

**REVIEW BOARD
FOR
GOVERNMENT CONTRACTS**

**REPORT ON
THE 2005 ANNUAL REVIEW OF
THE PROFIT FORMULA FOR
NON-COMPETITIVE
GOVERNMENT CONTRACTS**

May 2005

The Rt Hon Dr John Reid, MP
Secretary of State for Defence
Ministry of Defence
Main Building
Whitehall
London
SW1A 2HB

May 2005

Dear Secretary of State

I have pleasure in submitting the Review Board's report on the 2005 Annual Review of the profit formula for non-competitive Government contracts.

Copies have been sent to the President of the Confederation of British Industry and to the Director General Commercial.

Yours sincerely

George Staple
Chairman

REVIEW BOARD FOR GOVERNMENT CONTRACTS

List of Members

George Staple CB QC, Chairman

Fraser Ashman

Francis Dobbyn

Dr Alan Fox

Chris Melrose

Secretaries

Deloitte & Touche LLP

Athene Place, 66 Shoe Lane

London EC4A 3BQ

NOTE:

[Published reports usually contain a note at this point, stating whether recommendations have been accepted by the Ministry of Defence and the Joint Review Board Advisory Committee and cross-referring to an agreed statement by the parties which is presented as an addendum to this report.]

CONTENTS

<i>Section</i>		<i>Paragraph</i>	<i>Page</i>
	EXPLANATION OF TERMS AND ABBREVIATIONS.....		vii
I	INTRODUCTION.....	101	1
II	SUMMARY OF RECOMMENDATIONS.....	201	2
	The Profit Formula.....	201	2
	Annual Returns and Post-Costing Data	203	2
	Implementation of the Board’s Recommendations	207	3
III	THE TARGET RATE OF RETURN.....	301	4
	Introduction	301	4
	The Reference Group.....	302	4
	The Profit Formula Methodology	307	5
	The Standard Baseline Profit Allowance	316	7
	The Risk/Reward Matrix	321	8
	The Comparability Principle.....	327	9
IV	RECENT PROFITS ON NON-COMPETTIVE CONTRACTS.....	401	10
	Introduction	401	10
	Annual Returns	402	10
	Post-Costing.....	406	10

APPENDICES

A	The Recommended Profit Formula - Illustrations	14
B	Flowchart of the Various Stages of Baseline Profit	17
C	The Risk/Reward Matrix	18

ADDENDUM

Agreed Statement by MOD and the JRBA	[XX]
--------------------------------------	-------	------

EXPLANATION OF TERMS AND ABBREVIATIONS USED IN THIS AND IN PREVIOUS REPORTS

Adjusted Standard Baseline Profit Allowance ('ASBPA')	The profit allowance on cost applicable to firm, fixed price and target cost contracts and contract amendments with an estimated or target cost of £50 million or more subject to any further adjustment in accordance with the risk/reward matrix.
Annual return	The return to the Review Board prepared by a contractor showing the profit achieved each year on its non-competitive Government contracts.
Annual Review	The review by the Review Board of the principal components of the profit formula, undertaken annually between General Reviews. The report on the 2002 Annual Review was published by The Stationery Office (ISBN 0-11-772999-X) in September 2002.
Baseline Profit Rate ('BPR')	The profit of the Reference Group after deducting allowances for the servicing of capital employed, expressed as a percentage of the Reference Group's cost of production.
BBB3 Corporate Bond	The credit quality of debt obligations issued by corporations is evaluated by organisations such as Thomson Financial BankWatch, Moody's, S&P, and Fitch Investors Service. Bloomberg uses these evaluations to produce a composite rating. BBB3 is the lowest investment grade rating ie immediately above non investment grade.
CE	Capital employed
Comparability principle	The aim of the profit formula to give contractors a return equal on average to the overall return earned by British industry having regard to both capital employed and the cost of production.
Contract Baseline Profit Allowance ('CBPA')	The profit allowance on cost applicable to a specific contract after making all appropriate adjustments in accordance with the risk/reward matrix.
CP	Cost of production

CP:CE ratio	The ratio formed by dividing a contractor's cost of production by its capital employed. This ratio is used to attribute to individual contracts a proportion of the contractor's capital employed.
CP:CE ratio unit	The business unit or other sub-division of a contractor's business for which a CP:CE ratio is calculated for the purposes of pricing non-competitive Government contracts.
CSAs	Capital Servicing Allowances, a term used to refer to Fixed Capital Servicing Allowances and Working Capital Servicing Allowances collectively.
DEFCONs	The series of defence contract conditions applicable to MOD contracts. These are contained in the Commercial Managers' Toolkit which can be accessed on the MOD website. DEFCONs replaced the Standard Conditions.
FCSA	Fixed Capital Servicing Allowance provided to contractors for their investment in tangible and, subject to the GACs, capitalised intangible fixed assets.
General Review	The review conducted by the Review Board, usually triennially, at which all aspects of non-competitive Government contracts are open to examination. The report on the 2003 General Review was published by The Stationery Office (ISBN 0-11-773023-8) in March 2004.
Government Accounting Conventions ('GACs')	The accounting conventions used for the determination of overhead costs attributable to non-competitive Government contracts and for the calculation of CP:CE ratios.
Historic cost	The accounting basis incorporating all assets at their original cost less depreciation and excluding revaluations.
Historic cost rate of return	Operating profit (before interest and taxation) as a percentage of the average of the opening and closing historic cost capital employed.
International Accounting Standards ('IASs')	International Accounting Standards issued by the International Accounting Standards Committee, the body that preceded (1973-2001), the International Accounting Standards Board.
International Financial Reporting Standards ('IFRSs')	International Financial Reporting Standards issued by the International Accounting Standards Board.
Intra-group inter-unit trading	Trading between different CP:CE units within the same group of companies.
Joint Review Board	A body comprising representatives of the CBI and those

Advisory Committee ('JRBAC')	trade associations and companies that have particular interest in non-competitive Government contracts.
LIBOR	London Inter Bank Offered Rate
Ministry of Defence ('MOD')	The Ministry of Defence is the predominant user of the profit formula for non-competitive Government contracts and since the 1987 General Review has had the responsibility, formerly vested in HM Treasury, for communicating with the Board on behalf of Government on all matters concerning the profit formula. However, if both contracting parties agree, the profit formula and its associated arrangements are available for application to non-competitive contracts placed by other Government departments or public sector bodies, by incorporation of the appropriate contract conditions. References in this report to MOD include, where appropriate, reference to other bodies making use of the profit formula and its associated arrangements.
Modified historic cost ('MHC')	MHC is not defined in accounting standards or company law. For the purposes of the GACs we take it to refer to the depreciated fixed asset value shown in a company's statutory accounts. These assets might be shown at cost or might be revalued in accordance with UK GAAP.
NAPNOC contracts	'No Acceptable Price No Contract'. Contracts placed according to arrangements introduced by MOD in July 1992 where MOD's aim is that such contracts should be priced before they are placed.
Non-competitive Government contracts	Those Government contracts, or sub-contracts from other contractors in aid of Government contracts, let other than by means of competitive tendering and priced either prior to or following contract award with reference to the profit formula.
Non-risk contract	A contract placed on a cost reimbursement basis (whether with a fixed fee or a percentage profit) which insulates a contractor against loss.
Post-costing	A review by MOD of the actual costs incurred on a contract, for comparison with the costs as estimated at the time when the price for the contract was agreed.
Profit formula	The formula for the pricing of non-competitive Government contracts.
Private Venture Research and Development ('PV R & D')	Research and development expenditure which is not directly chargeable to the Government or any other customer under the terms of a specific contract.
Reference Group	The group of UK companies representative of British industry whose average rate of return is used by the Review Board to determine the target rate of return in the

profit formula.

Risk contract	A contract with a pricing arrangement which does not insulate the contractor against loss.
Risk/Reward matrix	A table with notes that sets out the adjustments to be made to the SBPA (or ASBPA for risk contracts and contract amendments with an estimated or target cost of £50 million or more) to reflect the differing levels of risk for different types of work
SAYE	Save As You Earn
Semi-CCA	A basis of inflation accounting incorporating fixed assets at their depreciated current cost, but making no allowance for the effect of inflation on the value of stocks and net working capital.
SORP	Statements of Recommended (Accounting) Practice relating to specialised sectors.
Standard Baseline Profit Allowance ('SPBA')	The profit allowance on cost applicable to firm, fixed price and target cost contracts and contract amendments with an estimated or target cost of less than £50 million, subject to any further adjustment in accordance with the risk/reward matrix.
Standard Conditions of Government Contracts for Stores Purchases (SCs)	The series of conditions applicable to Government contracts, published as Form GC/STORES/1. At MOD these have now been replaced by DEFCONs.
Target Cost Incentive Fee ('TCIF') Contracting	A pricing basis whereby the target fee is calculated by reference to the average total cost outturn estimate and a formula is agreed between Government and the contractor on how to share cost over-runs and cost savings usually subject to an overall maximum price.
The 1968 Memorandum of Agreement	The agreement between the Government and the CBI establishing the Review Board.
The Profit Formula Agreement	The agreement between the Government and the CBI reached in 1968 which set out the basis of pricing non-competitive Government contracts.
Total Contract Profit Allowance ('TCPA')	The total profit allowance applicable to a specific contract or contract amendment, expressed as a percentage of cost, comprising the sum of the CBPA, the FCSA and the WCSA.
Trigger points	A contract or sub-contract, incorporating the appropriate conditions, is eligible for reference to the Board where outturn costs vary from estimated costs by more than a specified percentage. The limits thus defined are referred to as the trigger points and are currently set by reference

to a 10 per cent variation from estimated costs (see also paragraph 17 of the 1968 Memorandum of Agreement).

UITF 17	Urgent Issues Task Force Abstract 17 Employee Share Schemes. UITF abstracts are issued by the Accounting Standards Board to assist in the identification of acceptable accounting treatment for various issues.
UK GAAP	UK Generally Accepted Accounting Practice. There is no formal definition of UK GAAP, but in simple terms it means compliance with UK company law and accounting standards (including UITF abstracts and SORPs and, where relevant, IASs and IFRSs).
WCSA	Working Capital Servicing Allowance provided to contractors for their investment in working capital.
WIP	Work in progress.

SECTION I

INTRODUCTION

101. Annual Reviews of the profit formula for non-competitive Government contracts were introduced in 1984 following the recommendations in the report on the Fourth General Review. They are normally limited to examination of the target rate of return and of other statistical data underlying the profit formula. A wider ranging General Review has been undertaken, normally triennially, since the Review Board was established in 1969.

102. The 2003 General Review¹ was completed by the Review Board and submitted to Government and the CBI in March 2004. The Review contained recommendations for major revisions to the methodology underlying the profit formula, which were accepted by Government and the CBI. The previous formula was based on a return on capital employed and the revised formula is based partly on a return on cost of production, and partly on a return on capital employed. The full details of the changes are contained in the 2003 General Review.

103. The basis for pricing non-competitive Government contracts is set-out in The Profit Formula Agreement, which was agreed between Government and the CBI in 1968 and has since been subject to numerous revisions. Also, certain terms used in the 2003 General Review, when explaining the new methodology introduced in that Review, have been modified at the request of the MOD and the JRBAC. In view of all these changes, the Board has drafted a consolidated document setting out the current agreement between the parties and detailing the prevailing Profit Formula arrangements. This document is currently under consideration by the MOD and the JRBAC and the Board hopes that a consolidated document will be available for inclusion in the Board's next Report.

104. This report contains the Board's recommended profit formula for the year from 1 July 2005.

105. At the conclusion of each General Review or Annual Review the Board makes a report to the Ministry of Defence ('MOD')² giving its recommendations. These reports are simultaneously made available to the Joint Review Board Advisory Committee³ ('JRBAC') and form the basis for discussions between MOD and the JRBAC.

¹ The report on the 2003 General Review of the Profit Formula for non-competitive Government Contracts was published by The Stationery Office (ISBN 0-11-773023-8).

² See Explanation of Terms.

³ See Explanation of Terms.

SECTION II

SUMMARY OF RECOMMENDATIONS

The Profit Formula

201. To achieve comparability with the return earned by British industry, the profit formula from 1 July 2005 should be structured as follows:

		2003 <i>General Review</i> %	2005 <i>Annual Review</i> %
FCSA	Fixed Capital Servicing Allowance (page 6)	7.30	6.99
WCSA	Working Capital Servicing Allowance (page 6)	5.67	5.59
BPR	Baseline Profit Rate (page 6)	6.27	6.25
SBPA	Standard Baseline Profit Allowance (page 7)	5.67	5.95
ASBPA	Adjusted Standard Baseline Profit Allowance (page 8)	5.37	5.65
NBPA	Non-risk Baseline Profit Allowance (page 8)	4.25	4.46

202. A flowchart showing the various stages of Baseline Profit is included at Appendix B.

Annual Returns and Post-Costing Data

203. In the course of the Annual Review the Board requested annual returns from contractors setting out the overall results achieved on their non-competitive work. The Board did receive some returns but, towards the end of the Review, MOD and the JRBAC asked the Board to withdraw the requirement for annual returns as they both believed they were of limited value as a result of the new profit formula arrangements introduced with the 2003 General Review. The Board recognises that the revised profit formula methodology introduced in the 2003 General Review will necessitate a major revision to information requested in annual returns in due course but would have expected to undertake the annual return analysis for the current Review (page 10).

204. The Board understands that the process for revising the annual returns has now started and trusts that this can be completed in time for the next Review.

205. The Board notes that just 17 contracts were post-costed in 2003. However, it recognises that this level of post-costing does not yet reflect the changes resulting from the 2003 General Review⁴, whereby MOD is entitled to a contract retention through the post-costing period. This change may in due course result in an increase in the level of post-costing both in terms of the numbers of contracts post-costed and in the timeliness of post-costing activity (page 10).

206. The post-costing results for 2003 show an overall return on capital employed that is considerably in excess of the target rate. As mentioned above the number of contracts post-costed was low, so the results might not reflect returns on the generality of non-competitive contracts. However, as the Board did not receive annual return data from contractors this possibility cannot be explored (page 10).

⁴ 2003 General Review paragraphs 618-634.

Implementation of the Board's Recommendations

207. As agreed between MOD and the JRBAC the implementation date should be 1 July 2005.

SECTION III

THE TARGET RATE OF RETURN

Introduction

301. For the 2005 Annual Review the target rate of return has been derived using the comparability principle, which has been enshrined in the profit formula since 1968. Accordingly, the review focuses upon the latest available evidence of the return earned by British industry, derived from the accounts of a Reference Group of UK companies. The precise approach and methodology for deriving the target rate of return has been modified over the years, including a major revision in the 2003 General Review.

The Reference Group

302. The Reference Group comprises all major British listed companies except where the Board considers that a sector comprises companies that are so fundamentally different, in their capital structure and areas of operation, from the companies undertaking non-competitive contracts that it would be inappropriate to include that sector in the Reference Group. Sectors currently falling into this category are: banking, insurance, investment trusts, property investment, mining, water, power, oil and gas. In addition one company, Eurotunnel plc, is excluded as an exceptional case.

303. Historically the Reference Group has been derived from analysis obtained from Datastream. The Thomson Corporation has now acquired Datastream and combined and restructured its data service which is provided under the name of Worldscope. Accordingly, the Reference Group is now derived from data obtained from Worldscope.

304. The latest year for which published accounts for the Reference Group are available is 2003; the Board defines this as including companies' annual accounts for the periods ending between 1 April 2003 and 31 March 2004. The 2003 Reference Group comprises 728 companies with a total capital employed of approximately £254 billion and sales of some £678 billion. This compares with the 2001 Reference Group of 1,095 companies with capital employed of £254 billion and sales of £663 billion. It can be seen that whilst the number of companies in the 2003 Reference Group is somewhat lower, the aggregate volumes of capital employed and sales are not materially different from the 2001 Reference Group. The Board considers that the 2003 Reference Group is sufficiently large and broadly based to provide a sound basis for application of the principle of comparability.

305. The weighted average rate of return of the Reference Group in recent years (on the modified historic cost basis) is as follows:

	Return on Capital Employed %	Return on Cost of Production %
1994	19.7	10.3
1995	21.35	11.0
1996	22.9	10.6
1997	22.5	10.8
1998	22.4	11.3
1999	23.4	11.4
2000	23.8	10.9
2001	19.65	8.15
2002	22.7	9.9
2003	24.8	10.2

306. It can be seen that the return on capital employed of the Reference Group has been rising steadily in recent years and that the return on cost of production has remained relatively constant.

The Profit Formula Methodology

307. At the 2003 General Review it was agreed that the return on non-competitive contracts should be made up of three elements:

- A) An allowance for the servicing of Fixed Assets used for non-competitive contracts (referred to as a 'Fixed Capital Servicing Allowance' or 'FCSA');
- B) An allowance for the servicing of Working Capital used for non-competitive contracts (referred to as a 'Working Capital Servicing Allowance' or 'WCSA'); and
- C) After making allowances for servicing recognised capital through the above elements (A and B) (together the 'Capital Servicing Allowances' or 'CSAs'), the Reference Group has a residual profit figure (referred to as 'Baseline Profit'). The Baseline Profit figure is expressed as a percentage of cost of production to arrive at the Baseline Profit Rate ('BPR') which, after adjusting for any differences in the reporting of cost of production as between the Reference Group and the Contractors, determines the Standard Baseline Profit Allowance ('SBPA') on the cost of production of individual contracts.

308. The underlying methodology is therefore that the Reference Group return should be reduced by the FCSA and the WCSA in order to derive a Baseline Profit figure from the Reference Group.

The FCSA

309. Taking account of the fact that the fixed assets the FCSA is intended to finance will have been acquired over a number of years and may have been financed at different rates, the FCSA is:

- Linked to the 7 year moving average of the 15 year Gilt rate; plus
- A 1.5 percentage point premium to take it up to the average cost of a BBB rated corporate bond; plus
- 0.5 of a percentage point to incorporate a premium for a BBB3 rating and the liquidity discount.

310. Based on the rates prevailing up to 30 October 2004, this gives an FCSA of 6.99%.

The WCSA

311. The purpose of the WCSA is to provide contractors with an appropriate allowance for their investment in working capital and it is therefore appropriate to link the WCSA to the cost of short term funds. It is the Board's view that an appropriate short-term funding rate for the Reference Group is 1.25 percentage points above the one year LIBOR.

312. To reduce volatility the WCSA is based on a moving average of the one year LIBOR rate. The 36 month moving average of the one year LIBOR based on rates prevailing up to 30 October 2004 was 4.34 per cent, so the appropriate WCSA should be 5.59 per cent currently.

313. From time to time a few contractors do have negative capital employed. In such cases, a negative WCSA should be computed on all of the negative capital employed and this amount should be deducted from that contractor's Baseline Profit entitlement, except where the contractor can demonstrate that the negative capital employed does not relate to non-competitive Government work.

The Baseline Profit

314. By taking the total profit earned by the Reference Group and deducting the capital servicing allowances for financing fixed assets and working capital, the balance of the profit can be expected to represent the return the average company gets on its uncapitalised intangible assets and for the risks it assumes. This can be expressed as a percentage of the Reference Group cost of production. This percentage, referred to as the Baseline Profit Rate, can then be used to determine the Standard Baseline Profit Allowance paid on the cost of production of non-competitive contracts. The calculation of the last three years' Baseline Profit Rates is set out below:

Table 3.1: Reference Group 3 year average Baseline Profit Rates

	1999/0	2000/1	2001/2	2002/3	2003/4
	Reference	Reference	Reference	Reference	Reference
	Group	Group	Group	Group	Group
	£m	£m	£m	£m	£m
(A) Cost of Production	489,139	549,939	613,333	580,164	615,558
(B) Capital Employed	239,088	250,924	254,113	253,589	253,826
(C) CP:CE ratio (A÷B)	2.05	2.19	2.41	2.29	2.43
(D) FC:WC ratio	96:4	95:5	95:5	92:8	92:8
(E) Actual Profit (EBIT)	55,944	59,705	49,906	57,533	62,885
(F) FCSA % (see note below)	8.98%	8.62%	8.11%	7.62%	7.17%
(G) WCSA % (see note below)	7.96%	7.51%	6.92%	6.23%	5.57%
(H) FCSA (B×(D['FC']÷100)×F)	20,620	20,546	19,578	17,778	16,743
(I) WCSA (B×(D['WC']÷100)×G)	761	942	879	1,264	1,131
(J) Total CSA (H+I)	21,382	21,488	20,457	19,041	17,874
(K) Baseline Profit (E-J)	34,562	38,217	29,448	38,491	45,011
(L) BP as % of CP (K÷A)	7.07%	6.95%	4.80%	6.63%	7.31%
3 year simple average			6.27%	6.13%	6.25%
Total profit:					
- expressed as ROCE ((J+K) ÷B)	23.4%	23.8%	19.65%	22.69%	24.78%
- expressed as ROCP ((J+K) ÷A)	11.4%	10.9%	8.15%	9.92%	10.22%

Note. The FCSA and WCSA percentage figures are derived using the methodology set out earlier in this Section, using the data applicable as at 31 March of the year concerned.

315. Following the 1993 General Review it was agreed between MOD and the JRBAC that the target rate of return in the profit formula should in future be determined on a rolling average basis to reduce the volatility of the target rate caused by year-to-year fluctuations in the level of the Reference Group's profitability. The simple average of the Reference Group Baseline Profit Rates for 2001, 2002 and 2003 is 6.25 per cent and we recommend that this should be adopted in the Profit Formula.

The Standard Baseline Profit Allowance

316. The Reference Group Baseline Profit Rate on cost of production of 6.25 per cent, on the modified historic cost basis, needs to be embodied in a profit formula suitable for the pricing of non-competitive Government contracts after making any adjustments for differences in the reporting of cost of production as between the Reference Group and the Contractors.

317. The Board's assessment is that the level of cost of production in the contractor group will be higher than that of the Reference Group, because the contractors' figures for cost of production include intra-group inter-unit trading whereas similar trading within the Reference Group will be eliminated as consolidation adjustments in company accounts. Therefore the level of intra-group trading by the contractor group needs to be assessed and eliminated in order to maintain comparability.

318. At the 2003 General Review the level of intra-group trading was estimated by the JRBAC to be of the order of 11 per cent of the total costs of non-competitive contracts including the major prime integration contracts. Recognising that this adjustment was based

on certain assumptions as to the level of intra-group trading in the contractor group, the Board announced its intention to gather additional information at future reviews so that this adjustment could be based on factual data in future. For the 2005 Annual Review MOD and the JRBAC have undertaken a joint assessment which the Board understands is based on factual data relating to 2003 and covers a more representative sample of contractors. Based on this assessment MOD and the JRBAC have agreed that the current level of intra-group trading is 5.0 per cent. The MOD and the JRBAC have also agreed to review the process for collecting relevant data in future to ensure the process is as robust as possible.

319. Part of the 5.0 per cent intra-group trading estimate will relate to contracts priced in excess of £50 million, and will therefore attract a reduced profit rate in accordance with the arrangements outlined in paragraph 323 below. The Board estimates that the 5.0 per cent intra-group trading figure needs to be reduced to 4.8 per cent to allow for this effect.

320. The Baseline Profit Rate of 6.25 per cent therefore needs to be reduced by the abated intra-group trading figure of 4.8 per cent, giving a rate of 5.95 per cent. The Board therefore recommends that the Standard Baseline Profit Allowance to be used for pricing non-competitive contracts should be 5.95 per cent.

The Risk/Reward Matrix

321. The MOD and the JRBAC recognise that the risk profiles of different types of work will vary and that the higher risk contracts should receive a higher target return than lower risk contracts. At the 2003 General Review the parties agreed that, to start with, the variable risk/reward matrix should be kept relatively simple to facilitate implementation and deal only with different types of work. The intention was that as Government and Industry gain experience of applying the risk/reward matrix to individual contracts, it can be further developed and perhaps also address varying degrees of risk in the context of different types of contract. At the start of this Annual Review, the parties agreed it was too early to develop the risk/reward matrix any further. The risk/reward matrix, as it currently stands, is reproduced at Appendix C.

322. One particular matter addressed in the notes to the risk/reward matrix is an interim arrangement to recognise the fact that as sub-contracts pass up through a prime contractor's books they attract a second layer of profit and the Board considers that there are differences in risk as between a prime's own costs and those of subcontractors that pass through its books. This is because, in the Board's view, a competent prime contractor should be able to lay off a significant element of the risk relating to work that it sub-contracts to others and, conversely, a competent prime contractor brings specialist contract management and risk management skills to bear which enable it to take the risks of integrating and managing all the sub-contracts – risks that justify a higher profit allowance on the prime's own costs.

323. The interim arrangement agreed by the parties at the 2003 General Review was to reduce the Standard Baseline Profit Allowance applicable to all risk contracts or contract amendments with a value of £50 million or more by a net 30 basis points. Accordingly, the Board recommends that this Adjusted Standard Baseline Profit Allowance ('ASBPA') should now be 5.65 per cent pending a review of this interim arrangement in due course.

324. The risk/reward matrix also addresses the issue of non-risk contracts and notes that non-risk contracts should attract the Standard Baseline Profit Allowance less 25 per cent, ie they should attract a Contract Baseline Profit Allowance of 4.46 per cent.

325. The SPBA (for contracts under £50 million) or ASBPA (for contracts over £50 million) for firm, fixed price or target cost contracts over £5 million is subject to possible further adjustment in accordance with the risk/reward matrix referred to in paragraph 321. Following this consideration the resultant allowance is known as the Contract Baseline Profit Allowance ('CBPA').

326. As described in paragraph 307, the profit formula methodology is made up of three elements. The profit allowance applicable to specific contracts and contract amendments therefore comprises the sum of the CBPA, the FCSA and the WCSA. This total allowance applicable to a non-competitive contract using the profit formula methodology is known as the Total Contract Profit Allowance ('TCPA').

The Comparability Principle

327. In accordance with the provisions of an agreement between MOD and the JRBAC during the 1990 General Review the Board is asked to consider whether there is 'any perceived ill-effect for either party, or for both, deriving from the strict observance of the comparability principle' to which the Board wishes to draw attention. The Board has concluded that it has seen no evidence of any such ill effect.

SECTION IV

RECENT PROFITS ON NON-COMPETITIVE GOVERNMENT CONTRACTS

Introduction

401. In the past the Board has received information on profits recently achieved on non-competitive Government contracts from two sources. The primary source was annual returns prepared for the Board by contractors, on a confidential basis, showing the overall results achieved on their non-competitive work in each financial year. The Board also received reports summarising the results of MOD's post-costing investigations into the profits achieved on individual contracts.

Annual Returns

402. At the commencement of this Annual Review the Board requested annual returns and the JRBAC agreed to ask contractors to provide them. The Board has since received some returns but, towards the end of the Review, MOD and the JRBAC asked the Board to withdraw the requirement for annual returns as they both believed they were of limited value as a result of the new profit formula arrangements introduced with the 2003 General Review. The Board recognises that the revised profit formula methodology introduced in the 2003 General Review will necessitate a major revision to information requested in annual returns in due course but would have expected to undertake the annual return analysis for the current Review.

403. The Board understands that the process for revising the annual returns has now started and trusts that this can be completed in time for the next Review.

404. The Board considers that this might also be an appropriate time to give effect to its recommendations contained in the 2003 General Review (paragraph 215), namely, that submission of returns should be a requirement included within a DEFCON.

405. MOD has in the past contended that the results of post-costing investigations have consistently demonstrated that contractors in aggregate incur lower costs than those estimated at the time of pricing. JRBAC has disputed this contention and has argued that contracts chosen for post-costing tend to be those where the MOD believes that there may be grounds for seeking a rebate from the contractor or making a reference to the Board. The analysis of the annual returns from contractors has shown that, whilst this data is not directly comparable to the results of post-costing, there is no discernable trend in the annual aggregate variance between the target profits and the actual returns made by contractors as shown by the annual returns. It is unfortunate that this valuable alternative source of information on profits on non-competitive contracts is not available for this review.

Post-costing

406. Post-costing is a review by MOD of the actual costs incurred on a contract, for comparison with the costs estimated at the time when the price of the contract was agreed. Post-costing is designed to assist MOD in contract pricing by providing a check on the accuracy of estimating procedures and to provide a guide to follow-on pricing. It is intended that the post-costing data should be agreed between MOD and the contractor, but the JRBAC has expressed

concerns that post-costing results do not always reflect an agreed final position, as the parties see little benefit in negotiating the position if it will not result in a refund or affect follow-on contracts.

407. In the past the Board has expressed concern that the number of contracts being post-costed appears to be low. The tables below show that just 17 contracts were post-costed in 2003. However, it is recognised that this level of post-costing does not yet reflect the changes resulting from the 2003 General Review⁵, whereby MOD is entitled to a contract retention through the post-costing period. This change may in due course result in an increase in the level of post-costing both in terms of the numbers of contracts post-costed and in the timeliness of post-costing activity.

408. Post-costing results received from MOD are shown below:

TCIF contracts post-costed by MOD					
	1999	2000	2001	2002	2003
Total of contracts post-costed					
(a) Number	1	2	7	Nil	Nil
(b) Value	£3m	£11m	£646m	Nil	Nil

All contracts, excluding TCIF contracts, post-costed by MOD					
	1999	2000	2001	2002	2003
Total of contracts post-costed					
(a) Number	52	28	77	28	17
(b) Value	£551m	£453m	£1250m	£738m	£450m
Of which the following were not fully analysed:					
(a) Number	8	2	3	4	Nil
(b) Value	£103m	£43m	£22m	£66m	Nil

Analysis of all contracts fully analysed by MOD (excluding TCIF contracts)					
	1999	2000	2001	2002	2003
A – Contracts where +/- 5 per cent accuracy was achieved:					
(a) Percentage by Number	34%	38%	41%	46%	36%
(b) Percentage by Value	45%	40%	73%	71%	51%
B – Contracts where +/- 10 per cent accuracy was achieved:					
(a) Percentage by Number	57%	73%	78%	88%	83%
(b) Percentage by Value	63%	78%	93%	98%	98%
C – Contracts where target cost exceeded cost outturn by 0 per cent to 10 per cent (i.e. cost underrun):					
(a) Number	13	17	42	11	9
(b) Value	£107m	£312m	£599m	£218m	£372m
D – Contracts where target cost exceeded cost outturn by more than 10 per cent (i.e. cost underrun):					
(a) Number	16	6	11	2	3
(b) Value	£153m	£78m	£70m	£13m	£6m
E – Contracts on which refunds were negotiated by MOD in light of post-costing results:					

⁵ 2003 General Review paragraphs 618-634.

(a) Number	15	Nil	10	Nil	1
(b) Value	£122m	Nil	£112m	Nil	£1m
(c) Amount of refund	£7.2m	Nil	£3.9m	Nil	£0.04m
F – Contracts where cost outturn exceeded target cost by 0 per cent to 10 per cent (i.e. cost overrun):					
(a) Number	12	2	16	10	5
(b) Value	£174m	£9m	£537m	£437m	£72m
G – Contracts where cost outturn exceeded target cost by more than 10 per cent (i.e. cost overrun):					
(a) Number	3	1	5	1	Nil
(b) Value	£14m	£11m	£22m	£3m	Nil

409. The following tables show the average returns on capital earned on risk contracts for which post-costing was completed in the six year period to 2003.

Post-costing: Average Return on Capital for Contracts Priced on Historic Cost							
Year Post Costing Completed	Value	Contract target ROCE	Actual return on intended capital	Variance	Actual return on actual capital	Overall variance	Variance Adjusted for Refunds
A	£m B	% C	% D	Percentage Points E	% F	Percentage Points G	Percentage Points H
1998	435	30.1	31.0	+0.9	25.6	-4.5	-7.9
1999	329	30.0	44.1	+14.1	51.4	+21.4	+12.3
2000	323	20.0	38.1	+18.1	35.9	+15.9	+15.9
2001	952	28.8	31.6	+2.7	33.1	+4.3	+2.6
2002	404	17.3	17.2	-0.1	23.0	+5.7	+5.7
2003	414	26.2	42.1	+15.9	46.8	+20.6	+20.6

Post-costing: Average Return on Capital for Contracts Priced on Semi-CCA							
Year Post Costing Completed	Value	Contract target ROCE	Actual return on intended capital	Variance	Actual return on actual capital	Overall variance	Variance Adjusted for Refunds
A	£m B	% C	% D	Percentage Points E	% F	Percentage Points G	Percentage Points H
1998	537	13.6	15.9	+2.3	16.1	+2.5	+2.1
1999	118	12.3	2.4	+11.1	31.1	+18.8	+16.1
2000	87	12.9	19.8	+6.9	22.8	+9.9	+9.9
2001	276	14.9	21.3	+6.4	24.8	+10.0	+9.9
2002	267	19.2	21.8	+2.6	22.7	+3.45	+3.45
2003	36	24.1	19.7	-4.4	54.5	+30.4	+30.4

410. The contract target return is calculated by applying the profit formula to the contractor's CP:CE ratio. A variance on a fixed price contract can arise if:

- Actual costs are different from those used in the pricing estimate. This difference results in the return shown in column 'D' above, and the variance shown in column 'E'; and/or
- The outturn capital employed required on the contract is different from that indicated by the CP:CE ratio used for pricing. This difference causes the figures in column 'D' above to be increased or decreased to those shown in column 'F'.

411. The overall variance between the target return on the intended capital at the time of price fixing ('C') and the actual outturn return on the actual outturn capital employed on the

contract ('F') is shown in column 'G'. Column 'H' shows the overall variance ('G') after adjusting for refunds negotiated by MOD. The variances for 2003 show an overall return on capital employed that is considerably in excess of the target rate. As mentioned earlier the number of contracts post-costed was low, so the results might not reflect returns on the generality of non-competitive contracts. However, as the Board did not receive annual return data from contractors this possibility cannot be explored.

APPENDIX A

THE RECOMMENDED PROFIT FORMULA - ILLUSTRATIONS

Prepared by the Review Board for Government Contracts - February 2005

This appendix provides some illustrations on the use of the recommended profit formula to determine the Total Contract Profit Allowance for individual contracts.

Set out in Annex I to this appendix are a range of illustrations on the application of the recommended profit formula assuming:

1. a CP:CE ratio of 3:1 and a contract attracting the Standard Baseline Profit Allowance
2. a CP:CE ratio of 6:1 and a contract attracting the Standard Baseline Profit Allowance
3. a CP:CE ratio of 1.5:1 and a contract attracting the Standard Baseline Profit Allowance
4. a CP:CE ratio of 3:1 and a contract for a repeat production order attracting the Standard Baseline Profit Allowance less 10 per cent
5. a CP:CE ratio of 3:1 and a contract requiring specialist skills and attracting the Standard Baseline Profit Allowance plus 10 per cent
6. a CP:CE ratio of 3:1 and a non-risk contract attracting the Standard Baseline Profit Allowance less 25 per cent

Annex II to this appendix provides an illustration of the application of the recommended profit formula on contracts with an estimated or target cost of £50 million or more.

APPENDIX A: ANNEX I

ILLUSTRATIONS OF THE APPLICATION OF THE RECOMMENDED PROFIT FORMULA

	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
CP:CE ratio calculation:						
(A) Fixed capital (50%)	1,500,000	750,000	3,000,000	1,500,000	1,500,000	1,500,000
(B) Working capital (50%)	1,500,000	750,000	3,000,000	1,500,000	1,500,000	1,500,000
(C) Total capital (A + B)	3,000,000	1,500,000	6,000,000	3,000,000	3,000,000	3,000,000
(D) Total cost of production	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000
(E) CP:CE ratio is therefore (D/C)	3	6	1.5	3	3	3
CSA calculation:						
(F) FCSA	6.99%	6.99%	6.99%	6.99%	6.99%	6.99%
(G) FC proportion (A)	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
(H) (F x G)	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
(I) WCSA	5.59%	5.59%	5.59%	5.59%	5.59%	5.59%
(J) WC proportion (B)	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
(K) (I x J)	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
(L) CSA (H + K)	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%
(M) CSA as percentage of CP (L/E)	2.1%	1.05%	4.2%	2.1%	2.1%	2.1%
Individual contract price:						
(N) Contract CP	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
(O) Standard Baseline Profit Allowance	5.95%	5.95%	5.95%	5.95%	5.95%	5.95%
(P) Adjustment in accordance with the Risk/Reward matrix	nil	nil	nil	-10%	+10%	-25%
(Q) Contract Baseline Profit Allowance	5.95%	5.95%	5.95%	5.36%	6.55%	4.46%
(R) CSA (M)	2.10%	1.05%	4.20%	2.10%	2.10%	2.10%
(S) Total Contract Profit Allowance (Q + R)	8.05%	6.95%	10.15%	7.46%	8.65%	6.56%
(T) Total formula payments (N x S)	80,500	69,500	101,500	74,550	86,450	65,625
(U) Total contract price (N + T)	1,080,500	1,069,500	1,101,500	1,074,550	1,086,450	1,065,625

Explanation: the above illustrations assume contracts with a CP of £1 million in a variety of circumstances. Example 1 assumes that the Standard Baseline Profit of 5.95% is applicable and the contractor's CP:CE ratio is 3:1. Examples 2 and 3 illustrate how payments will change for contractors with varying CP:CE ratios. Examples 4, 5 and 6 illustrate how payments change for contracts where the Standard Baseline Profit Allowance requires an adjustment in accordance with the risk/reward matrix.

APPENDIX A: ANNEX II

**ILLUSTRATION OF THE APPLICATION OF THE RECOMMENDED PROFIT
FORMULA UNDER THE SPECIAL ARRANGEMENTS FOR CONTRACTS IN EXCESS
OF £50 MILLION**

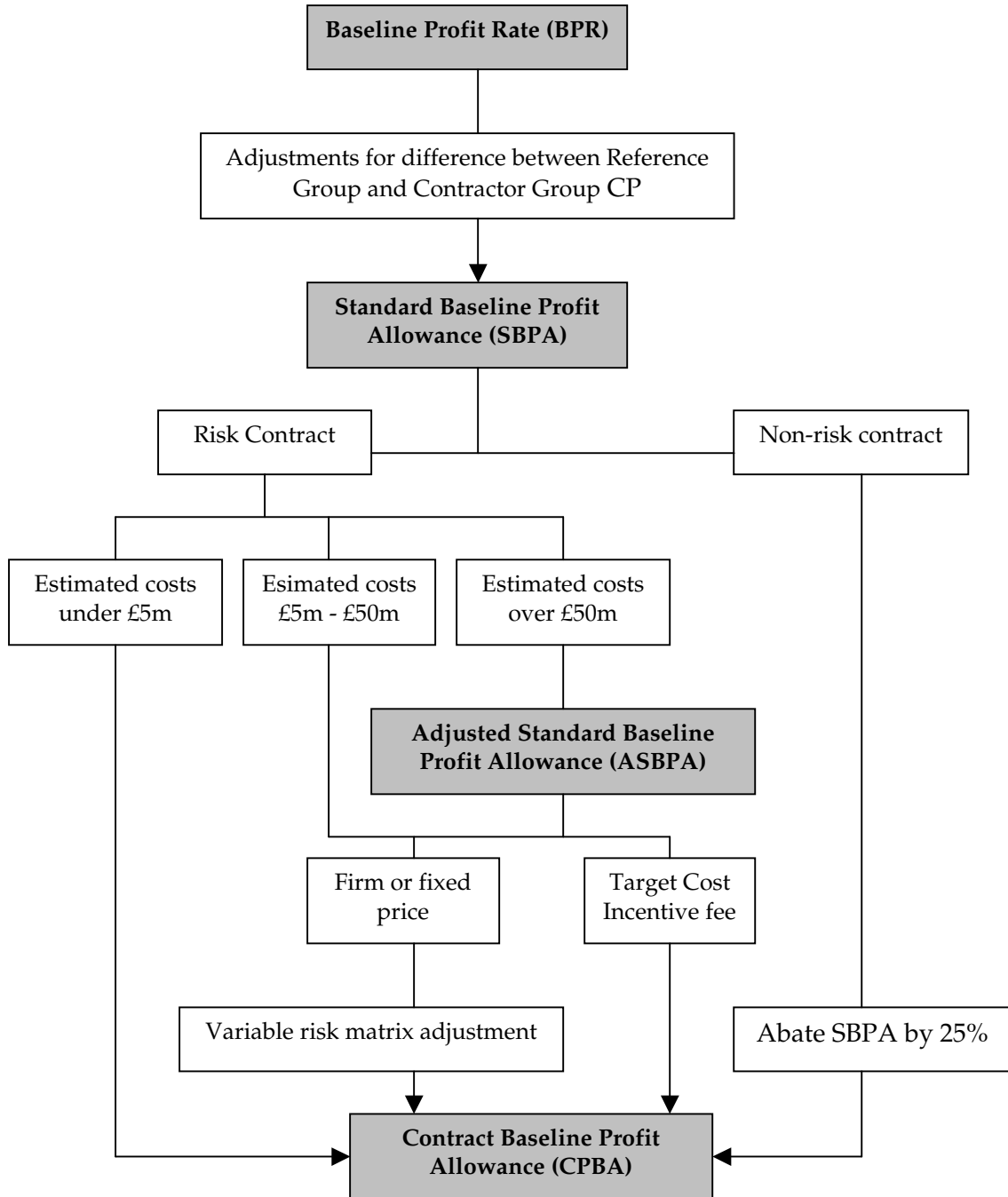
	CSAs	Total
Contractor's CP:CE ratio:		
(A) Fixed capital (80%)	24,000,000	
(B) Working capital (20%)	6,000,000	
(C) Total capital (A + B)	30,000,000	
(D) Total cost of production	90,000,000	
(E) CP:CE ratio is therefore (D/C)	3	
CSA calculation:		
(F) FCSA	6.99%	
(G) FC proportion (A)	80.00%	
(H) (F x G)	5.59%	
(I) WCSA	5.59%	
(J) WC proportion (B)	20.00%	
(K) (I x J)	1.12%	
(L) CSA (H + K)	6.71%	
(M) CSA as percentage of CP (L/E)	2.24%	
Individual contract price:		
(N) Contract CP	75,000,000	75,000,000
(O) Standard Baseline Profit Allowance	5.95%	
(P) Reduction for contracts over £50m	0.30%	
(Q) Adjusted Standard Baseline Profit Allowance (O – P)	5.65%	
(R) Adjustment in accordance with the Risk/Reward matrix	nil	
(S) Contract Baseline Profit Allowance	5.65%	
(T) CSA (M)	2.24%	
(U) Total Contract Profit Allowance (S + T)	7.89%	
(V) Total formula payments (N x U)	5,917,500	5,917,500
(W) Total contract price (N + V)		80,917,500

Explanation:

The illustration assumes a contract with a CP of £75 million being undertaken by a contractor with a CP:CE ratio of 3:1. It also assumes that the Adjusted Standard Baseline Profit Allowance does not require any adjustment in accordance with the risk/reward matrix for this contract.

APPENDIX B

FLOWCHART SHOWING THE VARIOUS LEVELS OF BASELINE PROFIT AND THE RECOMMENDED TERMINOLOGY AND ABBREVIATIONS TO BE USED



CBPA	+	FCSA	+	WCSA	=	Total Contract Profit Allowance (TCPA)
------	---	------	---	------	---	---

APPENDIX C

The Risk/Reward Matrix

FLEXIBLE PROFIT ADJUSTMENT (TO STANDARD BASELINE PROFIT ALLOWANCE)			
TYPE OF WORK	SBPA – 10%	SBPA	SBPA + 10%
SUPPLY	<ul style="list-style-type: none"> ● Follow on and repeat orders for production/ supply involving existing specification ● Repeatable quality 	<ul style="list-style-type: none"> ● Interrupted production ● Typical/normal production orders 	<ul style="list-style-type: none"> ● First production batch for a new requirement with significant development/production overlap ● One-off high technology procurement
SUPPORT/SERVICE PROVISION	<ul style="list-style-type: none"> ● Clearly defined specification ● Repeatable quality ● Reactive support/repairs, maintenance or ongoing contracts 	<ul style="list-style-type: none"> ● Initial repair and support order ● Customer specified repair and maintainability standards ● Support requirements not fully defined 	<ul style="list-style-type: none"> ● Long term commitment to Service and Capability provision to a defined output standard
DEVELOPMENT	<ul style="list-style-type: none"> ● After design certification, support activities involving routine document maintenance and simple analysis of existing designs ● Post development work, minor development work and programmes involving minor modification of established technologies 	<ul style="list-style-type: none"> ● Development work ● Contractor accepts full responsibility for performance and integration ● Modification Programmes including proposals for, and analysis of, extensive changes to existing design in respect of established technologies ● Fault management 	<ul style="list-style-type: none"> ● High Technology or Specialist skills or new concepts

NOTES

1. Deciding on the appropriate rate on individual contracts should depend on a balance of factors. The underlying principle should be that the majority of activity should attract the standard rate of profit unless there are strong characteristics to indicate otherwise. Where there are strong characteristics indicating otherwise the profit rate applicable to that contract shall be the rate that is applicable to the majority of activity.
2. The risk matrix set out above should apply to contracts with an estimated cost in excess of £5 million. Contracts below this amount should receive the standard rate of risk (or non-risk) profit.
3. Cost-plus (ie non-risk) contracts should attract the Standard Baseline Profit Allowance less 25 per cent in all instances. The risk matrix set out above does not apply to cost-plus contracts.
4. In the case of firm or fixed price contracts and contract amendments with an estimated or target cost of £50 million or more, the Baseline Profit allowance should be 30 basis points less than the Standard Baseline Profit Allowance (known as the Adjusted Standard Baseline Profit Allowance or ASPBA) subject to any further adjustment in accordance with the risk/reward matrix.
5. The Target Baseline Profit on TCIF contracts and contract amendments:
 - should be based on the Standard Baseline Profit Allowance for contracts or contract amendments with a target cost below £50 million; and
 - should be based on the Adjusted Standard Baseline Profit Allowance (ie the SBPA less 30 basis points) for contracts or contract amendments with a target cost of £50 million or more.
6. The aim of the variable profit rate arrangements should be to achieve a broadly neutral cost impact for MOD, assessed not on an annual basis but over a time period covering a number of years. The assessment should not include contracts that are dealt with in accordance with notes 4 and 5 above.
7. The variable profit arrangements and their application on individual contracts are subject to review and monitoring in order that the arrangements can be refined and developed.