

SSRO

Single Source
Regulations Office

Key questions and answers regarding the SSRO's *Single source baseline profit rate, capital servicing rates and funding adjustment methodology*

This document should be read in conjunction with the SSRO publication *Single Source Baseline Profit Rate, Capital Servicing Rates and Funding Adjustment Methodology* (March 2019) and *Guidance on the Baseline Profit Rate and its Adjustment* (March 2019). Earlier versions of this Q&A document related to previous years' rates assessments are available on the SSRO's website.

Terms and definitions

Comparability principle: The aim of the baseline profit rate is to provide the starting point in the determination of the contract profit rate. 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.

Baseline profit rate: Step 1 of the 6-step process to calculate the contract profit rate of a contract that falls under the Single Source Regulations. The baseline profit rate is the average of the underlying rates for the last three years.

Underlying rate: The median rate of profit (return on cost of production) based on the performance of the companies in a comparator group over a financial year. The SSRO reports this before and after the application of the capital servicing adjustment.

Return on cost of production: The measure of profit used as the basis for the underlying rates and baseline profit rate:

$$\text{Return on cost of production} = \frac{\text{Earnings before interest and tax (EBIT)}}{\text{Cost of Production}}$$

Capital servicing adjustment: An adjustment to the return on cost of production to account for the levels of fixed capital and working capital employed by companies in the comparator groups. A corresponding adjustment is made in the pricing of individual contracts by an adjustment at step 6 of the contract profit rate.

Activity type: A group of economic activities, defined by the SSRO, which correspond to types of activity that contribute to the delivery of QDCs and QSCs.

Comparable companies: A company whose economic activities are included, in whole or in part, within an activity type.

Comparator group: A group of comparable companies undertaking one or more of the economic activities which make up an activity type.

The baseline profit rate

1. How is the baseline profit rate calculated?

The baseline profit rate (BPR) is an average of the actual profit rates of companies whose activities are comparable to those that contribute to the delivery of MOD single source contracts. The SSRO categorises those activities under the headings 'Develop and Make' and 'Provide and Maintain' and companies are selected into those comparator groups based on the nature of their activities. The BPR is the rolling average of the underlying rate for the current year and those of the two previous years.

2. Why does the baseline profit rate change every year and why has it increased?

The Defence Reform Act 2014 (the Act) requires the SSRO to provide the Secretary of State with an assessment of the appropriate baseline profit rate for each financial year.

The baseline profit rate for 2019/20 is 7.63 per cent (prior year: 6.81 per cent). The annual underlying rate used to determine the BPR has risen for three consecutive years. This year's composite underlying rate of 8.50 per cent replaces the 2016/17 underlying rate of 6.06 per cent in the calculation of the three-year average which determines the SSRO's BPR recommendation.

The SSRO's approach is to use the most recent data available at the time of making its assessment in order to ensure its assessment is appropriate. The baseline profit rate assessment changes year-on-year in response to changes in the comparator group data. It is the SSRO's assessment that the increase this year is mainly caused by changes in the performance of companies that make up the comparator groups, reflecting changing economic conditions. The impact of companies joining or leaving the group due to the SSRO's annual verification process was 0.07pp this year.

3. What is the impact of the new higher baseline profit rate and how much will it cost the taxpayer?

The BPR is the first of six steps that contribute to the Contract Profit Rate (CPR), which supports both value for money in government expenditure and fair and reasonable prices for contractors. The new rate will mean that Step 1 of the CPR will be 0.82 percentage points higher compared to 2018/19, and 0.17 percentage points higher than in 2017/18. The other five steps of the CPR take account of factors such as risk, performance incentives and capital servicing. SSRO data on contract profit rates is shown in the table below.

The implications of an increase in the BPR for MOD will depend on how all six of the steps which determine the contract profit rate are applied. In addition, the performance of the contractor, the pricing method which allocates cost risk between the parties to the contract, specific contract terms and conditions, and any final price adjustment, will come together to determine the final contract price. Prices may therefore decrease or increase alongside a change in the BPR.

The following table of the average contract profit rates of contracts entered into each year shows that changes in contract profit rates may not always mirror changes in the BPR, as a result of those other factors.

Average (mean) estimated contract profit rate by financial year

Financial year in which contract became a QDC/QSC	Baseline profit rate (%) Step 1	Average contract profit rate reported by contractors to the SSRO via statutory reports (%) Steps 1-6	Difference – baseline vs. contract
2015/16	10.60	11.47	0.87
2016/17	8.95	10.61	1.66
2017/18	7.46	8.56	1.10
2018/19 Apr to Dec	6.81	8.73	1.92

Source: SSRO (2018) *Quarterly Qualifying Defence Contract Statistics: Q3 2018/19*. Available at www.ssro.gov.uk

Note: The differences between the baseline profit rate and the observed contract profit rates are due to the application of steps 2-6 in the calculation. For more details see SSRO (2019) *Guidance on the Baseline Profit Rate and its Adjustment*.

4. What are the lowest and highest profit rates achievable under the new BPR?

The following table illustrates the range of initial contract profit rates achievable given the adjustments that are possible. The SSRO's *Annual qualifying defence contract statistics*¹ includes a summary of actual agreed contract profit rates to date.

Illustration of the six steps and the range of CPRs before the impact of contractor performance

Contract profit rate step		Value/Adjustment
Step 1	Baseline profit rate	7.63%
Step 2	Cost risk adjustment*	+/- 1.91 pp
Step 3	POCO adjustment	0
Step 4	SSRO funding adjustment	-0.042pp
Step 5	Incentive adjustment**	(up to) 2 pp
	Maximum CPR at step 5	11.50%
	Minimum CPR at step 5	5.68%
Step 6	Capital servicing adjustment***	0.85pp on average for 2017/18
	Illustrative high CPR	12.35%
	Illustrative low CPR	6.53%

Notes:

The six-step process is set out in the SSRO's publication *Guidance on the Baseline Profit Rate and its Adjustment* available on its website.²

* Based on an adjustment of +/- 25 per cent of the BPR – the maxima currently permitted.

** A positive adjustment of up to two percentage points may apply to incentivise the achievement of enhanced performance.

*** Mean average value for contracts priced in 2017/18. The actual adjustment may be higher, lower or negative. For example, it ranged from 0 per cent to 2.6 per cent during that period.

Source: SSRO (2018) *Annual Qualifying Defence Contract Statistics: 2017/18*

Depending on the contract pricing method, it is possible for a contractor to achieve a higher percentage profit than was initially agreed at contract signing by outperforming cost estimates, or to achieve a lower profit rate by underperforming. The final contract profit rate will therefore only be known once the contractor has delivered the contract.

¹ <https://www.gov.uk/government/collections/ssro-qualifying-defence-contract-statistics>

² <https://www.gov.uk/government/collections/profit-rate>

5. How do the profits of the companies who make up the BPR compare to those of the MOD's main suppliers?

The table below shows the range of profits (return on cost of production) exhibited by all listed companies in the MOD's top 20 single source suppliers selected by value of non-competitive spend in 2017/18, as reported by the MOD.³ The median profit rate of the companies used in this year's comparator groups is included for reference. The rates shown for the suppliers are the median over the last five years to illustrate what might be considered typical for each.

The suppliers' median profit rates ranged from 16.64 per cent to 0.88 per cent. The overall median was 9.6 per cent, which is similar to that of the comparator groups and lies midway within the illustrative range of possible CPRs presented in Q4 above (12.35 per cent to 6.53 per cent).

Company name	Return on cost of production: median 2013/14 - 2017/18*
Safran	16.64%
QinetiQ	15.37%
Raytheon	15.14%
Northrop Grumman	14.98%
General Dynamics	14.42%
Lockheed Martin	12.23%
VINCI	11.69%
Rolls-Royce	11.18%
Babcock	10.25%
BAE Systems	8.95%
Thales	8.30%
Boeing	8.06%
DXC‡	7.48%
Jacobs Engineering	5.24%
Airbus	5.18%
Leonardo	4.87%
Cobham	3.19%
Serco	0.88%
Provide & Maintain median†	11.42%
Develop & Make median†	8.78%

Source: Orbis supplied by Bureau van Dijk and SSRO calculations

*Return on cost of production, unadjusted for capital servicing

‡DXC was incorporated in 2017 therefore the median is of data that is available

†Median of the underlying rate, unadjusted for capital servicing, of the current year comparator group over the last 5 years

³ Ministry of Defence (2018) *MOD Trade, Industry and Contracts: 2018*, Table 4 Annex. <https://www.gov.uk/government/statistics/mod-trade-industry-and-contracts-2018>

6. Will the baseline profit rate increase or decrease in the future?

The underlying rate is set with reference to actual returns generated by profitable comparator companies. The rate is therefore responsive to changes in the underlying performance of those comparator companies and could increase, decrease or stay constant. The SSRO's methodology is not written or applied with a specific direction in mind and the SSRO has not made any assessment of its recommended profit rate for any years beyond 2019/20. However, the baseline profit rate is a three-year average of the underlying rate therefore at any time two thirds of the inputs in to the following year's assessment are already known.

7. How does the baseline profit rate compare to the MOD suppliers' weighted average costs of capital?

In SSRO (2017) *Developing the SSRO's Approach to Calibrating Profit Rates in Single Source Contracts: Discussion Paper* the SSRO presented analysis showing that the weighted average cost of capital (WACC) for the major MOD's suppliers was between 8 and 10 per cent.

The WACC describes the expected return required by investors on the money they put in to a business. This is a very different measure to the BPR which is based on return on cost of production (also known as a mark-up on cost, or a profit mark-up).

$$\text{Return on cost of production} = \frac{\text{Profit (£)}}{\text{Revenue (£)} - \text{Profit (£)}}$$

The relationship between investment in a company and cost incurred is complex. For an individual contract, a return on cost of production could be lower, higher or the same as the WACC and meet the requirements of investors. The required contract profit rate will depend on the individual circumstances of each contract and company, and there are few conclusions to be drawn from a direct comparison of the WACC to the BPR.

Measure	Definition	Key similarities and differences
Profit margin or net margin	$\frac{\text{Profit (£)}}{\text{Revenue (£)}}$	Uses the same inputs as return on cost but is the return on revenue
Return on capital employed	$\frac{\text{Profit (£)}}{\text{Capital Employed (£)}}$	The return is measured against the assets that are used as part of operations
Return on invested capital	$\frac{\text{Profit (£)}}{\text{Invested Capital (£)}}$	The return is measured against the capital that has been invested in operations

The methodology and the comparator groups

8. What is the basis of the SSRO's methodology and how does this provide a fair and reasonable return to industry?

The SSRO is confident that the baseline profit rate is a fair and reasonable starting point for the contract profit rate calculation because it is set with reference to the actual returns of comparable companies. The methodology takes steps to remove loss-making companies and to only incorporate companies that perform comparable economic activities in comparable countries.

The comparable company search process follows the transfer pricing 'arm's length principle' set out in the OECD transfer pricing 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 from the other(s), as a third party would do. Transfer pricing is employed extensively by multinational enterprises and tax authorities globally, including the UK,⁴ and as such the guidelines, and their related expectations and practices, are widely known and understood and their practical implications have been explored.

For transparency, the SSRO publishes the list of criteria used to select comparable companies in the methodology and publishes the resulting list of comparable companies used in the comparator groups.

9. How representative are the activity type comparator groups of the UK defence industry?

It is not the SSRO's intention that the comparator groups contain only companies from the defence industry. To produce a robust, open-market benchmark, the BPR methodology includes companies operating in the defence sector as well as companies operating in non-defence sectors and outside of the single source regime. Companies that either have the word 'defence' or 'defense' included in their activities description in the Orbis database account for 18 per cent of the companies used in the calculation of the composite rate for this year (2018/19: 16 per cent).

The methodology identifies companies whose economic activities are of the type which contribute in whole or in part to the delivery of QDCs and QSCs. The result of the process is a robust comparator group that is relevant to the activities which contribute in whole or in part to the delivery of QDCs and QSCs. The range of contract profit rates achievable given this year's BPR give us confidence an appropriate group of companies has been selected (see questions 4 and 5).

⁴Part 4 Taxation (International and Other Provisions) Act 2010.

10. Why have some companies left the comparator group and some joined?

The set of comparator companies was last fully refreshed for the 2017/18 recommendation and anticipated to last for three years. In the years before the next full refresh, an annual review is undertaken to validate each group to ensure that members remain appropriate comparators to the activities in question.

Companies may drop out over time for a range of technical reasons (such as having been taken over, or due to a lack of financial data), or where a review of the latest evidence available is not sufficient to confirm that the company's activities remain comparable. In some cases, a company may leave the group temporarily and re-join it later if its circumstances change. For example, if it has made a loss in one year, but later returns to profitability.

To confirm that the companies selected continue to undertake comparable activities, the SSRO has systematically reviewed each company that met the Orbis selection criteria. Assessments drew on detailed information from Orbis, on company websites, and other reputable information sources such as Bloomberg. This process was carried out independently of any consideration of the companies' profit data. This review contained some subjective elements, but every effort is made to assess these aspects consistently.

Companies may also be added through the annual review of contractors with QDCs or QSCs (or their ultimate parent undertakings) and the latest data on the MOD's spending with suppliers.⁵ Inclusion of additional companies is subject to the companies' activities being comparable to the SSRO's activity types and their meeting the relevant selection criteria such as turnover, independence and profitability. The overwhelming majority of the MOD's main suppliers in recent years are included in the comparator groups.

Our process ensures that, as in previous years, companies are included or excluded on the basis of the most up-to-date and robust evidence available to the SSRO. The effect of companies leaving and joining the comparator groups this year had a limited positive impact of 0.07 percentage points on the BPR compared to what the rate would have been if the companies from 2018/19 had simply been carried over.

11. What is the source of company data for the SSRO's assessment?

The Orbis database⁶ supplied by Bureau van Dijk is used to search for comparable companies and as a source of financial information; the calculation uses publicly-reported financial data that is prepared in accordance with accounting standards and aggregated in to the Orbis database. The SSRO publishes its methodology on its website containing detailed information on the data fields it uses.

For a number of the MOD's major suppliers we have verified the financial data in Orbis against published financial statements. The SSRO is satisfied that the data contained in the Orbis database accurately reflects the financial statements of the comparator companies.

⁵ <https://www.gov.uk/government/collections/defence-trade-and-industry-index>

⁶ <https://www.bvdinfo.com/en-gb/our-products/data/international/orbis>

12. How big are the companies in the comparator group?

Only companies with a turnover of £5 million or more in each of the last five years are included in the comparator groups, and we impose no upper limit. The turnover of companies in the comparator groups range from around £5 million to £90 billion, with a mean of around £2.6 billion. This includes a number of companies that may be considered either large or small relative to the MOD's single source suppliers, reflecting the diversity of contractors with QDCs and QSCs, both in terms of the type and scale of work. The SSRO is guided by the principles of transfer pricing⁷ which mean that each company in the comparator group may not exhibit all the features of single source defence contractors, for example, having a different level of turnover.

The SSRO has 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 may exhibit high or low profits. We have considered the effect of excluding companies with annual turnover below that which is commonly associated with small- and medium-sized enterprise (£25 million to £36 million). Such a change this year would have resulted in an increase in the BPR of less than one per cent.

The profitability of the comparator group is, on average, comparable to that of the MOD's largest single source suppliers (see questions 5). We are, therefore, not persuaded it is justified to alter any individual aspect of the methodology in isolation (such as the turnover threshold) which may act to move away from this position of comparability.

Where the size, or other characteristics, of an individual contractor differs from the comparator group in a way which can be shown to be relevant to the contract profit rate the six-step process allows for good value for money and fair and reasonable prices to be achievable.

13. Why is the BPR set at the median average with loss-making companies excluded from the comparator groups?

The methodology is carefully calibrated to ensure that it represents a reasonable starting point for the application of the six steps. The SSRO has published analysis which supports the exclusion of loss makers and using the median as an analytically-robust approach.

The choice of average should reflect the specific characteristics of the data set and the median is a superior measure of central tendency compared to the mean or weighted mean given the skewed nature of the data set. This is due to the fact that:

- the SSRO excludes loss-makers but does not place an upper limit on the profit measure, resulting in a small number of companies with very high profit rates in the comparator group. The mean is unduly affected by the presence of such outliers; and
- the SSRO excludes small companies but does not place an upper limit on company size, resulting in a small number of very large companies in the comparator group. Using the weighted mean would result in the BPR being heavily influenced by this small group of companies resulting in volatility and uncertainty about the result.

⁷ OECD (2017) *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*

The median is robust to these features of the data set and is the most appropriate choice of average.

Loss-making companies are removed to reflect the expectation of positive profit on estimated Allowable Costs in QDCs. This maintains consistency with the construct of the profit formula as a mark-up on estimated Allowable Costs and removes the possibility of a negative BPR being produced. Incorporating loss-makers this year would have resulted in a decrease in the BPR of less than one per cent.

The profitability of the comparator group is, on average, comparable to that of the MOD's largest single source suppliers (see questions 5). We are, therefore, not persuaded it is justified to alter any individual aspect of the methodology in isolation (such as the inclusion of loss-makers) which may act to move away from this position of comparability.

14. What adjustments has the SSRO made to the 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 by companies' external auditors, and which is subsequently aggregated by Bureau van Dijk.

The SSRO makes a capital servicing adjustment to take into account the different levels of fixed capital and working capital employed by the companies in the comparator group. A corresponding adjustment is then added back at step 6 in the calculation of the contract profit rate for a particular QDC or QSC. The SSRO's view is that no further adjustment should be made other than that which relates to capital servicing.

The SSRO does not make any adjustments to the comparable company profit data to take into account costs that do not meet the requirement of being Allowable Costs. We do not consider it possible to reliably make an assessment of the costs of comparator companies, or to make corresponding adjustments to their other financial results (such as EBIT) to reflect the company's position as if the "disallowed" cost had not been incurred. The SSRO assumes the cost of production for each comparator company to be both appropriate, attributable and reasonable in the circumstances.

We understand that companies might use alternative performance measures in their annual report and accounts. These might, for example, highlight exceptional items in the income statement or include additional subtotals to show profit before amortisation of goodwill. There are a number of reasons why we do not use these measures:

1. In order to do so we would need to apply them consistently across the whole comparator group:
 - a. Detailed information may be available for some companies, but we look at a wide range of companies that have different reporting requirements.
 - b. Where detailed information is available, our observation is that there are no consistent rules or principles we could apply to determine what is or is not exceptional.
2. Despite their separate disclosure, such items remain part of the total operational costs of a company. Individual companies may like to provide additional context to help investors understand their underlying results, but we have a different objective, which is to produce comparable measure of return on total operational expenses of a large group of companies.

15. What is the impact if a company restates their financial information and will the SSRO reassess a previous year's rate if financial data has changed?

The financial information we draw from Orbis to calculate the underlying rate reflects the latest set of financial statements issued by a company. This means that if a company were to restate their prior financial results due to adopting a new accounting standard the information used to calculate the current year capital servicing adjustment would be those restated figures.

The SSRO calculates each underlying rate once and we do not re-assess previous years' underlying rates. Calculating an underlying rate requires two full years of data, so it would normally not be possible for us to recalculate previous underlying rates because when companies restate financial information it is usually only presented in detail for the current and prior year.

If a material change in the underlying rate were to occur, due to market-wide accounting change or for any other reason, the three-year averaging helps mitigate short-term volatility in the baseline profit rate assessment and incorporates changes in a phased and predictable way. We consider this to be beneficial to contractors and the MOD. Restating past underlying rates would undermine this process.

16. Why does the SSRO recommend a composite rate based on the Develop and Make and Provide and Maintain activity types? Why are rates also published for Ancillary Services and Construction?

The composite rate is derived from two activity types: Develop and Make (D&M) and Provide and Maintain (P&M). Together, these types of work represent the vast majority of single-source procurement.

Given Ancillary Services and Construction 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. The approach taken for the 2019/20 recommendation is the same as for the 2018/19 BPR recommendation.

The data on all four activity types is provided so that the Secretary of State can understand the basis on which the composite rate had been calculated and why it was considered appropriate.

17. The OECD recommends a minimum profit rate of 5 per cent. How have you factored this into your analysis?

The OECD provides an elective simplified approach to determine arm's length charges for low value-adding intra-group services with a suggested mark-up of 5 per cent.⁸ The SSRO does not adopt this simplified approach in its application of the OECD guidance for the rates assessment. This is because:

- we do not consider a simplified approach would help ensure the robustness of our methodology;

⁸ *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* Chapter VII para 7.61 (2017), OECD

- the baseline profit rate is typically not used for pricing of low-value-adding intra-group services; and
- low-value-adding intra-group services may be considered to be a similar category to our Ancillary Services activity type, which we assess using a full arm's length assessment. This group exhibits an underlying rate of similar order to the OECD's suggested approach.

Capital servicing rates

18. How does the SSRO calculate the capital servicing adjustments and how are these used in the calculation of the baseline profit rate?

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

- Fixed capital
- Positive working capital
- Negative working capital

The profit rate of each comparator company is adjusted in proportion to the ratio of fixed and working capital employed to costs of production, a measure of the capital intensity of the company. A corresponding adjustment is made in the pricing of individual contracts by an adjustment at Step 6 of the contract profit rate to reflect the capital intensity of the contract.

This process ensures that the contract profit rate reflects an appropriate and reasonable return on the fixed and working capital employed by the contractor for the purposes of enabling the contractor to perform the contract.

SSRO Funding Adjustment

19. How does the SSRO funding adjustment fund the SSRO's activities and why does it change year-on-year?

The SSRO is an executive non-departmental public body sponsored by the Ministry of Defence, who provide a grant-in-aid for the SSRO's running costs. The funding adjustment calculation is intended to set the adjustment at a level that allows the MOD to recover half of the SSRO's grant-in-aid through a reduction in the amounts paid on single source contracts, shared across contractors based upon the value of their QDCs.

The funding adjustment is calculated with reference to the average annual total Allowable Costs of contracts entered into, which may change year on year. The adjustment may change accordingly while still delivering a similar reduction in costs to the MOD. The increase in the 2019/20 recommendation compared to 2018/19 is primarily caused by a decrease in the average annual total Allowable Costs of contracts entered into compared to the previous year.