report the value contributed by each business unit or expected to be contributed by each business unit in each year in contract reports submitted for each QDC or QSC. This would enable DefCARS to collect and aggregate the value of goods, works or services contributed by each business unit to QDCs and QSCs. From this, a preliminary view could be reached about whether a business unit is a QBU, which would provide a basis on which to raise appropriate queries if overhead reports were not submitted.

7.26 ***The SSRO would appreciate feedback from stakeholders on the best way for dealing with the current lack of information in DefCARS to identify QBUs and keep under review the extent to which designated persons are complying with their obligations to submit supplier reports.***

Benchmarking

- 7.27 DefCARS currently collects standardised data through the QBUCAR¹⁵ reports which aims to allow the MOD to conduct analysis of a QBU's overhead costs by business function. The SSRO's reporting guidance supports standardisation by providing a glossary of cost categories and definitions.
- 7.28 The SSRO has carried out some limited benchmarking of overhead costs provided for a small number of business units. As expected, there are differences in the proportions of costs, with business units having markedly different percentages for some types of overheads (such as finance, IT and site services).
- 7.29 The SSRO's current view is that there may be scope to improve standardisation and support benchmarking, by further analysing submitted data and considering the definitions of cost categories. This could potentially be a significant piece of work that will require close liaison with stakeholders and is not something proposed to be undertaken as part of the current review. ***We invite preliminary stakeholder views on how best to capture data for use in benchmarking.***

¹⁵ The QBUACAR and QBUECAR are collectively known as the QBUCAR.