

# Impact of the recession on the building services engineering sector

## Summary of Key Issues



**Summit** SKILLS

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### Summary of key issues

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In light of the economic downturn currently affecting the UK, SummitSkills carried out research amongst building services engineering BSE consultants to gather views on the recession and how it may impact the BSE sector's workload. Fifty-six BSE consultancy companies took part in the research; these included both small single site and large multi-site companies.

#### Consultants' view of their workforce

- 66% had experienced increase in workforce in last five years
- 18% expect that workforce will increase over next twelve months, 29% expect a decrease and 53% predict no change.
- In the medium to longer term, 50% expect an increase in workforce 2010-2011, growing to 64% who predict growth over a five year period to 2015. This prediction of growth is positive news for the future recruitment of graduates.

#### Work sectors

For analysis purposes, SummitSkills has broken down the workload of the sector into five main 'work sector' headings: private commercial (office accommodation, shops); private industrial (warehouse and factory-type developments); private housing; social housing and major public works (e.g. NHS and school new build/refurbishment).

#### Likely impact on workload

The consultants were asked to take a view on what percentage of work due to start on site in 2009 is likely to be cancelled or postponed as a result of the recession. Estimates were made for each of the five identified work sectors, allowing a best and worst case scenario to be developed for each sector. Overall, in the best case scenario only 10.4% of work will be affected (in the social housing sector), whilst the worst case scenario emerged in the private housing sector where up to 55.75% of work may be affected if the consultants' estimations are accurate.

**Percentage of BSE work due to start on site in 2009 by work sector likely to be mothballed or cancelled**

Work sector	Best case scenario	Worst case scenario
Private Commercial	11.62%	35.58%
Private Industrial	30.96%	49.36%
Private Housing	32%	55.75%
Social Housing	10.4%	29.6%
Major Public Works	20.4%	44.2%

#### Potential impact on contractors

The cancellation or postponement of work may have a negative impact on the BSE contracting industry, should companies be forced to make redundancies as a result of a decrease in workload.

In an attempt to estimate the potential effect on workforce numbers should this occur, SummitSkills first calculated the number of operatives across the industries within the sector. Then, using the estimated best and worst case scenarios, the potential jobs that may be affected were calculated (using an assumption that a 1% reduction in workload could lead to a 1% reduction in labour).

**Total indicative notional UK job losses from the best case and worst case scenarios, by BSE industry**

	Employment 2008	Indicative notional job losses best case scenario	Indicative notional job losses worst case scenario
<b>United Kingdom</b>			
Electrical Trades and Installation	196,810	35,490	82,125
Plumbing	90,424	16,306	37,731
Heating and Ventilation	55,645	10,034	23,222
Air Conditioning and Refrigeration	27,821	5,121	11,621

The figures within the table are based on a variety of assumptions that include:

- Interviewees' estimation of work to be postponed or cancelled may not transpire to be fully accurate
- A 1% reduction of labour may not equate to a 1% reduction in work.

Other factors that may affect future workforce figures include:

- Reduction of compulsory overtime by employers may reduce actual job losses
- Devaluation of the pound against the Euro may mean that it is not as cost beneficial for migrant workers to remain within the UK, which may lead to a natural reduction in the workforce.

Because of these assumptions and factors, SummitSkills stresses the need to see these figures as indicative rather than established fact.

**Potential impact on apprentices**

The postponement or cancellation of projects and reduction in workforce may also lead to apprentices being made redundant. SummitSkills has estimated the potential numbers that may be affected in this area, working to an assumption that 3.5% of the total workforce are apprentices.

**Total indicative notional UK apprentice job losses best case and worst case scenarios by BSE industry**

	Indicative notional job losses best case scenario	Indicative notional job loss best case scenario apprentices	Indicative notional job losses worst case scenario	Indicative notional job losses worst case scenario apprentices
<b>United Kingdom</b>				
Electrical Trades and Installation	35,490	1,242	82,125	2,874
Plumbing	16,306	571	37,731	1,321
Heating and Ventilation	10,034	351	23,222	813
Air Conditioning and Refrigeration	5,121	179	11,621	407

## Conclusion

Building services engineering consultants expect a significant drop in work over the next two years due to postponement or cancelation of projects affected by the recession.

Based on this, SummitSkills has estimated the impact this will have on the contracting industry. Approximate calculations indicate there could be job losses of between 67,000 and 154,000 across the building services engineering sector. Within these figures, there is potential for between 2,300 and 5,400 apprentices to be made redundant.

As a result of this research, SummitSkills has identified four key areas to work on with its stakeholders with the aim of reducing the impact of the recession on the sector. These four work areas will explore ways to:

1. **Redeploy and maintain the training of redundant apprentices** - *transferring or sharing apprentices between employers to allow them to complete their training, preparing them for an upturn in work following the recession.*
2. **Support employers to develop the skills of existing workers in new market areas** – *helping employers exploit emerging markets which are likely to grow (such as microgeneration, sustainable buildings and meeting zero carbon aspirations) as we come out of recession, by encouraging course provision and funding availability.*
3. **Support the education and training delivery infrastructure** – *exploring ways to maintain course provision for new entrants and extending training provision to develop existing workers' skills.*
4. **Maintain the stream of new entrants in preparation for the sector coming out of recession** – *looking at ways to manage the training of new entrants who are not in employment, to prepare for an upturn in employers' labour requirements.*

Work on these areas are already underway but will continue throughout 2009 in order to minimise potential disruption to the sector's workforce and its skills levels.

## Annex A

Table 5.2 Approximate numbers of operatives in the BSE crafts working within the five defined work areas

	Employment 2008	Total Industrial and Commercial 60%/70%	Private Commercial 45%	Private Industrial 29%	Major Public Works 26%	Total Domestic Sector 40%/ 30%	Private Housing 26%	Social Housing 24%	Repair and Maintenance 50%
<b>United Kingdom</b>									
Electrical Trades & Installation	196,810	118,086	53,139	34,245	30,702	78,724	20,468	18,894	39,362
Plumbing	90,424	54,254	24,414	15,734	14,106	36,170	9,404	8,681	18,085
Heating & Ventilation	55,645	33,387	15,024	9,682	8,681	22,258	5,787	5,342	11,129
Air Conditioning & Refrigeration	27,821	19,475	8,764	5,648	5,063	8,346	2,170	2,003	4,173
<b>North West</b>									
Electrical Trades & Installation	21,810	13,086	5,889	3,795	3,402	8,724	2,268	2,094	4,362
Plumbing	8,699	5,219	2,349	1,514	1,357	3,480	905	835	1,740
Heating & Ventilation	5,354	3,212	1,445	931	836	2,142	557	514	1,071
Air Conditioning & Refrigeration	2,677	1,874	843	543	488	803	209	192	402
<b>North East</b>									
Electrical Trades & Installation	10,190	6,114	2,751	1,773	1,590	4,076	1,060	978	2,038
Plumbing	3,755	2,253	1,014	653	586	1,502	391	360	751
Heating & Ventilation	2,310	1,386	624	402	360	924	240	222	462
Air Conditioning & Refrigeration	1,155	809	364	235	210	346	90	83	173
<b>Yorks &amp; Humber</b>									
Electrical Trades & Installation	16,590	9,954	4,479	2,887	2,588	6,636	1,725	1,593	3,318
Plumbing	9,329	5,597	2,519	1,623	1,455	3,732	970	896	1,866
Heating & Ventilation	5,741	3,445	1,550	999	896	2,296	597	551	1,148
Air Conditioning & Refrigeration	2,870	2,009	904	583	522	861	224	206	431
<b>East Midlands</b>									
Electrical Trades & Installation	14,560	8,736	3,931	2,533	2,272	5,824	1,514	1,398	2,912
Plumbing	5,995	3,597	1,619	1,043	935	2,398	623	576	1,199
Heating & Ventilation	3,690	2,214	996	642	576	1,476	384	354	738
Air Conditioning & Refrigeration	1,845	1,292	581	375	336	553	144	132	277
<b>West Midlands</b>									
Electrical Trades & Installation	18,610	11,166	5,025	3,238	2,903	7,444	1,935	1,787	3,722
Plumbing	8,747	5,248	2,362	1,522	1,364	3,499	910	839	1,750
Heating & Ventilation	5,382	3,229	1,453	936	840	2,153	560	516	1,077
Air Conditioning & Refrigeration	2,691	1,884	848	546	490	807	210	193	404
<b>East of England</b>									
Electrical Trades & Installation	25,290	15,174	6,828	4,400	3,946	10,116	2,630	2,428	5,058
Plumbing	8,991	5,395	2,428	1,565	1,402	3,596	935	863	1,798
Heating & Ventilation	5,533	3,320	1,494	963	863	2,213	575	531	1,107
Air Conditioning & Refrigeration	2,766	1,936	871	561	504	830	216	199	415
<b>Greater London</b>									
Electrical Trades & Installation	24,510	14,706	6,618	4,265	3,823	9,804	2,549	2,353	4,902
Plumbing	10,613	6,368	2,866	1,847	1,655	4,245	1,104	1,018	2,123
Heating & Ventilation	6,531	3,919	1,764	1,137	1,018	2,612	679	627	1,306
Air Conditioning & Refrigeration	3,266	2,286	1,029	663	594	980	255	235	490
<b>South East</b>									
Electrical Trades & Installation	24,480	14,688	6,610	4,260	3,818	9,792	2,546	2,350	4,896
Plumbing	13,505	8,103	3,646	2,350	2,107	5,402	1,405	1,296	2,701
Heating & Ventilation	8,310	4,986	2,244	1,446	1,296	3,324	864	798	1,662
Air Conditioning & Refrigeration	4,155	2,909	1,309	844	756	1,246	324	299	623
<b>South West</b>									
Electrical Trades & Installation	13,870	8,322	3,745	2,413	2,164	5,548	1,442	1,332	2,774
Plumbing	7,800	4,680	2,106	1,357	1,217	3,120	811	749	1,560
Heating & Ventilation	4,800	2,880	1,296	835	749	1,920	499	461	960
Air Conditioning & Refrigeration	2,400	1,680	756	487	437	720	187	173	360
<b>Northern Ireland</b>									
Electrical Trades & Installation	7,560	4,536	2,041	1,315	1,180	3,024	786	726	1,512
Plumbing	2,959	1,775	799	515	461	1,184	308	284	592
Heating & Ventilation	1,821	1,093	492	317	284	728	189	175	364
Air Conditioning & Refrigeration	910	637	287	185	165	273	71	65	137
<b>Scotland</b>									
Electrical Trades & Installation	15,500	9,300	4,185	2,697	2,418	6,200	1,612	1,488	3,100
Plumbing	6,760	4,056	1,825	1,176	1,055	2,704	703	649	1,352
Heating & Ventilation	4,160	2,496	1,123	724	649	1,664	433	399	832
Air Conditioning & Refrigeration	2,080	1,456	655	422	379	624	162	150	312
<b>Wales</b>									
Electrical Trades & Installation	3,840	2,304	1,037	668	599	1,536	399	369	768
Plumbing	3,271	1,963	883	569	511	1,308	340	314	654
Heating & Ventilation	2,013	1,208	544	350	314	805	209	193	403
Air Conditioning & Refrigeration	1,006	704	317	204	183	302	79	72	151

## Annex B

Table 8.1 Total indicative notional job losses from the best case and worst case scenarios, by BSE industry, UK, devolved nation and English region

	Employment 2008	Indicative notional job losses best case scenario	Indicative notional job losses worst case scenario
<b>United Kingdom</b>			
Electrical Trades & Installation	196,810	35,490	82,125
Plumbing	90,424	16,306	37,731
Heating & Ventilation	55,645	10,034	23,222
Air Conditioning & Refrigeration	27,821	5,121	11,621
<b>North West</b>			
Electrical Trades & Installation	21,810	3,933	9,101
Plumbing	8,699	1,569	3,631
Heating & Ventilation	5,354	965	2,235
Air Conditioning & Refrigeration	2,677	493	1,119
<b>North East</b>			
Electrical Trades & Installation	10,190	1,838	4,252
Plumbing	3,755	677	1,567
Heating & Ventilation	2,310	416	964
Air Conditioning & Refrigeration	1,155	213	483
<b>Yorkshire and Humberside</b>			
Electrical Trades & Installation	16,590	2,992	6,924
Plumbing	9,329	1,682	3,892
Heating & Ventilation	5,741	1,035	2,395
Air Conditioning & Refrigeration	2,870	527	1,199
<b>East Midlands</b>			
Electrical Trades & Installation	14,560	2,624	6,076
Plumbing	5,995	1,081	2,501
Heating & Ventilation	3,690	667	1,540
Air Conditioning & Refrigeration	1,845	341	771
<b>West Midlands</b>			
Electrical Trades & Installation	18,610	3,356	7,766
Plumbing	8,747	1,576	3,649
Heating & Ventilation	5,382	971	2,246
Air Conditioning & Refrigeration	2,691	495	1,125
<b>East of England</b>			
Electrical Trades & Installation	25,290	4,561	10,553
Plumbing	8,991	1,622	3,751
Heating & Ventilation	5,533	998	2,309
Air Conditioning & Refrigeration	2,766	510	1,155
<b>Greater London</b>			
Electrical Trades & Installation	24,510	4,420	10,228
Plumbing	10,613	1,914	4,429
Heating & Ventilation	6,531	1,178	2,726
Air Conditioning & Refrigeration	3,266	601	1,364
<b>South East</b>			
Electrical Trades & Installation	24,480	4,415	10,216
Plumbing	13,505	2,437	5,635
Heating & Ventilation	8,310	1,498	3,468
Air Conditioning & Refrigeration	4,155	764	1,736
<b>South West</b>			
Electrical Trades & Installation	13,870	2,500	5,784
Plumbing	7,800	1,407	3,255
Heating & Ventilation	4,800	867	2,002
Air Conditioning & Refrigeration	2,400	442	1,001
<b>Northern Ireland</b>			
Electrical Trades & Installation	7,560	1,364	3,155
Plumbing	2,959	533	1,235
Heating & Ventilation	1,821	327	760
Air Conditioning & Refrigeration	910	168	380
<b>Scotland</b>			
Electrical Trades & Installation	15,500	2,795	6,468
Plumbing	6,760	1,219	2,820
Heating & Ventilation	4,160	750	1,736
Air Conditioning & Refrigeration	2,080	383	868
<b>Wales</b>			
Electrical Trades & Installation	3,840	692	1,602
Plumbing	3,271	590	1,366
Heating & Ventilation	2,013	362	841
Air Conditioning & Refrigeration	1,006	184	420

## Annex C

**Table 9.1 Total indicative 'notional' job losses from the best case and worst case scenarios, by BSE industry and by UK, devolved nation and English region for apprentices**

	Indicative notional job losses best case scenario	Indicative notional job losses best case scenario apprentices	Indicative notional job losses worst case scenario	Indicative notional job losses worst case scenario apprentices
<b>United Kingdom</b>				
Electrical Trades & Installation	35,490	1,242	82,125	2,874
Plumbing	16,306	571	37,731	1,321
Heating & Ventilation	10,034	351	23,222	813
Air Conditioning & Refrigeration	5,121	179	11,621	407
<b>North West</b>				
Electrical Trades & Installation	3,933	138	9,101	319
Plumbing	1,569	55	3,631	127
Heating & Ventilation	965	34	2,235	78
Air Conditioning & Refrigeration	493	17	1,119	39
<b>North East</b>				
Electrical Trades & Installation	1,838	64	4,252	149
Plumbing	677	24	1,567	55
Heating & Ventilation	416	15	964	34
Air Conditioning & Refrigeration	213	7	483	17
<b>Yorkshire and Humberside</b>				
Electrical Trades & Installation	2,992	105	6,924	242
Plumbing	1,682	59	3,892	136
Heating & Ventilation	1,035	36	2,395	84
Air Conditioning & Refrigeration	527	18	1,199	42
<b>East Midlands</b>				
Electrical Trades & Installation	2,624	92	6,076	213
Plumbing	1,081	38	2,501	88
Heating & Ventilation	667	23	1,540	54
Air Conditioning & Refrigeration	341	12	771	27
<b>West Midlands</b>				
Electrical Trades & Installation	3,356	117	7,766	272
Plumbing	1,576	55	3,649	128
Heating & Ventilation	971	34	2,246	79
Air Conditioning & Refrigeration	495	17	1,125	39
<b>East of England</b>				
Electrical Trades & Installation	4,561	160	10,553	369
Plumbing	1,622	57	3,751	131
Heating & Ventilation	998	35	2,309	81
Air Conditioning & Refrigeration	510	18	1,155	40
<b>Greater London</b>				
Electrical Trades & Installation	4,420	155	10,228	358
Plumbing	1,914	67	4,429	155
Heating & Ventilation	1,178	41	2,726	95
Air Conditioning & Refrigeration	601	21	1,364	48
<b>South East</b>				
Electrical Trades & Installation	4,415	155	10,216	358
Plumbing	2,437	85	5,635	197
Heating & Ventilation	1,498	52	3,468	121
Air Conditioning & Refrigeration	764	27	1,736	61
<b>South West</b>				
Electrical Trades & Installation	2,500	88	5,784	202
Plumbing	1,407	49	3,255	114
Heating & Ventilation	867	30	2,002	70
Air Conditioning & Refrigeration	442	15	1,001	35
<b>Northern Ireland</b>				
Electrical Trades & Installation	1,364	48	3,155	110
Plumbing	533	19	1,235	43
Heating & Ventilation	327	11	760	27
Air Conditioning & Refrigeration	168	6	380	13
<b>Scotland</b>				
Electrical Trades & Installation	2,795	98	6,468	226
Plumbing	1,219	43	2,820	99
Heating & Ventilation	750	26	1,736	61
Air Conditioning & Refrigeration	383	13	868	30
<b>Wales</b>				
Electrical Trades & Installation	692	24	1,602	56
Plumbing	590	21	1,366	48
Heating & Ventilation	362	13	841	29
Air Conditioning & Refrigeration	184	7	420	15