

Measuring the economic impact of DTI Business Support activities for the purposes of SR 2004

This note provides further background to the DTI SR 2004 ETN

Contents of the paper

- 1 The Targets** A summary of the SR 2004 Business Support efficiency targets.

- 2 Measurement** An explanation of how progress towards each of the targets will be measured.
 - 2.1** Contracting Efficiencies
 - 2.2** Scheme Exits
 - 2.2.1** Effectiveness Measure to capture cashability
 - 2.3** SFIE Productivity Improvements

SR 2004 BSU Efficiency Targets

The efficiency targets in SR 2004 are specified in the Departmental Efficiency Technical Note (ETN) and are as stated in table 1¹. The total cashable saving target over the SR 2004 period is £41.36mn of which £4.2mn is contracting efficiencies, £25mn derives from scheme exits and £10mn from SFIE/RSA budget cuts.

Table 1: DTI ETN Business Support efficiency targets detail

| Financial Savings | <i>in millions</i> | 04/05 | 05/06 | 06/07 | 07/08 |
|---|--------------------|-------|----------|----------|---------|
| | Baseline Costs | | £402.33m | £425.80m | |
| <i>Contracting efficiencies</i> | | | £4.20m | £4.20m | £4.20m |
| <i>Scheme exits</i> | | | £9.35m | £19.10m | £25.00m |
| <i>SFIE (productivity improvements)</i> | | | £5.00m | £10.00m | £10.00m |
| | | | | | |
| Total Cumulative Savings | | | £18.55m | £33.30m | £39.20m |
| <i>GDP Deflators</i> | | | N/A | 1.027 | 1.055 |
| Adjusted Cumulative Savings | | | £18.55m | £34.20m | £41.36m |

How these will be measured is explained below.

¹ http://www.dti.gov.uk/pdfs/ETN_22Oct.pdf

2 The Measures SR 2004 ETN

Taking each of the targets in the ETN in turn:

| Financial Savings | <i>in millions</i> | 04/05 | 05/06 | 06/07 | 07/08 |
|----------------------------------|--------------------|----------|----------|---------|---------|
| Baseline Costs | | £402.33m | £425.80m | | |
| Contracting efficiencies | | | £4.20m | £4.20m | £4.20m |
| Scheme exits | | | £9.35m | £19.10m | £25.00m |
| SFIE (productivity improvements) | | | £5.00m | £10.00m | £10.00m |
| Total Cumulative Savings | | | £18.55m | £33.30m | £39.20m |
| GDP Deflators | | | N/A | 1.027 | 1.055 |
| Adjusted Cumulative Savings | | | £18.55m | £34.20m | £41.36m |

2.1 Contracting Efficiencies

Contracting efficiencies become cashable savings² as a result of the simple reduction in spend on contractors managing legacy and new schemes. This is achieved by legacy schemes shutting down, reducing total contractor overheads. Contractors' own efficiencies and competitive tendering for contracts can also help but the main gain is likely to derive from the reduction in the number of schemes which will reduce the number of contracts and therefore reduces the total amount of overhead.

This can be captured in a straightforward manner from the reduction in spend on contractors.

2.2 Scheme Exits

The scheme exits cashable savings are derived as a result of total impact of BS spend increasing as spend shifts to new products from legacy schemes. Evidence indicates that new products will have a larger impact on productivity and the drivers of productivity so total spend could fall while the impact on the wider economy remains constant or is higher.

Measure - This target uses the Effectiveness Measure that also captured improvement in value for money measured for SR 2002.

2.2.1 Effectiveness Measure

This measure captures the effectiveness element of value for money, or how well DTI spend on Business Support delivers the outcome of growth in productivity (and its drivers).

² **Cashable Savings:** Savings which release money for redeployment elsewhere, within the same objective or to another one, are cashable (in some cases these savings are ring-fenced). This does not necessarily mean 'funds that will be taken away'.

Non-cashable Savings: Savings that are achieved by the ability to deliver continued or better results or to cope with rising workloads – without a proportionate increase in resources. The saving is identified as the amount of resources that would have been required had this not been possible.

The high level aim of Business Support spend, particularly on the new products, is generally to correct the market failures that prevent firms from succeeding in improving productivity³.

The effectiveness measure captures how well Business Support spend delivers these productivity growth related outcomes. However these outcomes cannot be measured directly on a yearly basis, as some outcomes will take time to materialise for example, so some evidence based assumptions must be made to allow measurement.

To summarise

| |
|--|
| 1 the measure uses independent evidence on the effectiveness of different Business Support schemes in 2001/02 to categorise schemes in to high, medium and low effectiveness categories (H, M, & L) and |
| 2 the measure quantifies the impact per DTI pound spent for each effectiveness category by using the Cost Benefit Analysis estimates used in the new Business Support product business cases. |
| 3 The quantified impact per DTI pound spend for each effectiveness category can then be used to estimate the total impact of all Business Support spend year by year. Combining this impact estimate with DTI spend on products allows an estimate of value for money improvement over time. |
| 4 The Business Support Unit's regular Cross Product Monitoring Surveys will be used to confirm or reassess the impact of individual products over time ensuring the products are not categorised unfairly. |

³ For example this includes intervention in capital markets (SFLG, venture capital funds) to ensure that firms can access capital to invest in new processes, products and capabilities; and grants for R&D or collaboration in R&D projects to increase business investment in R&D which may increase innovation – the successful exploitation of new ideas.

The detail of each stage is as follows

2.2.1.1 Categorisation of the different Business Support products according to independent assessment of effectiveness

Legacy schemes in 2001/02

The best independent evidence available is an independent report commissioned by DTI in 2001/02. This report categorised legacy scheme spend and assessed the biggest 20 schemes in 2001/02 for value for money in relation to achieving DTI productivity objectives. The report categorised the schemes as either High, Medium or Low Effectiveness, with some integers that were merged for the purposes of this exercise. This provides categorisation of legacy scheme spend for 2001/02.

New Products

Turning to the categorisation of the new products, some schemes, which were similar to their successors (LINK became Collaborative R&D, Smart became Grant for R&D, TCS became KTP), were awarded High Effectiveness ratings. As the design of the successor products were intended to improve on the corresponding legacy products it is assumed that all new products can be attributed high effectiveness. The exceptions are SFLG and SFIE which were ranked more lowly in 2001/02. These new products are attributed medium effectiveness categorisation as they have also been modified somewhat to improve their productivity impact. SFIE, for example, has a specific labour productivity test.

Legacy schemes after 2001/02

As there are no detailed projections of legacy spend, the proportions of 01/02 M & L in total legacy spend excluding RSA/SFIE & the 3 schemes awarded high effectiveness (as they have a predetermined effectiveness allocation and became new products) are applied to the projections of legacy spend to create medium and low effectiveness allocations for legacy spend in the future⁴.

Assuming that all legacy products are low effectiveness would bias the benefits of the shift from legacy to new products upwards. If breakdowns of legacy spend do become available the 2001/02 categorisations can be used but we have no evidence to suggest that the 01/02 allocations are not representative for current spend on legacy products as the legacy schemes have not been altered significantly.

⁴ This is because a detailed breakdown of projections for legacy spend are not available and because not all legacy products were given low effectiveness categorisations.

2.2.1.2 Quantifying the effectiveness of BS spend per DTI pound spend

Estimates of the Net Present Value (NPV), a measure of economic benefit net of costs, per pound of DTI spend were taken from the DTI Cost Benefit Analyses developed for four of the new products. The weighted average of these was assumed to be the representative net present value of all new products (with the exception of SFLG and SFIE, which were awarded medium effectiveness (see above)). The weighting used was the proportion of spend that the products were projected to account for in high effectiveness product spend. These CBAs were reviewed and accepted by the DTI's Investment Committee which has an independent chair.

The average NPV/£ for medium effectiveness spend was assumed to be half that of high effectiveness. That of low effectiveness spend was assumed to be £1.

2.2.1.3 Quantifying the total effectiveness of BS spend

A simple multiplication of spend in each category with the relevant NPV/£ estimate reveals the total estimated impact of BS spend for any year.

The measure is summarised as:

$$\frac{\text{(Total NPV generated that yr from all BS products and legacy programmes)}}{\text{(BS products spend + legacy spend)}}$$

Projections indicate that the target will be exceeded. This is as expected because the premise of the BS transformation was to increase the effectiveness of BS schemes substantially⁵.

2.2.1.4 Use of evidence from the Business Support Monitoring Surveys

All 8 new products are covered regularly by the Business Support Monitoring Surveys which use telephone questionnaires of recipient firms to provide data on the quantitative and qualitative impact of the schemes. The data is an integral part of the Monitoring Appraisal and Evaluation system of the new products. The data is comparable across time and can be used to examine whether the new products are operating as expected and assess whether the new products warrant their categorisation over time.

2.2.1.5 Important Assumptions made

The measure is underpinned by a number of assumptions.

⁵ NB RSA/SFIE is not included in this target as it has its own, separate, target. A separate target was identified for RSA partly because it used to sit in its own regional objective, separate to other legacy schemes. It was also singled out because, as at Q1 2004, projections indicated that the SFIE and RSA budget combined would be £10mn less than RSA.

Assumption 1 The independent 2001/02 assessments of legacy schemes can be used to infer effectiveness of new products and legacy schemes over time. (The independent report is the most comprehensive assessment of BS schemes' effectiveness and this assessment can be compared with data from the Monitoring Surveys over time).

Assumption 2 Estimates of NPV of the new products are robust. (The NPV estimates were presented as part of some of the Business Cases of the new products to DTI's Investment Committee which has an independent chair).

Assumption 3 Estimates of NPV of the new products can be used to infer NPV of medium effectiveness products.

Assumption 4 The NPV/£ of DTI spend for low effectiveness products is £1.

Assumption 5 The NPV/£ estimates remain reasonable as time passes. (Cost Benefit Analysis is a useful and robust mechanism for assessing and comparing policy options that yield costs and benefits over long periods of time. Re-estimating the analysis every year would be onerous and also give the wrong impression that the analysis is accurate to that degree. In particular, there will be no new evidence on which to challenge the assumptions in the CBAs until full national evaluations of the products take place after a number of years).

Assumption 6 The Business Support Monitoring Surveys will provide adequate evidence on which to confirm or change the effectiveness categorisation of new products.

2.3 SFIE Productivity Improvements

The cashable savings are derived as a result of the productivity impact of spend increasing as it shifts from RSA to SFIE. RSA did not contain any key productivity considerations whereas SFIE projects must satisfy a labour productivity test.

Measure – The cashable savings are measured as a simple reduction in the RSA and SFIE budget over the SR period on the assumption that, given the productivity criteria in SFIE, which was not in RSA, the deduced total impact of RSA and SFIE would be higher than RSA was able to deliver.

Total RSA and SFIE spend is already projected to be at least £10m less by the end of the period than at the beginning. However these savings must be cashable so some evidence is required to indicate that the impact of the total SFIE/RSA spend is maintained.

It is expected that the evidence will be generated by the forthcoming DTI evaluation of SFIE and RSA. The evaluation is expected to examine the qualitative and quantitative impact of RSA cases over the period 2000 to 2003 and SFIE from April 2004. A comparison of the two schemes will be possible and this evidence should be sufficient to indicate the extent to which the savings are cashable.