



Alliance of Sector Skills Councils

Evaluating economic impact

Second Edition – March 2010

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Alliance of Sector Skills Councils

Foreword

Sector Skills Council Impact: we seek it, we seek to take credit for it, and we talk about it – in our plans, our reports and our demands on each other. Until now each of our members has made every effort to demonstrate their sector impact for their employers using a wide range of methods.

Recently, Skillset commissioned Baker Tilly to help it undertake a thorough study into this important area. It has led the way in elevating this work to an advanced level through the methodical application of the Social Return on Investment model (SROI).

Evaluating impact sounds so clinical, but the process which four more SSCs have been through in producing this report has been much more than that. The opportunity to examine in a new light the outcomes they have sought and achieved has led them and their stakeholders to see their contributions in that same new light. The realisation of just how much gain each is creating for the UK economy has been striking for all involved. At a personal level staff and directors alike have found a new value in their personal and collective achievements.

All the SSCs can take pride in what this review tells us. Any organisation that can achieve £100m or more of public gain, every year, from funding of only £5m can justifiably be proud of it.

However with recognition comes a challenge: indeed several challenges:

- to our stakeholders, private and public sector: to recognise our achievements and the huge value we bring to the UK economy. We need your support if we are to continue to grow and bring even more benefit in future;
- to those SSCs that took part: to continue to learn from the experience, and to build on this work for even greater achievements in future;
- to the other SSCs: to undertake their own evaluations and share them with their stakeholders, using them to develop their own missions and work.

And finally....

- to the rest of the Third Sector: to ask what impact it is having, and to determine how each wants to apply this approach.

Any foreword would be incomplete without a mention of the involvement of the Charities and Education Advisory team at the widely known and respected consultants, Baker Tilly. They have brought the guidance on methodology and the robustness of approach that is essential if the results of the review are to be both sound and credible.

This matters as it shows how much we, the SSCs, matter. I commend it to you.

John McNamara, Chief Executive

Alliance of Sector Skills Councils

Evaluating economic impact

Second Edition - March 2010

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Since the publication of the first edition of this report, in January 2010, we have received input and comment from a variety of interested parties. These have been discussed, considered, and reflected in this second edition. We are grateful to all those many parties which have expressed an interest.

Glossary of Abbreviations

Alliance	Alliance of Sector Skills Councils
BIS	The Department for Business, Innovation and Skills
Cogent	Cogent Sector Skills Council
DCF	Discounted Cash Flow
DCSF	Department for Children, Schools and Families
EU Skills	Energy and Utility Skills Sector Skills Council
GVA	Gross Value Added – the value of economic productivity after deducting direct costs
GDP	Gross Domestic Product – the value of economic productivity before deducting direct costs
HFM	Skills for Health’s Health Functional Map
HR	Human Resources
IAG	Information, Advice and Guidance
LMI	Labour Market Information
LSC	The Learning and Skills Council
NAO	The National Audit Office
NCIS	Nuclear Common Induction Standard
NITF	Nuclear Industry Training Framework
NOS	National Occupational Standards
NSA	National Skills Academy
Ofgem	Office of the Gas and Electricity Markets
People 1st	People 1 st Sector Skills Council
Sample SSCs	Cogent, Energy & Utility Skills, People 1 st and Skills For Health
SFH	Skills for Health Sector Skills Council
SQS	Sector Qualifications Strategy
SROI	Social Return on Investment
SSC	Sector Skills Council
UK	United Kingdom
UKCES	United Kingdom Commission for Employment and Skills

Alliance of Sector Skills Councils

Key Point Summary

1. This review, which encompasses sample studies of four SSCs (Cogent, Energy and Utility Skills, People 1st, and Skills for Health), and draws upon earlier work with a fifth (Skillset), looks at how the SROI(Social Return on Investment) methodology for evaluation of Social Impact may be applied to Alliance members. It gives guidance on how that can be done, but also draws conclusions on the range of impact figures that may be attributed to the sampled SSCs. In this it has recognised that the value gained by the public, both at State and individual level, by its work may be wider and greater than has traditionally been thought.
2. This second edition (published [] June 2010) includes the evaluation of a further project from Skills for Health which was not ready for inclusion in the first edition (published on 2 February 2010). All other evaluations remain as given in the first edition. The purpose of this second edition is to highlight a project that formed a significant part of Skills for Health's work in 2009, without which, it was felt, the results of their evaluation were, to some extent, understated, and showed a false mis-match against the results for the evaluations of the other SSCs. It should be noted, however, that even with the inclusion of an additional project this report does not seek to provide a full evaluation of Skills for Health or any other SSC's activities.
3. This edition also picks up comments and feedback from interested parties received following the publication of the first edition. It provides clearer explanations of, or in some cases more information about, the original review work in response to these.
4. It is important to understand what this review is not, as much as what it is. Whilst it draws from SROI-based evaluations of the four SSCs, it is not a report on these as such. Consequently it does not show the full detail of:
 - the data sources used for each separate SSC, which are:
 - third party, validated, sources such as Government statistics;
 - data sources developed internally by SSC research teams as part of normal project evaluation;
 - specific research or enquiry for the purposes of this review;
 - the calculations underlying each set of evaluations.

The Methodology

5. The methodology uses Social Return on Investment as its foundation, an approach which originated in research by New Economics Foundation, and latterly has been embodied in the paper published in May 2009 by the Office of the Third Sector. It can justifiably be seen as becoming the mainstream methodology for such evaluations in the Third and Public sectors. In their positioning Statement on it, published in May 2010, New Philanthropy Capital has described it as "an incredibly useful tool"¹ [REF] This has been developed in this review for the SSCs by a process of Action Research, in which the applications for the methodology are

¹ Ref to be added

co-developed by teams from within each SSC working with the advice, support and guidance of specialist consultants from Baker Tilly.

6. The methodology has been applied on the basis of a deep understanding of a selection of project areas from within each SSC. It has not been applied to the whole of each one's activities, as that would compromise the depth of analysis possible on each one, and lead to much later delivery of results with little gain in terms of knowledge of the SSC's operations and the value of its impact.
7. The use of Action Research has not only meant that the results are founded in real knowledge of each SSC's work, but also that the awareness brought by the process and results is appropriately embedded into the organisation: truly each has improved its self-awareness. This will give a sound foundation for further development of that understanding, and improvement in the services it describes.
8. In applying the methodology, a consistently conservative approach has been taken to evaluating the gains. Where a range of assumptions seems reasonable, the lower end of the range has been sought. Where a gain is subject to significant uncertainty, it has been discounted (reduced), or ignored. Where a gain is not thought sufficiently proximate to the activity and output that create it, it has also been ignored. Where a gain arises from activities which are only partly those of the relevant SSC, the gain has been shared out, and only a reasonable part attributed to the SSC's work.
9. The research results are on different bases depending upon whether the SSC focuses on predominantly Private or Public sector industries. In the case of the former the economic gains from additional productivity, tax revenues, and reduced future training costs, to name but three, can be the subject of reasonable estimate, and attributed wholly or partly to the work of the SSC. For the latter (in this case focussing on Health Sector workers), the increased productivity comes at a cost to the public purse, and it has been decided for this analysis not to take a corresponding credit for the consequently increased effectiveness of that work in improving National health. This is an example of the value judgements that must be made in applying the methodology which naturally lead to limitations in comparability between organisations.

Key Messages

10. In the first place this research shows that, for a typical SSC:
 - this methodology can be applied simply, accurately and sensibly;
 - it can involve an organised link to relevant publically-available, validated data sources;
 - it acts as a catalyst to engaging with a deeper understanding of the work of an SSC;
 - the Action Research approach operates well for achieving a properly validated evaluation, with the involvement of an appropriately experienced researcher or project leader.
11. The analysis shows clearly the strength and depth, as well as the considerable reach, of the benefits brought by the work of the SSCs. It also shows a remarkable consistency in the public gain from it, in education, industrial productivity and sustainability, and in health and social welfare.
12. The Sample SSCs show gains of between £100m and £130m a year from Government and Industry funding of £5m a year. The assumptions made in the detail of the analysis can be

discussed, and perhaps adjusted (down or up), but the point remains that the return from the SSCs' involvement is considerable, particularly when it is recognised that not all of each SSC's work has been evaluated, particularly in the case of Skills for Health, which has chosen not to evaluate some project outcomes for the purposes of this report. When viewed together, this indicates an average 'amplification value' of at least 20 times the original investment.

13. With gains at these levels, the observer might question whether the figures are perhaps not fully supported by the reality of the SSCs' work. However when the spread of that work - across the UK, across so many learning providers in the Institutions and in industry, across such considerable sections of industry and commerce – is taken as the context for these gains, the figures become eminently plausible, perhaps even predictable.
14. The analysis of the activities, outputs and outcomes for the similar projects in each of the SSCs suggest that there may be potential for collaboration between these or other SSCs with similar project profiles. With the potential for increased effectiveness from such collaboration, this is an area that is worthy of follow-up work, and may offer more gains than full merger since it allows the SSCs to maintain a dedicated industry focus whilst benefitting from economies of scale in the activities themselves.
15. The measurements produced by this analysis should not be used for comparison between dissimilar organisations, and particularly should not be used to label different Third or Public sector entities with a ratio of evaluated outcomes to evaluated inputs as if this were an absolute measure of their relative worth. They are, however, useful tools for promoting, measuring and encouraging improvement within the organisation, and organisational learning.

1 Introduction

- 1.1 Sector Skills Councils (“SSCs”) operate under license from the UK Government, which partially funds their activities. The 25 SSCs are employer-led organisations that represent industry sectors that cover c.85% of the UK workforce². SSCs have been set three key goals³:
1. to raise employer engagement, demand and investment in skills;
 2. to ensure authoritative Labour Market Information (“LMI”) is produced for their sectors; and
 3. to develop National Occupational Standards and ensure qualifications meet employer needs.
- 1.2 The concept that increasing workforce skills leads to increased productivity and economic growth is well accepted in economic theory. The Institute for Fiscal Studies’ (“IFS”) 2005 paper⁴ “conservatively” estimates that a 1% increase in training may lead to a 0.6% increase in productivity. A successful organisation with the aims set out above may therefore reasonably expect its activities to yield a substantial benefit to the economy.
- 1.3 Baker Tilly has been engaged by Alliance of Sector Skills Councils (“Alliance”) to investigate and provide examples of how the economic benefits that SSCs generate may be measured. This is with a view both to developing a workable protocol for such analysis which will be consistent for all SSCs, and illustrating that with analyses of four sample SSCs.
- 1.4 The prime focus is in showing that:
- the SROI methodology can be applied to SSCs simply, accurately and sensibly;
 - the data sources to support that are either already available or can be gathered and appropriately validated without undue additional effort;
 - the results are useful and highlight the importance of the work of the SSCs in a way that is appropriate to the needs of funders in Government and industry, and indeed within the SSCs themselves.
- 1.5 In recent years, there has been a marked shift in Government thinking away from the concept of ‘core’ funding to a more project-based view. This entails a move away from the concept of providing a body with a set amount of funding merely because it exists and carries out certain functions, towards a model that entails making funding decisions based on the return that is generated. Economic measures are of key importance in the process of defining the return generated. In the course of our work, we have seen examples of this approach within government, most notably in the introduction of National Audit Office (“NAO”) reports, which measure the impact of that organisation by reference to the value generated per pound spent on running it. Recently published work by Action for Children and New Economics Foundation is another example of this.
- 1.6 SSCs have historically been given ‘core’ funding by government, subject to regular re-licensing processes. Now, and particularly in the context of the global economic crisis, this funding has been increasingly subject to challenge, and SSCs need to be able to demonstrate

² Source: National Audit Office Sector Skills Relicensing Report on Cogent, April 2009

³ As stated in the National Audit Office’s relicensing reports during 2009

⁴ Dearden, Reed and Reenen (2005), ‘The Impact of Training on Productivity and Wages: Evidence from British Panel Data’, published by the Institute for Fiscal Studies

clearly the benefit that they bring to the UK economy. This argument is strengthened by the fact that a lack of impact measurement in economic terms has been identified by the NAO as a weakness that should be addressed in at least one recent SSC relicensing report.

- 1.7 Workforce skills has been a topic high on the agenda of BIS and its predecessor departments for a considerable number of years, particularly in the wake of Lord Leitch's report 'Prosperity for all in the global economy – world class skills', which was published in December 2006. That focus is shared by the Coalition Government elected earlier in the year. The imperative to increase workforce skills has become a vital element of the Government's strategy to ensure that the UK economy remains competitive in the global market. The SSCs have a remit that is focused on engaging with industry to ensure that training and qualifications are in place to meet this need. However, their approach and methods vary due to the nature of the industry that they serve.
- 1.8 In addition to public funding, some SSCs have also been able to obtain funding from industry sources. However in the light of the recession, many of their funders will be reviewing this funding as part of a wider drive to reduce costs. Whilst SSCs are likely to have good relationships with these companies at a senior level, relationships with the budget setters may not be as strong. In order to reduce the risk of funding cuts by industry, SSCs need to be able to demonstrate, in economic terms, the benefits that they deliver to industry in exchange for that funding.
- 1.9 Essentially, government and industry funders have three options:
 1. fully to fund SSCs;
 2. to reduce existing funding (partial funding); or
 3. to remove funding entirely.
- 1.10 In considering these options, the funders' focus will presumably be to give funding where value is to be gained.
- 1.11 Historically, SSCs have defended against challenges to funding by setting out the value of their work qualitatively in terms of increased skills and elucidating their ability to control the costs within their organisation. Whilst this goes some way to answering the question of what they do with their funding, it does not give funders an indication of the benefit that they receive in monetary terms as a result of funding the SSC. As a result, funders have no real means of identifying whether they are getting value for money.
- 1.12 In this report, we set out a number of examples of how economic benefit may be measured in a way that meets the expectations of funders. The fundamental concept behind the approach we have taken is to compare the cost of funding an SSC with the economic damage that would arise from its closure, i.e. the benefits that would no longer flow to the UK economy.
- 1.13 In our work with Alliance, we have discovered that many SSCs have previously shied away from measuring economic benefit in this way, as they felt that their contribution was so broad as to make it impossible to measure the impact. Whilst it may not be possible to measure the *full* impact of an SSC in monetary terms, or at least, very burdensome to do so, there are areas of impact for which it is possible arrive at a financial measure by reference to the value of the benefits to key stakeholders. Our analysis shows that economic benefits generated by the Sample SSCs significantly exceed the cost to both government and industry

funders. Hence, there is a strong case for retaining, or even increasing, funding to preserve and allow SSCs greater scope to increase these benefit.

1.14 This report analyses some of the key methodologies that may be applied to measuring economic benefit, and discusses in more detail some specific examples based on our work with four SSCs (“the Sample SSCs”):

- Cogent;
- Energy & Utility Skills;
- People 1st; and
- Skills for Health.

1.15 Our report also takes account of the results of an earlier project undertaken by us with Skillset, another SSC.

1.16 This report includes:

1. explanatory notes on the concepts and methodologies that underpin our work;
2. notes on the key activities of the Sample SSCs and the outcomes they produce;
3. based on the outcomes for each SSC, a compilation of a series of measures of economic gain and/or costs saved that may be used by SSCs to measure economic benefit, illustrated with worked examples; and
4. guidance notes on the application of these measures.

Confidential information

1.17 In the course of our work with the Sample SSCs, we have been given access to certain information that the SSCs have informed us is confidential, and is therefore not to be shared in the public content of this report.

1.18 The Sample SSCs have reviewed the sections of this report that refer to them and their activities, and have confirmed that none of the information contained in this report is inaccurate or confidential. Respective SSCs have also approved final copies of the confidential detailed analyses that underpin the report, in relation to their SSC.

1.19 Information that has been defined by the Sample SSCs as confidential includes the specific assumptions made by Sample SSC staff in the course of our analysis. Our report includes a description of the nature of these assumptions, and includes illustrative worked examples to demonstrate the working of the models that are not based on Sample SSC assumptions. We have been authorised by the Sample SSCs to disclose the results of our evaluations.

Reliance on work by the Sample SSCs

1.20 During the course of our work with the Sample SSCs, we have relied on information and explanations provided by them including:

- the nature and outcomes and beneficiaries of their services; and
- the assumptions used in evaluating the impact of their services.

- 1.21 Where possible, we have attempted to validate their assumptions based on independent data. However, in many cases the SSCs themselves are the only source of data upon which to base assumptions. In cases where similar assumptions have been made, we have cross-checked these to those made by others in the Sample SSC group; we have also compared these assumptions to those made by Skillset during our previous work with them.
- 1.22 The Sample SSCs are responsible for making the assumptions used in this report, and have confirmed that they are, to the best of their belief, accurate and reasonable.

Aim of this report

- 1.23 The aim of this report is to provide Alliance and its member SSCs, as well as SSC stakeholders, with guidance on methods of evaluating the economic benefits that are generated by the SSCs it represents. The methods are developed into worked examples, which have been based on a review of the key activities of the Sample SSCs.
- 1.24 Our report includes the results of our evaluations of the services we have reviewed for the Sample SSCs to illustrate the extent to which the economic benefits that flow from SSCs are likely to outweigh the cost of funding them.
- 1.25 It is hoped that the methodologies and worked examples included in this report can be used by other SSCs to carry out evaluations of their own economic benefit.

2 Concepts and methodologies used

Social Return on Investment (“SROI”)

- 2.1 The SROI methodology has been developed in order to help organisations to “...[measure and quantify] the benefits they are generating” (per Lawlor, Neizert & Nicholls writing in the SROI guide 2008). This approach was piloted in the UK through the Measuring What Matters programme during 2002 and has evolved since then as further work has been done to develop the framework around it.
- 2.2 New Philanthropy Capital, in their positioning paper on SROI published in April 2010, describe it as an “incredibly useful tool”. They mirror some of the comments in the first edition of this report about how the methodology needs some flexibility of application to make it work well, but conclude that is a workable solution in principle.
- 2.3 There are three ‘bottom line’ aspects of social return:
 - *Economic*: the financial and other effects on the economy, either macro or micro;
 - *Social*: the effects in individuals’ or communities’ lives that affect their relationships with each other; and
 - *Environmental*: the effects on the physical environment, both short and long term.
- 2.4 Our primary focus has been on economic and social benefits, rather than environmental benefits, as any environmental benefits generated would appear, for the SSCs and their mission, to be too far removed from the intended purpose of the original services provided and appear to be too difficult to measure reliably. Where environmental benefits arise from the work of an SSC, we have noted the nature of the benefit as an unmeasured additional benefit.
- 2.5 The benefits of using SROI as a methodology include:
 - *Financial Measurement*: it attaches financial proxies to recognisable and relevant outcomes;
 - *Accountability*: organisations are able to give both the numbers and the story that supports them;
 - *Planning*: SROI provides a change management tool to assist in the direction of resources towards the most effective services and to assess the viability of potential additional services;
 - *Cost and time effectiveness*: The measures produce an analysis of the most cost and time effective activities; and
 - *Simplicity*: impacts can be reduced to a simple comparison of the cost of funding an SSC and the benefits that flow from its core activities to facilitate analysis and give a clear indicator of success.
- 2.6 SROI takes total measurable outcomes, discounted to present value where the benefits occur in the future or are recurring over a period of time, and deducts:
 - *Deadweight*: Outcomes that would have occurred regardless of the intervention;
 - *Alternative attribution*: Outcomes that arise as a result of intervention by others; and
 - *Displacement*: Outcomes that are negated or compromised by disadvantages arising elsewhere either in terms of social, economic or environmental damage.

- 2.7 A review of academic work and practical examples of SROI in use by the Third Sector suggests that the measures fall into three patterns, which we have used in this work:
1. *Economic benefit created*: where there is an impact on earning capacity or productivity, it is shown as an increase in tax revenues, or on trade. We have used Gross Value Added (GVA) as a measure of productivity, as it is stated after deducting costs such as employee costs and therefore is a truer reflection of added value than GDP;
 2. *Costs saved or not wasted*: where the intervention results in a saving, either in the cost of another intervention or in a consequential cost (e.g. introducing prevention to save on the cost of a cure). This may be seen in either removing the need for or increasing the effectiveness of an alternative intervention; and
 3. *Alternative or cheaper sourcing*: where one intervention directly replaces another more expensive one.
- 2.8 In identifying these benefits, a key point is to consider not only the positive contribution that SSCs make, but also the economic damage that is avoided by having them in place. In some situations we have considered what the implications would be if an SSC did not exist, or was abolished, and have quantified the damage that would result based on these implications. By avoiding this damage, an SSC contributes to the economy just as meaningfully as where the effect is an overall improvement.

Issues to consider for users of SROI methodology

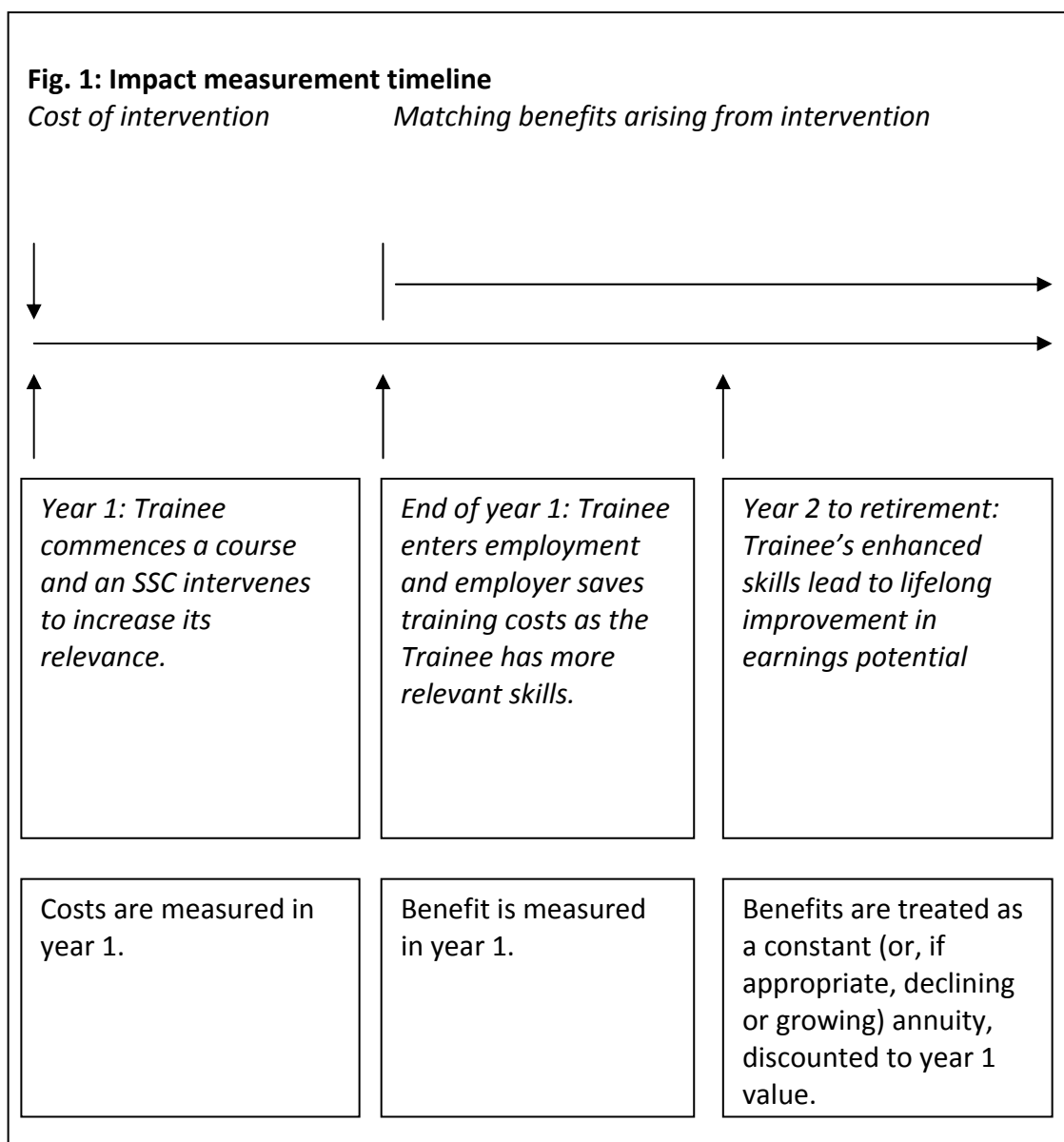
- 2.8 Overall, we feel that SROI is a vital tool to provide the Third Sector with a means to evaluate its contribution to Society. However, there are several issues to consider when applying this that are worthy of mention:
- SROI, as it is typically presented, tends to ignore the risks associated with the benefits generated. In the course of our work with Alliance, we have encouraged the Sample SSCs to consider the achievable benefit created, and to build in reductions to assumptions, where necessary. Other organisations that seek to use SROI must also take account of project-specific risks in order to create a sufficiently robust analysis that avoids overstatement;
 - a robust SROI analysis must consider the proximity of the benefit created to the actions of the organisation that is seeking to claim ownership of that benefit. Care is therefore needed in selecting proxies that may be directly attributed or reasonably proximate to the actions of an organisation with the shortest possible chain of causation between the organisation and the proxies it uses to measure Social Impact;
 - SROI is typically presented as a ratio of the value of the benefits achieved per pound spent to achieve those benefits. This may be useful internally to each organisation as a measure of performance relative to prior periods. However, as we note above in the case of the Sample SSCs, the use of this ratio to compare organisations is inherently flawed due to sector and organisation-specific factors that reduce the level of comparability between organisations;
 - there is a danger that organisations seeking to evaluate their impact using SROI may create calculations that are extremely granular to the extent that they become open to accusations of ‘spurious accuracy’. In this exercise, we have identified a smaller number of key assumptions and worked with the Sample SSCs to develop a prudent

result at a high level. We believe that it is important to present a more defensible, prudent analysis than one which is overly complicated and risks overstatement; and

- SROI does not take account of the interrelationship of Social Impact and brand value. By creating greater Social Impact, the recognition and perceived quality of an organisation's brand is likely to improve, thus increasing the value of that brand. In turn an entity with a stronger brand may use that to enhance the social impact of its project work.

Accounting for the timing of economic benefits

- 2.9 In the course of our work we have identified a number of ways in which the economy benefits over a period of many years as a result of intervention by an SSC. The typical example of this arises where an SSC's intervention results in a lifelong increase in earnings potential on the part of a trainee.
- 2.10 In our analysis, we have matched the full economic benefit that is generated as a result of an intervention with the full cost. Where an intervention has an impact over a long term as a result of a one-off intervention, it is therefore necessary to consider the value of the benefit that arises in future years to match these to the cost of the intervention. A practical example that illustrates one of the models used in this paper is set out in the timeline and commentary shown below:



2.11 The timeline above illustrates that:

- in year 1 a programme is implemented to improve the relevance of a qualification. The outcome of this is that a more skilled employee (“Trainee 1”) is released into the workforce with higher potential lifetime earnings as a result of their increased skills.
- upon commencement of employment in year 1 the employer saves part of the cost of induction training in relation to Trainee 1, as they can assume that they possess the relevant practical skills required to undertake the work. Currently many employers carry out basic skills training due to concerns over the relevance and quality of qualifications.
- from year 2 onwards Trainee 1 pays additional tax due to the higher earnings that have compared to the position they would have been in had the SSC not intervened to increase the relevance of the course;
- no further intervention is required with that trainee in order to generate that benefit. Any future interventions would further increase their earnings potential, but would not change the underlying increase that flows from the year 1 intervention;

- as no further intervention is required to generate this additional earnings potential, it is necessary to match the benefit that arises over the entire working life of Trainee 1 to the cost in year 1. To achieve this we have used a Discounted Cash Flow (“DCF”) method to account for the time value of the additional tax income generated;
- in the above example, a comparable programme is run in year 2 to increase the skills of Trainee 2, and the benefits of additional income for Trainee 2 from year 3 onwards are matched to the cost in year 2, and so on.

2.12 The result of this analysis is that in any given year the value in current terms of the benefit generated can be appraised without double counting the benefits that arise from previous or future years’ funding. This analysis should be replicated for each year group of trainees that complete a qualification.

Research methodologies

2.13 We have worked with the Sample SSCs to carry out the necessary research using an Action Research process (see Appendix II). In this we commenced by interviewing key staff members to determine the key services that each of the four SSCs provides, the outcomes and beneficiaries. This interviewing has been repeated, and interspersed with the interviewees’ testing out the conclusions from each interview by practical application in their work, then reporting the results back to the next interview.

2.14 Based on this research, we have discussed with key staff members potential means of evaluating the impact of these services by substituting financial measures (proxies) for the outcomes described. We have relied on the data and assumptions provided by staff at the Sample SSCs in our analysis; Baker Tilly have acted to facilitate the Sample SSCs’ understanding of the methodologies we are using to evaluate the impact but are not responsible for the assumptions used in the evaluations shown in this report.

2.15 However it is not correct to suppose that the data for evaluation is internally-generated invalidated data. The Action Research team has worked with the SSC’s project team to discover the appropriate quantitative data and match it to the relevant outcome. The data sources used for this were:

- third party, validated and published data, largely from Government Agencies;
- internally-generated, but similarly validated data researched as part of the SSC’s own performance and project evaluations;
- Additional data researched in the course of this review.

Measuring economic productivity

2.16 Where a measure of productivity is required, or where we are modelling a change in productivity, we do so with reference to Gross Value Added (“GVA”). GVA is a measure that is commonly used by SSCs, and so is most likely to produce a result that is meaningful to them.

2.17 GVA is a measure of the value a sector adds to the economy after deducting input costs, and therefore is a measure of the return to the economy of increased workforce skills after direct costs of achieving the growth, such as increased wages.

- 2.18 The use of GVA in this report is also intended to reduce risks of double counting benefits that may arise if Gross Domestic Product (“GDP”) is used. For example, if an SSC achieves an increase in GDP due to increased workforce skills, factors that cause displacement such as wage increases must be taken into account. By using GVA as a measure of productivity, such displacement is accounted for automatically.

3 Summary of Sample SSC key activities

3.1 For the purpose of this report, and in developing the underlying SC evaluations, we have not set out to evaluate the impact of all services provided by the Sample SSCs. The time and effort would not be justified by the additional clarity gained. Further, we have focused on the key activities that the SSCs feel are representative of the majority of their work. For each service, we have discussed with them:

- the nature of the service provided;
- the identification of the direct and indirect beneficiaries;
- the nature of the benefits derived from the service;
- where relevant, the identification of other agencies or companies that could provide a similar service; and
- the likely cost of providing services through alternative sources.

3.2 This discussion was developed to consider how financial measures can be substituted into the place of service outcomes, so that they can be measured. The results of this discussion are shown below for each of the four SSCs.

People 1st www.people1st.co.uk

3.3 People 1st is the SSC for the hospitality, leisure, travel and tourism sectors. Its mission is *“To support the hospitality, leisure, travel and tourism sector in developing the right numbers of people with the right skills and qualifications at the right time.”*

3.4 These sectors face a number of challenges including:

- a clear skills gap in managerial, customer service and ‘craft’ roles;
- the sector is mistakenly perceived as a transitional career disregarding the range of opportunities for career progression; and
- the UK is slipping in international rankings as a visitor destination as other countries become more competitive.

3.5 To meet these challenges, People 1st is acting to:

- streamline and simplify the range of qualifications and introduce new qualifications to meet new industry needs, thereby ensuring only those qualifications that are valued by and valuable to the industry are in place;
- stimulate world class education and training, assisting learners and employers to identify the training providers that offer the best education and training programmes;
- build clear progression routes within the sector to attract, develop and retain high quality people; and
- deliver a skills communication system where employers, employees and new entrants to the sector can access the information they need on skills, qualifications, funding and career progression.

3.6 The services we have reviewed for this report are:

Service	Outcome
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Service	Outcome
Research and LMI	High quality insight at a lower cost than alternatives ensures proper direction of training resource.
IAG portal and National Occupational Standards	Reduces staff turnover and reduces training wastage.
Education and Qualifications	Improves relevance and rationalisation of qualifications and avoids wastage.
UK Skills Passport (www.uksp.co.uk)	Increases transferability of skills, avoids wastage and improves career progression.
Stonebow – training in-house trainers	Reduces training costs compared to external courses.
Wider impact of productivity	Skilled employees are likely to be up to 4% more productive.

3.7 Further detail on the above services and outcomes is shown as Appendix III to this report.

3.8 Energy and Utility Skills (“EU Skills”) is the SSC for the gas, water and power industries. EU Skills’ mission, as set out in their Sector Qualifications Strategy, is *“to provide solutions to develop the skills of the workforce across the footprint which will enable employees to contribute more effectively to the future profitability of their respective organisations”*.

3.9 EU Skills’ focus has been on assisting the sectors it represents in planning for mid to long term skills needs. The sector is facing some extreme challenges, primarily due to the ageing workforce, with many skilled staff expected to retire or otherwise leave employment by 2024. Training in this sector is largely provided and funded by the employers themselves, who have historically placed little reliance on vocational qualifications as an indication of the fitness for purpose of staff. Funding to train their replacements is limited by caps imposed by Ofgem based on their view of the short term needs of the sector. These caps on funding place a limitation on both the quantity and quality of new trainees that can be taken on.

3.10 In addition to this, the energy and utility sectors rely on experience as a key part of training and development. As a result, it is not possible to meet staffing needs at a senior level quickly: to plug some skills gaps that will arise in, say, ten years time, it is likely to be necessary to begin training new employees now, so that they are ready to fill positions that become vacant as the current workforce retires.

3.11 To meet this challenge, EU Skills has acted to:

- build a workforce modelling tool to assist the industry in identifying its mid to long-term needs;
- represent and support the industry in requesting Ofgem to increase the amount they will be permitted to spend on training in order to meet the needs identified by their models;
- establish a National Skills Academy to provide a genuine market place for training and to ensure that training is provided in accordance with ‘best practice’; and
- introduce regulation schemes for contractors and employees to increase the transferability of skills.

3.12 The services we have reviewed for this report are:

Service	Outcome
Workforce planning model	Builds awareness of future skills gaps, thus ensuring training resource is properly directed.
Securing additional skills funding	Avoids future reductions in sector GVA and damage to wider economy.
National Skills Academy	Achieves efficiency savings of up to 35,000 saved training days p.a.
Registration schemes	Increases transferability of skills and reduces costs.

3.13 Further detail on the above services and outcomes is shown as Appendix IV to this report.

- 3.14 Skills for Health (“SFH”) is the SSC for the health sector. Its purpose is *“to help develop solutions that can deliver a skilled and flexible workforce to improve health and healthcare”*.
- 3.15 SFH has aims to help the whole UK health sector develop a more skilled, flexible and productive workforce to improve the quality of health and healthcare by:
1. acting as an authoritative voice on skills issues in its sector;
 2. offering employers and the workforce proven solutions and tools, with the expertise and experience to use them effectively. These solutions are recognised across the UK, transferable, quality assured and based on employer needs.
- 3.16 The services we have reviewed for this report are:

Service	Outcome
Increasing use of level 1 to 4 staff	Gives more effective use of senior staff time, improves efficiency and reduces waiting times.
Workforce strategy	Improves staff planning efficiency and therefore patient experience.
Jobs and employment	Reduces qualifications funding wastage and benefit costs.
Core learning units	Free of charge training system saves staff time.
LMI	High quality insight at a lower cost than alternatives ensures proper direction of training resource.
Skills mix and workforce redesign (2 nd Ed. only)	Use of Advanced Theatre Support Workers allows more effective use of operating theatres, registered practitioners and reduces waiting times.

- 3.17 Further detail on the above services and outcomes is shown as Appendix V to this report.

3.18 Cogent is the SSC for the Science Based Industries including the Chemicals, Pharmaceuticals, Nuclear, Oil & Gas, Petroleum and Polymer industries. Its mission is “to meet the skill needs of the Cogent industries to allow them to compete successfully”.

3.19 The industries represented by Cogent face similar issues to the utility sectors, in that an ageing workforce, combined with the need to remain up-to-date with technological developments has created a skills gap. Currently, there is an oversupply of employees with skills at Level 1 or lower, but a substantial deficit of employees with skills at levels 2 and 3⁵. Historically, a lack of clear understanding of career paths and a lack of skills transferability have also restricted productivity in this sector.

3.20 Cogent has identified five ‘big ticket’ goals to tackle these issues:

- *Cogent Industry Skills Standards and Qualifications*: including development of the Sector Qualifications Strategy (“SQS”), the Gold Standard, Nuclear Industry Training Framework, National Occupational Standards (“NOS”), 14-19 Diplomas and Progression in Science and Engineering;
- *Cogent Apprentices*: including the review and implementation of Apprenticeship frameworks to meet the skills needs of industry;
- *Future Skills*: including Cogent’s research programme that focuses on identifying the future skills needs of the industries it represents;
- *Cogent Career Pathways*: including an internet-based Information, Advice and Guidance (“IAG”) portal that is used by employers, individuals and careers advisers to understand career pathways and skills needed for career progression; and
- *Cogent Skills Benchmarking*: is underpinned by an IT platform which provides the all-important employer benchmarking against the Cogent Standards and Job Roles, as well as a web-based Skills Match product which allows individual assessment against the Gold Standard Competencies.

3.21 The services we have reviewed for this report are:

Service	Outcome
Research and LMI	High quality insight at a lower cost than alternatives ensures proper direction of training resource.
Cogent careers	Attracts the next generation to the sector and ensures career progression to fill current and future skills gaps.
Education and qualifications	Ensures relevance of qualifications, reduces the need for induction training and improves earning capacity.
Skills benchmarking	Increases transferability of skills and reduces costs.

3.22 Further detail on the above services and outcomes is shown as Appendix VI to this report.

⁵ Cogent Sector Qualification Strategy for the Chemicals, Nuclear, Oil and Gas, Petroleum, Pharmaceuticals and Polymer industries, August 2007

4 Matching outcomes to evaluation approaches

4.1 Having identified the outcomes that are derived from the activities of the Sample SSCs, we have considered, in conjunction with staff and officers of the Sample SSCs, how they may be measured using the evaluation approaches discussed above in section 2.

4.2 In each case we, and the relevant SSC's project team, have considered and taken account of:

- an uncertainty in the financial gain likely to arise from any intended outcome;
- the extent to which the outcomes targeted to be achieved are attained partly, or even substantially, from the activities and effects of others. Two examples are:
 - the apprenticeships programmes, where the SSCs facilitate an aspect of their development, but FE Colleges and other providers deliver the learning;
 - the operating theatres project for SFM, in which part of the gain must be attributed to the hospital with which the project was piloted;
- any adverse effects arising as corollaries of gains evaluated as positives.

4.3

4.4 The table below matches the outcomes described above to the three evaluation approaches (per para. 2.7) and describes, in general terms, the approach that we have taken to evaluating these outcomes:

Outcome	Model(s) used	Approach
<p>When carrying out research, an SSC is cheaper than a commercial research company would be.</p>	<ul style="list-style-type: none"> Alternative sourcing cost 	<ul style="list-style-type: none"> We have asked each of the Sample SSCs to provide us with an assumption of the likely cost of delivering their research products using a commercial research company. We have reviewed the estimates of the values of research output provided by the Sample SSCs for consistency with each other and the output from our work with Skillset. This amount is included in our cumulative total benefits and compared to the total funding cost. This is because 'core' funding is not broken down to include a specific amount for research to allow individual comparison. The impact of deadweight, attribution and displacement on this model are considered to be minimal, given that: <ul style="list-style-type: none"> the SSCs tend to work alone to produce research; The deadweight element is best reflected by reducing the economic benefit generated by avoiding the misdirection of funding (below); and By deducting the total funding cost for the SSCs from the total benefits in our conclusion, we account for the cost of funding the SSCs research function.

Outcome	Model(s) used	Approach
<p>SSCs have staff with a substantial amount of specialist industry knowledge that informs their conclusions and the insight that they provide. This is part of the basis upon which government and industry skills funding decisions are made.</p>	<ul style="list-style-type: none"> Costs saved or not wasted 	<ul style="list-style-type: none"> We have asked each of the Sample SSCs to provide us with an assumption as to the amount of government funding that is directed to their sector based upon the insight provided by their research. The SSCs' ability to recruit and use highly qualified and respected industry experts in their research might not be achievable by a commercial research agency. Hence, a commercial agency is arguably at more risk of missing or inappropriately interpreting industry trends, which would cause a proportion of funding to be directed less effectively. We have asked the Sample SSCs to provide us with an assumption as to the proportion of the funding amount that could be inappropriately directed if their qualitative insight was not available to funders. SSCs act as a hub for knowledge about their sector and make themselves available as a resource to government, often at short notice, in a way that a commercial agency would be unlikely to emulate. The concepts of deadweight and attribution are of importance here, as, clearly, much of the funding is likely to be appropriately directed by the government in any case, and research can be obtained from other sources. This is accounted for by adjusting the assumption on the proportion of poorly directed funding, such that it reasonably reflects the impact of the SSC's insight, and not the data it provides. We have reviewed the assumptions provided by the SSCs to ensure that there are no inconsistencies among the Sample SSCs, and that they are consistent with the output from our work with Skillset.

Outcome	Model(s) used	Approach
<p>The relevance of key qualifications has been increased.</p>	<ul style="list-style-type: none"> Costs saved or not wasted 	<ul style="list-style-type: none"> We have asked the Sample SSCs to provide us with information on their activities in the area of qualifications. In some cases, an intervention has occurred in order to improve existing courses so that they meet the needs of the industry more effectively. Others have intervened to approve/accredit qualifications such that only those that meet the needs of industry are funded. Using publicly available funding data and the number of trainees that are undertaking courses, we have calculated the total funding for specific qualifications. Based on this total, we have used assumptions provided by each SSC in order to identify the proportion of this funding that has been redirected at more relevant skills (i.e. funding that is no longer wasted on skills that are irrelevant to the industry). We have reviewed publicly available data on qualifications funding in order to validate the assumptions on funding per qualification. Other data has been provided by the SSCs themselves, as they tend to be responsible, on a national level, for collecting this type of information. We have reviewed the consistency of assumptions provided by the Sample SSCs on the proportion of the increase that is attributable to their work. However, we note that the extent and nature of the interventions in qualifications by the Sample SSCs vary, and as such may not be meaningfully compared: this review is intended as a sense-check only.

Outcome	Model(s) used	Approach
<p>IAG, National Skills Academies (“NSAs”), standardisation of training and career assist industries in directing funding effectively and avoiding wastage.</p>	<ul style="list-style-type: none"> Costs saved or not wasted 	<ul style="list-style-type: none"> The industries represented by the Sample SSCs tend to make substantial investment in training that does not result in a formal qualification. Historically, it has been difficult to transfer this training between employers, resulting in training being repeated unnecessarily. By increasing the extent to which employers use standardised courses and career progression frameworks, some of the Sample SSCs have increased the transferability of skills, thereby reducing costs from repeating training upon induction at a new employer. This is particularly notable in relation to contractors and site inductions by Cogent and EU Skills. This can be measured as a function of the number of days of training that are avoided each year and the cost of that training (taking into account assumptions of the cost of the course, the cost of a day’s salary and the opportunity cost from lost productivity). By increasing the understanding of key skills gaps, and the skills that are required for each role, some SSCs have helped to ensure that industry is directing funding at the most appropriate training, thereby avoiding training budget wastage. This can be measured by considering the proportion of the total training funding that is saved by avoiding training that is not required for an employee’s role, together with the amount that has been redirected away from training that was not effectively meeting the needs of the sector. Much of this impact flows from the work that the SSCs do by researching skills gaps as part of their LMI work. To avoid double counting the benefits of research, we have considered government skills funding as a direct benefit of research, and industry skills funding in relation to IAG, NSAs and other careers-related interventions. We have reviewed the consistency of assumptions between the Sample SSCs and compared this with the output of our previous work with Skillset. In relation to this outcome, we have considered that much of the benefit from directing this funding is attributable to the industry itself. Assumptions on the benefit generated by SSCs have been restricted to consider only the benefit that is attributable to the SSCs’ interventions.

Outcome	Model(s) used	Approach
Incremental impact on sector productivity	<ul style="list-style-type: none"> Economic benefit created 	<ul style="list-style-type: none"> The ultimate outcome of increasing workforce skills is an increase in productivity, as better qualified staff work more efficiently. For some sectors, this is difficult to calculate due to their diverse impact on the wider economy. The issue of proximity of effect is also relevant. It is also necessary to take account of the fact that an SSC will not, as yet, have had the opportunity to intervene with all members of the workforce in its sector. The approach to measuring this benefit can be either of two ways: <ul style="list-style-type: none"> <i>Top-down measurement:</i> Based on a function of industry productivity measures (such as GVA) and assumptions as to the expected productivity increase per employee as a result of its intervention (reduced to account for the proportion of the workforce that have benefited from its intervention). <i>Bottom-up measurement:</i> These models are built up from a number of assumptions including the number of interventions and the movement in productivity per intervention. These assumptions are likely to be derived from many other assumptions or data that are unique to each intervention. These models are highly sensitive to key assumptions on which data may currently be sparse. However broader-based but nevertheless well-founded data is often available to enable estimates to be made within a limiting space. In the course of our work, we have encouraged SSCs to be as prudent as possible, whilst fairly recognising the value they add to the economy. We note that deductions for deadweight or alternative attribution in excess of 90% of calculated benefits have been made in some cases in order to ensure that the outcomes of these models are prudent. For the bottom-up analysis, the SSCs are likely to be the only source of this data. We have carried out top-down analyses in order to sense-check the total benefit that the SSCs have claimed to generate based on the IFS' expectation of increased productivity due to training. Other agencies are involved in driving growth in industry sectors, and external economic factors will also have an impact on growth. The SSC assumptions have been limited to the benefit that they believe is attributable to their intervention. Any displacement caused is likely to impact on other global economies, and as such falls outside the scope of this report.

Outcome	Model(s) used	Approach
<p>Workforce planning models and other strategic tools develop industry understanding of future skills needs</p>	<ul style="list-style-type: none"> Alternative sourcing cost 	<ul style="list-style-type: none"> Employers have benefited from modelling and other strategic planning tools developed by SSCs and, in most cases, provided either free of charge or for a nominal membership fee. By developing a standardised tool, an SSC not only saves on the cost of developing these tools, compared to the cost of using a commercial consultancy practice, but also creates a unified approach within their sectors and increases employer engagement. This benefit may be multiplied from the perspective of industry, as it is highly unlikely that companies would cooperate or share such tools with their competitors; hence several companies could have developed their own tools at significantly greater cost, had a SSC not created an industry-wide solution. We have reviewed the values placed upon development services by comparing the responses of Sample SSCs, and having regard for our own experience of public and private sector consultancy work, and the typical fees we have seen across a number of sectors. In this situation, SSCs tend to be working alone; hence, for closely proximate gains, alternative attribution is unlikely to be an issue. We have assumed that the outcome of the work would be the same, and so the benefit is reflected only in the fact that the SSC has provided its services at minimal or no cost compared to the rates that a commercial consultancy practice would charge.

Outcome	Model(s) used	Approach
Releasing additional skills funding	<ul style="list-style-type: none"> Economic benefit created 	<ul style="list-style-type: none"> An increase in skills funding is a long-term investment in productivity and maintenance of the competitive position of the UK economy. Hence, by releasing additional funding for skills into the industry, whatever the source of that funding, an SSC generates an economic benefit. Again, the quantification of productivity increases was seen by several of the Sample SSCs to be difficult to measure reliably. However, we have identified and discussed three possible approaches to measuring such increases with the Sample SSCs: <ol style="list-style-type: none"> Assume that the value of the benefit must be at least equal to the value of funding raised, and therefore take the value of the funding to be the value of the benefit; Using a DCF model, calculate the return on the additional funding based on industry-specific models of how the funding will create a return, either by increasing productivity or by avoiding reductions in productivity. The present value of the funding plus an assumed return on investment that could be generated from an alternative use is deducted to calculate the incremental benefit; and As per model 2, but a second model is created to consider the return that would have been generated elsewhere by the funding if applied to a specific alternative project to calculate the true incremental benefit of the funding. The first approach is overly simplistic, and the third is impractical as the alternative project(s) and outcomes may not be known. The second approach balances the need to model the complexities and risks associated with the return generated by the project, with the need to consider the impact of diverting funding from alternative uses. We have reviewed the terms of the funding as presented by the SSC to confirm that the annual amounts shown are correctly calculated. Where the funding has been publicly announced, we have reviewed the announcement to confirm the amount and timing of the funding. In the examples seen in this report, it is unlikely that the funding would have been agreed in the event that the SSC had not intervened, and so deadweight and attribution are not considered to impact-upon the result. Where an SSC has acted in cooperation with other agencies to release funding, the benefit should be apportioned on an agreed basis.

Outcome	Model(s) used	Approach
Increasing labour and other cost efficiency	<ul style="list-style-type: none"> Economic benefit created 	<ul style="list-style-type: none"> Where training has enabled more junior staff to release senior staff to focus on work that is more appropriate to their training, we have considered the benefit as a function of the proportion of time that has been redirected and the salary cost of that time. This is primarily used in relation to Skills for Health's work to utilise skills mix to reduce delays in care, thus increasing patient throughput, while maintaining quality. It is also used to reduce the amount of time spent by senior staff on tasks that do not make the most effective use of their knowledge and skills. We have reviewed evidence, in the form of case studies, supplied by the Sample SSCs to validate the assumptions used. In the examples shown in this report, each SSC was solely responsible for developing the interventions considered. Displacement is considered, as other cost increases occurred in the implementation of the interventions. Had the SSC not intervened, they believe it is unlikely that these savings would have been achieved.
Consultancy services	<ul style="list-style-type: none"> Costs saved or not wasted 	<ul style="list-style-type: none"> Several SSCs provide skills and other workforce planning consultancy services to their industries for little or no cost. Were a commercial consultancy practice to be used in these roles, the cost would be significantly higher. We have asked the SSCs to provide us with an assumption, based on their knowledge of the time and expertise involved, of the likely cost of engaging a consultancy practice to carry out this work. We have reviewed the values placed upon consultancy services by comparing the responses of Sample SSCs. We have put this into context of our own experience of public and private sector consultancy work, and the typical fees we have seen across a number of sectors. In this situation, SSCs tend to be working alone; hence, alternative attribution is unlikely to be an issue. We have assumed that the outcome of the work would be the same, and so the benefit is reflected only in the fact that the SSC has provided its services at minimal or no cost compared to the rates that a commercial consultancy practice would charge.

Outcome	Model(s) used	Approach
<p>'Welfare to work' schemes move people back into the workforce</p>	<ul style="list-style-type: none"> Costs saved or not wasted 	<ul style="list-style-type: none"> By intervening to move people back into the workforce, SSCs have reduced the cost of other government interventions including benefits and the incremental costs of supporting people who are out of work. We have reviewed publicly available data on benefit and other costs for unemployed people to ensure that the SSC assumptions are consistent with this data. Where assumptions have been made on the number of people that have benefited from the SSC's intervention, we have relied on data provided by the SSC. Where other agencies are involved, we have asked the Sample SSCs either to consider the number of people that they, solely, helped, or to provide an assumption to apportion the benefit between them and the other agencies involved. By only calculating the saving based on a single year of cost, we have accounted for the fact that other interventions could have, helped these people back to the workplace; we have asked the SSCs to consider the number of people that they expect would have returned to work regardless of their intervention and have apportioned the result accordingly, if required.

5 Evaluation models and guidance notes

General notes on using the models

- 5.1 In this section, we have included worked examples selected from the actual evaluation projects with the four SSCs that illustrate the evaluation of the key outcomes, which are summarised at section 4, together with guidance notes on how these may be used by other SSCs in evaluating their own economic impact. For each of the models shown, we have included an analysis of the benefits we have calculated based on assumptions provided to us by the Sample SSCs.
- 5.2 These worked examples are intended to provide a guideline for SSCs on how they might approach the preparation of their own models. The illustrations in this section take a high level view of the measurements: SSCs should, where possible, consider how they can show a more detailed thought process behind key data or assumptions to support their calculations.
- 5.3 For this report, as it is to be given relatively broad circulation, the Sample SSCs have informed us that information and assumptions that they have provided for this exercise are to be kept confidential. In accordance with their wishes, we have not disclosed the detailed assumptions that underpin the evaluation models. However, we have included a detailed analysis of the methodologies and approach to determining assumptions that have been used in this report, together with an analysis of key areas of uncertainty.
- 5.4 In producing detailed impact evaluation reports, SSCs should have regard for the need to disclose the detailed workings of their models and the assumptions that they have used, as well as any sensitivity analysis that they have undertaken.
- 5.5 Care is needed when using these models to avoid double counting. For example, if we know that total funding is £200m, and that £50m of this relates to education and qualifications, the £50m and £150m must be either considered together in a single model or split between two (or more) models: if £200m is considered as well as £50m, there is a clear risk that part of the benefit has been double counted. In stating the sources of key assumptions, SSCs should include comment, where necessary, on the steps taken to avoid double counting of benefits.
- 5.6 When undertaking any evaluation of benefits, SSCs should consider from whose perspective they are evaluating the benefits. For example, a valuation from the perspective of the industry is likely to use different combinations of models and assumptions from one that focuses on the benefit to the government. It may be necessary to produce a number of models for each service to reflect the benefit to each stakeholder, taking care to avoid double counting.
- 5.7 Wherever possible and relevant, more than one measure should be considered, and the usefulness of the outcomes appraised, before a particular measurement method is chosen.

5.8 This section expands upon the analysis shown in section 3 of this report, and develops the approaches discussed at section 4 into evaluation models. For each model, the table below shows the SSCs and services they have been used to measure:

Model	SSCs and services
Cost savings achieved or funding wastage avoided (based on a total funding assumption)	<p>People 1st:</p> <ul style="list-style-type: none"> • Research and LMI insight; • IAG and careers information used by industry to target funding; and • UK Skills passport. <p>EU Skills:</p> <ul style="list-style-type: none"> • National Skills Academies; and • Regulation and skills registration schemes. <p>Skills for Health:</p> <ul style="list-style-type: none"> • Research and LMI insight. <p>Cogent:</p> <ul style="list-style-type: none"> • Research and LMI insight; and • Skills benchmarking and skills ‘passports’.
Funding wastage avoided (for education and qualifications)	<p>People 1st:</p> <ul style="list-style-type: none"> • Education and qualifications rationalisation. <p>Skills for Health:</p> <ul style="list-style-type: none"> • Improvements to Apprenticeship drop-out rates.
Increased tax paid on skills-related wage increases	<p>Cogent</p> <ul style="list-style-type: none"> • Education and qualifications improvement
Alternative sourcing costs (based on the use of commercial alternatives)	<p>People 1st:</p> <ul style="list-style-type: none"> • Research and LMI. <p>Skills for Health:</p> <ul style="list-style-type: none"> • Workforce strategy tools and consultancy services; • Core learning units and other training tools; and • Research and LMI. <p>Cogent:</p> <ul style="list-style-type: none"> • Research and LMI; and • Development of internet-based career pathways tool.

Model	SSCs and services
Incremental economic benefit generated (relating to productivity increases)	<p>People 1st:</p> <ul style="list-style-type: none"> Measuring the impact on sector productivity by reference to improvement in the productivity of individual employees. <p>Cogent:</p> <ul style="list-style-type: none"> Increased sector productivity due to interventions to increase the attraction of the industry and up-skill the workforce, thereby increasing productivity; and Improvements in the relevance of qualifications leading to an increase in trainee salaries upon qualification and therefore an increase in tax paid.
Future economic damage avoided	<p>EU Skills:</p> <ul style="list-style-type: none"> Avoiding future reductions in GVA resulting from increased employee costs required to fill gaps caused by workforce demographics by supporting negotiations to increase funding to train the next generation. <p>Cogent:</p> <ul style="list-style-type: none"> Avoiding future reductions in GVA resulting from increased employee costs required to fill gaps caused by workforce demographics by working to attract and up-skill the next generation.
Resources diverted to other interventions	<p>Skills for Health:</p> <ul style="list-style-type: none"> Use of level 1 to 4 training and creation of new roles to release senior staff to focus on more complex cases; Use of Advanced Theatre Support workers to release senior practitioners to focus on other interventions, increasing patient throughput; The Health Functional Map reduces the amount of time spent by administrators on recruitment; and 'Welfare to work' interventions.

5.9 The model used to reflect the benefits of incremental tax paid by employees whose earnings potential is increased by completing more relevant qualifications has been discussed with each of the Sample SSCs. Whilst there was general agreement that the logic of increased skills leading to increased pay was generally agreed with, there were a number of specific objections relating to some of the Sample SSC's specific sectors:

- **Displacement:** for SSCs such as SFH that primarily serve the public sector, an increase in wages as a result of increased skills leads to additional cost to the government that negates the benefit of the additional tax paid by employees in the sector; and
- **Correlation of skills and pay rises:** for industries where training is carried out informally, and may not therefore lead to a recognised qualification, it is likely to be difficult to determine the extent to which training has led to an increase in wages. Some of the Sample SSCs felt that there was too little evidence to support this concept to allow the use of this model to be defended.

- 5.10 The wage increases model has been used to consider the impact of Cogent’s work to enhance the relevance and rationalise the number of qualifications in its sector. We also note that this model applied in our previous work with Skillset, and so it is worthy of consideration by all SSCs seeking to measure their economic benefit, particularly from the perspective of measuring the return directly to the government.
- 5.11 For some services, it is necessary to use more than one of the above models to measure the full extent of the benefits generated. This would be the case where a service such as research leads to a saving compared to the alternative sourcing cost, and leads gains (or avoids damage) to productivity) within the sector. In such cases, the results of the models must be interpreted, and care is needed to avoid double counting of benefits.

Cost savings achieved or funding wastage avoided (total funding)

Application of this model

- 5.12 This model is intended for use where an outcome relates to the improved application of funding, whether from public or industry sources. Some typical examples of this which we have seen in the Sample SSCs are set out below:
- use by funders of SSC research as a basis for strategic decision-making on the direction of funding;
 - where a cost saving is achieved due to, for example, increased efficiency; and
 - where a known number of interventions will occur to achieve a known saving per intervention.
- 5.13 We have prepared two worked examples to illustrate these scenarios. The first (“top-down model”) considers a relatively basic analysis of a reasonable assumption of the percentage saving on a total amount of funding, while the second (“bottom-up model”) is constructed using a set of known data. Where possible, the bottom-up model is to be preferred, as this is based, to some extent, on known data and therefore has increased credibility. The top-down model is highly sensitive to the assumption of the proportion of the total that is saved, but is useful as an alternative where bottom-up analysis is not possible, or as further sense-checking where it is.
- 5.14 The economic benefits that these models reflect make up an important part of the benefit that an SSC generates. It is therefore equally important that, when evaluating an SSC’s impact on the economy, these benefits are included in the analysis. Where a top-down model is used, this should be stated and the assumptions highlighted as areas of uncertainty.

Worked examples and key assumptions

5.15 The table below shows a worked example of how the top-down model is used:

Top-down cost saving or wastage avoided	Assumptions	Benefits £m	Notes
Total funding (£m)	50		1
Proportion that could be directed at skills that do not meet industry needs	5%	<u>2.5</u>	2
		<u><u>2.5</u></u>	
Notes			
1 In many cases it is unlikely that government or industry will release this data in the public domain. SSCs should therefore make an assumption, having regard for the reasonableness of the number that they use.			
2 SSCs should base their assumption as to the proportion of the saving achieved on a reasonable view of the saving that is achieved solely through their own intervention. Where an SSC's intervention is closely related to another agency's work, they must take account of the attribution of benefits to the other agency.			

5.16 Whilst this model is heavily reliant on assumptions by the SSC, it may be argued that their knowledge of the sector and the qualitative feedback they receive place them in a strong position to make such assumptions. It is, however, important that these assumptions are seen as reasonable by an independent reader: where doubt exists, particularly in relation to the percentage saving achieved, SSCs should consider using a range of assumptions as a sensitivity analysis.

5.17 Other agencies can also claim credit for effectively directing this funding to meet the needs of industry, and SSCs must take this into account (see para. 5.21).

5.18 The table below shows a worked example of how the bottom-up model is used:

Bottom-up cost saving or wastage avoided	Assumptions	Benefits £m	Notes
Number of interventions	10,000		1
Annual cost saving per intervention (£)	500	<u>5.0</u>	2
		<u><u>5.0</u></u>	
Notes			
1 The number of interventions for an SSC is likely to equate to the number of people that have benefitted from improved or more efficient training due to the intervention of a SSC in terms of e.g. the number of training days saved by avoiding repetitious courses.			
2 The annual cost saving is likely to be made up of other data such as the cost of a single day of training course attendance, the value of lost productivity and the effectively wasted cost of employment for that day.			

5.19 This model has been used in evaluating the benefit of skills passport or skills register Schemes that are run by the Sample SSCs to reduce the amount of repeated training that occurs in an industry. In this situation, the assumptions shown above can be determined from:

- *Number of interventions*: this effectively equates to the number of days training avoided, which can be based on assumptions of the number of people using the scheme and the number of days saved per annum per person; and

- *Cost per intervention*: this equates to the cost saved per day of training avoided. This assumption must account for three elements of cost:
 - The salary of the employee attending unnecessarily repeated training;
 - The cost of the course; and
 - The opportunity cost relating to loss of production by the employee.

5.20 Whilst the bottom-up model can be based on data available to the SSC, such as the number of members of a scheme, other inputs to this model require assumptions to be made. As for the top-down model, where doubt exists on any assumption, a range of assumptions can be used as a sensitivity analysis.

Deadweight, Attribution and Displacement

5.21 Where possible, SSCs should make assumptions on the proportion of the benefit that is generated that belongs to them, the amount that would have occurred regardless of their involvement and the amount that is negated by some damage elsewhere in the economy as a result of that benefit.

5.22 For the purposes of the cost saving and wastage avoided models used in our work with the Sample SSCs, we have requested that they consider the impact that is due solely to their activities, and which would not have arisen in the normal course of events. In most cases, we would expect that an SSC can formulate assumptions based on that premise.

5.23 However, in the case of the bottom-up model, it may be necessary to make adjustments, for example if a scheme is run by more than one agency. In these cases, SSCs will need to make an assumption, and possibly seek the agreement of the other agency as part of the process, in order to apportion the benefit that the scheme generates between the parties.

5.24 Displacement is unlikely to be an issue when considering funding, as it is likely that the funds would have been made available for this purpose in any case. By diverting funding away from less useful uses, some damage may be caused, but this damage is justified, given that the alternative uses were not achieving the funders' objectives.

5.25 Where new funding has been given, displacement should be deducted for the value of the funding. Deadweight should be deducted using a typically expected return on investment that could otherwise have been obtained through the use of that funding elsewhere.

Sample SSC cost saving and wastage avoided analysis

5.26 Our detailed findings for each SSC are shown at section 6 of this report. The table below shows the total savings or wastage avoided by each SSC:

Summary of cost saving and wastage avoided	Total benefits measured £m
Cogent	37.7
Energy & Utility Skills	39.2
People 1st	91.2
Skills for Health	20.0

Key areas of uncertainty in this analysis

5.27 We have noted that the following areas are the subject of assumptions by the Sample SSCs, and as such are subject to some uncertainty. It should be noted that these assumptions are felt by the Sample SSCs to be on the conservative side of reasonable, and where judgment has been used, they have exercised prudence:

- amount of government and industry funding directed to the sector;
- proportion of funding that could be directed to projects that do not meet industry needs if the SSC did not intervene;
- number of training days saved; and
- cost of a single day of training.

Education funding wastage avoided

Application of this model

5.28 This model is intended for use where education funding has been redirected or wastage has been avoided due to the intervention of the SSC. This is typically seen in terms of:

- the improvement in the relevance to industry of qualifications;
- the rationalisation of qualifications so that only those that really add value are offered; and
- the improvement in completion rates so that the funding provided achieves the desired outcome rather than being ‘wasted’.

5.29 We have prepared a worked example to illustrate how this model may be used. This model considers the proportion of time that was previously directed at irrelevant skills, the proportion of courses that were ineffective at preparing trainees for the workplace, or the proportion of trainees that would dropout during the course due to a lack of relevance and/or engagement.

5.30 This model is based on the premise of calculating the number of trainees for whom the qualification has achieved the desired outcome solely because the SSC has intervened to improve it in some way. This number is then multiplied by the known cost per trainee of funding the qualification to arrive at the amount of funding that would have been wasted had the SSC not intervened.

Worked example

5.31 The tables below show our worked examples. Note that the funding assumption is set to reflect work with Apprenticeships:

<i>Education funding wastage avoided</i>	Assumptions	Benefits £m	Notes
Number of trainees	500		1
Funding cost per trainee (£)	2,800		2
Proportion of course time that could be less effectively directed in the absence of SSC intervention / proportion of irrelevant courses prior to intervention / proportion of trainees that would drop out in the absence of SSC intervention	20.0%		3
		<u>0.28</u>	

Notes

- 1 This can be based on data that will be collected by or otherwise available to the SSC.
- 2 Course funding data is publicly available from agencies such as the LSC.
- 3 The proportion of 'wasted' time should be based on an assumption, informed by the SSC's view of the extent to which it has reformed the course content (if applicable). Where the intervention consists of approving courses and/or rationalising courses such that only effective courses remain, this can be based on the number that have been terminated or not approved. SSCs will have access to dropout rate data, and should consider the extent to which any improvement may be attributed to them when arriving at this assumption.

5.32 The assumptions used in this model can be more firmly based on data that is available to an SSC, and are therefore less subject to issues around the accuracy of key assumptions.

Deadweight, Attribution and Displacement

5.33 For this model, the concepts of deadweight and alternative attribution are key due to factors including:

- other agencies having been involved in delivering and formulating the content of courses, and are entitled to claim some of the benefits that have arisen. This includes the government, the training provider and the employer (for vocational on-the-job courses);
- some improvements partially having occurred regardless of interventions, most notably increases in course completion rates. It is felt, however, that such deadweight is unlikely to be a significant factor, as the majority of the improvement must have been caused by some form of intervention, whether by the SSC or not, to remedy the issues that had caused poor performance; and
- in the event that the SSC had not intervened or did not exist, another agency having been called upon to carry out this work, albeit with reduced success compared to an SSC, as the SSC brings additional knowledge of the skills that industry really needs to their work.

- 5.34 In our work with the Sample SSCs, we have requested that they adjust their assumptions to reflect the benefits that are solely attributable to them.
- 5.35 When using this model, an SSC will need to evaluate the proportion of any improvement that is solely attributable to their work based on their knowledge of the extent to which other agencies were involved and a view on the improvement that could have been achieved if they had not intervened.
- 5.36 It is unlikely that displacement will be a key issue when applying this model, as the impact is to either reduce costs or ensure that funding that would be provided in any case achieves the desired outcome.

Sample SSC education funding wastage avoided analysis

5.37 The table below shows the results of these models for each of the Sample SSCs:

Summary of education funding wastage avoided	Total benefits measured £m
Cogent	Not measured
Energy and Utility Skills	Not measured
People 1st	12.5
Skills for Health	4.2

Key areas of uncertainty in this analysis

- 5.38 We have noted that the following areas are the subject of assumptions by the Sample SSCs, and as such are subject to some uncertainty. It should be noted that these assumptions are felt by the Sample SSCs to be reasonable, and where judgment has been used, they have exercised prudence:
 - Percentage improvement due solely to the intervention of the SSC; and
 - Number of trainees (for qualifications where data has yet to be collected).

Alternative sourcing cost

Application of this model

- 5.39 Conceptually this is a relatively basic model, in that we have asked the team leaders that are responsible for research and consultancy services at each of the Sample SSCs to provide us with an estimate of what their output would have cost if it had been commissioned from a private sector company. We have reviewed this in the light of our knowledge of purchasing and costing such services.
- 5.40 This assessment must be based on the individual circumstances of the SSC, specifically including:

- the amount of time spent by members of staff at the SSC on these services;
 - the nature of the assignments carried out;
 - the level of expertise required to complete these assignments; and
 - the actual cost to the SSC of completing the work.
- 5.41 From our work with the Sample SSCs, the majority of team leaders have been able to provide us with what they believe to be reasonable assumptions as to the likely cost that would have been involved in commissioning this work from a commercial source.
- 5.42 There are a number of reasons why this analysis is difficult to complete objectively:
- not all commercial companies will base their quotes by reference to staff charge-out rates;
 - where charge-out rates are used, these are often based on the size, location and nature of a business as well as the subjective views of an organisation on the value of its staff;
 - flat rates may be charged based on subjective judgments on the willingness of the buyer to pay; and
 - fees quotes may be set by reference to the value of the economic benefit that a piece of work is expected to deliver to the commissioning party.
- 5.43 If an SSC is able to form a view on a market rate for its staff time, and has records of the number of hours spent on specific types of work, a commercial cost could be calculated. This would, however, ignore the possibility that a consultancy or research organisation may seek to charge a higher rate due to the inherent complexity of the project, or a lower rate as a strategic move to ensure that they, rather than a competitor, win the work.

Worked example

- 5.44 Given the relative simplicity of this model, which usually comprises a single assumption, we have not produced a worked example. Our work with the Sample SSCs is shown below, together with an analysis of average values by service type, for illustrative purposes and to provide a benchmark for other SSCs to use when carrying out similar analyses.

Deadweight, Attribution and Displacement

- 5.45 It is unlikely that deadweight, alternative attribution and displacement will impact upon this analysis as it focuses on services that an SSC provides without the assistance or involvement of other agencies. If the SSC did not exist, these services could be commissioned from another organisation, but at a greater cost, hence it is unlikely that displacement will be a major issue.
- 5.46 The deadweight element of these services is accounted for in other models that consider the wider implications of the use of an SSC's research. The wider impacts of an SSC's research are typically included in our analysis of cost saving or wastage avoided (para. 5.12).

Sample SSC alternative sourcing cost analysis

5.47 The table below shows the results of this model for each of the Sample SSCs:

Summary of alternative sourcing costs	Total benefits measured £m
Cogent	3.6
Energy and Utility Skills	Not measured
People 1st	0.6
Skills for Health	6.7

5.48 Whilst it was felt that there was a measurable alternative cost for the development of EU Skills’ workforce planning tool, the primary benefit of this activity actually lies in the value of the damage to GVA avoided from the use of that model. Hence, the alternative sourcing cost of this tool has not been included above.

Key areas of uncertainty in this analysis

5.49 We have noted that the following areas are the subject of assumptions by the Sample SSCs, and as such are subject to some uncertainty. It should be noted that these assumptions are felt by the Sample SSCs to be reasonable, and where judgment has been used, they have exercised prudence:

- estimated commercial values of research deliverables; and
- estimated commercial value of consultancy work done.

Incremental Economic benefit generated or damage avoided

Application of this model

5.50 An increase in sector productivity is a logical and expected result of up-skilling the workforce that is likely to add significant value to the UK economy (para 1.2). However, we have noted for some of the Sample SSCs, that there is some concern over the use of an industry productivity-based model, as this would ignore the wider impact on the economy of this improvement for some sectors.

5.51 For example, we note that for EU Skills and Cogent, which together represent the UK’s power generation sector, the impact of reduced workforce skills and therefore productivity could include:

- interruptions to power supply, reducing the productivity of affected areas; and
- failure to meet demand increase requirements, therefore increasing reliance on expensive imported energy.

- 5.52 An analysis that takes account of the full extent of the damage avoided/benefit achieved may be difficult to construct reliably for some SSCs. However, we have also noted that in some cases it will be possible to build an analysis based on assumptions derived from known industry data.
- 5.53 Wherever it is reasonable and possible, such analysis is to be recommended as it constitutes a significant part of the impact of SSCs on the economy.
- 5.54 A good example of this is People 1st, which has gathered data on the expected productivity increase of a well-qualified employee compared to an unqualified employee. By adjusting this productivity uplift downwards to account for alternative attributions such as to the government and training provider, we can assess the likely impact on productivity of People 1st's work.
- 5.55 Cogent and EU Skills have avoided reductions in GVA by identifying future skills gaps caused by an ageing workforce, and then acting to attract and begin training their replacements. GVA would be reduced as a result of additional input costs such as the use of overtime or contractors compared to a normal employee rate. If GDP remained constant but staff costs increased, GVA would fall. The benefit of this work will be felt in 5 to 10 years.
- 5.56 Cogent has acted to improve the number, quality and transferability of skilled staff in the workforce, thereby leading to a reduction in the number of reported unfilled vacancies due to a lack of appropriate skills. As a result productivity has increased, particularly at a level where one would expect to see employee productivity in excess of the average.
- 5.57 Key assumptions for this model include:
- expected percentage uplift in productivity per employee;
 - current average productivity per employee for the industry; and
 - the number of employees that the SSC has intervened with to deliver this increase.

Worked example 1

5.58 The table below shows a worked example of the measurement of productivity increase due to SSC interventions:

<i>Economic benefit generated through productivity increases</i>	Assumptions	Benefits £m	Notes
Number of employees affected by SSC intervention (total to date)	25,000		1
Percentage uplift in productivity for these employees compared to others	1%		2
Average productivity per employee for the sector	31,400	<u>7.85</u>	3

Notes

- 1 This may be based on the numbers of trainees whose skills have been enhanced by SSC intervention. This should also take account of employees that have benefited from standardisation of training and other outcomes that result in improved or more relevant skills. Assumptions may be needed to assess the full extent of an SSC's influence on employees.
- 2 If possible, this assumption should be derived from actual data. For example, if it is known that qualifications make an average 5% increase to productivity, an SSC could, perhaps, argue that by further increasing the relevance of qualifications, they add an additional 1% to those employees that benefitted from the intervention to reflect the benefit of the additional skills that they acquired.
- 3 Many SSCs will already collect this information for their sector. The number shown in this example broadly equates to the average GVA per UK employee across all sectors.

5.59 As this model is based on a set of 'bottom-up' assumptions and takes account of the number of employees affected by the SSC, it is likely to be more credible than one which is based upon a higher level analysis such as an assumption of a percentage uplift in industry productivity overall.

5.60 The key assumption for the model above is likely to be the additional increase in productivity that results from the intervention of an SSC. This is unlikely to exceed the average productivity increase, although the SSC could take the view that their intervention generates an increase that is distinct from the average increase.

5.61 The number of employees used should be a cumulative number of people that have benefitted from the interventions of the SSC to date, as they will continue to generate an additional increase in productivity over many years as a result of their improved skills.

5.62 The use of an average sector productivity measure takes account of the fact that employees that have benefitted from the interventions of an SSC may be found at all levels of an organisation.

Worked example 2

5.63 The table below shows a worked example of avoided reduction to GVA resulting from increased employment costs. This is intended for use in industries with an ageing workforce. The model reflects the damage that would occur if SSCs did not provide early warning of the issue and contribute to bringing in the next generation in time to replace the outgoing workforce:

<i>Future damage to productivity avoided</i>	Assumptions	Benefits £m	Notes
Current sector costs of employment (£m)	1000		1
Proportionate increase in employment costs if no action is taken to meet future skills shortages	1%		2
Annual incremental cost of filling skills gap if no action is taken	10		
Expected duration of incremental costs (years)	10		3
Expected delay until incremental costs commence (years)	5		4
Discount rate used	3.50%		5
Annuity factor to calculate present value upon commencement of cost increase	8.32		6
Discount factor to calculate value of cost increase at measurement date	0.84		6
Present value of cost increases (and therefore reduction to GVA) avoided	70.0		
Deduction for deadweight (if not included above)	10%		7
Deduction for alternative attribution (if not included above)	10%		7
Value attributable to SSC intervention		56.0	

Notes

- 1 This should already be known to, or can be reliably estimated by, the SSC
- 2 If no action is taken and a large number of employees retire without a next generation ready to replace them, in order to maintain productivity additional costs will be incurred either in the form of overtime or additional payments to contractors (potentially, this could include the use of overseas workers). Any increase in employment costs will be observed as a reduction in GVA for the sector. This assumption reflects a premium paid in excess of normal wages.
- 3 The length of time taken to replace the retiring workforce, if no action is taken in advance to prepare the next generation.
- 4 The number of years until the majority of the existing workforce will retire.
- 5 Historical average UK inflation rate for a twenty year period, per the Bank of England. This data is published on the internet.
- 6 The present value of the reduction to GVA avoided stated at the date when the cost increase is expected to begin, and is then discounted back to the date of measurement. See appendix I for further detail.
- 7 Deductions for deadweight and alternative attribution (see section 2 of this report) should be made either by reducing the value of the expected cost increase or by including separate deductions to the value of the benefit calculated. In this case, it is anticipated that employers would begin to take some action to remedy the problem, but that the early identification and resolution of this problem by the SSC will contribute to, rather than form the majority of, the benefits calculated.

5.64 This model measures the avoided reduction in GVA that would result in an increase in costs of employment in order to fill the expected future skills gap when the existing workforce has retired, in the absence of interventions to bring the next generation in early enough to take over effectively. In the event that no action is taken, and in order to maintain existing productivity additional costs would be incurred to use contractors or to cover the cost of overtime. Even if GDP remained stable as a result of this, GVA, which is a truer reflection of the economic value created by the industry, would decrease as direct costs would increase.

- 5.65 In the course of our work with the Sample SSCs, we have noted that the assumptions used for the additional costs of employment have been assumed to be c.1% to 2%, which appears to be prudent compared to the premium we would expect to be paid for staff overtime or the use of contractors.
- 5.66 The model assumes that the additional costs occur over the period required to train replacements, if no action is taken before the existing workforce retires. Given the seniority and experience of the retiring employees, it is anticipated that it would take at least ten years to adequately train their replacements. The calculated annual damage avoided is treated as an annuity commencing in the year when the majority of the workforce is expected to retire, and is then discounted to present value in order to match the timing of the benefit to the timing of the work currently being done to create it.
- 5.67 In cases where the solution provided by the SSC has been to obtain the additional funding needed to train the next generation, the present value of the funding, including an assumed return on investment, should be deducted from the benefit calculated, and deductions for alternative attribution must be made to reflect the funder's contribution to achieving the solution.

Deadweight, Attribution and Displacement

- 5.68 It is essential that SSCs distinguish the increase in productivity that is generated by their work from the increase that would arise in any case because an employee has completed qualifications for their role. In our analysis, we have asked the Sample SSCs to provide an assumption that is adjusted to account for this.
- 5.69 By limiting this analysis to employees that are known to have benefitted, the analysis above restricts the benefits calculated to interventions by the SSC. If SSCs choose to base their analysis on the percentage uplift to total sector productivity (a similar model to the cost saving or wastage avoided scenario), then care will be needed to ensure that the percentage uplift assumed is restricted to their intervention.
- 5.70 Using the ageing workforce model above, deductions are needed to account for the fact that the industry would be likely to have identified the issue and taken its own action to achieve a solution. Where an SSC has firm evidence that this is not the case, these deductions may be reduced.
- 5.71 Again, it is felt that displacement is unlikely to be a significant issue within the UK economy under the productivity increase model. Clearly, if the SSC has improved the UK's productivity, some damage may be done to other economies outside the UK, which falls outside the scope of this report.
- 5.72 Where additional funding has been sought by the SSC to remedy the issue of an ageing workforce, there may be some displacement in that the funding may have been diverted from other causes. Where this is the case, a deduction is needed to account for benefits not achieved elsewhere (i.e. only the benefits in excess of that which would otherwise have been generated are recognised). This could be accounted for using an assumed return on investment.

Sample SSC analysis of economic benefit through productivity increase

5.73 The table below shows the economic benefits for each of the Sample SSCs:

Summary of incremental economic benefit achieved	Total benefits measured £m
Cogent	67.5
Energy & Utility Skills	86.2
People 1st	5.1
Skills for Health	Not measured

Key areas of uncertainty in this analysis

5.74 We have noted that the following areas are the subject of assumptions by the Sample SSCs, and as such are subject to some uncertainty. It should be noted that these assumptions are felt by the Sample SSCs to be reasonable, and where judgment has been used, they have exercised prudence:

- number of employees’ productivity uplifted through SSC intervention;
- percentage uplift to employee productivity resulting from SSC intervention;
- wage premium paid to replace retiring employees in the absence of a succession plan;
- expected duration of wage inflation due to the succession gap;
- expected time to retirement of the employee cohort in question; and
- deductions for deadweight and alternative attribution (either considered in arriving at assumptions or considered separately).

Resources diverted to other interventions

Application of this model

5.75 This model can be used where an SSC has acted either to reduce the cost of, or to remove the need for, an alternative intervention. Some key examples we have seen of this in the Sample SSCs include:

- interventions to assist people who are not in employment, including the long term unemployed, back into the workplace. By helping in this way, SSCs release public funding for use in other interventions;
- interventions to make more efficient use of staff time. For example, Skills for Health’s initiatives to make use of level 1 to 4 qualified staff, the introduction of Advanced Theatre Support Workers and the introduction of new junior roles have released senior practitioners to spend more time on work that is appropriate to their skills rather than clerical or routine work. Skills for Health believes that these programmes also increase patient throughput and improve the quality of care provided. We do not seek to evaluate the benefits to the economy from reduced patient waiting times or the benefits of early diagnosis and treatment.

- 5.76 The rationale for this approach is that by removing the need for an intervention in one area, it will be possible to begin a new intervention, to direct more funding at an alternative intervention that will generate some economic benefit or to achieve a reduction in costs.
- 5.77 The key assumptions for this model are:
 - *The value of a single intervention:* This can be built up from a number of underlying assumptions or from known data, such as the annual cost of unemployment benefits per individual; and
 - *The number of interventions to date:* This should be known to the SSC, based on their own data or expectations of the impact of the project. By taking the total number of interventions up to the point of measurement, an SSC is considering the total value achieved for the year in which they are measuring the benefit.
- 5.78 A Discounted Cash Flow model could be used to calculate the present value of future benefits resulting from the interventions in a single year. However, this method is likely to be subject to inaccuracy, as it would assume that the benefit is consistently achieved over a long period, and that no subsequent interventions remove or reduce the benefit. Hence, the assumption on the length of this period could be subject to challenge, and it is felt to be better to recalculate this benefit annually.
- 5.79 In some cases, it will be necessary to build in workings for displacement. We have prepared two worked examples, one of which demonstrates a relatively basic saving in unemployment benefits, the other shows a project in which displacement is accounted for.

Worked examples

- 5.80 The table below shows an example of a project that achieves a reduction in unemployment benefits by assisting people back into the workplace:

Resources redirected - example 1	Assumptions	Benefits £m	Notes
Weekly unemployment benefit paid (£)	64		1
Number of weeks per year	52		2
Number of interventions	1,500	<u> </u>	3
		<u> </u> <u> </u> 5.0	

Notes

- 1 per www.directgov.gov.uk
- 2 This is a constant
- 3 This data is likely to be available from the SSC's records, but can be based on a reasonable assumption if exact numbers are not known.

- 5.81 In this example, the benefit is calculated as the value of a single intervention multiplied by the number of interventions.
- 5.82 In the example above, a further benefit may arise from the additional tax that will be paid by the employee during the period that they would otherwise have been out of work. However, the issue of attribution may negate that benefit because:
 - it is the employer, rather than the SSC that created the job; and

- the amount of tax would, arguably, be paid in any case as the vacancy would be filled whether by someone who is already in employment or someone who was out of work, therefore no incremental benefit is generated.

5.83 In situations where an SSC can attribute the additional tax income paid by the employee, they should use the additional tax income model below (para. 5.94). Care should be taken in selecting an assumption to use with respect to the period over which the benefit arises, as this assumption should reflect the amount of time that a person would remain out of employment, allowing for the effect of other interventions that would move them back into the workplace.

5.84 The table below shows an example of a project that redirects a resource, but increases costs in another area to achieve this reduction:

<i>Resources redirected - example 2</i>	Assumptions	Benefits £m	Notes
Total annual cost of resource redirected (£ per intervention)	35,000		1
Proportion of resource redirected due to SSC intervention	10%		2
Cost increases due to SSC intervention (£ per intervention)	2,500		3
Number of interventions	5,000	<u>5.0</u>	4

Notes

- 1 This may be based on data such as average salary rates
- 2 This may be based on specific case studies, feedback from beneficiaries or a reasonable assumption
- 3 This may be based on data such as average salary rates
- 4 This data is likely to be known to the SSC, or can be based on a reasonable assumption

5.85 The benefit shown above is calculated by deducting the additional cost of the intervention from the value of the redirected resource, for a single case. This difference is then multiplied by the number of similar interventions achieved in total.

5.86 An example of this could be made up by taking the salary of a senior employee, the proportion of their time that has been redirected and then deducting the cost of additional salaries paid to achieve that redirection.

Deadweight, Attribution and Displacement

5.87 Attribution will be a key issue, particularly in the use of the first worked example, as other agencies, such as Job Centre Plus, can claim part of the credit for moving unemployed people back to the workplace. Where required, the benefits calculated should be apportioned to reflect the contributions of other agencies, based, where appropriate, on reasonable assumptions.

5.88 For the second example, the simplest method of adjusting for alternative attributions will be to calculate the benefits in total and then apportion the result to reflect the contributions of other agencies. The alternative is to apportion both the proportion of redirected resource and the additional costs incurred to achieve the redirection.

5.89 Where an improvement has occurred, such as an increase in unemployed people moving back to the workplace, it may be necessary to adjust the results to account for the number of interventions where the same result would have been achieved in any case. For the first

worked example, this can be adjusted for by assuming that only a single year of benefits is saved, as this presumes that they would eventually move back into employment. Further adjustments may also be made to the assumed number of interventions.

5.90 For the second example, displacement is a key consideration, as the basic premise of the intervention is that by increasing cost 'a', resource 'b' can be more effectively directed. The increase in 'a' is, clearly, an example of displacement. This must be adjusted for in the workings of the model, as shown above, by deducting the additional cost from the benefit achieved.

Sample SSC analysis of economic benefit through resource redirection

5.91 This second edition (published [] March 2010) includes the evaluation of Skills for Health's Advanced Theatre Support Worker project, which was not ready for inclusion in the first edition (published on 2 February 2010). The benefits of this project primarily relate to the diversion of operating theatre resources to other applications, hence this has been included in the revised summary table shown below.

5.92 The table below shows the results of this model for each of the Sample SSCs:

Summary of resource redirection	Total benefits measured £m
Cogent	Not measured
Energy and Utility Skills	Not measured
People 1st	1.7
Skills for Health	79.6

Key areas of uncertainty in this analysis

5.93 It is felt that many of the assumptions used in this analysis can be derived from data held by the SSC. However, where assumptions are required, uncertainty may exist in areas including one or more of the following:

- the number of interventions;
- the value of the redirected resource, and the proportion that is redirected; and
- the value of cost increases required to achieve the redirection.

Incremental tax income resulting from salary increase

Application of this model

5.94 This methodology also allows for salary enhancement models to be considered. An analysis of additional tax income has not been included for all of the Sample SSCs, because sector-specific issues, including:

- The SSCs are concerned that there is little evidence of a correlation between qualifications and pay scale in industries where much of the training is carried out 'in-house' and does not lead to a qualification; or
- The benefits are expected to be negated through deadweight, alternative attribution or displacement (see para. 2.6) due to specific issues in their sectors.

5.95 Whilst we have used this analysis for only one of the Sample SSCs, we have seen it in use in similar circumstances elsewhere in the third sector, particularly as part of our previous impact evaluation work with Skillset, and so would encourage other SSCs to consider the use of this approach. Any SSCs considering this should be aware of the sector-specific issues, including those listed above, and take them into consideration when selecting models that can be applied to their activities.

5.96 Key assumptions used in this model are:

- the expected annual increase in salary that is achieved as a result of achieving a qualification that has been adjusted by an SSC to address the needs of the sector more effectively;
- the rate at which this additional income is taxed. It is felt that the prevailing basic rate of tax at the time of measurement offers a reasonable assumption for this purpose, as it attributes any higher band earnings to other interventions and the employees own efforts;
- length of working life is assumed in the example below as 35 years, which could be taken as an assumption that an employee enters the workforce aged 20 and retires aged 55. This is felt to allow sufficient margin for employees to retire or otherwise leave the workforce early. SSCs using this model should base their assumption on any industry-specific knowledge they have on working life trends; and
- discount rate to apply is assumed to equate to a long term average UK rate of inflation. SSCs should have regard, when making the assumptions noted above, to other risks that may influence the likelihood of achieving the expected increase. They should either adjust other assumptions or increase the discount rate to account for these risks.

5.97 The use of a Discounted Cash Flow model is appropriate in this situation, as the intervention to enhance a qualification occurs only once but has an impact over the entire working life of an employee with no further costs. This is illustrated in more detail above at para. 2.9.

Worked example

5.98 The model below shows a calculation assuming that 1,000 people benefit from a £250 annual increase in salary throughout their working life as a result of an SSC's intervention:

<i>Benefit due to salary increase</i>	Assumptions	Benefits £m	Notes
Assumptions			
Number of employees affected	1,000		1
Additional annual earnings due to SSC intervention (£)	250		2
Tax rate to apply on earnings (%)	20.0%		3
Length of working life (years)	35		4
Discount rate to apply (%)	3.5%		5
Calculations			
Total annual additional tax paid by 1,000 employees	50,000		
Annuity factor	20.001		6
Present value of additional tax income (£)		<u><u>1.0</u></u>	
Notes			
1 This should be available from data held by the SSC			
2 This is likely to require a reasonable assumption, made with reference to other data e.g. the increase that would occur regardless of the intervention to enhance the qualification			
3 The basic rate of tax prevailing at the time of measurement is publicly available data. The basic rate is used in preference to the higher rate for prudence. Any earnings achieved at the higher rate are effectively attributed to the employee.			
4 This is felt to be a prudent assumption, accounting for the likelihood that employees may retire or otherwise leave the workforce early.			
5 Historical average UK inflation rates are available from the Bank of England website			
6 The Annuity Factor is calculated using the formula shown in Appendix I			

Deadweight, Attribution and Displacement

5.99 Deadweight and attribution are a key consideration for this model. This can be seen in workings involving Apprentices, who are expected to earn an additional £100,000 over their working lives compared to an employee at a similar level without this qualification (per www.apprenticeships.org). This increase is deadweight, as it would occur regardless of the SSC's intervention or is attributable to other agencies such as the government and the training provider. The salary increase attributable to the SSC would be any amount in excess of the average increase that could be paid as a result of the employee being more 'fit for purpose' than others, more productive and therefore of greater value to their employer.

5.100 By using GVA in our analysis of increased productivity, the benefits shown elsewhere are stated after the costs of employing direct labour. This avoids the issues of double counting and displacement caused by increased labour costs to generate growth, and so the use of this model does not create displacement for the productivity increase models shown above.

Sample SSC analysis of economic benefit through resource redirection

5.101 The table below shows the results of this model for each of the Sample SSCs:

Summary of incremental tax income paid due to increase earning potential	Total benefits measured £m
Cogent	6.0
Energy and Utility Skills	Not measured
People 1st	Not measured
Skills for Health	Not measured

Key areas of uncertainty in this analysis

5.102 It is felt that many of the assumptions used in this analysis are likely to be available from data held by the SSC, or could be reasonably estimated based on other data. However, where assumptions are required, uncertainty may exist in areas including one or more of the following:

- The number of trainees that benefit from an increase in earnings potential post-qualification; and
- The annual salary increase gained from completing a more relevant qualification.

5.103 Other assumptions are likely to be derived from publicly available sources.

6 Conclusion and Next Steps

- 6.1 SSCs are playing a vital role in helping to achieve the UK Government’s goal of preparing the economy to face increasing competitive pressure from other countries. In addition to their historical ‘core’ roles of raising employer engagement, providing Labour Market Information and developing National Occupational Standards, many of the SSCs are providing additional services that are demonstrated in this report to be adding substantial value to their sectors.
- 6.2 As the UK Government moves more towards a project-based approach for reviewing funding, and seeks to measure performance in terms of economic gain generated rather than ‘soft’ measures, SSCs need to follow this approach in presenting their performance. Indeed, the NAO has included the adoption of this type of measurement as a key development point in at least one recent relicensing report.
- 6.3 The UK Government spent c£77.8bn on post-secondary, tertiary and other education and training during 2009⁶; SSCs receive a total of £68m (i.e. 0.08% of the total funding) to ensure that this funding is directed effectively to meet the needs of the industries they represent. Typically an SSC receives core funding of c£1.6m from the UK Commission for Employment and Skills (“UKCES”), together with varying amounts of additional funding from the industry it represents and project-specific funding, such as funding to establish National Skills Academies (“NSAs”).
- 6.4 We have carried out a study, using Action Research methodology and Social Impact Evaluation tools to identify and refine a number of evaluation models that reflect the ways in which SSCs typically generate benefit for the economy. These models substitute financial measures (proxies) for the outcomes that are generated by the SSCs’ outputs taken from the perspectives of the UK Government and the industries that the SSCs represent. We have not sought to measure the entirety of the activities of the Sample SSCs, but have focused on the key services that fulfil their core remit and make up the majority of their activities.
- 6.5 Based on this work, we have identified key outcomes that typically arise from the activities of the Sample SSCs as:
- providing insight into skills issues in their sector, and acting as a hub for sector knowledge, reducing the risk that public and industry skills and training funding is directed in a way that fails to meet the needs of the sector;
 - ensuring that funding is directed at only the most effective qualifications, and acting to ensure that qualifications meet the needs of the industry;
 - providing research, careers information and, in some cases, consultancy services at a significantly reduced cost, or free of charge, compared to alternative commercial sources;
 - acting as a lobbying body to leverage additional funding from both public funds and the industry for skills in their sectors, thereby increasing long term productivity and competitiveness; and
 - helping to increase effectiveness of staff at all levels through the promotion of qualifications and training, thereby making their industries function more efficiently.

⁶ Source: www.ukpublicspending.co.uk

- 6.6 Our report does not seek to evaluate all services of the Sample SSCs. Rather, we have worked with them to evaluate those services that they feel are of greatest importance and represent the majority of the work that they do. We have not sought to measure all outcomes of these services, only those that are reasonably proximate and can be measured reliably: for example, we have avoided measuring the impact of increased engagement between the government and employers, as this is too far removed from the direct outcomes of the services provided and would be difficult to quantify.
- 6.7 We have used Social Return on Investment (“SROI”) methodology, which is an increasingly prominent tool used by the third sector to measure the Social Impact of organisations. The Cabinet Office’s recent paper of SROI endorses its use both to forecast and measure existing benefits created. In our analysis, we have used three models to understand the ways in which SSCs create economic benefits:
- *Economic benefit created*: where there is an impact on earning capacity or productivity, it is shown as an increase in tax revenues, or on trade. We have used Gross Value Added (“GVA”) as a measure of productivity, as it is stated after deducting costs such as employment costs, and is therefore a truer reflection of added value than GDP;
 - *Costs saved or not wasted*: where the intervention results in a saving, either in the cost of another intervention or in a consequential cost (e.g. introducing prevention to save on the cost of a cure). This may be seen in either removing the need for or increasing the effectiveness of an alternative intervention; and
 - *Alternative or cheaper sourcing*: where one intervention directly replaces another more expensive one.
- 6.8 SROI is a valuable tool for measuring the economic benefit generated by SSCs and other third sector organisations. However, there are a number of issues to consider when using and interpreting results to ensure that the final analysis is sufficiently robust:
- SROI is typically presented as a ratio of the value of the benefits achieved per pound spent to achieve them. This may be useful internally to each individual organisation as a measure of performance relative to prior periods. However, this ratio should not be used to compare different organisations, as this would create a flawed analysis that ignores organisation and sector-specific issues that make organisations, and therefore their SROI, unique. In any event, SROI should not be used as a means of ranking or prioritising funding;
 - any study that considers future benefits must account for the risks associated with the achievability of those benefits. We have taken project-specific risks into account in this analysis, by encouraging the SSCs to be prudent in their assumptions, having regard for the probable quantum of benefits that will actually flow from their work;
 - a robust SROI analysis must consider the proximity of the benefits created to the actions of the organisation that is seeking to claim ownership of that benefit;
 - SROI calculations should seek accurately to represent the manner in which benefits are created, but must avoid overly complex and granular calculations that could be open to accusations of ‘spurious accuracy’: a prudent result calculated using higher level assumptions is likely to be more easily understandable and defensible; and
 - we also note that SROI does not account for the interrelationship of Social Impact and brand value. By creating greater Social Impact, the recognition and perceived quality of an organisation’s brand is likely to improve, thus increasing the value of that brand.

- 6.9 As SROI and Social Impact are relatively new concepts, and are certainly new to the SSCs, many of the models used in our evaluations are based on reasonable assumptions, founded, wherever possible, on data held by the SSCs. This report represents a view that is felt by the SSCs to be on the prudent side of reasonable.
- 6.10 The tables below show the benefits generated for each of the SSCs by evaluation method, sub analysed by each evaluated service:

Cogent evaluation summary		£m
Cost savings achieved or wastage avoided		
Training costs saved through benchmarking and skills passport		24.5
Industry training wastage avoided		13.2
Education and qualifications		
Additional tax paid due to salary increase		6.0
Alternative sourcing costs		
Research and LMI		1.5
Career pathways tool		2.1
Economic benefits generated		
Reduction in skills shortage-related vacancies		11.2
Damage avoided due to workforce age demographic skills gaps		56.3
Total value of benefits measured		<u>114.8</u>

EU Skills evaluation summary		£m
Cost savings achieved or wastage avoided		
National Skills Academies		14.0
Regulation and registration schemes		16.6
Workforce planning tool		7.0
Qualifications reform		1.6
Return on additional funding released for training in the sector		
Leveraging additional training budget from Ofgem		86.2
Total value of benefits measured		<u>125.4</u>

People 1st evaluation summary		£m
Cost savings achieved or wastage avoided		
Research and LMI insight		2.5
LMI insight, qualification reform and IAG leading to improved training and higher staff retention rates		88.7
Education funding wastage avoided		
Rationalisation of qualifications		12.5
Alternative sourcing costs		
Research and LMI		0.6
Increase in sector productivity		
Improvement in skills leading to increased productivity		5.1
Resources diverted to other interventions		
Benefits costs saved by assisting unemployed people back to the workplace		1.7
Total value of benefits measured		<u><u>111.1</u></u>

Skills for Health evaluation summary		£m
Cost savings achieved or wastage avoided		
Research and LMI insight		20.0
Improvement in apprenticeship dropout rates		4.2
Alternative sourcing costs		
Workforce strategy tools, NOS and consultancy		5.7
Research and LMI		0.5
Value of core learning units and training tools		0.5
Resources diverted to other interventions		
Use of level 1 to 4 staff		30.0
Use of Advanced Theatre Support Workers		41.6
Welfare to work interventions		5.0
Health functional map		3.0
Total value of benefits measured		<u><u>110.5</u></u>

The table below shows the total economic benefits measured compared to the total cost of funding for each SSC. This, of course, is not necessarily the same as the total value of inputs as non-monetary inputs such as intellectual capital may be contributed by industry stakeholders and others. It should be noted that our evaluations do not consider the full range of activities for each SSC. However, they do demonstrate clearly the high impact achieved from the variety of projects selected. It is reasonable to assume that other projects in these or other SSCs are likely to present a similar range of evaluations of their outcomes. The table below summarises the measured benefits, setting them against the total funding available.

Summary of impact evaluations	Total benefits measured £m	Total funding £m
Cogent	114.8	5.0
Energy & Utility Skills	125.4	5.0
People 1st	111.1	5.5
Skills for Health	110.5	5.0
Average benefit per SSC	115.4	5.1

Source: Baker Tilly analysis, SSC data and SSC assumptions

- 6.11 Following the publication of the First Edition of this report, Skills for Health completed the evaluation of economic benefits from an additional workforce redesign service that was introduced during 2009. This Second Edition has been adjusted to include the benefits for that project.
- 6.12 The table above suggests that on average SSCs may be expected to generate benefits amounting to c20 times the total amount of funding that they receive. Benefits generated fall into a range of £110m to £125m, with an average of £115m per annum.
- 6.13 It should be noted that the Sample SSCs have chosen not to measure some key projects and outcomes, as this work focuses on a sample of their activities. Other projects exist at each SSC that would, undoubtedly, give rise to further economic benefits that have not been measured in this report. In particular, there are two key issues that have restricted the evaluation of Skills for Health:
- the benefits have been evaluated as regards operational productivity, but have not been evaluated in respect of the wider economic benefits of earlier diagnosis or treatment. Skills for Health was not satisfied that data about this was sufficiently reliable to support these conclusions; and
 - most of the affected workers are in the public sector: This means that the benefits of upskilling are frequently counter-balanced by increased pay costs to the public purse: hence the gain is reduced by a displacement effect, which has been accounted for in our evaluation.
- 6.14 The recent Skills Strategy White Paper⁷ draws on the work of the IFS, which indicates that increasing training by 1% leads to a 0.6% increase in productivity. This puts our findings in

⁷ Skills For Growth – the national skills strategy, published by the Department for Business, Innovation and Skills in November 2009

context: the sectors represented by the Sample SSCs have total GVA in excess of c£120bn. A 0.6% increase in sector productivity at this level would equate to a benefit of c£720m. This provides a useful sense-checking measure, not only for the findings presented above, but also for future studies carried out by other SSCs.

- 6.15 SSCs are an ambitious group, and would doubtless regard the potential long term impact of their work as significantly greater in magnitude than the below 1% increase in training that is implied in our analysis above.
- 6.16 In addition to these results, we note that our work with Skillset suggests that the value of the benefits it generates exceeds £95m⁸.

Comparability of results

- 6.17 The results for each SSC are likely to have been influenced by key factors including:
- the size of the industry in which the SSC operates in terms of both its GVA and the number of employees;
 - the extent to which benefits generated are displaced by increased costs elsewhere due to the nature of the industry (most notably for SSCs that primarily serve the public sector);
 - the extent to which the SSC has obtained further funding from its sector to fund additional activities; and
 - the scope and nature of the SSC's chosen activities.
- 6.18 As a result it is unhelpful and misleading to compare the relative performance of one SSC with another, and in particular we would urge against the use of the ratio that is typically used to express the output of a SROI calculation. Such use of ratios is open to considerable challenge, as it tends towards unfounded comparisons and would elevate the ratio to the status of a 'magic number', leading to the risk that inappropriate funding decisions are made by users of such analysis.
- 6.19 In addition to this quantitative analysis, users of this and other SROI reviews should consider qualitative factors that may further increase the value of an organisation's work, but may not be reliably quantifiable. A good example of this is that value of SSCs increasing the level of engagement between employers and the government.
- 6.20 The table above may be used for benchmarking by other SSCs in that it provides a range in which the economic benefits generated may be expected to fall. It also allows the calculation of an average ratio of benefits to funding. Both of these measures can be used as a sense-check for similar evaluations.

Given the unique nature of each SSC's sector and services, it is recommended that they carry out their own evaluations rather than relying on the range shown above or a ratio derived from it.**Next Steps**

- 6.21 It is imperative that SSCs, and their funders, recognise the extent to which the benefits that SSCs are achieving for the UK economy exceed the cost of funding them. In the context of the

⁸ Source: Skillset

current economic recession, presenting a strong case for preserving funding is of vital importance to ensure that the benefits observed in this study can be maintained, or increased, in future.

- 6.22 SSCs should begin to use SROI methodologies, including evaluation models such as those shown in this report to measure their impact. The results of these models illustrate the importance of SSCs to the UK economy, and present a convincing argument for at least maintaining the existing level of funding, if not increasing it to generate further benefit.
- 6.23 Furthermore, the use of these measurement techniques can serve as a useful tool in evaluating the benefit of a planned service compared to the cost of running it, or for identifying existing activities for which benefits could be improved further by modifying the services that an SSC offers.
- 6.24 Following the completion of our work with the Sample SSCs, all other SSCs should begin to review their own services and outcomes and produce analyses to demonstrate their own impact in economic terms, particularly in light of the inclusion of a requirement to begin measuring impact in at least one NAO relicensing reports during 2009.

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Appendix I – Notes on Discounted Cash Flow methodology

Our analysis takes into account, where necessary, the premise that the value of money changes over time. The value of future cash flows is subject to the risk that those cash flows will not in fact occur for any number of reasons.

For the purposes of this report, we have taken the assumptions provided by the sample SSCs to be reflective of any risks associated with the likelihood of benefits actually flowing to the stakeholder. This leaves the risk that the value of the benefit will fluctuate due to economic factors that are beyond the control of the SSC or stakeholder; this can be measured using a long term average rate of inflation. Where necessary we have used a discount rate of 3.5%, which equates to the average rate of inflation in the UK measured over the past twenty years.

For benefits only during the year in which they are funded no discounting is used as both the funding and the benefit are released during the year and the timings are therefore already matched.

Where a benefit occurs in a future year, the value of the benefit is multiplied by a discount rate to allow comparison with the cost of funding. The discount factor is calculated using the formula below:

$$DF = \left(\frac{1}{1+r}\right)^t$$

Where:

- *'DF'* is the discount factor by which a future benefit is multiplied to restate it in current terms;
- *'r'* is the discount rate used; and
- *'t'* is the time, stated in years, between the date at which value is measured and the date at which the benefit is achieved.

To measure salary increases, we have asked the Sample SSCs to assume that any future benefits occur in the form of a constant annuity over a fixed period. The expected annual cash flow is then multiplied by an annuity factor to give the value in present day terms of the benefit. The annuity factor is calculated using a modified discount formula, as shown below:

$$AF = \left(\frac{1}{r}\right) \times \left[1 - \left(\frac{1}{1+r}\right)^t\right]$$

Where:

- *'AF'* is the factor by which a constant annuity is multiplied in order to obtain the present value of that annuity over a given period of time;
- *'r'* is the discount rate used; and
- *'t'* is the number of years the annuity is expected to occur over.

For the purposes of measuring the impact of salary increases in this report, we have assumed that 't' is 35 years, on the basis that this approximates to the working life of the individual, taking into account that fact that they may choose to retire early.

Appendix II – Notes on Action Research methodology

Action Research, or Action Science as some, including Gummerson⁹ prefer to call it, is a recognised and respected research approach originating in the social sciences arena, which involves the researcher and the researched jointly learning in and investigating the research area. Whilst primarily a qualitative methodology, it can be constructed in such a way as to gather and test data with levels of validity that would constitute scientific research (as opposed to casual enquiry) whilst retaining the proximity to that data that best comes from working with those who are involved with it.

The researcher works with the researched jointly to investigate an issue of common interest. Together they gather data, test and validate it, and draw interpretations and conclusions from it.

Action research is hence an iterative research methodology that is intended to bridge the gap between theoretical research and the practical realities of the real world. As Gustavsen puts it:

“The point is to understand the world as it is by confronting it directly; by trying to grasp the phenomena as they really are.”¹⁰

Reason and Bradbury (2001) define Action Research as *“a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview... It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.”* (2001, p.1).

In simplistic terms, Action Research is collectively learning from experience by sharing that experience with others and taking action to bring about change by building on that experience.

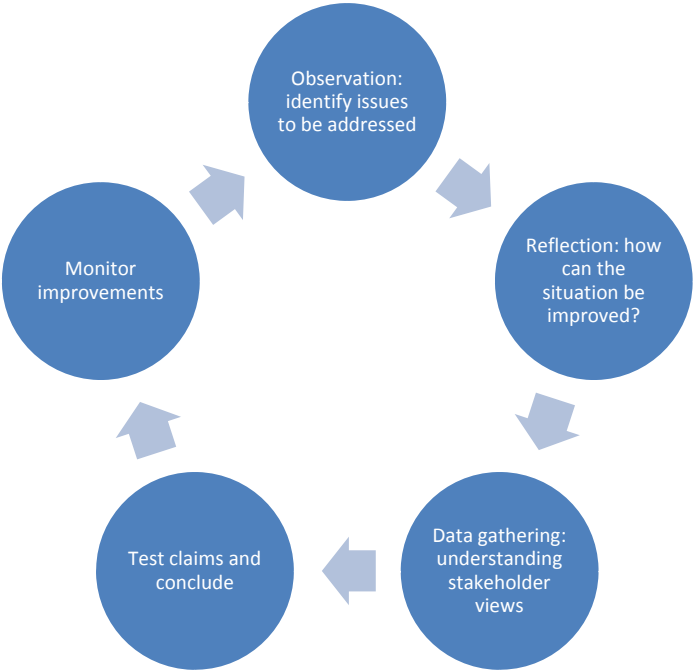
In our work with Alliance, it has been vital that we gained an understanding, not just of how SSCs could theoretically be benefiting the UK economy, but of how individual SSCs create benefit in practice, and how their industry and other factors affect the extent and nature of the benefit that is generated. Theoretical research on SROI methodologies gives us a view on where the benefits may lie, but only through an iterative process of discussing, developing and refining our understanding can we get a true picture of where the benefits of an SSC's activities actually lie.

This can be seen in our analysis, in that there are several models available to measure economic impact but not all SSCs have used all of the models. SSCs must use their own experience to inform their choice of evaluation tools and assumptions.

⁹ Gummerson, E. 2000, *Qualitative Methods in Management Research*. 2nd Ed. Thousand Oaks, Ca. Sage Publications

¹⁰ 'New Forms of Knowledge Production and the Role of Action Research', Bjorn Gustavsen, *Action Research* 2003; volume 1 at p.153

The process of conducting Action Research may be summarised using the diagram shown below:



The diagram shows an iterative five stage approach to Action Research. We describe below how our approach fits with this model:

- 1. Observation:** from our work with Skillset and our initial discussions with Alliance, it is clear that a lack of understanding of the Social Impact of SSCs may weaken their position with regard to negotiating with funders, thus damaging their ability to continue their work;
- 2. Reflection:** by using Social Impact measurement tools such as SROI, and working together with SSCs to understand how their activities benefit society we believe it is possible to begin to increase understanding of the benefits SSCs generate;
- 3. Data gathering:** we have discussed with the Sample SSCs the services that they provide, and the outcomes these services produce and identified the key beneficiaries. We have discussed a range of possible methods of evaluating these services using the three models discussed in Section 2 of this report to cover the concept of value from the perspective of all key stakeholders. By building an understanding of common services and common ways in which the Sample SSCs create benefits for their stakeholders we have been able to build common and consistent approaches to valuing them;
- 4. Test claims and conclude:** in the course of preparing this report, we have been able to compare the assumptions made by each of the Sample SSCs to check that they are consistent with similar assumptions made by others in the sample group. We have encouraged the use of prudent assumptions throughout this process. In the first instance much of this work is based on assumptions for which data can be collected in future to re-measure benefits. The use of prudent and consistent assumptions is felt to produce a robust conclusion pending the collection of more accurate data;

- 5. Monitor improvements:** in the wake of our Interim Report, which was presented at political party conferences during the autumn of 2009, Alliance has noted an improvement in the awareness of the political community and its SSC members of the extent to which SSCs benefit the UK economy. With the final findings now in place, it is hoped that this will achieve the expected improvements to address the risks identified at stage 1 of our process.

Having reached a stage where an improvement is expected, the iterative nature of Action Research allows for further studies to be carried out in future to build on the work presented in this report, when more data has been gathered to measure Social Impact. It becomes a continual process of review, enabling the measures of Social Impact to become embedded in the management and operational processes of the researched organisation.

Our work with a sample group of SSCs has enabled us to form what leading Action Research writer Björn Gustavsen refers to as a “*common pool of knowledge*”. This allows us to combine the knowledge of all four Sample SSCs to both inform our work with the group and validate our work with the individual SSCs. Where there are discrepancies or inconsistencies, we are able to identify, investigate and, where necessary, work with the SSCs to refine the approach or the assumptions used in the evaluation models.

Clearly, wherever data already exist to quantify a benefit, they are to be used. However, the absence of observed data on much of the economic benefit that is generated by SSCs necessitates the use of methodologies such as Action Research, as this allows us to gain an accurate perspective on the real benefits that are generated. In some cases it will be impossible directly to observe the impact, as to do so would require a comparison between a world in which the SSC exists and one in which it does not, all other factors being equal. Clearly such comparison will never be possible, and so we must rely on the common-sense and judgment of the SSCs, based on their real-world experiences, as refined by the process of creating this common pool of knowledge.

Where data may be, but is not currently, observed, our work allows us to refine the list of useful data that may be gathered in future as a basis for refining the measurement of the economic benefit that is generated. This project may therefore act as a platform for identifying further Action Research projects that will develop detailed measurement tools.

Any outline of a research methodology would be incomplete without looking at broader criticisms of it in management science circles. Criticisms of action research are several, but most emanate from proponents of statistical sampling and questionnaire-based research methodologies. In brief, these tend to surround the following areas, each of which is shown with a brief response related both to theory and to this research in particular.

- How can you generalise from case-study-based research of four SSC’s?

Since the in-depth understanding gained from the detailed work and interactive approach is greater, with more reasons why embedded in the responses, the researcher can gain “a fundamental understanding of the structure, process and driving forces rather than a superficial establishment of correlation or cause-effect relationships”.¹¹

This in-depth understanding is necessary to get close to the intricate cause and effect relationships implicit in the SROI methodology.

¹¹ Norman, R. 1970. A Personal Quest for Methodology. Stockholm. SIAR. p.53

The generalisation possible across SSC's and within SSC's from the work done is based upon:

- the consistency of patterns of response gained (effectively a form of benchmarking) of the research outputs;
 - the common threads in the understanding gained and the common cause and effective patterns emerging;
 - a realistic view being taken as to whether other SSC's are therefore likely to show similar patterns but subtly different actual figures, albeit broadly similar substantial returns on the low initial funding common to all.
- How can you assert validity when all the data is of internal origin?

Bypassing the theoretical debates about the validity of different data sources and the extent to which all are, to some degree, partly objective and partly partisan, the key point here is that the data is not all of internal origin.

Many of the measurement criteria within the financial proxies are:

- from publically available data sources, often validated Government data;
 - from appropriately structured pilot studies;
 - from research appropriately undertaken by the subjects' own research team; or
 - separately sense-checked or reviewed by the research team.
- It is not true research because the researcher influences, and is involved in the outcome.

It is true that the researcher is involved in the sense that "the action researcher... may help clients make more sense of their practical knowledge and experience..."¹².

This is consistent with the second of the seven principles of SROI: Measurement with people.

If the researcher facilitates the better collection and interpretation of data from the researched and leaves them with an understanding and knowledge to enable them to embed that in future action, then this active involvement must be seen as a virtue and not a weakness. It improves the understanding of data gathered and at the same time, seeks to embed the results in the organisations (the final stage of the SROI process).

¹² Gill, J. And Johnson, P. 2002. Research Methods for Managers. 3rd Ed. London, Sage. p.92.

Berg¹³ summarises the strengths of action research in these fields as follows:

- “a highly rigorous, yet reflective or interpretative, approach to empirical research;
- the active engagement of individuals...in the research enterprise;
- the integration of some practical outcomes related to the actual lives of participants in this research project;
- a spiralling of steps...”.

We have found, in this study and other similar ones, that Action Research provides an ideal foundation approach for developing a Social Impact Evaluation and embedding it in the organisation.

¹³ Berg, B. 2009. *Qualitative Research Methods for the Social Sciences*. 7th Ed. Upper Saddle River, NJ. Pearson. .248.

Appendix III – detailed description of People 1st’s activities

Service	Description	Outcome
Research	<p>People 1st produces an annual report on skills within the sector (the ‘State of the Nation’ Report).</p>	<p>The State of the Nation report is welcomed by the industry as a “valuable contribution¹⁴” to sector knowledge on the labour market. People 1st’s research also meets the information needs of central and regional government agencies.</p> <p>One impact of this work is felt in the saving achieved, compared to finding an alternative source for the State of the Nation Report. We have noted that People 1st believes that it would be extremely unlikely that any other organisation could carry out this work to the same standard, due to the complexity of data collection and the requirement to engage effectively with employers in order to obtain the information and qualitative analysis that distinguishes their work.</p> <p>This research is used by government and the industry in making strategic choices on the skills training that they should be funding to prepare for the future.</p>
Online IAG portal and National Occupational Standards	<p>People 1st has an online facility that allows individuals, employers and careers advisers to identify key training needs in order to meet their career progression goals and plug skills gaps in the workforce.</p>	<p>People 1st advises that the industry has historically experienced high staff turnover. They believe this to have been caused by a generally held perception that this sector does not offer a long term career prospect. The large numbers of leavers result in training costs being effectively wasted, as the historical investment in training those who have left will cease to bring any long term benefits to the sector, and additional, unnecessary, expenditure is needed to train staff to replace them.</p> <p>By focusing on skills and career progression, People 1st is increasing staff retention and helping to increase the quality of the workforce as more staff view their jobs as a viable career with good prospects.</p> <p>The industry spends c£4bn p.a. on training. By helping employers to focus training on the actual skills gaps in their organisation, People 1st is helping to ensure that this funding is directed with maximum efficacy for long term gain.</p>

¹⁴ People 1st’s State of the Nation Report 2009, page 2

Service	Description	Outcome
Education and qualifications	<p>People 1st is intervening in Apprenticeships and other key qualifications to ensure that these are delivering training in skills are linked to the current and long term needs of the industry.</p> <p>People 1st advises that it has streamlined and simplified the range of qualifications and added additional ones to meet new employer needs.</p>	<p>The Department for Children, Schools and Families (“DCSF”) and the Department for Business, Innovation and Skills (“BIS”) have noted the historical concern around low completion rates for apprenticeships, and have welcomed the improvements that have been achieved in recent years, stating that increasing the take-up of Apprenticeships is a key goal for the upskilling of the UK workforce¹⁵.</p> <p>By increasing the relevance of qualifications, People 1st is making them more meaningful and is therefore making completing them more worthwhile. They expect that completion rates will significantly increase in the coming years, partly as a result of their involvement.</p> <p>More meaningful qualifications and clearer progression routes add to the perception of the sector as a long term career prospect, thereby increasing staff retention.</p> <p>The value of government funding for qualifications has remained broadly consistent in this sector, in line with the number of people being trained, despite the reduction in the number of courses available. This suggests that a proportion of this funding is now being directed at meeting the needs of the industry.</p>
UK Skills Passport (www.uksp.co.uk)	<p>Currently, only 3%¹⁶ of training results in a formal qualification in this sector. This has led to low transferability of skills between employers. People 1st has introduced the UKSP scheme to improve the recognition of training and therefore the transferability of skills gained.</p>	<p>Increasing transferability of skills by recognising training undertaken in previous employment is likely to reduce the cost of induction training upon commencement of a new job for those that are registered on www.uksp.co.uk.</p> <p>By clearly identifying skills and development needs and sources of funding through their portal, People 1st is helping individuals to have well-planned and more rapid career progression in this sector.</p>

¹⁵ World-class Apprenticeships: Unlocking Talent, Building Skills For All’: joint publication by DCSF and BIS published in February 2009

¹⁶ Source: People 1st response to Baker Tilly

Service	Description	Outcome
Stonebow	<p>People 1st operates a division that provides 'train the trainer' services to the industry. Attendees at courses are equipped to return to the workplace and deliver training to employees.</p>	<p>The cost of attending an external training course in People 1st's sectors ranges from £500 to £2000 per day. By using internal trainers, the industry saves on the additional cost of sending employees on externally-run courses: the costs are reduced to that of using their own facilities and the salaries of the trainer and trainees for the duration of the course. This benefit could be seen as displaced by the corresponding reduction in productivity of the training company.</p> <p>Individual companies benefit from using their own staff to deliver training, as their own trainers are more likely to have an awareness of the specific needs of the company and its staff.</p>
People 1 st 's wider impact on productivity	<p>The combined effect of People 1st's activities is to develop skills that lead to an increase in productivity. People 1st believes that its work to encourage the development of skills training in the industry will lead to an improvement in both employee retention and productivity.</p>	<p>People 1st advises that the sector 'wasted' £66.2bn p.a. in training costs due to poor staff retention (based on 2007 data). This results from staff leaving the sector altogether, for example, due to the perception that it does not offer a long term career opportunity. By changing this perception through the introduction of clear career pathways, People 1st is reducing the wastage of training people that will not provide a long term benefit to the sector.</p> <p>People 1st estimates that a properly skilled employee is likely to be up to 4% more productive than an employee that has not undertaken adequate training to ensure that they have the appropriate skills for their role. Whilst they have not yet impacted upon the entire workforce, the benefit in terms of quality of service will have generated revenue growth or efficiency savings that have increased the sector's contribution to the UK economy.</p>

Appendix IV – detailed description of EU Skills’ activities

Service	Description	Outcome
Workforce planning model	<p>EU Skills has developed and given employers access to a workforce planning tool that they have developed to identify skills needs built up from data relating to individual employees.</p>	<p>As a result of this model, employers are able to plan and direct their training budgets to meet mid to long-term needs that were unknown prior to EU Skills’ intervention. Hence, much of the training spend could have been directed at less effective training provision and funding for training may not have been approved in the absence of this model.</p> <p>By developing this model, EU Skills has saved the industry the cost of developing its own models It has also ensured that all the industry has the same model available. Furthermore, by drawing employers together to produce data collaboratively, EU Skills has been able to unify the approach of the industry to the issue of the ageing workforce. In the event that EU Skills had not produced this model, other more expensive and, arguably, less suitable tools may have been purchased by individual companies.</p>
Representation of the sector to increase funding using evidence from the workforce planning tool	<p>Ofgem, the regulator that controls much of EU Skills’ footprint, carries out five-yearly reviews of the companies in these sectors. These reviews include a review of the allowable cost base of the companies, given that this has an impact on the level of costs that are passed on to the consumer.</p> <p>EU Skills has used its workforce modelling tool, which has brought together data that accurately reflects the skills training needs of the entire sector, to argue for an increase in the allowable training budget to meet the needs it has identified, arising from the expected retirement of c90% of the workforce within 10 years.</p>	<p>EU Skills’ intervention has been instrumental in releasing an additional £72m p.a. of funding for skills in the gas sector and has received indications that an additional c£150m p.a. will be released for the power sector.</p> <p>Whilst this has increased the costs to the energy companies, and therefore the consumer, the impact of this funding has significant implications for the wider economy:</p> <ul style="list-style-type: none"> • unless long-term skills gaps are addressed, the UK’s infrastructure will be dramatically short of skilled labour within ten to fifteen years; • a smaller and less skilled workforce in the future would be overstretched and therefore the cost of maintaining existing provision would increase due to overtime or the use of contractors, particularly where these contractors are drawn from overseas. An increase in employment costs would lead to a reduction in GVA. • as the UK economy seeks to grow and diversify its power generation activities towards ‘greener’ technology, more skilled staff will be needed to implement and maintain this change. If skills funding is limited, this growth would be significantly more difficult and costly to achieve, making the UK more reliant on expensive imports.

Service	Description	Outcome
National Skills Academy	<p>EU Skills has established an NSA for the power industry in order to provide a market place to match training needs to provision and to ensure that 'best practice' is consistently taught across the sector.</p> <p>Of the 35,000 existing staff in the power sector, c90% are expected to leave by 2024. 61,000 learners are required to replace these employees and achieve the growth in workforce numbers that is needed.</p>	<p>The NSA is expected to achieve an efficiency saving due to the increased transferability of skills. Without the NSA, employers would lack visibility on the quality of training received in previous employment, and would be likely to repeat training to ensure that their staff are appropriately trained.</p> <p>The NSA estimates it can generate a saving of at least 35,000 training days p.a. through avoiding repetition and more efficient and focused training.</p>
Introduction of registration schemes	<p>EU Skills has established a benchmarking scheme for the water industry in order to ensure that training and standards are common across the sector.</p> <p>Recently, EU Skills, in conjunction with Summit Skills, has taken over administration of the Gas Safe scheme (the successor body to Corgi).</p>	<p>EU Skills now holds a register of people that have the skills required to work in the water and gas sectors. These registers are publicly available, and act as a guarantor of the level of skills held by an individual.</p> <p>In the case of the water industry, this has achieved significant savings in terms of the avoidance of repetitive training before entry to water and construction sites. Contractors were required to undertake inductions at each site in order to ensure that they were working to the required standard. Now much of this training repetition can be avoided by checking that the contractor is on the register.</p> <p>The Gas Safe scheme has moved away from the Corgi model to become more focused on ensuring that members are developing skills that are relevant to the needs of the sector, including the use of new 'green' technologies. By focusing training on skills rather than purely compliance-based testing, the Gas Safe scheme is expected to save c1.5 days of training for each member every five years. The register is now competency focused, and therefore allows for skills gaps to be identified and funding to be effectively directed. This also allows identification of those members that are 'early adopters' in order to target training in new technologies most effectively.</p>

Appendix V – detailed description of Skills for Health’s activities

Service	Description	Outcome
<p>Increasing investment in level 1 to 4 training and development of new roles</p>	<p>SFH has intervened to secure an additional £70m to £80m of LSC funding specifically to invest in training staff at levels 1 to 4. Their intervention continues in ensuring that this funding is directed at the most effective roles to achieve reductions in waiting times and improvements in the quality of care services.</p> <p>As part of this programme, SFH has introduced new roles such as the ‘assistant practitioner’ within radiology.</p>	<p>By upskilling more junior staff, SFH is ensuring that time is used more effectively across an organisation.</p> <p>For example, prior to this intervention, senior radiologists in breast cancer screening centres were thought to be spending c95% of their time carrying out work that required only c5% of their skills. By increasing the skills of junior staff, the routine work is now completed at a more appropriate level, leaving senior staff free to review cases that are more appropriate to their skills. Now, the c95% of senior staff time spent on routine work is has been re-directed to a more appropriate level, thereby increasing efficiency and allowing institutions to deliver on their targets to increase breast screening within their existing budget. The ability to deliver on the target to increase breast screening has the impact that there is a greater chance of detecting cancer cases early, thereby increasing the chance that a treatment is possible, and reducing the cost of that treatment.</p> <p>In other areas, level 1 to 4 staff are used in a similar manner, primarily in supporting at a diagnostic level in order to increase throughput, and thus reduce waiting times as well as achieving improvements in efficiency and quality.</p> <p>SFH has received positive feedback from NHS trusts and UKCES in relation to its workforce redesign work:</p> <p><i>“Skills for Health’s experience helped us bring sharp clarity to both new and existing roles – and their tools enabled us to improve productivity on the ground”</i> (Joanna Birch, Clinical Director, Clinican Therapy and Rehabilitation Service Calderdale and Huddersfield NHS Foundation Trust).</p> <p>Charlie Mayfield (Chair of SSC committee at UKCES) described Skills for Health’s approach to workforce redesign as “groundbreaking”.</p>

Service	Description	Outcome
Introduction of Advanced Theatre Support Workers	SFH has intervened to increase the operational efficiency of operating theatres by making more effective use of junior staff for scrub and recovery roles in order to divert practitioner time to other surgical interventions. This was implemented using a competency framework inherent in the NVQ Level 3 in Perioperative Care (Surgical Support Award)	<p>As is the case for level 1 to 4 staff (above), this intervention redirects senior practitioner time to focus on surgical interventions and improves patient throughput.</p> <p>The benefits of this project had not been quantified at the time of publishing the first edition of this report. This second edition is based on the evaluation by SFH of a case study that showed net benefits of c320k p.a. resulting from this intervention in one hospital (after deducting the cost of implementing the project).</p> <p>The benefits measured arise from redirecting expensive practitioner time, reduced overtime costs and improved efficiency in theatre availability. Given that operating theatres are estimated to cost c£15 per minute to run, regardless of whether an operation is in progress, a reduction in the amount of non-productive time in a theatre has a significant impact on the cost of each intervention.</p>

Service	Description	Outcome
Workforce strategy	<p>SFH has created a series of workforce strategy toolkits over the past 18 months. These have been piloted and developed in conjunction with employers over the past 9 months and are now being implemented more widely.</p> <p>These toolkits have developed means of planning workforce requirements based on competencies.</p> <p>A further example is the Health Functional Map (“HFM”), an internet-based tool that allows institutions to plan its workforce, identify competencies for roles within the institution and plan career progression pathways for staff based on skills required to move to the next level.</p> <p>SFH also provides project-specific consultancy services, including recent work on meeting the requirements of the Working Time Directive.</p>	<p>SFH has produced tools that allow for more effective resource planning by focusing on the competencies required.</p> <p>For example, SFH was instrumental in assisting a care provider to win a contract to deliver nursing services by providing a staffing planning tool. The contract was to provide nursing staff; however, SFH’s competency-based tool suggested that the contract could be delivered more effectively by using a combination of nurses, physiotherapists and administrative staff. This contract is now being delivered more efficiently and more cost-effectively.</p> <p>The HFM is allowing resource planning functions to be carried out more effectively and in a more unified way across the UK by looking at the competencies needed for specific roles and providing a set of career progression plans. This allows the Human Resources (“HR”) teams in institutions to achieve a saving in terms of the time they spend on e.g. creating job descriptions and assessing candidates against them.</p> <p>Independent healthcare providers can use SFH’s strategy tools to improve their patient experience rating by working more efficiently, and thereby secure more work from NHS contracts.</p> <p>SFH’s consultancy services are provided at a substantially cheaper cost than if a private sector consultancy practice were asked to carry out an equivalent piece of work.</p>

Service	Description	Outcome
Jobs and employment	<p>SFH has intervened in the way Apprenticeships are run, by re-designing the programmes. Completion rates of Apprenticeships have risen from 32% to 72%, according to the most recent data. In 2009/10 the health sector is expected to produce 5,000 new Apprentices.</p> <p>SFH has worked to build a 'Welfare to Work' programme in order to provide training and opportunities to move unemployed people into jobs with the NHS.</p>	<p>By increasing the completion rates for Apprenticeships, SFH has avoided substantial wastage of funding that previously went to pay for trainees that never went on to gain a qualification, thereby casting doubt on the benefit gained from the tuition they received. In order to produce 5,000 new apprentices in 2009/10, it is now necessary to take on c6,900 trainees (based on 72% going on to complete the course). Prior to SFH's intervention, it would have been necessary to take on c15,600 trainees to produce 5,000 qualified Apprentices.</p> <p>SFH's work with the unemployed across the UK results in a number of benefits and savings:</p> <ul style="list-style-type: none"> • as people move into employment, the funding previously required to pay for unemployment benefits is saved or made available for other purposes; • it is anticipated that the incidence of mental and other illness among unemployed people will be higher than would normally be expected. By moving people back into work it is expected that the costs associated with this care would decrease; and • the people moved back into work will begin paying tax.
Core learning units and other tools	<p>SFH has developed a number of internet-based training tools that meet the need for e.g. Health and Safety in the Workplace training.</p> <p>They have also developed a rostering system that is used to plan staffing within institutions.</p>	<p>These systems are provided free of charge to the sector. Both allow substantial cost savings to be achieved in terms of saving staff time and, in the case of online training, saving the cost of sending employees on an externally run course.</p> <p>The cost to the NHS alone of engaging a commercial consultancy practice to develop these tools would be substantially greater than the costs incurred by SFH in developing them.</p>

Service	Description	Outcome
Labour Market Intelligence (“LMI”)	SFH is a vital source of LMI for both the government and the health sector. Their work includes data and insight that is used in strategic decision-making in relation to skills funding.	<p>If SFH did not produce this quality of data and insight into skills needs in the sector, another source would have to be found to provide a replacement. This would be at a substantially increased cost, as LMI would have to be sourced from a commercial provider.</p> <p>SFH provides insight and analysis of the data it collects that is of an extremely high quality and is based on the many years experience of the sector that they bring to their work. SFH believes that this insight adds value to their work that may not be found to the same extent from a commercial provider. This leads to the risk that poor strategic funding decisions could be made, such that funding could be directed at less effective skills training.</p>

Appendix VI – detailed description of Cogent’s activities

Service	Description	Outcome
Research and LMI	<p>Cogent provides high quality research into the current and future skills position within the UK Science based industries. Its reports are used not only by the UK government and the industry, but also by international bodies such as the International Atomic Energy Agency.</p> <p>Cogent also produces bespoke research products, which are commissioned by industry to address specific concerns such as salary surveys.</p>	<p>Cogent provides high quality research to the UK government and the industry that facilitates planning and funding of skills training that will meet the current and future needs of the industry. Cogent provides this research for funding that is significantly lower than it would cost to obtain similar research from a commercial research agency.</p> <p>The insight and industry knowledge that Cogent’s team of highly qualified industry experts bring to the work they undertake is, arguably, irreplaceable as a commercial research agency may not necessarily have employed industry experts of this calibre. As a result, it follows that an alternative provider would not produce data or insight of the same quality. Hence, if Cogent did not exist, there would be a risk that some strategic funding decisions could result in industry training funding being directed less effectively. Cogent’s insight avoids the potential ‘wastage’ that could result from directing some funding at skills training that does not meet industry needs.</p>

Service	Description	Outcome
Cogent careers	<p>Cogent's internet-based IAG portal, which was launched in 2007, includes profiles and case studies showing career paths for 150 roles in industry.</p> <p>Cogent's IAG portal is used by employers, careers advisers and prospective and current employees that wish to:</p> <ul style="list-style-type: none"> • find out more about careers and entry requirements for the sector; and • obtain information on the competency framework (including NOS and Cogent's Gold Standard) for specific roles, in order to understand where skills gaps exist on a personal or company level in order to plan future training. 	<p>Currently this site attracts 4,000 to 6,000 unique users per month, and can be expected to serve to increase the level of interest in careers in this sector. Up to 40% of the existing workforce in the sector have reached or will be close to retirement age by 2020. By acting now to address this future need, Cogent is reducing the potential increase in costs to employers that would arise from having to fill these posts either through overtime or the use of contractors. Any future increase in employment costs would lead to a reduction in GVA.</p> <p>By providing NOS and the Gold Standard through this user-friendly internet platform, Cogent is helping to harmonise the skills and competency requirements for specific roles across the industry. This has the impact of increasing the transferability of skills, as many employers were engaged in the process of developing these standards.</p> <p>By using the competency frameworks to assess employees' skills, the industry is better placed to target funding at training which will really add value to their staff, thereby avoiding wastage on irrelevant training. It follows that a better skilled workforce is likely to be more productive.</p> <p>Cogent's interventions have increased the size and skills of the workforce, and have improved transferability of skills between employers. This has contributed to a reduction in the number of reported job vacancies that have not been filled due to a lack of skilled employees. As a result there are a greater number of more skilled, and therefore more productive, employees in the sector.</p> <p>Cogent has developed this IAG portal itself. If this had been developed by a commercial consultancy practice, the cost would have been significantly higher than the cost of funding its development through Cogent.</p>

Service	Description	Outcome
Education and qualifications	<p>Cogent has worked with the Learning and Skills Council ("LSC") to rationalise and provide approvals for the qualifications that are on offer in this sector. This ensures that only those courses that meet the skills needs and/or priorities of the industry are offered and funded.</p> <p>Cogent has worked to encourage SMEs in its sectors to co-operate in taking on more apprentices such that there is sufficient demand for local colleges to provide courses. This has resulted in an additional 52 Apprentices completing courses annually.</p>	<p>By ensuring that vocational qualifications such as Apprenticeships meet the needs of industry, Cogent is ensuring that funding is appropriately directed towards training to equip people with the skills that they will need in the workplace.</p> <p>By enhancing the relevance of vocational qualifications from the perspective of employers, Cogent has increased the value of trainees that have completed these courses in the workforce. This is expected to lead to an increase in the salary paid to employees who are better equipped to enter the workforce. Increases in salary due to better skills result in a return to the government in the form of increased tax paid.</p>

Service	Description	Outcome
Skills benchmarking	<p>Much of the training in this sector is provided by the industry itself. Cogent has acted to set skills training standards to unify training, such as the Nuclear Industry Training Framework (“NITF”).</p>	<p>Standardised training, both in educational institutions and within the industry, that is focused on known skills needs and based on standardised career paths, ensures that quality is consistent, thereby increasing the transferability of skills and reducing the need for additional induction training.</p> <p>A clear example of this is the Basic Common Induction Standard (“BCIS”). Previously, contractors and employees were often required to attend training upon entry to a new facility in order to ensure that they were suitably skilled to carry out work at the site. The introduction of BCIS has meant that training is both standardised and recognised across the industry, thereby reducing the need for site induction training.</p> <p>The NITF includes databases of training standards, qualifications and standard job roles and is accessed online by the skills passport. The passport provides the employer with assurance as to:</p> <ul style="list-style-type: none"> • the quality and relevance of the training that new employees have already received; and • the quality and relevance of planned future training courses. <p>Cogent’s work has reduced the number of days lost to repetitious or unfocused training, and has therefore ensured that training funding is directed only at effective courses that meet the needs of the industry. Without this intervention, some funding would be effectively ‘wasted’ on irrelevant courses.</p>

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Alliance of Sector Skills Councils



The Alliance was established in 2008 as the collective voice of the SSCs – the employer-led authorities on skills for sectors across the economy. By working together as a strong Alliance, SSCs have positioned themselves for increased impact in which the whole is greater than the sum of the parts.

The Alliance is committed to:

- articulating the collective voice of its members when and where it really matters
- promoting the distinctive role of SSCs in the skills and employment infrastructure
- supporting SSCs in their role of developing standards and qualifications that meet employers' needs
- enabling SSCs to deliver first class, consistent and accessible LMI
- establishing new arrangements for the development of cross sector skills like Leadership and Management
- ensuring that members receive key information and guidance on priority topics
- co-ordinating activity to help build the capacity and capability of SSCs.

Unique selling points in a complex landscape are:

- SSC footprints include 1,707,885 enterprises and cover 90% of the workforce across the UK, which gives the Alliance strength in breadth
- Alliance members have in total 350 senior employers from every sector of the UK economy on their individual SSC boards, and this gives powerful leverage
- Employers naturally cluster and work collaboratively on a sector basis, and this is evidenced through a wide range of successful sector-base initiatives
- SSCs have a robust and distinctive evidence base for skills development in their sectoral Labour Market Intelligence (LMI)
- By working together as an Alliance skills can be mapped across the economy - and thereby facilitate mobility and redeployment between sectors.

Baker Tilly



Baker Tilly is a large firm with national and international reach. We have national coverage through our network of 29 offices and international coverage in over 110 countries. Our specialist charity and education team of 80 partners and manager includes more ICAEW Charity Diploma holders than any other firm.

With 1,000 charity clients, our specialist expertise is very wide. Not only are we the number one firm for charities but we are also the leading auditors for independent schools and further educational colleges. We have strong expertise in social housing and in the public sector. We provide forums for the top 250 charities to share experiences and best practice.

We work closely with all the leading sector bodies and have a track record of leading the debate on sector issues. We are committed to client empowerment through sharing insightful, relevant and useful information. These include online publications, briefings, best practice tools, quarterly newsletters and in the last 12 months over 400 clients and contacts attended our events nationwide.



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