

Key questions and answers regarding the SSRO's baseline profit rate, capital servicing rates and funding adjustment methodology 2018/19

This document should be read in conjunction with the SSRO publication *Single source baseline profit rates, capital servicing rates and funding adjustment methodology* March 2018 and *Guidance on the baseline profit rate and its adjustment.*

1. What is the impact of the new baseline profit rate on defence contractors and how much will the taxpayer save as a result?

The SSRO's duty is to support value for money for the taxpayer in government expenditure and fair and reasonable prices for contractors.

It is important to note that the baseline profit rate (BPR) is the first of six steps that contribute to the calculation of the contract profit rate (CPR) which is applied to the Allowable Costs which together make up the price of a QDC or QSC. For each individual contract, adjustments can be made to take account of factors such as risk, performance incentives and capital servicing rates.

The actual profit rate achieved may be higher or lower than the agreed CPR. The outcome for contractors and the implications for the taxpayer will depend on the performance of the contractor, the contract pricing method which allocates cost risk between the parties to the contract, any specific contract terms and conditions and the final price adjustment (if applied). It is possible to achieve a higher percentage profit than was agreed at contract signing, or generate savings, by contractors outperforming cost estimates. Profits or savings may be lower if contractors underperform against cost estimates.

The 2018/19 BPR has decreased by 0.65 percentage points to 6.81 per cent from the 2017/18 rate of 7.46 per cent. In 2016/17 it was 8.95 per cent. The table below shows how the BPR compares to the average expected CPR in QDCs and QSCs agreed each year, which includes the effect of the six steps.

Financial year	Prevailing BPR (%)	Average estimated CPR (%)
2015/16	10.60	11.57
2016/17	8.95	10.64
2017/18 (to 31 Dec)	7.46	8.46

Baseline profit rates and Average (mean) estimated CPRs

Source: Quarterly qualifying defence contract statistics: Q3 2017/18. Available at www.ssro.gov.uk

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

The actual profit rates earned will depend on the contract profit rate agreed (totalling steps one to six) alongside other factors such as the contractor's performance and risk sharing arrangements. There is no prescribed maximum rate, although the Secretary of State and contractor may agree to adjust the final contract price once profit exceeds certain thresholds.

The following tables are illustrative of the range of profits achievable given the adjustments that are possible and variations in the contractor's performance against the estimated Allowable Costs. There is an incentive and opportunity for contractors to earn higher profits than were agreed at the start of the contract.

Contract profit rate step		Value/Adjustment
Step 1	Baseline profit rate	6.81%
Step 2	Cost risk adjustment*	+/- 1.70 рр
Step 3	POCO adjustment	0
Step 4	SSRO funding adjustment	-0.024pp
Step 5	Incentive adjustment**	(up to) 2 pp
	Maximum CPR at step 5	10.49%
	Minimum CPR at step 5	5.09%
Step 6	Capital servicing adjustment***	1.36pp on average
	Maximum CPR	11.85%
	Minimum CPR	6.45%

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

Illustration of the impact of contractor performance on the agreed CPR

Contractor performance	Profit rate impact	
5% cost saving on a firm price contract	5рр	
Allowable Costs are as estimated	Орр	
5% cost overrun on a firm price contract	-5pp	

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.

* 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 2016/17. The actual adjustment may be higher, lower or negative. Source: *Annual qualifying defence contract statistics: 2016/17* available at www.ssro.gov.uk

3. Does a reduction in the BPR this year lead to a possibility that the MOD will face a lack of interest in bidding for contracts, or worse-still – a financial failure by a contractor?

The SSRO's approach to the BPR is intended to support value for money for the taxpayer and fair and reasonable prices for contractors. It is set at the median of the actual returns generated by profitable comparator companies using a three-year average to avoid volatility. Loss-making companies are removed from the comparator groups to reflect the expectation that contractors will earn a positive profit on QDCs and QSCs and to avoid the influence of companies with going concern issues. The SSRO keeps this issue under review and has published data in its *Annual report on the regime 2017* which showed that on average that MOD's top 10 single source suppliers were seen as lower risk investments than the stock market as a whole. All but one maintained an investment grade credit rating.

The level of profit a contractor can expect to earn when bidding on a contract will be determined by six steps which result in the contract profit rate, alongside other relevant factors such as the company's estimate of its own performance and the risk sharing arrangements. The SSRO's *Quarterly qualifying defence contract statistics (Q3 2017/18)* sets out that to date, actual contract profit rates agreed have been higher on average than the BPR at the time of pricing (see question 1). To illustrate the profit rates earned in sectors that are generally regarded as a more competitive and lower value-added than those which typically contribute to the delivery of QDCs, we also publish information on ancillary services and construction companies. They have earned lower profits on average than the BPR over time. These comparator groups do not form part of the BPR calculation.

4. How were the company comparator groups selected for 2018/19?

The current comparator groups were established for the 2017/18 BPR and have a planned lifespan of three years, after which we intend to refresh them. An annual review has been undertaken this year to validate each group to ensure that members remain appropriate comparators to the activities in question.

The process of company validation is, to a significant extent, automated. To be included in the comparator groups, companies must meet a number of specified criteria in the Orbis database (from which the data on each of the comparator companies is drawn). These criteria relate to company size, profitability, independent ownership, activities and data availability.

To confirm that the companies selected were actually undertaking comparable activities, the SSRO systematically reviewed each company that met the Orbis selection criteria. Assessments drew on detailed information in 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. The company review process has been subject to external quality assurance.

5. How representative are the activity type comparator groups of the UK 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 nondefence sectors and outside of the single source regime. It is not the SSRO's intention that the comparator groups contain only companies from the defence industry, although we clearly expect them to be represented to enhance comparability.

Last year the SSRO modified the BPR methodology to include search criteria relating to defence activities. Prime contractors to the MOD are included provided they meet the necessary criteria (for example, that they are profitable).

This year we have also considered for inclusion in the comparator groups all contractors (or their ultimate parent undertakings) with a qualifying defence contract or sub-contract and organisations paid more than £5 million by the MOD during 2016/17. Organisations have been included subject to their activities being comparable to the SSRO's activity types and meeting the relevant selection criteria for inclusion, such as turnover, independence and profitability. This has resulted in 16 new companies being admitted to the comparator groups for 2018/19. This had the effect of reducing the BPR by 0.01 percentage points compared to what the rate would have been had they been excluded. The overwhelming majority of the MOD's main suppliers in recent years are now included in the comparator groups.

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

The SSRO publishes factsheets on its website containing details of the companies in the comparator groups. Companies that either have the word 'defence' or 'defense' included in their activities description in the Orbis database account for 16 per cent of the companies used in the calculation of the composite rate; an increase from 11 per cent in 2017/18. We consider use of companies' self-reported activities descriptors (as recorded in the Orbis database) to be a reasonable approach to identifying companies undertaking defence sector work. The SSRO does not impose its own view onto this.

7. Why did the underlying profit rates for D&M and P&M increase this year, but the baseline profit rate fall?

The increase in the underlying rates is the result of a combination of factors:

- There has been an overall increase in the profitability of companies in the comparator groups, which form the basis of this year's recommendation.
- Reductions in the capital servicing rates, combined with changes in the capital structure of the comparator groups have resulted in a lower capital servicing adjustment which reduces downward pressure on the BPR.
- Companies leaving the comparator groups this year, through the application of the Orbis search criteria and the company validation process, resulted in further marginal increases in the year-on-year profitability of the overall group. This was offset to a small extent by the entry of a number of MOD suppliers to the group.

The BPR is the result of a rolling averaging process using benchmark rates from three previous years. Whilst the underlying rate for this year has risen, this is the first year that the BPR calculation does not include the higher rates calculated using the previous

Review Board methodology. 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. Therefore, even though the underlying rates have continued to increase, the exclusion of the legacy rates from the calculation has resulted in a decrease in the BPR.

8. Is the SSRO open to the possibility of the baseline profit rate needing to increase in the future and what would be the impact on savings to the Ministry of Defence?

The SSRO's duty is to support value for money for the taxpayer and fair and reasonable prices 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 2018/19. In 2018/19 the composite underlying profit rate has increased for the second consecutive year. Any changes in future years would be subject to the effects of previous years in the three-year rolling average used to smooth annual changes in the results, and the capital servicing adjustment.

The implications of an increase in the BPR for MOD savings will depend on how the six steps which determine the contract profit rate have been applied. In addition, the performance of the contractor, the pricing method which allocates cost risk between the parties to the contract, any specific contract terms and conditions and the final price adjustment (if applied), will determine the final contract price. Prices may therefore increase, decrease or remain the same alongside a higher BPR.

9. 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 transfer pricing guidelines, and its related expectations and practices, are widely known and understood, and the practical implications have been explored.

The methodology supports 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 baseline profit rate is to provide the starting point in the determination of the contract profit rate (totalling steps one to six). In assessing if the BPR is contributing to a fair and reasonable return for industry, it is relevant to consider the contract profit rate agreed and the actual profit rate achieved, as these may differ. The return to industry will ultimately be determined by the agreed contract profit rate, the contract pricing mechanism, the performance of the contractor, any specific contract terms and conditions and the final price adjustment (if applied). In the SSRO's discussion paper *Developing the SSRO's Approach to Calibrating Profit Rates in Single Source Contracts* it was noted that after contracts end the SSRO will monitor actual profits, using data from contract completion reports. The small number of contract completions at this time means it is not yet possible to undertake a meaningful analysis which could inform calibration of the BPR for 2018/19.

10. How did the SSRO ensure the comparator companies reflect the complexity and diversity of work undertaken on single source contracts?

The SSRO is confident that the companies selected through the process set out in its *Single source baseline profit rates, capital servicing rates and funding adjustment methodology* 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's 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, 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'.¹ Transfer pricing is employed extensively by multinational enterprises and tax authorities globally and as such the OECD guidelines, and their related expectations and practices, are widely known and understood, and their practical implications have been explored.

In developing these activity characterisations, 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's *Defence Contracts Bulletin* and other defence media to understand the type of contracts being awarded, both competitive and single source.
- It logs queries to the SSRO Support 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 and QSCs 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 plans to supplement this through expanding its access to a network of subject matter experts from across the stakeholder community and beyond.
- 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.

¹Part 4 Taxation (International and Other Provisions) Act 2010.

- 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 baseline profit rate.
- It learns about each individual contract through the statutory reports it receives and the additional information which is provided by contractors through our engagement with them and their responses to consultations.
- 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 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 are used (which classify companies by type of economic activity), along with analysis of company business descriptions, using specific text search terms.

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.

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

11. How does the range of contract profit rates compare with the profits of the MOD's main suppliers?

The range of profits (return on cost of production) exhibited by the MOD's suppliers varies year on year. In 2015/16 the range of profit rates was 15.31 per cent (General Dynamics) to -0.86 per cent (Serco) and was 9.27 per cent on average (median was 10.42 per cent). For 2016/17 the range was from 26.88 per cent (Safran) to -28.61 per cent (Cobham) and was 8.15 per cent on average (median was 10.48 per cent). The average rates lie well within the range of possible CPRs (6.45 per cent to 11.85 per cent, based on the average 2016/17 capital servicing adjustment) presented in Q2 above. It is possible that actual CPR achieved in a QDC or QSC may be higher or lower, depending on the specific the capital servicing adjustment applied and the performance of the contractor.

Company name	Profit rate 15/16*	Profit rate 16/17*
Safran	14.75%	26.88%
Qinetiq Group PLC	11.08%	17.11%
General Dynamics Corp	15.31%	15.93%
Raytheon Company	14.89%	15.56%
Ultra Electronics Holdings PLC	10.77%	15.14%
Northrop Grumman Corporation	15.04%	14.98%
Lockheed Martin Corp	12.69%	12.15%
VINCI	10.96%	11.68%
BAE Systems PLC	9.88%	10.70%
Babcock International Group PLC	10.06%	10.25%
Thales SA	8.30%	8.90%
Boeing Company (The)	8.14%	6.28%
Leonardo S.P.A.	4.98%	5.51%
Airbus SE	6.58%	3.34%
Serco Group PLC	-0.86%	0.88%
Rolls-Royce Holdings PLC	12.25%	0.29%
Marshall of Cambridge (Holdings) Limited	1.45%	-0.20%
Cobham PLC	0.51%	-28.61%

Source: Orbis supplied by Bureau van Dijk and SSRO calculations *Return on cost of production - unadjusted for capital servicing

*This table was updated on 10 April 2018

12. Why have some companies dropped out of the comparator groups this year?

Companies dropped out for a range of technical reasons (such as having been taken over or due to a lack of financial data) and where the latest evidence available at the time of this year's review was not sufficient to confirm comparability. This represents a refinement of the overall comparability of the group, ensuring 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 removal of companies had a limited positive impact of 0.28 percentage points on the BPR compared to what the rate would have been if the companies from 2017/18 had simply been carried over.

13. Why do the comparator groups include smaller companies?

The range of company sizes (measured by annual income) in the comparator groups reflects the broader representation within the Orbis database 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 is, therefore, content to include these companies in the comparator groups.

Very small companies are excluded from the calculation of the BPR as only those with a turnover of £5 million or more in each of the last five years are included in the comparator groups. This assists the SSRO in identifying a manageable number of companies with the information required to calculate the BPR.

The principle of comparability used by the SSRO to identify comparable companies is based on similarity of the activities undertaken and of the markets in which those activities are undertaken. This is guided by the principles of transfer pricing.² This means that companies in the comparator groups 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.

14. 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. Sensitivity analysis on the comparators shows that increasing the turnover threshold can increase the profit rate for some comparator groups, decrease it in others and, in some cases, have almost no impact at all. 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 in single source contracts and that the comparator group is appropriate.

15. Why are loss-making companies excluded from the comparator groups?

The methodology is carefully calibrated in respect of the treatment of loss makers, the turnover threshold and the choice of average, to ensure that it represents a reasonable starting point for the application of the six steps. Loss-making companies are removed to avoid selecting companies that have going concern issues and 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 rate being produced. The OECD

² OECD transfer pricing guidelines for multinational enterprises and tax administrations (2017)

transfer pricing 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.

Compared to a methodology that included loss-making companies, their exclusion in 2018/19 increases the underlying 'Develop and Make' and 'Provide and Maintain' profit rates by 1.7 and 2.6 percentage points respectively. This has the effect of raising the composite rate by 0.8 percentage points.

16. 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 and 2018/19 BPR comparator groups shows that the single largest company, and the most profitable 1 per cent of companies, have a disproportionate impact on the weighted mean and mean respectively. The outcomes using the median were considerably more resilient given the SSRO does not remove these outliers. Having the BPR being influenced to such an extent by a small number of exceptionally large companies or profit outliers would undermine the credibility of the process.

17. What is the geographic mix of companies in the comparator groups?

The SSRO publishes factsheets on its website containing details of the 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 United Kingdom and North America represent around half of the companies in every comparator group, and this has increased on last year. The SSRO publishes a series of factsheets, which provides further details on the geographic composition of the comparator groups.

18. 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 by companies' external auditors, and which is, 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 Defence Reform Act 2014 and Single Source Contract Regulations 2014).

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 for a particular QDC or QSC.

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 costs pass the relevant tests to be deemed Allowable). EBIT is selected as it results in these items being included in the cost of production, which maintains symmetry with the approach to Allowable Costs in QDCs.³ Adopting an alternative approach would result in contractors being reimbursed for these items at a flat rate, irrespective of whether or not they are incurred in the delivery of a QDC or QSC.

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. The absence of any guarantee that any intragroup transactions are conducted on an arm's length basis mean divisional results are not used.

³ SSRO (2018) Single source cost standards: Statutory guidance on Allowable Costs February 2018.

19. Why does the SSRO not exclude exceptional items from the profit level indicator used to calculate the baseline profit rate?

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 annual report and accounts 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 profit level indicators for the purpose of determining the BPR recommendation would not be consistent with 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' used in transfer pricing is to leave these items included.

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

For a number of the MOD's prime contractors 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.

21. What further transparency will the SSRO provide on its recommendation?

As for the 2017/18 recommendation, the SSRO will publish its baseline profit rate, capital servicing rates and funding adjustment methodology. The methodology was extensively updated for the 2017/18 recommendation to provide greater clarity and detail on areas of the methodology, in response to feedback from stakeholders.

The methodology contains detailed explanations of, for example:

- 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 will publish a series of factsheets containing detailed information on the comparator groups for each activity type.

22. 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 represent the vast majority of single-

source procurement by value. The SSRO believes that the composite supports the SSRO's aim to support good value for money for government and fair and reasonable prices for contractors.

The data on the D&M and P&M 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 SSRO also provided the Secretary of State with information on Ancillary Services and Construction activity types alongside the recommendation and the D&M and P&M rates. The underlying rates for Ancillary Services and Construction are lower than those for D&M and P&M and we believe are of interest to the SSRO's stakeholders. 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 with respect to D&M and P&M. The approach taken for the 2018/19 recommendation is the same as for the 2017/18 BPR recommendation.

23. How is the composite rate calculated?

Calculating the 2018/19 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 Develop and Make (D&M) and Provide and Maintain (P&M) activity types. It resulted in two sets of company data, one for each activity type, alongside the corresponding underlying rates for 2016/17 and 2017/18.

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

- The median of each data set was taken, producing an underlying rate for D&M and another for P&M.
- For each activity type, the mean of the 2018/19 underlying rate and the underlying rates for the two prior years was calculated. This resulted in three-year rolling averages for both D&M and P&M.
- The mean of the D&M and P&M three-year rolling averages was calculated as the composite rate.

This 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
- the resulting BPR being not unduly affected by differences in the population of companies in each activity type comparator group.

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 P&M and D&M three-year rolling averages.

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

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 Bloomberg index for 15-year BBB-rated yields of sterling-denominated corporate bonds.
- Positive working capital three-year average of Bloomberg index for one-year BBB-rated yields of sterling-denominated corporate bonds.
- Negative working capital three-year average of the Bank of England data on monthly interests 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 is 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 (the capital servicing adjustment) 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 capital servicing adjustment in calculating the contract profit rate for a QDC or QSC.

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 for a QDC or QSC. This ensures that contractors are not disadvantaged should the aggregate credit rating of the comparator group differ from their own.

25. 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 =

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

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. The total value of QDCs is the average of the total Allowable Costs in

QDCs agreed in the three years preceding the year of the recommendation, as reported in the SSRO's most recent quarterly contract statistics bulletin.