

# Key questions and answers regarding the SSRO's baseline profit rate, capital servicing rate and funding adjustment methodology

The document should be read in conjunction with 'Single source baseline profit rate, capital servicing rates and funding adjustment methodology 2017/18'.

#### 1. Are all prime defence contractors included in the comparator groups?

Yes, almost all prime defence contractors are included in the comparator groups. The changes to the methodology in 2017/18, including updated text search terms and NACE codes, has allowed the SSRO to identify a wide range of companies that undertake defence-related work. The overwhelming majority of the MOD's main suppliers are now included in the comparator groups. We have also reviewed the availability of data on US companies for the calculation of the 2017/18 baseline profit rate (BPR) and introduced a new cross-check to identify the number of major suppliers to the MOD that feature in the comparator group.

## 2. What proportion of companies in the comparator groups are in the defence sector?

Companies that either have the word 'defence' or 'defense' included in their Orbis text description account for 11 per cent of the companies used in the calculation of the composite rate<sup>1</sup>. This is a reasonable proxy for defence activities and relies upon the description in Orbis. The SSRO does not superimpose its own view onto this.

### 3. Why do the comparator groups include smaller companies?

The range of company sizes in the comparator groups reflects the broader representation within Orbis of companies that carry out activities which contribute in whole or in part to the delivery of QDCs and QSCs. This includes a number of companies that may be considered small relative to the MOD's largest single source suppliers. The SSRO has not found turnover to be a systematic determinant of profitability, and therefore is content with the inclusion of these companies in the comparator groups.

Very small companies are excluded as only those with a minimum turnover of £5 million in each of the last five years are included in the calculation of the profit rate. This assists the SSRO in generating manageable numbers of companies with the information required to calculate the BPR.

<sup>&</sup>lt;sup>1</sup> This is based on companies that were accepted as comparators after applying the search criteria and the review of company information, but before the exclusion of companies with a negative capital servicing adjusted profit level indicator.

The principle of comparability is determined with respect to activity undertaken in line with transfer pricing principles. This means that comparator companies may not exhibit all of the features of defence contractors in the UK, for example the level of turnover. As long as a company meets the set criteria, it is selected as a potential comparator.

Company data and information is then reviewed in detail in order to confirm whether it undertakes activities which contribute in whole or in part to the delivery of QDCs and QSCs and should remain in the comparator group.

Even where single source contracts are large, they are composed of a diverse range of activities, both in terms of type and scale. This diversity is mirrored in the comparator groups, which include companies undertaking activities from large-scale systems integration to relatively smaller scale work at the sub-system level.

#### 4. Why is the turnover threshold set at £5 million?

Setting the threshold at £5 million returns a credible sample size for the purposes of calculating the BPR. In order to consider whether the size of a company, as measured by its turnover, is a relevant factor when assessing comparability, the SSRO examined the statistical relationship between turnover and profitability in its comparator company data and was unable to establish that one existed. Both small and large companies exhibit high and low profits. Raising the turnover threshold significantly reduces the number of comparator companies available to analyse, and means the activities of the comparator groups are less representative of the range of activities relevant to QDCs and QSCs.

The SSRO is confident that the companies selected through this process are valid comparators to the work undertaken on single source contracts and that the comparator group is appropriate, as is the use of the median average.

### 5. Why are loss making companies excluded from the comparator groups?

Loss makers are removed to avoid selecting companies that have going concern issues and to reflect the expectation of positive profit on estimated Allowable Costs. This maintains consistency with the construct of the profit formula as a markup on estimated Allowable Costs. The OECD Guidelines recognise that an independent enterprise would not tolerate sustained losses, but that an associated enterprise may remain in business under these circumstances if it were beneficial to the group as a whole. At present, the SSRO places no upper limit on the profit level of comparator companies and considers the use of the median average as a suitable alternative to address the distortionary impact of outliers.

#### 6. What is the reason to use the median as the choice of average?

The median is widely recognised as the most reliable measure of central tendency, especially given the characteristics of the data the SSRO uses.

While every effort is made to exclude firms that have a lesser degree of comparability, adjusted profit levels will vary within a range. Measures to identify the central tendency of the range (such as an average) are therefore required to arrive at a single figure for the BPR. The OECD transfer pricing guidelines advise that the measure of central tendency should be selected based on the specific characteristics of the data.

The SSRO does not place boundaries on the profits or size of companies in the comparator groups, other than to exclude loss makers and those with turnover below £5 million. There is no upper limit to the profit measure. As a result there are a small number of very profitable companies, and these are both small and large. The impact of these companies on the BPR has been considered and this further supports the

use of the median. The median is a superior measure of central tendency to the mean or weighted mean, given the skewed nature of the data.

Evidence from the 2017/18 BPR comparator groups shows that the single largest company, and the most profitable 1 per cent of companies, were significant determinants of the weighted mean and mean respectively. The outcomes using the median were considerably more resilient to these outliers. Having the BPR being influenced to such an extent by the particular circumstance to a small number of exceptional large companies or erroneous profit outliers undermines the credibility of the process.

### 7. What sensitivity analysis has the SSRO carried out?

This is a robust and comprehensive methodology that relies on a series of interdependent parameters. The SSRO has tested the sensitivity of the BPR to changes in this year's parameters. Alternative combinations of the turnover threshold, the treatment of loss makers and the types of average were considered, producing only small variations in the BPR. This demonstrates that the SSRO's approach for 2017/18 is reasonable.

8. What is the geographic mix of companies in the comparator groups? Companies from the UK, Western Europe and North America are included in the comparator reference groups. The range of representation of countries in the comparator groups reflects the broader coverage within Orbis of companies that carry out activities which contribute in whole or in part to the delivery of QDCs and QSCs. The UK and North America represent the greatest proportion of companies in every comparator group. Nevertheless, the range of profit level indicators exhibited shows that no single country introduces a downward bias in the BPR. The SSRO has published a series of fact sheets, which provides further details on the geographic composition of the comparator groups.

# 9. How did the SSRO ensure the comparator companies reflect the complexity of work undertaken on single source contracts?

The SSRO is confident that the companies selected through the process set out in the 'Single source baseline profit rate, capital servicing rates and funding adjustment methodology 2017/18' are valid comparators to the work undertaken on single source contracts and that the comparator group is appropriate.

The comparable company search process follows the transfer pricing 'arm's length principle' set out in the OECD transfer pricing guidelines for multinational enterprises and tax administrations (2010) (the Guidelines). Transfer pricing is a concept which seeks to ensure that companies operating in a number of territories receive appropriate income and profit in each, as if each territory were operating at arm's length as a third party would do. The UK's transfer pricing legislation details how transactions between connected parties are handled and, in common with many other countries, is based on the internationally recognised 'arm's length principle'. Transfer pricing is employed extensively by multinational enterprises and tax authorities globally and as such the Guidelines and their related expectations and practices are widely known and understood, and their practical implications have been explored.

<sup>&</sup>lt;sup>2</sup> Part 4 Taxation (International and Other Provisions) Act 2010.

In developing its methodology, the SSRO considered the nature of the activities involved in QDCs and QSCs. The SSRO invests time and resource to understand the defence industry as well as the contracts which are reported to it. The organisation does this in a number of different ways:

- It undertakes a regular programme of site visits to defence companies to understand their businesses and the nature of the work involved in QDCs.
- It regularly reviews the MOD Contracts Bulletin to identify the type of contracts, both competed and single source, which are being awarded.
- It logs queries to the SSRO Helpdesk so it can understand the areas where contractors may not be clear about the requirements of the regime, and how these apply to individual contracts.
- It provides information on all QDCs to SSRO staff so they can understand at a high level the elements of each contract.
- It attends a range of defence industry events like the DSEI conference, Farnborough Air Show and DPRTE to identify future developments and requirements.
- It has a number of staff who have experience of defence procurement and/or the defence environment.
- It speaks with the MOD integrated project teams to understand the complexity involved in defence procurement contracts.
- It attends training courses delivered by the Defence Academy to understand future priorities for the Front Line Commands.
- It reviews the annual reports of defence companies to understand past performance and future priorities.
- It reviews individual company details to confirm whether they are a comparator company in the calculation of the BPR.
- It learns about each individual contract through the statutory reports it receives and the additional information which is provided by contractors.
- It provides statistical bulletins based on what it learns across contracts on a range of topics, such as pricing methods and sub-contracting.

The SSRO has developed characterisations detailing the types of activity a company is expected to undertake in order to be considered comparable. We then derived corresponding search criteria to select companies whose work corresponds to types of activity that contribute to the delivery of QDCs and QSCs. Additional filters based on criteria relating to profit, turnover, geography, legal form and independence were then applied to the financial database to extract comparable companies.

To extract companies with relevant functions, industry NACE codes were used (which classify companies by type of economic activity), along with analysis of company business descriptions, using specific text search terms.

To confirm that the companies selected were actually undertaking comparable activities, we systematically reviewed company data, accounts and other information for the selected companies in detail. This involved assessing if the company's activities are consistent with the activity characterisation and if it operates in comparable markets.

This review contained some subjective elements but every effort is made to assess these aspects consistently. The search process was conducted in full for 2017/18, which resulted in some companies that were not present in 2016/17 entering the compactors groups and others leaving. For example the ownership structure or profitability of a company in the 2016/17 comparator group may have changed over the course of the year.

The result of the review is a robust comparator set that is relevant to the activities which contribute in whole or in part to the delivery of QDCs and QSCs. This will include companies that do not engage in the delivery of QDCs or QSCs and those that do. MOD contractors will have a close relationship to the activities involved in a QDC or QSC. However differences are likely to exist between contracts carried out on a single source basis to those that are not. Care is taken to avoid circularity by looking beyond the companies that engage in the delivery of single source MOD contracts.

The previous methodology included companies carrying out completely different work to that in the defence sector, for example in the retail, pharmaceuticals and tobacco sectors.

For transparency the SSRO has published the list of criteria used to select comparable companies, including the NACE industry codes and text search terms. The SSRO has also published the list of comparable companies used in the comparator groups.

## 10. Has the SSRO reviewed the company search criteria including NACE codes for 2017/18?

The SSRO reviewed all aspects of the company search criteria prior to calculating its 2017/18 recommendation. This resulted in updates to the NACE codes and text search terms used to identify potential comparator companies in the Orbis database.

The NACE codes and text search terms used for the 2017/18 BPR are an updated version of those used for the 2016/17 BPR. These were initially selected for 2016/17 as they were considered representative of the activities a company is expected to undertake in order to be considered comparable. The update incorporated the feedback from the 2016 profit rate consultation<sup>3</sup> which identified where changes could be made to better align the choice of codes and text keywords with the activity characterisations. The keywords 'defence' and 'defense' were added to the text search for all activity types. The NACE codes added to the search are listed in Table 1

As a consequence of these updates, the search process for comparable companies and the detailed review of the results have been conducted in full generating updated comparator groups for the 2017/18 BPR.

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<sup>&</sup>lt;sup>3</sup> Review of single source baseline profit and capital servicing rates methodology and adjustment guidance 2016 available at https://www.gov.uk/government/consultations/review-of-single-source-baseline-profit-and-capital-servicing-rates-methodology-and-adjustment-guidance-2016

Table 1: Additional NACE codes for the 2017/18 company search

Activity type	NACE code for inclusion in the 2017/18 search
Develop & Make	29 Manufacture of motor vehicles, trailers and semi-trailers 293 Manufacture of parts and accessories for motor vehicles
	309 Manufacture of transport equipment n.e.c. 2651 Manufacture of instruments and appliances for measuring, testing and navigation
Construction	431 Demolition and site preparation 432 Electrical, plumbing and other construction installation activities
	433 Building completion and finishing
Ancillary services	802 Security systems service activities

#### 11. What is the impact of the new BPR on defence contractors?

First, it is important to note that the BPR is the first of six steps that contribute to the contract profit rate, and that is applied to estimated costs. The 2017/18 BPR has decreased from the 2016/17 rate of 8.95 per cent to 7.46 per cent, a reduction of 1.49 percentage points. The contract profit rate for QDCs and QSCs will be determined by combining all six steps. The contract pricing mechanism and the performance of the contractor are also relevant for the final profit that may be achieved.

The BPR is the starting point for agreeing the profit rate for each contract and is not the actual contract profit rate which will be achieved. For each individual contract, adjustments can be made to take account of factors such as risk, performance incentives and capital servicing rates. In 2015/16, the average contract profit rate reported by contractors was 11.52 per cent (compared to the prevailing BPR of 10.60 per cent). The mean contract profit rate reported in the first nine months of 2016/17 was 10.80 per cent<sup>4</sup> (compared to the prevailing BPR of 8.95 per cent).

It is possible to achieve a higher percentage profit than was agreed at contract signing, by outperforming cost estimates. The potential for such gains will be affected by the contract pricing mechanism.

A three-year rolling average is applied to the BPR. This will also ensure there will be less volatility year on year in the BPR.

# 12. Is the SSRO open to the possibility of profit rates needing to increase in the future or is it more likely that they will continue to be reduced?

The SSRO's duty is to balance value for money for the taxpayer with a fair and reasonable return for contractors.

The profit rate could increase, decrease or stay constant. The SSRO has not made any assessment of its recommended profit rates for any years beyond 2017/18. However, if the profits of the comparator groups increase over time, the BPR would also increase in line with this. Any such changes would be subject to the effects of previous years in the three-year rolling average used to smooth annual changes in the results.

The underlying rate for 2017/18 has increased from 2016/17. The reason why the BPR has decreased is the use of the three year rolling average.

<sup>&</sup>lt;sup>4</sup> Quarterly qualifying defence contract statistics: Q3 2016/17, available at <a href="https://www.gov.uk/government/publications/quarterly-qualifying-defence-contract-statistics-q3-201617">https://www.gov.uk/government/publications/quarterly-qualifying-defence-contract-statistics-q3-201617</a>

#### 13. How does this provide a fair and reasonable return to industry?

The transfer pricing methodology used to determine the BPR is employed extensively by multinational enterprises and tax authorities globally to ensure that companies operating in a number of territories receive fair and reasonable income and profit in each. The OECD's Guidelines on this approach, and its related expectations and practices, are widely known and understood, and the practical implications have been explored.

The methodology provides a fair and reasonable return to industry because it is set with reference to the returns of companies whose economic activities are included in whole or in part in the activity types that contribute to the delivery of QDCs and QSCs. Previous profit rates were based on comparison with industry and activity that had little in comparison with fulfilling defence contracts.

The aim of the BPR is to provide the starting point in the determination of the contract profit rate (totalling steps one to six). The return to industry will ultimately be determined by the contract profit rate, the contract pricing mechanism and the performance of the contractor. The SSRO is therefore examining how it can use information on the returns to industry once all these factors have been taken into account in order to monitor the effectiveness of the single source contract regulations.

#### 14. What adjustments has the SSRO made to the comparator company profit data?

In line with the OECD guidelines, adjustments are made to the company data where they can be performed accurately and are expected to enhance reliability of the results. The SSRO's calculation of the BPR is based on publicly reported financial data that is prepared in accordance with accounting standards, is audited and subsequently aggregated by Bureau van Dijk. The SSRO's view is that no further adjustment should be made other than that which relates to capital servicing (as required by the Act and Regulations).

In line with the practice of previous years, the SSRO makes a capital servicing adjustment to take into account the cost of fixed capital and working capital employed by the companies in the comparator group. This is then added back at step 6 in the calculation of the contract profit rate.

The SSRO does not make any adjustments to the comparable company profit data to take into account costs that would generally not be Allowable. Any attempt to examine if the costs the comparator company incurred would be considered Allowable, or to consider return on cost of production at contract level, would be hampered by a lack of disclosure and consistency in financial reporting.

More broadly, the SSRO's approach means that it is not necessary to consider if costs incurred by the comparator companies are typically Allowable in QDCs and QSCs. The SSRO uses EBIT as the measure of the return a company makes on its operations.

EBIT reported by a comparator company is attributable to the entire cost of production incurred. The SSRO assumes this cost of production to be both appropriate and reasonable. Therefore, if it was possible to reliably adjust the cost of production in respect of costs that are typically non-Allowable in QDCs, a commensurate adjustment may need to be applied to EBIT. The SSRO does not consider this additional layer of adjustment of financial data, on top of that by management, auditors and the data aggregator, would enhance comparability.

Contractors may be reimbursed for depreciation and amortisation through Allowable Costs on a contract by contract basis (where these pass the relevant tests). EBIT is selected as it excludes these items from profit and includes them in the cost of production, which maintains symmetry with the approach to Allowable Costs<sup>5</sup>. Adopting an alternative approach would result in contractors being reimbursed for these items at a flat rate, irrespective of whether they are incurred in the delivery of a QDC or QSC or not.

The SSRO uses historical reported data of companies as the basis for benchmarking contract profits. A lack of available contract level data and reliable forecasts mean there is no reasonable alternative but to use historical company data to benchmark contract profits. Such an approach would be hampered by the lack of consistency and disclosure in financial reporting. The absence of any guarantee that any intragroup transactions are conducted on an arm's length basis mean divisional results are not used.

## 15. Why does the SSRO not exclude exceptional items from the profit level indicator used to calculate the BPR?

The SSRO's profit level indicator is a measure of return on costs using the total operational expenses of the company. The measure of return used is EBIT as it is the return a company makes on its operations.

The SSRO recognises that companies may wish to use alternative performance measures, and make adjustments in their report for exceptional items on the income statement and include subtotals to show the profit before such items.

Despite their separate disclosure, exceptional items remain part of the total operational costs of a company. Excluding exceptional items from the calculation of the BPR would not be consistent in the aim of producing a comparable measure of return on total operational expenses.

Furthermore, differences in the approaches taken to the reporting of exceptional items introduces inconsistency into measures of underlying profit within the comparator groups. Therefore the approach most consistent with the 'arm's length principle' is to leave these items included.

### 16. Can the data used in Orbis be reconciled with company accounts?

The SSRO has undertaken a due diligence exercise on the data contained in the Orbis database and is satisfied that it accurately reflects the financial statements of the comparator companies.

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<sup>&</sup>lt;sup>5</sup> Single source cost standards: Statutory guidance on Allowable Costs July 2016.

#### 17. What further transparency will the SSRO provide?

The SSRO has published an extensively updated version of its BPR, capital servicing rates and funding adjustment methodology. The updates add clarity and detail to areas of the methodology, which addresses feedback from stakeholders.

The following notable areas have been updated:

- the principle of comparability;
- the activity characterisations;
- the search criteria;
- the detailed company review; and
- the calculation of the capital servicing rates.

In addition, the SSRO has published a series of fact sheets, containing detailed information on the comparator groups on each activity type.

# 18. Why did the SSRO decide to recommend a composite rate? What happened to the proposal to introduce multiple rates?

The basis for calculating the composite rate is considered to strike an appropriate balance between the objectives of good value for money for government and a fair and reasonable return for contractors. The SSRO nevertheless continues to focus the discussion on the potential benefits of multiple rates and assist the MOD with modelling in this regard.

The SSRO provided the Secretary of State with information on multiple profit rates alongside the recommendation. The data on the multiple rates was provided so that the Secretary of State was better able to understand the basis on which the composite rate had been calculated and why it was considered appropriate.

The composite rate is derived from two activities: 'Provide and Maintain' (P&M) and 'Develop and Make' (D&M), which together represent the vast majority of single-source procurement by value. The underlying rates for 'Ancillary Services' and 'Construction' are lower than those for P&M and D&M. Given these activity types account for a small minority of single-source contract spend they are not included in the composite rate as doing so would not be consistent with the principle of comparability with respect to D&M and P&M. This methodology is the same as in 2016/17.

#### 19. How is the composite rate calculated?

Calculating the 2017/18 composite BPR involved combining several different profit rates into a single number. This data was drawn from the underlying rate for the previous two years and two separate searches for companies whose activities were characterised by the D&M and P&M activity types. It resulted in two sets of company data, one for each activity type, alongside the corresponding underlying rates for 2015/16 and 2016/17.

The SSRO took the following approach to combining the two data sets into the single composite BPR:

- The median was taken of each data set, producing an underlying rate for D&M and another for P&M.
- For each activity type, the mean of the 2017/18 underlying rate and the underlying rates for the two prior years was calculated. This resulted in a three-year rolling average for D&M and another for P&M.

• The mean of the D&M and P&M three year rolling averages was calculated as the composite rate.

The SSRO felt this approach provided the best balance between the following factors:

- the median as the most robust measure of central tendency of the data on company profits;
- D&M and P&M existing as two distinct and separate activity types with different profitability characteristics;
- the desire to recommend a rate for contracts that had significant elements of the D&M and P&M activity types; and
- it was not unduly affected by differences in the population of each activity type.

This approach recognises that the benchmark profit rate for the two activity types is different, and balances the influences of each group of companies equally in the calculation of the composite rate. In practice this approach results in the composite BPR sitting exactly in the middle of the higher P&M rate and the lower D&M three-year rolling averages.

# 20. Why is the adjustment for capital servicing higher than last year, whereas the capital servicing rates themselves are lower?

The impact of the capital servicing adjustment on the underlying profit rate is determined by the aggregated adjustments on each comparator company's financial data. These adjustments depend on the capital servicing rates, the capital intensity of the comparator groups and the relative mix of fixed, positive working and negative working capital. While the capital servicing rates are lower for 2017/18, the combination of capital intensity and mix have more than offset this reduction.

The changes in capital structure of the comparator group has been accompanied by a year-on-year increase in the underlying rate. The combined effect of these developments is an increase in the underlying composite rate for 2017/18 on last year.

## 21. How does the SSRO calculate the capital servicing adjustments and how are these used in the calculation of the BPR?

The SSRO calculates the following three capital servicing rates based on averages of interest rate data published by Bloomberg and the Bank of England:

- Fixed capital seven-year average of the Bloomberg index for 15-year BBB-rated yields of sterling-denominated corporate bonds.
- Positive working capital three-year average of the Bloomberg index for oneyear BBB-rated yields of sterling-denominated corporate bonds.
- Negative working capital three-year average of the Bank of England data on monthly interest rates for short-term deposits.

The 'Yellow Book' regime's methodology used a BBB- credit rating approximated by a BBB interest rate plus an adjustment. To reflect this legacy issue, an equivalent adjustment applied to all data points up to and including the 31 December 2014.

The profit rate of each comparator company is adjusted to set a baseline with respect to capital employed upon which Step 6 in the calculation of the contract profit rate can be applied. The approach is to adjust the profit rate in proportion to the ratio of fixed and working capital employed by each comparator company. This is the exact reverse of the Step 6 in calculating the contract profit rate.

The capital servicing rates that apply in the calculation of the BPR are the same as those that apply at Step 6 in the calculation of the contract profit rate. This ensures that contractors are not disadvantaged should the aggregate credit rating of the comparator group differ from their own.

### 22. How is the SSRO funding adjustment calculated?

The method to calculate the funding adjustment calculation is intended to set it at a level that allows the MOD to recover half of the SSRO's costs through a reduction in the amounts paid on single source contracts shared across contractors based upon the value of their QDCs.

The SSRO funding adjustment is calculated as:

SSRO funding adjustment =

 $\frac{1}{2}$  x  $\frac{\text{SSRO costs - costs of additional tasks request by the Secretary of State}}{\text{Total value of QDCs}}$ 

The SSRO costs and the costs of additional tasks requested by the Secretary of State are the mean averages of the three full financial years preceding the year of the recommendation.