The Social Element of Sustainable Civil Engineering Public Procurement in Northern Ireland

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Abstract
Sustainable development was first introduced by Dyllick & Hockerts (2002), their vision defined sustainable development as a share of the key components. There is evidence to show that sustainable development is proposed and concluded without complete regard to the social element. Therefore this research demonstrates current misconceptions in the corporate social responsibility clauses in Northern Ireland's public sector procurement. The research comes in two components initially a literature review of procurement social policy for Northern Ireland. Secondly, a questionnaire study reports on the views of public sector procurement personnel. The findings show that although the European Union wish to create a collaborative network of social solutions and best practice, the current practice in Northern Ireland's public procurement is an assortment of standards that may not be best suited to achieving the social component of sustainable development.

Keywords: Corporate strategy, Social impact, Construction, Procurement Law, Public Administration.

1. Introduction
Public Spending in Northern Ireland accounts for 15-20% of the GDP, thus procurement in Northern Ireland has a large role to play (European Union, 2008). Masterman (2002) indicates that procurement route choice is important in assisting project success. The procurement route does not, however, form a legislative role (OGC, 2007). They further indicate it only initiates the mechanisms, and empowers the appropriate personnel. This enables the procurement personnel to achieve, and perhaps exceed the legislative and organisational requirements. The legal requirements in the UK exhibit the hierarchy indicated in Figure 1. European legislation relating to procurement is documented in European Directives EU (2004a) and EU (2004b). This legislation is then interpreted at national level, by parliament and initiatives introduced by the OGC (OGC, 2009). In the UK, the Public Contracts Regulations (2006, 2009) have provided this elucidation. Initiatives, such as, Achieving Excellence (OGC, 2003), give guidance on how the current working methods may be realigned to ensure the Contracting Authority meets legislation and governmental requirements such as Value-for-money(VFM) in Procurement (OGC, 2005b).
The Sustainable Development initiative (OGC, 2005a) attempts to embed sustainability throughout Government strategies and initiatives. Sustainability thinking has dissipated into the national ethos, and departments are seeking to embed it within guidance documentation and procedures. Haughton (1999) classified sustainable development into five sections: futurity – relating to the impartiality and justice over generations; social justice – equity and fairness within a social group; transfrontier responsibility – impartiality in different geographical locations; procedural equity – open and fair procedures; interspecies equity – importance of biodiversity. Dyllick & Hockerts (2002) summarise these into three divisions called the Triple Bottom Line. Sustainable development, by their definition, is a balance of the social, economic and environmental issues involved in development (Figure 2). Golusin, Ivanovic & Teodorovic (2011) measure the Ecological and Economic components by use of linear regression. However, the social issues are somewhat more difficult to measure due to their inherent subjectivity, conflicting views and values. White & Lee (2009) suggest that previous literature related mainly to the technical aspects and rarely tackled the social dimension. They recommend further research to attain a solution to what they found at the weakest pillar of sustainability.

![Figure 2: The Three dimensions of Sustainability](image)

White & Lee (2009) show that the three elements of sustainable development are not always applied evenly. Counsell & Haughton (2006) note that departments are inclined to prioritise their preferred characteristics of the sustainability agenda, with the focus being dependent on the departments' fundamental principles and function. These findings are further supported by Meehan & Bryde (2011) indicating that the triple bottom line is not generally balanced today. Bartle & Vass (2007) note that economic and social policy may be agreed based on evidence and reasoned arguments, and should be subject to democratic decision making. However, they further suggest that social issues are rarely raised in the democratic process. The deduction from this is that the social component may be seen by some as the least important in a strategy that was intended to be an all-encompassing mutual balance of the Environment, Economic and Social issues, the triple bottom line. Within the social aspect of sustainability, Corporate Social Responsibility (CSR) is becoming embedded into portions of the private sector by implementation of ISO 2600 (ISO 2010). Hughes (2009) indicates that Socially Responsible Public Procurement (SRPP) is a subset of CSR which in turn may be seen as a subset of the social element from the triple bottom line (Figure 3).

![Figure 3: Social Compartmentation](image)
The initial introduction of the Lisbon Treaty (EU, 2007) reinforced the European development of employment and social policy. Hughes (2009) indicates the need for a higher level social inclusion as key element of CSR. Therefore the European Union treats CSR as a valuable tool which enables social inclusion for projects. EU documentation allows public procurement to demonstrate best practice through adopting SRPP and use their considerable influence to give the private sector real incentives to develop a socially responsible strategy (Hughes, 2009). The aims of a SRPP strategy can be achieved by use of intelligent purchasing by the public sector, which can promote social opportunities of work, inclusion and trade while pursuing wide and substantial social standards and best practice (EC, 2011). Procurement is therefore one of four key support activities of any CSR strategy (Porter & Kaplan 2006).

2. Europe and Corporate Social Responsibility

Hughes (2009) states that Europe’s main role is to raise awareness of CSR, promote best practice across Europe from research, and organise debate on current CSR issues. This will be carried forward through:

- A study on how CSR can contribute to local employment development;
- A guide on social considerations in public procurement to clarify how EU rules allow authorities to take account of social aspects in public purchasing; and
- Funding for cross-European research and information-sharing on themes where project partners have a particular expertise and which fit in with the Commission’s CSR agenda.

Hence the EU must appreciate CSR principles and their component parts within a sustainable future for Europe. In this regard research and knowledge sharing are part of the key to success (Hughes, 2009). Whilst it is simple to see the reasons for CSR, it would be prudent to remember that CSR comes at a price, and organisations in the current climate have to take cognisance of financial issues. Sometimes CSR and profitability may become contrasting mechanisms as noted by Doane (2005). Furthermore Sikka (2010) shows that some companies used CSR as an advertising tool but do not follow up on their corporate claims. Hence Tajani (2010) called for the clarity and transparency of CSR in the public sector.

The European Commission produced the ongoing ‘Programme for Employment and Social Solidarity’ (PROGRESS) (EC, 2011c). Its mission is to create additional and improved employment opportunities while building a more cohesive society. It has targeted all European participants who help shape the progress of appropriate and effective employment and social legislation and policies (EC, 2011a), with its €743.25million budget is aimed at:

- Employment;
- Social inclusion and protection;
- Working conditions;
- Non-discrimination; and
- Gender equality.

Those involved in the procurement pilot studies and works are member states, all allied authorities, public employment bodies, academic and research institutions, social partners and non-governmental organisations (EC, 2011a). Therefore sustainable development is a priority area for the European Union and the Government at both National (OGC, 2005a) and local level (The Planning Service, 2010). The drive for VFM and sustainable development are intertwined in national initiatives and procurement strategies. These priority areas and initiatives may be affected during recession and post-recession, but Hughes (2009) argues that short term social needs and long term competitiveness should lead to the retention of CSR clauses. Anon (2010) further indicates that this is still a viable business strategy post recession. Thus a balance of the key elements of sustainable development needs to be embedded into current procurement practice.

At a local level the three elements of sustainability are governed by different departments. Local legislation regarding the Environmental Impact of projects is regulated by the Department of the Environment Planning Service Northern Ireland (The Planning Service, 2011). The integration of Economic constraints and feasibility may however, come from the Strategic Investment Board (SIB 2011), or a Green Book assessment (HM Treasury, 2003). The social integration of a project is partially covered by current legislation regarding the non-discrimination of personnel by race, religion and gender labelled as UK ‘soft law’ by Moreno (2010). Office of Government Commerce (2009c) state that the social issues may be tackled at the six stages of procurement. This research investigates stages two to five of the six below:

1. Pre-procurement- by engaging with the community;
2. At Selection stage – by selecting a socially competent Economic Operator;
3. At specification stage – by defining requirements;
4. Through contract conditions – Which are proportionate and related to the procurement;
5. At award – by use of relevant social related award criteria; and

Selection for contracts above the European threshold using the Restricted procedure incorporate a pre-qualification questionnaire (PQQ). This may be used to assess the extent to which Economic Operators are socially competent. A ruling of the European Court for Justice (1988) found incorporation of social clauses acceptable when introduced into the PQQ providing they were non-discriminatory. According to the OCG (2011) the PQQ enables the production of a short list of potential suppliers based on their previous experience. At specification stage the ‘real’ social issues, known as the ‘basket of basic human needs’ (Strong & Hemphill, 2006) need to be addressed through the social inclusion and social engagement targets. The uniqueness and complexity of individual construction projects requires true integration of contract specific elements of the triple bottom line throughout the specification. This in reality may prove to be a difficult process, Bartle & Vass (2007) show that the social element is often thought of least. Lee & Rhee (2007) suggest that when government strategies are implemented correctly business’ attitudes are changed through the supply chain and the wider business environment. This also applies to CSR and SRPP.

The public sector has incorporated additional social responsibility clauses into the contract conditions and at the quality/price assessment stage. This research investigates a knowledge gap in the literature regarding their use and applicability across departments. Hawkins & Wells (2007) show that the problems associated with assessing and implementing social elements is a world-wide problem. The Northern Ireland Assembly see social policy as a priority; The Committee for Finance and Personnel (2010) state that they wish to encourage a social economy and acknowledge the work of the Strategic Industry Board in helping introduce social policy through the introduction of a social toolkit. This toolkit was used on a project at the Crumlin Road Gaol, where an introduction of five new apprentices where employed (SIB, 2010). OGC (2009) states that the three measures of social gain that can be incorporated into the works by procurement are: Implementation of formal training plan to develop their workforce; Minimum percentage of apprentices or Skills for life level 2 or 3 and Specification of minimum quantity of hours worked on a contract by trainees. While these are stated in the literature little investigation has been previously been carried out into the importance of each of these elements.

There is disagreement as to the length of unemployment to be categorised as long-term unemployment for the purposes of the CSR clauses. The Equality Commission for Northern Ireland (2008) provided a pilot for the implementation of CSR clauses which set the length of long-term unemployment at greater than 3 months. Translink (2009) indicate that the length should be greater than six months. However, the Gregg and Wadsworth (2010) define long-term unemployed as greater than 12 months. This timescale is echoed by the Sheehan & Tomlinson (1998) definition of long term unemployed, and those of the Northern Ireland Building Sustainable Prosperity (2009) and Northern Ireland Audit Office (2009). The depth of knowledge by those in procurement in this regard was investigated in this paper.

3. Methodology
An electronic survey using Limesurvey a PHP/MySQL database to manage the process was used to gather information from procurement personnel within the seven Centres of Procurement Excellence (CoPE’s), Central Procurement Directorate and local government in Northern Ireland. The sample size was 70, with a response of 56 surveys, 23 complete, 33 incomplete. Therefore the response rate was 80%. With a total estimated population of approximately 90 people in procurement in central and local government in Northern Ireland, according to Fincham (2008) the sample has a nonresponse bias of ratio of 20%, meeting the requirements in relation to response rate. It can therefore be seen from Bartlett et al (2001) that the response rate achieved continuous data with a margin of error = 0.03, an alpha =0.5 and a t=2.58. Fincham (2008) state that a minimum response rate of 60% should be achieved in all research with a target of 80% for the standard evaluation their market sector, which was achieved by this research.

Using a similar method as that by Chan and Kumaraswamy (2001), relative importance index (RII) was employed to establish the respondent’s opinion on the best method of achieving social gain. RII is defined by the following formulae:-

\[
\text{Relative Importance Index (RII)} = \frac{\sum W}{A \times N} \quad (0 \leq \text{index} \leq 1)
\]

Where:
W is the weighting given to each element by the respondents. This will be between 1 and 5, where 1 is the least significant element and 5 is the most significant element; 
A is the highest weight; and 
N is the total number of respondents. 
Subsequently the RII was further employed to discover the respondents perception on which of these methods provides best value for money.

4. Findings at Selection / Prequalification Stage 
The research established whether a social responsibility component was incorporated in the PQQ process. The responses indicate 44% of respondents do not include a social component in their PQQ process, while 41% do with 15% of respondents selecting ‘Not Applicable’. The respondents were then asked if they used the same pre-qualification element in the PQQ and the contract documents, 19% said that these where the same clauses, with 44% choosing ‘no’ and 37% choosing ‘Not applicable’. The following question ascertained if the clause was a standard clause, 73% stated that they used a standard clause with 18% using a bespoke clause and 9% unsure on the clauses originality. The Clauses inserted at PQQ stage were investigated for availability and coverage. This indicates three options achieving 25%, namely, ‘COPE’, ‘Whole authority’, and ‘Whole public sector to whom it applies’. The remaining two options ‘Department’ and ‘Section’, achieved 13% and 12% respectively.

5. Findings at Specification / Contract Condition Stage
Table 1 indicates that the respondents feel ‘Specification of minimum quantity of hours worked on a contract by trainees’ is the best method of social gain for Economic Operators. However, the difference in RII score from third place to first is only 0.04, which indicates the perception of the respondents is that the application of any of these methods provides approximately the same social gain.

Table 1 Achieving Social Gain

<table>
<thead>
<tr>
<th>From your experience evaluate the following with respect to their application to the inherent social gain</th>
<th>Sum W</th>
<th>AxN</th>
<th>RII</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of formal training plan to develop their workforce</td>
<td>94</td>
<td>140</td>
<td>0.67</td>
<td>1</td>
</tr>
<tr>
<td>Minimum percentage of apprentices or Skills for life level 2 or 3</td>
<td>89</td>
<td>140</td>
<td>0.64</td>
<td>2</td>
</tr>
<tr>
<td>Specification of minimum quantity of hours worked on a contract by trainees</td>
<td>88</td>
<td>140</td>
<td>0.63</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2 shows the respondents ranking of VFM in relation to the three elements, this ranks ‘Specification of minimum quantity of hours worked on a contract by trainees’ as the optimum response among the options available in relation to VFM. However, the difference between the most suitable and the least suitable is only 0.04, indicating little differential between the options regarding the respondents attitude to value for money. In comparison of Table 1 and Table 2, the RII values in Table 1 were 0.62-0.67, whereas those in Table 2 were 0.51-0.55. As the RII index is an index based on the relative importance with a response close to ‘1’ being ‘Very Important’ and a response close to ‘0’ providing a ‘very low importance’, this indicates that VFM is seen as less important in relation to social gain.

Table 2: Best Value for Money regarding social inclusion

<table>
<thead>
<tr>
<th>From your experience evaluate the following with respect to value for money</th>
<th>Sum W</th>
<th>AxN</th>
<th>RII</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of formal training plan to develop their workforce</td>
<td>77</td>
<td>140</td>
<td>0.55</td>
<td>1</td>
</tr>
<tr>
<td>Specification of minimum quantity of hours worked on a contract by trainees</td>
<td>74</td>
<td>140</td>
<td>0.53</td>
<td>2</td>
</tr>
<tr>
<td>Minimum percentage of apprentices or Skills for life level 2 or 3</td>
<td>71</td>
<td>140</td>
<td>0.51</td>
<td>3</td>
</tr>
</tbody>
</table>

An investigation was then carried out to evaluate the inclusion of social responsibility clauses within new contract documents. In relation to the conditions of contract, 61% of respondents incorporate social responsibility clauses into all new contract documentation. A determination of where these clauses were inserted followed. Sixty-three (63%) of the respondents indicated it was included as an additional clause to the standard form of contract, whereas 31% place the additional clause into the works information and the remaining 6% undefined.
The origin of the clause inserted showed 94% used standard clauses and 6% were unsure. The respondents who indicated they used standard clauses when producing contract documentation were then asked regarding the availability and coverage of these, with 50% stating that the standard clause is available to ‘the COPE’ only, 25% chose ‘used by the whole department’, 13% chose ‘the section’, 6% ‘the whole authority’ and 6% ‘All of the public sector department for whom it applies’. No one chose ‘other’, proving that standard contract clauses where only available to the public sector procurement personnel.

6. Findings at Award Stage

When questioned on the incorporation of social responsibility within their quality evaluation process for quality price contacts, 48% of respondents incorporate social responsibility within their quality evaluation process for quality price contacts, 41% do not and 11% indicated it was not applicable. Caution needs to be expressed during this evaluation, quality must be part of the Most Economically Advantageous Tender (MEAT) evaluation, with the criteria set and published Europe wide during the advertisement process. The evaluation is based on the contracting authority’s published evaluation criteria, subsequent amendments breaches the requirements of The Public Contract Regulations (2006, 2009), and may pose the procurement exercise invalid.

7. Findings regarding social gain employment

A qualitative question then asked the respondents to explain what happened to the personnel who were employed as part of a social responsibility clause, subsequent to the project completion. The results indicate an understanding, within the contracting authorities, that construction Economic Operators are still under pressure due to the ongoing effects of the recent recession and budget constraints. The responses indicate that the recession has increased competition for contracts and the need to employ staff on a contract only basis. The respondents perception is that additional staff employed through social responsibility clauses are employed on a similar basis. Some respondents indicated they did not know what happens to these staff as there are no records kept.

The “Steps to Work Operational Guidelines” Annex B (DELNI, 2011) indicates that the minimum employment time should be 26 weeks. Additionally the respondent’s opinion was sought on the definition of 'long-term unemployed'. Results are shown in Figure 4 below, 33.3% chose more than 3 months in line with the Equality Commission for Northern Ireland (2008) definition and the same amount of personnel chose more than 12 months. Sheehan & Tomlinson (1998) define long term unemployed as ‘more than one year’ this is echoed by the definitions provided by Northern Ireland Building Sustainable Prosperity (2009) and Northern Ireland Audit Office (2009). While the foregoing figures accounted for the majority of the responses, 19% backed the Translink (2009) documentation definition, indicating that long-term unemployed were those out of work for greater than six months. The extra responses allowed for but not backed by documentation produced a much lower response. This, however, highlights the fact that many procurement professionals are unable to accurately define who the additional CSR clauses are meant to apply to.

![Figure 4: Respondents perception of long-term unemployed](image)

8. Conclusions

The paper assessed OGC’s drive to incorporate corporate responsibility into contracts (OGC, 2009). The impact of social gain and VFM was evaluated using the RII index. The introduction of a minimum number of hours worked by trainees provided the least social gain with the Implementation of formal training plan to develop their workforce was found to be the highest inherent social gain. In the opinion of the respondents, the Minimum percentage of apprentices or Skills for life level 2 or 3 provide the least value for money and the Implementation of formal training plan to develop their workforce was found to provide the best value for money.
An improved strategy regarding the long-term employed should be developed to provide an increase in social gain and VFM. The research then sought information regarding the social responsibility clauses incorporated into the contract documents, finding only 61% included these in new contract documentation. The prequalification stage is an important stage to ensure that the correct bidders are selected to go forward to compete for contracts. Therefore, information regarding the company’s CSR or perhaps their previous experience applying social aspects may be used through the PQQ stage to access suitability, if the social content is deemed to be necessary or important to the contract. However, the PQQ process is looking into the past, and tender evaluation is looking forward. After the Commission of the European Communities (2006) case there has been a defined separation of PQQ and tender evaluation, thus the criteria used in the PQQ may not be used again in the tender evaluation process. This was not appreciated by 19% of respondents. However, 37% did state that this was not applicable and 44% stated that it was not the same. Thus some respondents have a social aspect in the PQQ and a different element in tender documents.

Sixty-three percent (63%) of these respondents put theirs in as an additional clause to the contract and 31% place theirs in the works, thus the social components seem to have split opinion on where they belong in the contract strategy. However, 94% agree that they use a standard clause. These standard clauses are available to a varied mix, with 50% stating they had standard CoPE wide clauses, 6% have access to clauses from the whole authority and 25% have clauses that are available to their department. Thus there are several ‘standard’ contract clauses, and they are shared through different areas. This indicates the need for clauses to be bespoke for the various different types of contract in the public sector. It further shows that a standard clause cannot fit every situation. However, if the public sector is to continue using standard clauses perhaps it would prove better value for money for the same catalogue of clauses to be shared through all of the public sector, to ensure that the major components are similar. A robust set of standards may help to allow cross collaboration of the responses required to alleviate problems and introduce a social element that adds true value. The results show that this will also apply to the second stage of a contract let under the restricted procedure.

DEL (2010) are implementing social involvement through the integration of skills and helping long term unemployed by directly targeting these groups with bespoke clauses. Evaluation of each site and the associated social problems are required to ensure the best option is used, as there may be a vast difference in sites due to site or community issues. When asked about their understanding of the long term unemployed, the responses are varied, and 33% think it is more than 3 months, while a similar amount think it is more than 12 months, thus the population being directly targeted by the introduction of social clauses are not fully understood by the staff introducing the clauses. A standard length of time across all the government departments should be applied and published to enable propagation of a standard approach across the departments. Hughes (2009) show that Europe’s main role is to raise awareness of CSR, promote and research best practice across Europe. This can only happen when procurement staff understand their role, the function of procurement, the legislative atmosphere and appreciate that a well written contract incorporating a fair balance of the sustainability principles may provide a large community success without compromising best value for money. Projects can only be sustainable when they undertake a balanced spread of sustainable development priorities by incorporating social factors. This is not happening in all cases as too much emphasis is being leveraged on to the Environmental and Economic factors. The social element needs to be further embedded into procurement to demonstrate best practice. The world recession and current financial climate is a good opportunity for companies to reorganise and reevaluate their strategies. It is a time for the public sector to introduce robust sustainable policies and appropriate corporate social responsibility. The impact and measurement of these policies is the subject of further research.

References