



**THE ENGINEERING AND
TECHNOLOGY BOARD
2005 SURVEY OF
REGISTERED ENGINEERS**
FULL REPORT

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INTRODUCTION

THE ENGINEERING AND TECHNOLOGY BOARD



The etb works in partnership with business and industry, the Government, the professions and the education sector to improve the perception of science, engineering and technology (SET) in the UK and better reflect their relevance to everyday life.

The driving force behind this partnership is the desire to ensure the supply of appropriately skilled individuals better matches and stimulates the present and future SET needs of UK plc.

The etb is financially supported through corporate membership, the registration fees of 250,000 engineers and industry sponsorship. It also receives core funding from the Department for Trade and Industry.

For further information on the work of the etb, visit:

www.etechb.co.uk

BACKGROUND

ERS Market Research has regularly since 1995 been commissioned to conduct a major survey of Registered Engineers. Prior to 2003, ERS was commissioned to do this by The Engineering Council. From 2003, the commission has come from The Engineering and Technology Board (etb), following its establishment to work alongside The Engineering Council UK (EC^{UK}).

The surveys have varied in length and subject matter, though they have always sought up to date information on earnings.

This year, the etb and EC^{UK} have been particularly keen to research the views and circumstances of Incorporated Engineers and Engineering Technicians who, in combination, account for around a quarter of EC^{UK} Registrants. In order to ensure that we received sufficient completed questionnaires from each, we have over-sampled Registrants in these two categories and consequently under-sampled Chartered Engineers.

The EC^{UK} provided ERS with names and addresses of 10,052 registered engineers. All had UK based registered addresses and none were believed to be aged over 65.

The questionnaire took the form of a four-page document and was sent along with a letter of introduction from Sir Peter Williams, Chairman of The etb. In his letter, Sir Peter encouraged recipients to respond and stressed our role as guarantor of the confidentiality of people's opinions. A pre-paid return envelope, addressed to ERS, was also included in the mailing.

Questionnaires were sent to the sample of Registered Engineers by ERS on Friday, 10th June 2005. By the extended closing date of Friday, 15th July, 3,460 completed questionnaires had been received at our offices, giving us a response rate of 34.4%. Unweighted response rates by Sector of Registration were 36.4% (Chartered Engineers), 35.8% (Incorporated Engineers) and 27.0% (Engineering Technicians).

This Full Report shows the overall response to each question with weighted results. The weighted results take account of the fact that both Incorporated Engineers and Engineering Technicians were over-sampled, and therefore their views have been weighted down to reflect the actual proportion of each as part of the etb. In addition to the overall responses, this report also contains in-depth question on question analysis.

SUMMARY OF KEY FINDINGS

Among all respondents:

- ◆ 72.3% are Chartered Engineers;
- ◆ 21.3% are Incorporated Engineers;
- ◆ 6.5% are Engineering Technicians;

These figures reflect the weightings. The unweighted proportions are 53.3%, 30.9% and 15.8% respectively.

- ◆ 6.7% were unemployed and seeking re-employment at some time during the year ending 5th April 2005;

This is true of:

- ◆ 6.7% of Chartered Engineers;
- ◆ 6.3% of Incorporated Engineers;
- ◆ 7.0% of Engineering Technicians;

Among all respondents who are not retired, partially retired or a student:

- ◆ Chartered Engineers had average earnings of £53,067 – 8.1% above the 2003 figure;
- ◆ Incorporated Engineers had average earnings of £40,533 - 7.1% above the 2003 figure;
- ◆ Engineering Technicians had average earnings of £33,767 – 2.3% above the 2003 figure;
- ◆ Chartered Engineers had median earnings of £45,500 – 4.7% above the 2003 figure;
- ◆ Incorporated Engineers had median earnings of £37,000 – 8.8% above the 2003 figure;
- ◆ Engineering Technicians had median earnings of £31,000 – 6.9% above the 2003 figure;

Among all respondents:

- ◆ 49.9% of those who are currently in employment have their subscription and registration fees paid for by their employer;

This is true, among those currently in employment, of:

- ◆ 54.5% of Chartered Engineers;
- ◆ 40.0% of Incorporated Engineers;
- ◆ 32.0% of Engineering Technicians;

SUMMARY OF KEY FINDINGS ...CONT.

- ◆ 57.4% of those who are currently in employment stated that their employer offers financial support for their professional development;

This is true, among those currently in employment, of:

- ◆ 59.1% of Chartered Engineers;
- ◆ 53.9% of Incorporated Engineers;
- ◆ 50.1% of Engineering Technicians;
- ◆ 41.3% stated that they, at least to some extent, benefit from the support of (other) engineering technicians in their work;

This is true of:

- ◆ 41.9% of Chartered Engineers;
- ◆ 42.7% of Incorporated Engineers;
- ◆ 31.2% of Engineering Technicians;
- ◆ 50.5% stated that, generally within the profession, they feel that the importance of the contribution made by engineering technicians is understated;

This is true of:

- ◆ 43.5% of Chartered Engineers;
- ◆ 68.0% of Incorporated Engineers;
- ◆ 71.5% of Engineering Technicians;
- ◆ 62.9% stated that they believe that the Government should act to increase the supply of engineering technicians;

This is true of:

- ◆ 58.5% of Chartered Engineers;
- ◆ 75.1% of Incorporated Engineers;
- ◆ 72.0% of Engineering Technicians;
- ◆ 21.8% stated that, of their Institution memberships, the IEE is the most relevant to their work, whereas 14.4% stated the Institution of Mechanical Engineers and 14.2% stated the Institution of Civil Engineers;

SUMMARY OF KEY FINDINGS ...CONT.

- ◆ 78.9% stated that they felt that the perception that it would be helpful in their career development was a significant factor in their initial decision to join their Institution, whereas 44.0% stated that they felt it would be helpful in keeping up to date with the profession;

This is true, respectively, of:

- ◆ 81.8% and 41.4% of Chartered Engineers;
- ◆ 72.2% and 49.5% of Incorporated Engineers;
- ◆ 69.1% and 54.4% of Engineering Technicians;
- ◆ 46.7% stated that their *one* preferred means for their Institution to contact them was their institution journal;

This is true of:

- ◆ 43.9% of Chartered Engineers;
- ◆ 53.7% of Incorporated Engineers;
- ◆ 55.3% of Engineering Technicians;
- ◆ 77.1% stated that their Institution membership is at least fairly important to them;

This is true of:

- ◆ 75.8% of Chartered Engineers;
- ◆ 81.0% of Incorporated Engineers;
- ◆ 78.1% of Engineering Technicians;
- ◆ 51.5% stated that, in principle, they would be prepared to take part in a campaign to encourage more engineers to register;

This is true of:

- ◆ 51.3% of Chartered Engineers;
- ◆ 52.5% of Incorporated Engineers;
- ◆ 51.6% of Engineering Technicians;
- ◆ 68.3% think that Continuing Professional Development (CPD) is at least fairly important in maintaining their professional qualifications, ensuring their skills and expertise are relevant and up-to-date;

This is true of:

- ◆ 65.1% of Chartered Engineers;
- ◆ 76.2% of Incorporated Engineers;
- ◆ 78.4% of Engineering Technicians;

SUMMARY OF KEY FINDINGS ...CONT.

- ◆ 7.4% stated that in the last 3 months, they have received the ETB's monthly newsletter 'Catalyst', whilst 70.1% stated that they have not. The remaining 22.5% stated that they do not know or cannot remember whether or not they have received it;
 - ◆ Among Chartered Engineers, 8.6% have and 67.8% have not;
 - ◆ Among Incorporated Engineers, 4.2% have and 75.4% have not;
 - ◆ Among Engineering Technicians, 5.2% have and 77.3% have not;

Amongst those who have received the ETB's monthly newsletter 'Catalyst', in the last 3 months:-

- ◆ 32.2% stated that they receive Catalyst from their engineering institution, whilst 30.3% indicated that they receive it direct from the ETB. The remaining 37.5% stated that they don't know or can't remember from whom they receive this publication;

Amongst all respondents:-

- ◆ 44.1% stated that they believe that the average starting salary for a graduate engineer is between £18,001 and £21,000, whilst 28.0% indicated that they believe it is between £15,001 and £18,000;
- ◆ 58.7% stated that, generally, they think starting salaries for engineers are at best fairly unfavourable, compared to those of other professions (e.g. Accountancy, Law, Architecture, Medicine);

This is true of:

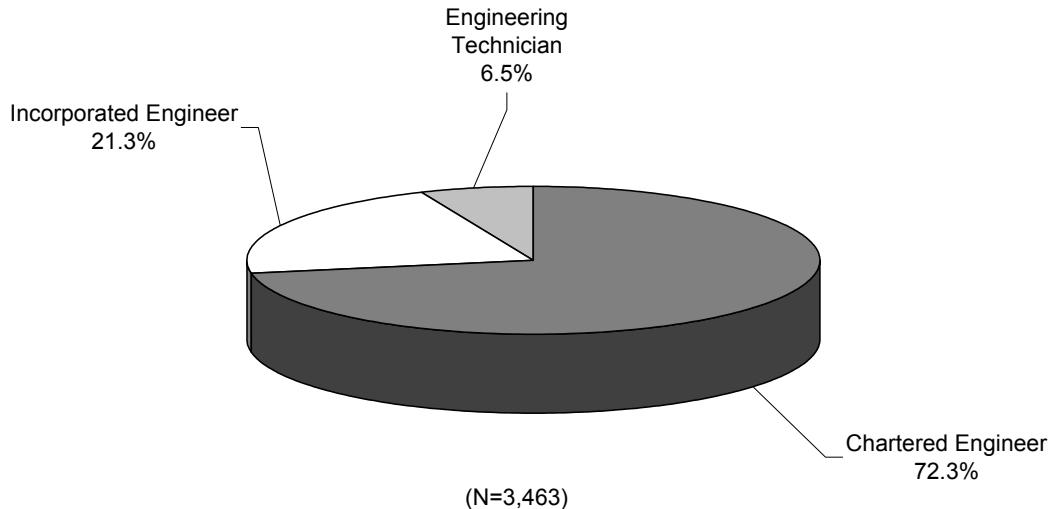
- ◆ 58.5% of Chartered Engineers;
- ◆ 60.2% of Incorporated Engineers;
- ◆ 55.8% of Engineering Technicians;
- ◆ 85.4% stated that, generally, they think average mid career salaries for engineers are at best fairly unfavourable compared to those for other professions (e.g. Accountancy, Law, Architecture, Medicine).

This is true of:

- ◆ 86.1% of Chartered Engineers;
- ◆ 84.1% of Incorporated Engineers;
- ◆ 81.0% of Engineering Technicians.

PROFILE OF RESPONDENTS

1. Please indicate your Section of Registration:



The chart and first table below show the weighted responses from the 2005 and 2003 surveys. Unweighted responses are shown in the second table below.

These figures are weighted to reflect the actual proportion of registrants in each section of the ETB

	2005 (N=3,463)	2003 (N=4,417)
Chartered Engineer	72.3%	75.9%
Incorporated Engineer	21.3%	18.6%
Engineering Technician	6.5%	5.4%

These figures are unweighted

	2005 (N=3,453)	2003 (N=4,425)
Chartered Engineer	53.3%	43.5%
Incorporated Engineer	30.9%	40.5%
Engineering Technician	15.8%	16.0%

2. Are you:

	2005 (N=3,451)	2003 (N=4,396)
Male	96.8%	96.4%
Female	3.2%	3.6%

This year, as in 2003, the vast majority of survey participants, both overall and within each section of registration are found to be male. This is very much in line with the gender split among the overall registrant population.

	2005 Chartered Engineer (N=2,497)	2003 Chartered Engineer (N=3,336)	2005 Incorporated Engineer (N=732)	2003 Incorporated Engineer (N=821)	2005 Engineering Technician (N=222)	2003 Engineering Technician (N=240)
Male	96.1%	95.6%	98.7%	99.3%	98.3%	98.4%
Female	3.9%	4.4%	1.3%	0.7%	1.7%	1.6%

3. Into which of the following age bands do you fall?

This question was not included in 2003.

2005 (N=3,461)	
21-24 yrs	0.1%
25-34 yrs	7.4%
35-44 yrs	24.1%
45-54 yrs	32.7%
55-64 yrs	35.7%
65 yrs +	0.1%

Just over two thirds of all respondents (68.4%) fall into the age bands between 45-64 years, whereas nearly a quarter of respondents (24.1%) fall into the 35-44 years band. The remainder mostly fall into the 25-34 years group (7.4%).

The table below shows that Chartered Engineers have the largest proportion of respondents (8.8%) in the under 35 year old age groups. The Incorporated Engineers have the largest proportion of respondents (77.1%) in the age groups which incorporate 45 years and over. Engineering Technicians have the smallest proportion of respondents (29.2%) in the 55 and older years age brackets.

	2005 Chartered Engineer (N=2,502)	2005 Incorporated Engineer (N=735)	2005 Engineering Technician (N=223)
21-24 yrs	0.0%	0.1%	0.6%
25-34 yrs	8.8%	3.0%	5.7%
35-44 yrs	25.0%	19.8%	27.5%
45-54 yrs	30.8%	37.7%	37.1%
55-64 yrs	35.3%	39.3%	29.2%
65 yrs+	0.1%	0.1%	0.0%

4. Were you unemployed and seeking re-employment at any time during the year ending 5th April 2005?

	2005 (N=3,433)	2003 (N=4,356)
Yes	6.7%	8.8%
No	93.3%	91.2%

The above table shows that, since the 2003 survey, there has been a small reduction in the proportion of registrants who experienced a period of unemployment and who sought re-employment during the previous financial year.

This is true in all sections of registration, with the largest decrease being within the Chartered Engineers group where the 2003 proportion of 9.2% reduced to 6.7% in 2005.

	2005 Chartered Engineer (N=2,482)	2003 Chartered Engineer (N=3,304)	2005 Incorporated Engineer (N=728)	2003 Incorporated Engineer (N=814)	2005 Engineering Technician (N=223)	2003 Engineering Technician (N=237)
Yes	6.7%	9.2%	6.3%	7.3%	7.0%	7.9%
No	93.3%	90.8%	93.7%	92.7%	93.0%	92.1%

5. Which of the following best describes your *current* employment status?

	2005 (N=3,443)	2003 (N=4,363)
An employee	74.5%	73.3%
Self employed (including principal or partner in a firm)	9.2%	9.4%
Contract worker	2.9%	2.7%
Retired early (before expected age)	6.0%	6.4%
Retired or partially retired	5.9%	6.1%
Unemployed and seeking re-employment	1.2%	1.8%
In receipt of long term sickness benefit	0.3%	0.2%
Student receiving tax-free grant or on reduced pay from your employer	0.0%	0.1%

Slightly less than three quarters of all respondents (74.5%) describe their current employment status as an employee, just under one in eight (11.9%) is partially or fully retired, and a little below one in 10 are self-employed (9.2%). These figures are similar to those seen in 2003.

As can be seen in the following table, Engineering Technicians (who have the smallest proportion in the 55 years and older age group) are the least likely group to have registrants who are retired and the most likely to have registrants who are employees. This is again consistent with the 2003 findings.

	2005 Chartered Engineer (N=2,493)	2003 Chartered Engineer (N=3,311)	2005 Incorporated Engineer (N=730)	2003 Incorporated Engineer (N=814)	2005 Engineering Technician (N=221)	2003 Engineering Technician (N=238)
An employee	73.8%	72.1%	75.0%	76.8%	80.3%	78.1%
Self employed (including principal or partner in a firm)	9.1%	9.7%	9.2%	7.5%	10.2%	10.7%
Contract worker	3.1%	2.9%	2.6%	2.3%	2.6%	1.9%
Retired early (before expected age)	6.2%	6.5%	6.4%	6.5%	2.2%	5.3%
Retired or partially retired	6.4%	6.6%	5.2%	4.9%	2.8%	2.7%
Unemployed and seeking re-employment	1.2%	1.8%	1.1%	1.9%	1.1%	0.7%
In receipt of long term sickness benefit	0.2%	0.2%	0.5%	0.2%	0.7%	0.4%
Student receiving a tax-free grant or on reduced pay from your employer	0.1%	0.2%	0.0%	0.0%	0.0%	0.1%

INCOME

- 6. Please enter your gross basic annual income from employment, including any London or large town allowance, before deduction of Income Tax, National Insurance and Pension contributions, as at 5th April 2005.**

Respondents were asked to exclude any overtime, bonus and commission payments, unearned income and pensions from previous employment.

If respondents were solely or partly self-employed, they were asked to state net profit before tax for the year 2004/05 less expenses allowed for tax, but before the deduction of personal, capital or other expenses.

If their financial year ends at a date other than 5th April, respondents were asked to estimate their net profit before tax for their financial year ending between 6th April 2004 and 5th April 2005.

			Average basic income	Median basic income
2005	Chartered Engineer	(N=1,492)	£49,472	£43,507
2003	Chartered Engineer	(N=1,506)	£46,441	£42,000
2005	Incorporated Engineer	(N= 872)	£38,272	£35,093
2003	Incorporated Engineer	(N=1,450)	£35,414	£32,851
2005	Engineering Technician	(N= 477)	£31,879	£30,000
2003	Engineering Technician	(N= 590)	£30,609	£27,500

Weighting has not been applied to the above table.

The table above shows the average and median basic income (i.e. discounting any overtime, bonus and/or commission payments) of respondents, analysed by section of registration, from the 2005 and 2003 surveys. In both cases, respondents who indicated that they had been unemployed during the relevant financial year or in receipt of long term sickness benefit have been excluded from these calculations.

In each section of registration, there is an increase in average and median basic income from the 2003 survey. The tables below show the amounts and percentages by which this is true.

	Average basic income	Median basic income
Chartered Engineer	+ £3,031	+ £1,507
Incorporated Engineer	+ £2,858	+ £2,242
Engineering Technician	+ £1,270	+ £2,500

	Average basic income	Median basic income
Chartered Engineer	+ 6.5%	+ 3.6%
Incorporated Engineer	+ 8.1%	+ 6.8%
Engineering Technician	+ 4.1%	+ 9.1%

7. Please enter all overtime, bonus and commission payments received in the 12 months to 5th April 2005.

Respondents who were self-employed were asked to leave this question blank.

The table below shows the average overtime, bonus and/or commission payments received by respondents giving each section of registration. No median is shown since the majority of respondents did not indicate that they received an overtime, bonus or commission payment. Respondents who were unemployed at any time during the last financial year, are retired, or who are in receipt of long term sickness benefit have again been excluded from these figures.

		Average bonus among all respondents	
2005	Chartered Engineer	(N=1,492)	£3,595
2003	Chartered Engineer	(N=1,506)	£2,647
2005	Incorporated Engineer	(N= 872)	£2,261
2003	Incorporated Engineer	(N=1,450)	£2,432
2005	Engineering Technician	(N= 477)	£1,888
2003	Engineering Technician	(N= 590)	£2,384

Weighting has not been applied to the above table.

The above table shows a comparison between the 2003 and 2005 surveys of the average overtime, bonus and/or commission payment given by all respondents who indicated that they have been in full time work throughout the year.

Within the Chartered Engineers group, the average bonus payment has risen by 35.8%. However, among both the Incorporated Engineers and Engineering Technicians, average bonus payments have decreased - by 7.0% and 20.8% respectively.

7. Please enter all overtime, bonus and commission payments received in the 12 months to 5th April 2005. ...Cont.

The table below shows the average and median bonuses from the 2005 and 2003 surveys among those who received a bonus, i.e. following the exclusion of those who told us that they had received no bonus or commission.

			Average bonus among bonus recipients	Median bonus among bonus recipients
2005	Chartered Engineer	(N=595)	£8,661	£4,500
2003	Chartered Engineer	(N=605)	£6,590	£3,200
2005	Incorporated Engineer	(N=299)	£6,287	£3,000
2003	Incorporated Engineer	(N=593)	£5,946	£2,825
2005	Engineering Technician	(N=170)	£4,975	£3,000
2003	Engineering Technician	(N=234)	£6,012	£3,000

Weighting has not been applied to the above table.

Among those Chartered Engineers who received a bonus payment during the financial year ending 5th April 2005, the average bonus received has increased by £2,071 (31.4%). Among the Incorporated Engineers who received a bonus, the average amount received has increased by £341 (5.7%). However, among all Engineering Technicians who received a bonus, the average bonus payment has decreased since 2003 by £1,037 (17.2%).

Looking at the median bonus payments, there has been an increase of £1,300 for Chartered Engineers and £175 for Incorporated Engineers (40.6% and 6.2% respectively), while the median bonus for Engineering Technicians has remained the same as in the 2003 survey.

AVERAGE AND MEDIAN EARNINGS

The table below shows the average earnings of respondents (i.e. the total of the basic incomes of those who indicated their basic income, plus the additional payments given, divided by the number of respondents who indicated their basic income).

Again, respondents who are retired, who were unemployed at any time during the last financial year or who were in receipt of long term sickness benefit have been excluded from these calculations.

As a result of rounding up figures to the nearest pound, the amount shown in the tables may vary slightly from the total of average basic income and average bonus shown in previous tables.

			Average earnings	Median earnings
2005	Chartered Engineer	(N=1,492)	£53,067	£45,500
2003	Chartered Engineer	(N=1,506)	£49,088	£43,477
2005	Incorporated Engineer	(N= 872)	£40,533	£37,000
2003	Incorporated Engineer	(N=1,450)	£37,845	£34,000
2005	Engineering Technician	(N= 477)	£33,767	£31,000
2003	Engineering Technician	(N= 590)	£32,993	£29,000

Weighting has not been applied to the above table.

The above table analyses the average and median earnings (basic income plus overtime/bonus/commission) of respondents within each section of registration. The figures are shown for 2005 and 2003 for comparative purposes.

Across all sections of registration both the average and the median earnings show an increase since the time of the 2003 survey. The average earnings for each section of registration have increased since 2003 by 8.1%, 7.1% and 2.3% for Chartered Engineers, Incorporated Engineers and Engineering Technicians respectively. Similarly, there is an increase in the median earnings across each section of registration, with the increases being 4.7%, 8.8% and 6.9% for Chartered Engineers, Incorporated Engineers and Engineering Technicians respectively.

AVERAGE AND MEDIAN EARNINGS ...CONT.

The tables below indicate the earnings by decile for each type of engineer. For example, for Chartered Engineers, the 10% decile shows the earnings of the 149th respondent (10% of the 1,492 respondents) and the 90% decile shows the earnings of the 1,343th respondent (90% of the 1,492 respondents) when the respondents are ranked in the order of lowest to highest earnings.

The two extremes of 0% and 100% (i.e. the engineer from each grade earning the least and the most) are not shown, and, therefore, there are only nine figures.

	Chartered Engineer	Incorporated Engineer	Engineering Technician
10% Decile	£30,010	£24,796	£19,960
20% Decile	£35,000	£29,000	£24,000
30% Decile	£38,500	£31,500	£27,000
40% Decile	£42,000	£34,000	£29,420
50% Decile	£45,500	£37,000	£31,000
60% Decile	£50,000	£40,000	£34,000
70% Decile	£56,000	£43,000	£36,000
80% Decile	£65,615	£49,910	£40,000
90% Decile	£80,350	£60,000	£48,000

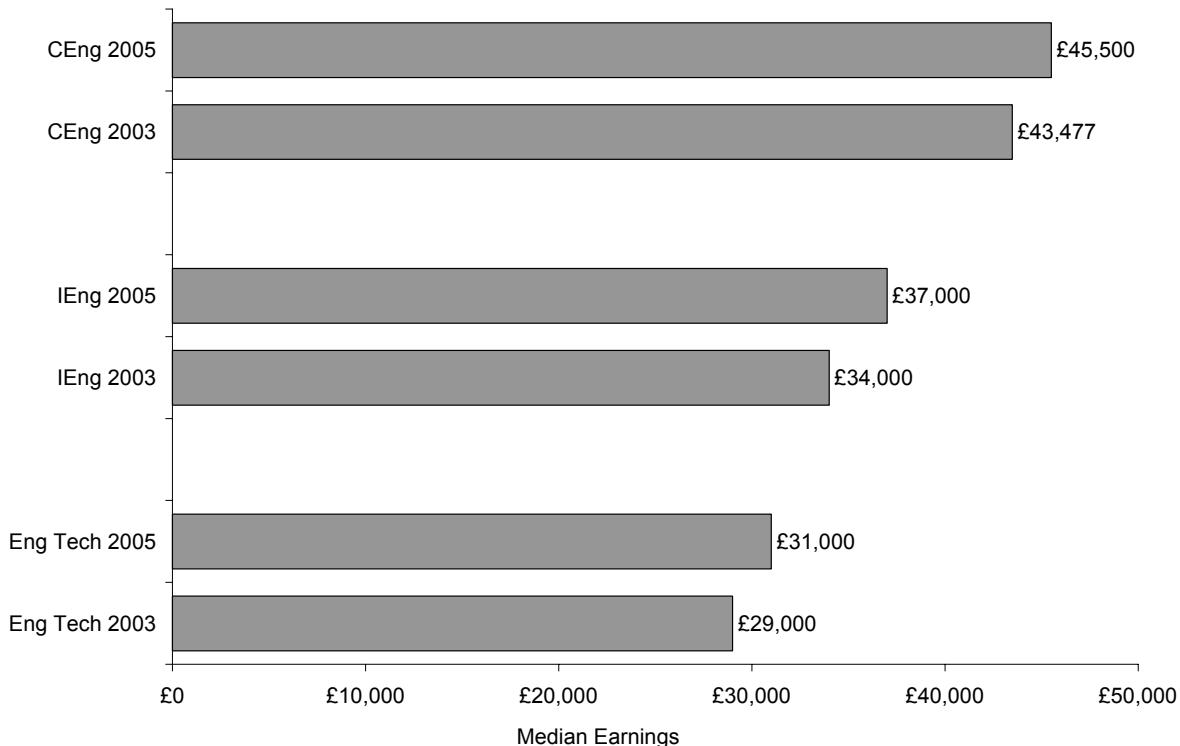
	Chartered Engineer 2005	Chartered Engineer 2003	Incorporated Engineer 2005	Incorporated Engineer 2003	Engineering Technician 2005	Engineering Technician 2003
10% Decile	£30,010	£28,056	£24,796	£23,604	£19,960	£19,309
20% Decile	£35,000	£32,900	£29,000	£26,834	£24,000	£22,009
30% Decile	£38,500	£36,201	£31,500	£29,905	£27,000	£25,000
40% Decile	£42,000	£40,000	£34,000	£31,810	£29,420	£27,000
50% Decile	£45,500	£43,477	£37,000	£34,000	£31,000	£29,000
60% Decile	£50,000	£48,000	£40,000	£37,000	£34,000	£32,000
70% Decile	£56,000	£53,000	£43,000	£40,000	£36,000	£34,000
80% Decile	£65,615	£62,000	£49,910	£46,000	£40,000	£39,080
90% Decile	£80,350	£76,060	£60,000	£55,000	£48,000	£49,000

Above can be seen the deciles for 2005 compared to those for 2003. For every decile shown for Chartered Engineers, there is an increase in the 2005 figures from the 2003 figures, with the largest percentage increases being seen at the lowermost 3 deciles (7.0%, 6.4% and 6.4% respectively). The smallest percentage increase is at the 60% decile (4.2%).

There is also an increase from the 2003 figures for Incorporated Engineers across the board, with the largest percentage increases being seen at the 50% decile (8.8%) and the top two deciles (8.5% and 9.1% respectively). The smallest percentage increase (5.0%) is at the lowermost decile. The figures for Engineering Technicians show increases in all the deciles with the exception of the top (90%) decile (-2.0%). The largest increases for this group are for the deciles from 20% to 40% (9.0%, 8.0% and 9.0% respectively).

AVERAGE AND MEDIAN EARNINGS ...CONT.

The chart below shows the median earnings for each section of registration, with the figures from the 2005 survey being compared to those from the 2003 survey. In all cases, the 2005 figures show an increase from those from 2003.



The actual and then the percentage increases in average and median earnings since the 2003 survey are shown in the tables below.

	Actual change in average earnings	Percentage change in average earnings
Chartered Engineer	+£3,979	+8.1%
Incorporated Engineer	+£2,688	+7.1%
Engineering Technician	+£ 774	+2.3%

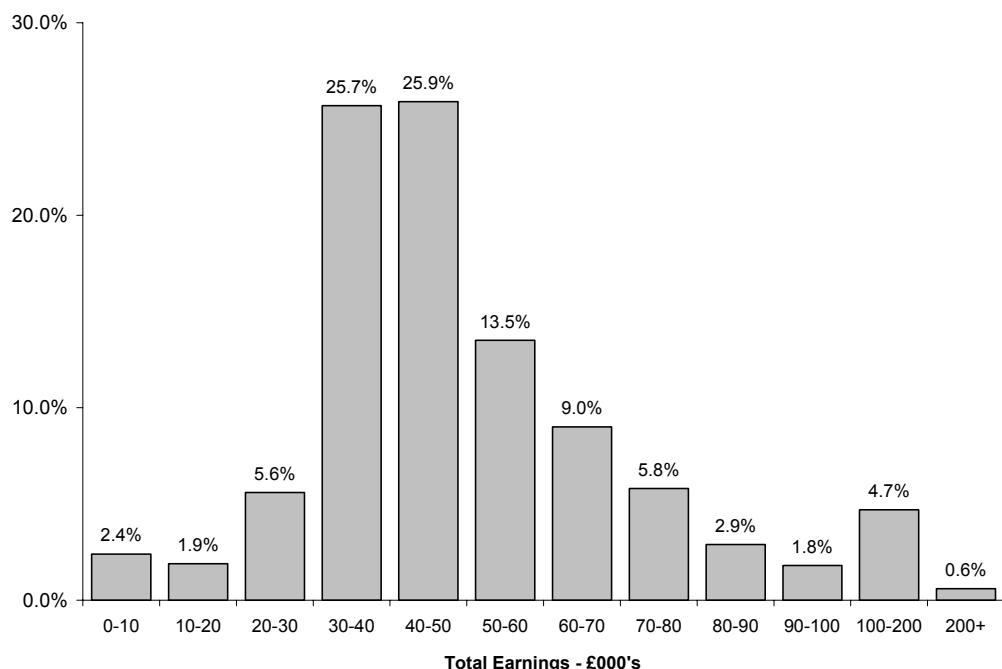
	Actual change in median earnings	Percentage change in median earnings
Chartered Engineer	+£2,023	+4.7%
Incorporated Engineer	+£3,000	+8.8%
Engineering Technician	+£2,000	+6.9%

AVERAGE AND MEDIAN EARNINGS ...CONT.

The three charts below and on the following two pages indicate the proportion of respondents from each section of registration whose earnings fall into each of the given bands.

As before, those who are retired or who were unemployed and seeking re-employment at any time during the last financial year are excluded, as are those in receipt of long term sickness benefit. In the £10,000-£20,000 earnings band, the total includes those answering £10,001 up to and including £20,000; those earning £20,001 to £30,000 are included in the next band and so on.

CHARTERED ENGINEER



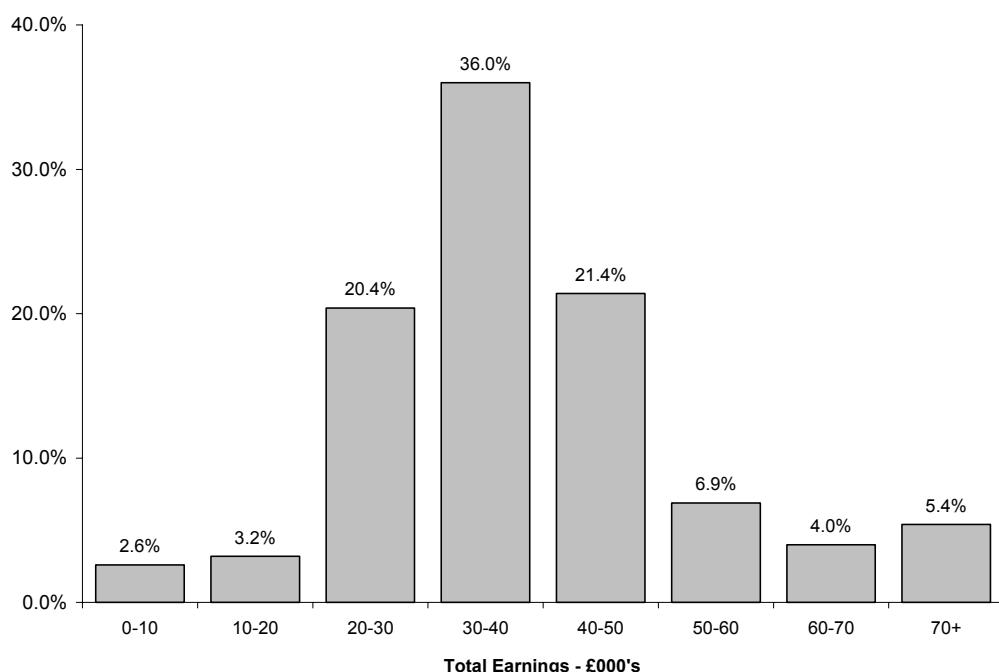
Over half of all Chartered Engineers responding (51.6%) indicated that their total earnings in the last financial year fell between £30,001 and £50,000. This was also true for 51.0% in 2003 whose total earnings fell in the same bracket. A total of nine (just over one in 200) Chartered Engineers indicated that their total annual earnings were in excess of £200,000.

AVERAGE AND MEDIAN EARNINGS ...CONT.

INCORPORATED ENGINEER

The following table shows the total earnings of Incorporated Engineer respondents in the last financial year, revealing that around a third (36.0%) earn between £30,001 and £40,000. This was also the band most likely to have been given as annual earnings in 2003 (35.9%).

The proportion of Incorporated Engineers stating that their earnings fall in the £20,001 to £30,000 bracket has decreased from 29.6% in 2003 to 20.4% in 2005, however the proportion stating their earnings fall within the £40,001 to £50,000 bracket has risen from 15.2% in 2003 to 21.4% in 2005.

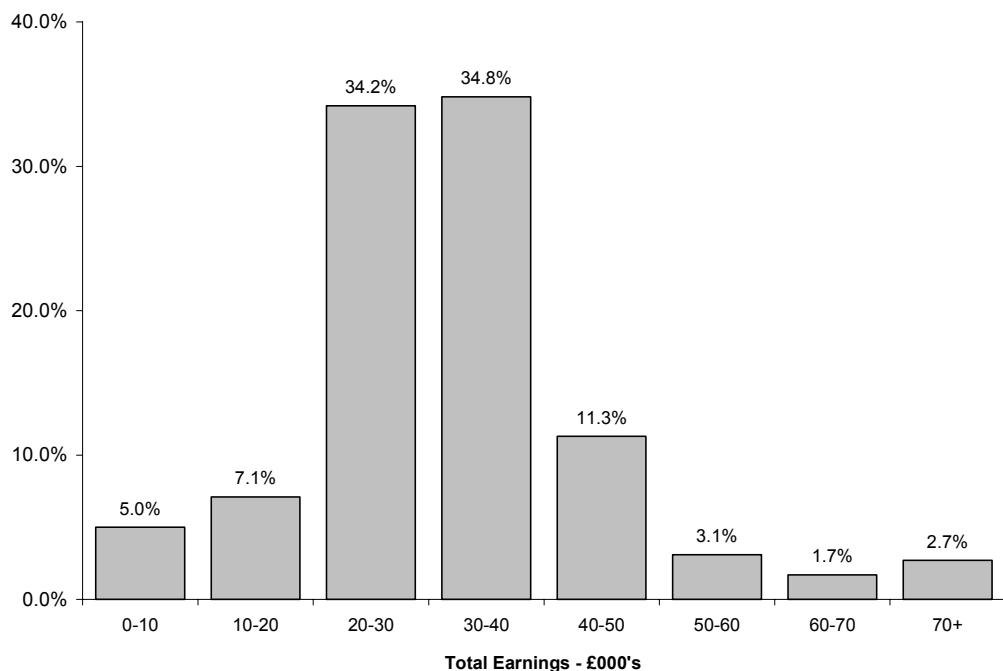


AVERAGE AND MEDIAN EARNINGS ...CONT.

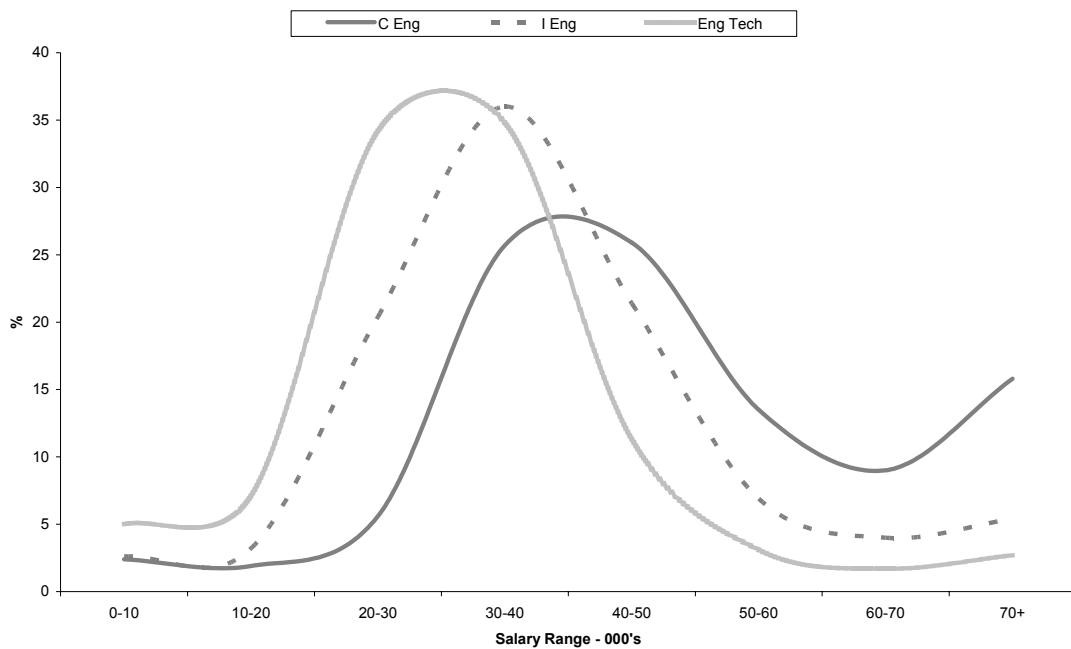
ENGINEERING TECHNICIAN

In 2005 69.0% of Engineering Technicians stated that they earned between £20,001 and £40,000 as the following chart reveals, which is a similar figure to the 69.6% who stated the same in 2003.

However, looking at this more closely, the proportion of Engineering Technicians who stated that they earned between £20,001 and £30,000 in the last financial year ending 5th April 2005 has decreased from 41.5% in 2003 to 34.2% in 2005. Conversely, the proportion whose stated earnings fall between £30,001 and £40,000 has risen from 28.1% in 2003 to 34.8% in 2005.



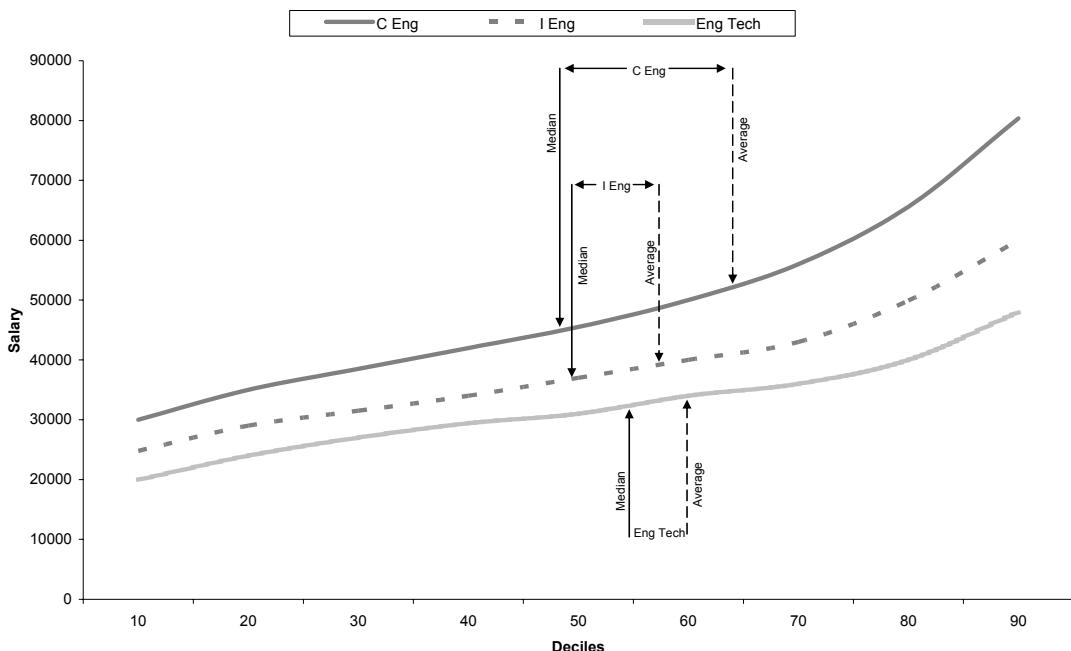
AVERAGE AND MEDIAN EARNINGS ...CONT.



The above chart shows that the salary distribution for each section of registration shapes up differently, indicating that the spread of salaries within each section varies. The Incorporated Engineers follow a normal distribution most closely and the average salary falls closest to the highest point. The Engineering Technicians distribution is similar, though the high point occurs at a lower salary level, and a greater percentage falls within a smaller range.

The distribution of the Chartered Engineers is markedly different. Of particular interest is the wider spread at the midpoint around the mean, and also the rise at the end of the distribution at the £70,000 + point. The first of these points demonstrates that the earning potential for Chartered Engineers starts at a consistently higher point. The second shows the Chartered Engineers group to contain the highest proportion who earn significantly more than the norm for their group.

AVERAGE AND MEDIAN EARNINGS ...CONT.



The above graph shows the distribution of the salary deciles for Chartered Engineers, Incorporated Engineers and Engineering Technicians. The solid arrow highlights the median salary point and the dashed arrow highlights the average salary point.

Up until the 50th decile point, the distribution is fairly uniform across the three types. After this point the Chartered Engineer distribution shows a steeper incline, which is steepest at the 70th decile point.

Another interesting observation is about the median and average salaries. In a normal distribution these points would be identical. The distance between the median and average for the Incorporated Engineers and Engineering Technicians groups is quite small. There is a wider gap for the Chartered Engineers. This, and the steep climb of salaries observed from the 70th decile onwards, further emphasises that there is a higher proportion of Chartered Engineers earning significantly more than the norm than is the case with the other two sections of registration.

ETHNIC GROUP

8. Please tick the appropriate box:

	2005 (N=3,438)	2003 (N=4,369)
White British	95.5%	95.4%
Other White	1.5%	1.9%
White and Black Caribbean	0.1%	0.1%
White and Black African	0.1%	0.1%
White and Asian	0.3%	0.3%
Other Mixed	0.2%	0.1%
Indian	0.6%	0.7%
Pakistani	0.1%	0.0%
Bangladeshi	0.0%	0.0%
Other Asian	0.3%	0.4%
Black Caribbean	0.1%	0.1%
Black African	0.1%	0.1%
Other Black	0.0%	0.0%
Chinese	0.6%	0.2%
Any other ethnic group	0.5%	0.6%

The above table shows that the overwhelming majority (97.0%) of respondents indicated their ethnic group as being White British or White Other. As can be seen in the table on the following page, this is true of at least 96.6% of respondents in each section of registration.

THE ENGINEERING AND TECHNOLOGY BOARD
2005 SURVEY OF REGISTERED ENGINEERS – FULL REPORT

8. Please tick the appropriate box: ...Cont.

	2005 Chartered Engineer (N=2,486)	2003 Chartered Engineer (N=3,311)	2005 Incorporated Engineer (N=731)	2003 Incorporated Engineer (N=820)	2005 Engineering Technician (N=221)	2003 Engineering Technician (N=238)
White British	94.8%	94.9%	97.4%	96.9%	96.5%	97.1%
Other White	1.8%	2.2%	0.8%	1.1%	0.9%	1.3%
White and Black Caribbean	0.1%	0.1%	0.3%	0.1%	0.0%	0.0%
White and Black African	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%
White and Asian	0.4%	0.3%	0.1%	0.1%	0.0%	0.0%
Other Mixed	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%
Indian	0.7%	0.8%	0.2%	0.6%	0.6%	0.3%
Pakistani	0.1%	0.0%	0.2%	0.1%	0.2%	0.0%
Bangladeshi	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Other Asian	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%
Black Caribbean	0.1%	0.2%	0.4%	0.1%	0.4%	0.1%
Black African	0.1%	0.1%	0.1%	0.1%	0.6%	0.3%
Other Black	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Chinese	0.8%	0.3%	0.1%	0.1%	0.4%	0.0%
Any other ethnic group	0.6%	0.6%	0.4%	0.9%	0.4%	0.7%

REGISTRATION ISSUES

9. Does your employer pay your subscription and registration fees?

The below tables are based only on those respondents who are currently employed.

	2005 (N=2,558)	2003 (N=3,158)
Yes	49.9%	46.6%
No	50.1%	53.4%

Around half of all respondents (49.9%) who are currently employed have their subscription and registration fees paid for them by their employer. This is a slight rise from the proportion of respondents who were employed at the time of the 2003 survey (46.6%).

When analysing this question by each section of registration, Chartered Engineers who are employees are the group most likely to have their subscription and registration fees paid for by their employer (54.5%). Looking at the other sections of registration, 4 in 10 Incorporated Engineers employees (40.0%) have their subscription and registration fees paid for them, while around 3 in 10 Engineering Technicians who are in employment (32.0%) have the same.

These responses show a slight increase across all the sections of registration since 2003. The greatest increase is for Engineering Technicians (5.4%), then Chartered Engineers with an increase of 4.1%, and finally Incorporated Engineers with an increase of 1.9%.

	2005 Chartered Engineer (N=1,836)	2003 Chartered Engineer (N=2,358)	2005 Incorporated Engineer (N=545)	2003 Incorporated Engineer (N=618)	2005 Engineering Technician (N=177)	2003 Engineering Technician (N=183)
Yes	54.5%	50.4%	40.0%	38.1%	32.0%	26.6%
No	45.5%	49.6%	60.0%	61.9%	68.0%	73.4%

10. Does your employer offer financial support for your professional development?

The below tables are based only on those respondents who are currently employed.

	2005 (N=2,545)	2003 (N=3,139)
Yes	57.4%	57.1%
No	42.6%	42.9%

Just fewer than six in 10 respondents (57.4%) who are currently an employee are offered financial support from their employer for their professional development. This is a similar figure to the 2003 survey.

When looking at the breakdown by section of registration among those who are currently in employment, the proportion of respondents whose employer offers financial support has increased slightly for Chartered Engineers by 1.6%, but decreased for Incorporated Engineers and Engineering Technicians by 2.7% and 3.2% respectively.

	2005 Chartered Engineer (N=1,828)	2003 Chartered Engineer (N=2,344)	2005 Incorporated Engineer (N=542)	2003 Incorporated Engineer (N=614)	2005 Engineering Technician (N=175)	2003 Engineering Technician (N=182)
Yes	59.1%	57.5%	53.9%	56.6%	50.1%	53.3%
No	40.9%	42.5%	46.1%	43.4%	49.9%	46.7%

The table below shows analysis of this question by whether employees responding previously indicated that their employer pays their subscription fees. Over seven in 10 respondents (72.9%) who are currently an employee and whose employer pays their subscription fee are offered financial support from their employer for their professional development.

Interestingly nearly seven in 10 respondents who are currently an employee and whose employer does not pay their subscription fee are not offered financial support from their employer for their professional development.

Employer pays subscription fees		
	Yes (N=1,457)	No (N=1,864)
Yes	72.9%	31.2%
No	27.1%	68.8%

THE ROLE OF ENGINEERING TECHNICIANS

11. To what extent do you benefit from the support of (other) engineering technicians in your work?

This question was not included in 2003.

(N=3,293)	
To a great extent	15.8%
To some extent	25.5%
A little	16.5%
(Virtually) not at all	28.6%
No view	6.6%
Not currently working	7.0%

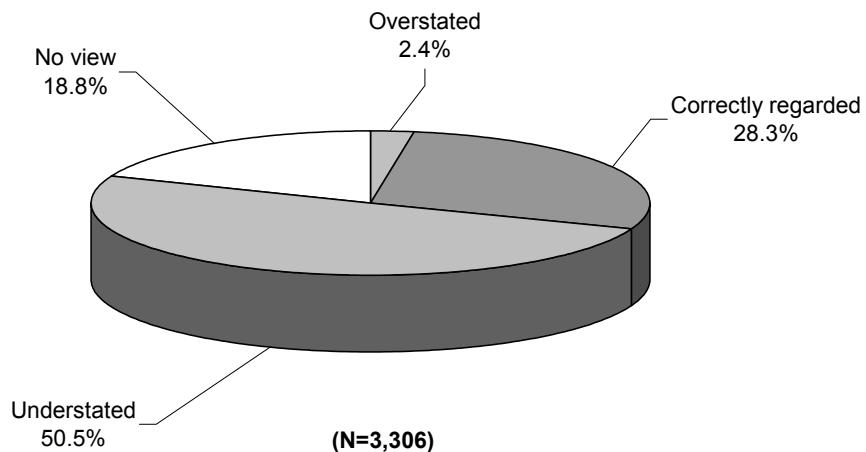
Just over 9 in 20 respondents (45.1%) stated that they benefit a little or (virtually) not at all from the support of (other) engineering technicians in their work. This compares to just over 4 in 10 respondents (41.3%) who stated that they benefit at least to some extent from their support.

In the results shown below for section of registration, there are some distinct differences between the Engineering Technicians and the other types of engineer. Nearly 6 in 10 Engineering Technicians (58.9%) stated that they benefit a little or (virtually) not at all from the support of (other) engineering technicians. However, this figure drops to 44.1% and 44.0% for Chartered Engineers and Incorporated Engineers respectively. In all cases, the proportion answering either ‘a little’ or ‘(virtually) not at all’ exceeds the proportion answering either ‘to a great extent’ or ‘to some extent’.

	2005 Chartered Engineer (N=2,375)	2005 Incorporated Engineer (N=697)	2005 Engineering Technician (N=222)
To a great extent	17.1%	12.9%	11.1%
To some extent	24.8%	29.8%	20.1%
A little	15.6%	18.3%	20.1%
(Virtually) not at all	28.5%	25.7%	38.8%
No View	6.8%	6.4%	5.0%
Not currently working	7.2%	6.8%	4.8%

12. Generally within the profession, do you feel that the importance of the contribution made by engineering technicians is:

This question was not included in 2003.



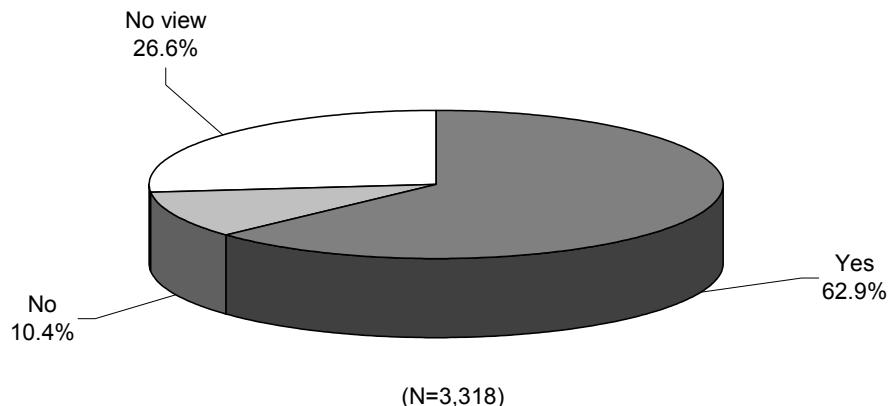
Around half of all respondents (50.5%) feel that the importance of the contribution made by engineering technicians is understated, while a little over a quarter (28.3%) feel it is correctly regarded.

Analysing these results by the three sections of registration, there is a clear difference of opinion, as can be seen in the table below. The proportion of Chartered Engineers who feel that the importance of the contribution made by engineering technicians is understated is just over four in 10 (43.5%), while this figure rises notably to 68.0% and 71.5% for Incorporated Engineers and Engineering Technicians respectively. Similarly, the proportion of Chartered Engineers who feel it is correctly regarded is around three in 10 (31.2%), a figure which decreases to 21.3% and 18.9% for Incorporated Engineers and Engineering Technicians respectively.

	2005 Chartered Engineer (N=2,388)	2005 Incorporated Engineer (N=697)	2005 Engineering Technician (N=221)
Overstated	2.8%	1.0%	2.6%
Correctly regarded	31.2%	21.3%	18.9%
Understated	43.5%	68.0%	71.5%
No view	22.5%	9.7%	7.0%

13. Do you believe that the Government should act to increase the supply of engineering technicians?

This question was not included in 2003.



Over six in 10 of all respondents believe the Government should act to increase the supply of engineering technicians.

Again there is a marked difference in opinion across the sections of registration with Chartered Engineers (58.5%) being the least likely to believe that the Government should act to increase the supply of engineering technicians and Incorporated Engineers (75.1%) being the most likely, followed by Engineering Technicians (72.0%).

	Chartered Engineer (N=2,395)	Incorporated Engineer (N=702)	Engineering Technician (N=221)
Yes	58.5%	75.1%	72.0%
No	11.9%	6.6%	7.2%
No view	29.6%	18.3%	20.8%

14. What actions should the Government take to increase the supply of engineering technicians?

This question was not included in 2003.

Only those respondents who believe that the Government should act to increase the supply of engineering technicians were asked to answer this question.

	(N=1,522)	(N=1,522)	(N=3,463)
Promote engineers more/make engineers more publicly recognised/positively encourage engineering as a profession	483	31.7%	13.9%
Encourage apprenticeships/help increase number of apprenticeship schemes	364	23.9%	10.5%
Greater funding for training & development	344	22.6%	9.9%
Encourage engineering at schools and/or colleges/greater emphasis on engineering in schools and/or colleges	325	21.4%	9.4%
Improve pay/financial incentives (e.g. grants)	207	13.6%	6.0%
Less academic focus in education with more emphasis on practical skills (technical, vocational)	203	13.4%	5.9%
Support employers/provide more incentives for employers to recruit more engineers (i.e. funding, advice)	99	6.5%	2.9%
Employers to provide more training in the workplace/on-the-job training	74	4.9%	2.1%
Provide tax breaks for engineering employers/companies	64	4.2%	1.9%
Other	184	12.1%	5.3%
No reply	1,941	-	56.1%

In the table above, percentages in the second column are calculated against the number of respondents who gave an answer to this question, indicated in the first column. The final column of percentages is calculated against the total number of respondents who took part in the survey.

No 'Other' suggestion was made by more than around 25 respondents.

As respondents could make more than one suggestion, the sum of percentages will inevitably exceed 100.

Promoting or publicising engineers and engineering is the most commonly cited suggestion for how the Government could go about increasing the supply of engineering technicians among those who feel that this is something that the Government should be doing (31.7%). Approaching a quarter of those who answered this question mentioned Government support for apprenticeships (23.9%).

Among respondents to this question, 22.6% indicated that they believe increasing funding for training would help increase the supply of engineering technicians, whilst 21.4% suggested that promoting engineering at an earlier stage (in schools or colleges) could play a part.

The comments shown below and on the following page are taken verbatim from questionnaires and are representative of the sorts of views most commonly expressed.

"Engineering does not hold any attraction in this day and age. It needs to be re-marketed."

"Encouragement rather than legislation. Change peoples attitude; it is not conceived as a glamorous occupation, yet where would we be without engineers/inventors?"

"Subsidising employers to develop craft level apprentices etc."

14. What actions should the Government take to increase the supply of engineering technicians? ...Cont.

*“Too much emphasis on degrees (in stupid subjects).
Experience + good training more important.”*

*“I think engineering is one area Britain is good at
and the Government should sell this point to
get more people interested especially at school age.”*

“Widen the curriculum to encourage people to take GCSE/‘A’ levels in more technical/practical based subjects – i.e., construction, surveying, CAD.”

“Engineers should have the same professional status as other professionals.”

*“Support more ‘modern apprentice’ type schemes
leading to increased ‘production’ of technicians.”*

“Reinstate the ‘technical school’ type of further education.”

“Educate to improve perceived status of engineers – often seen by some as lower status than some managerial posts.”

“Provide training support grants to employers and trainees.”

“Support the apprentice culture.”

“Financial. To encourage school leavers into engineering by study grants tax free and by tax incentives to employers to train more technicians.”

“Encourage the re-introduction of apprentice work.”

*“Increase awareness of engineering in schools. Prevent the use of ‘engineer’ by unqualified people.
Increase status of engineers to match places like Germany!”*

“Consider funding options to promote student interest in taking courses that lead to engineering technical qualifications.”

“Fund apprentice training schemes based on the more traditional format of the 1960-90 era. It seemed to produce well ‘rounded’ craftsmen & engineering technicians, unlike the largely academic focus of today.”

“Encourage schools to show benefits of working as engineering technicians.”

“Better incentives.”

“Financial incentives to study engineering courses at university.”

“Subsidise training through an employer.”

YOUR INSTITUTION

- 15. Please indicate from the alphabetical list below, which of your Institution memberships is *most* relevant to your work.**

This question was not included in 2003.

	(N=3,100)
British Computer Society	4.8%
British Institute of Non-Destructive Testing	0.2%
Chartered Institution of Building Services Engineers	3.6%
Chartered Institution of Water and Environmental Management	1.8%
Energy Institute	1.0%
IEE	21.8%
Institute of Acoustics	0.1%
Institute of Cast Metals Engineers	0.2%
Institute of Highway Incorporated Engineers	1.0%
Institute of Marine Engineering, Science and Technology	2.3%
Institute of Materials, Minerals and Mining	2.8%
Institute of Measurement and Control	1.1%
Institute of The Motor Industry	0.5%
Institute of Physics	0.5%
Institute of Physics & Engineering in Medicine	0.2%
Institute of Plumbing and Heating Engineering	0.5%
Institution of Agricultural Engineers	0.3%
Institution of Chemical Engineers	5.1%
Institution of Civil Engineers	14.2%
Institution of Engineering Designers	0.8%
Institution of Fire Engineers	0.3%
Institution of Gas Engineers and Managers	1.8%
Institution of Healthcare Engineering & Estate Management	0.7%
Institution of Highways & Transportation	0.6%
Institution of Incorporated Engineers	8.7%
Institution of Lighting Engineers	0.1%
Institution of Mechanical Engineers	14.4%
Institution of Nuclear Engineers	0.4%
Institution of Railway Signal Engineers	0.5%
Institution of Structural Engineers	3.4%
Institution of Water Officers	0.1%
Royal Aeronautical Society	2.6%
Royal Institution of Naval Architects	0.7%
Society of Environmental Engineers	0.1%
Society of Operations Engineers	2.3%
Welding Institute	0.3%

The above table shows that the IEE is the institution most commonly cited as being the *most* relevant to our respondents work, (21.8%), whilst the Institution of Mechanical Engineers is mentioned by just over one in seven respondents (14.4%), as is the Institution of Civil Engineers (14.2%).

15. Please indicate from the alphabetical list below, which of your Institution memberships is *most* relevant to your work. ...Cont.

	Chartered Engineer (N=2,282)	Incorporated Engineer (N=632)	Engineering Technician (N=186)
British Computer Society	6.2%	1.1%	0.4%
British Institute of Non Destructive Testing	0.1%	0.4%	1.5%
Chartered Institution of Building Services Engineers	3.2%	4.3%	6.4%
Chartered Institution of Water and Environmental Management	2.0%	1.6%	0.4%
Energy Institute	1.0%	1.1%	0.4%
IEE	25.9%	8.8%	14.8%
Institute of Acoustics	0.2%	0.0%	0.0%
Institute of Cast Metals Engineers	0.1%	0.4%	0.2%
Institute of Highway Incorporated Engineers	0.1%	4.0%	2.6%
Institute of Marine Engineering, Science and Technology	1.7%	4.5%	2.0%
Institute of Materials, Minerals and Mining	3.3%	1.4%	1.1%
Institute of Measurement and Control	1.0%	1.5%	2.0%
Institute of The Motor Industry	0.1%	0.9%	3.1%
Institute of Physics	0.6%	0.1%	0.0%
Institute of Physics & Engineering in Medicine	0.2%	0.2%	0.2%
Institute of Plumbing and Heating Engineering	0.1%	0.4%	6.8%
Institution of Agricultural Engineers	0.2%	0.9%	0.4%
Institution of Chemical Engineers	6.9%	0.2%	0.0%
Institution of Civil Engineers	17.2%	6.7%	2.6%
Institution of Engineering Designers	0.2%	2.9%	1.3%
Institution of Fire Engineers	0.2%	0.3%	0.4%
Institution of Gas Engineers and Managers	1.7%	2.1%	2.4%
Institution of Healthcare Engineering & Estate Management	0.3%	2.1%	1.3%
Institution of Highways and Transportation	0.5%	0.8%	0.4%
Institution of Incorporated Engineers	0.1%	34.7%	26.3%
Institution of Lighting Engineers	0.0%	0.7%	0.2%
Institution of Mechanical Engineers	18.4%	3.5%	2.9%
Institution of Nuclear Engineers	0.3%	0.9%	0.2%
Institution of Railway Signal Engineers	0.5%	0.4%	0.4%
Institution of Structural Engineers	4.0%	2.4%	0.2%
Institution of Water Officers	0.1%	0.4%	0.2%
Royal Aeronautical Society	2.4%	2.7%	4.6%
Royal Institution of Naval Architects	0.8%	0.4%	0.2%
Society of Environmental Engineers	0.0%	0.2%	0.2%
Society of Operations Engineers	0.4%	6.6%	11.9%
Welding Institute	0.3%	0.2%	1.3%

The above table shows the breakdown of most relevant institution membership by section of registration.

There are some prominent differences across the sections of registration. Chartered Engineers top three most relevant institution memberships are the IEE (25.9%), the Institution of Mechanical Engineers (18.4%) and the Institution of Civil Engineers (17.2%). Incorporated Engineers top three most relevant institutions are the Institution of Incorporated Engineers (34.7%), the IEE (8.8%) and the Institution of Civil Engineers (6.7%). Engineering Technicians top three most relevant membership institutions are the Institution of Incorporated Engineers (26.3%), the IEE (14.8%) and the Society of Operations Engineers (11.9%).

15. Please indicate from the alphabetical list below, which of your Institution memberships is *most relevant to your work*. ...Cont.

Institutions with less than 50 responses are not shown here.

CHARTERED ENGINEER

	N	Average earnings	Median earnings
British Computer Society	86	£59,090	£50,500
IEE	340	£54,968	£46,966
Institution of Chemical Engineers	91	£59,358	£55,000
Institution of Civil Engineers	246	£48,168	£42,125
Institution of Mechanical Engineers	251	£51,908	£46,000
Institution of Structural Engineers	64	£46,647	£38,900

The table above shows the average and median earnings of Chartered Engineers among our respondents analysed by most relevant institution membership where 50 or more respondents indicated a particular institution. As can be seen, those citing the Institution of Chemical Engineers as being most relevant to their work have both the highest average and median earnings, whilst those citing the Institution of Structural Engineers have the lowest.

The tables below show the average and median earnings of Incorporated Engineers and Engineering Technicians analysed by most relevant institution where 50 or more responses were received. As can be seen, for Incorporated Engineers, those citing the Institution of Incorporated Engineers have both the highest average and median earnings. This being true for Engineering Technicians of those indicating that the IEE is the institution most relevant to their work.

INCORPORATED ENGINEER

	N	Average earnings	Median earnings
IEE	69	£37,271	£35,000
Institution of Civil Engineers	55	£38,345	£33,000
Institution of Incorporated Engineers	239	£41,214	£37,000
Society of Operations Engineers	54	£38,777	£37,250

ENGINEERING TECHNICIAN

	N	Average earnings	Median earnings
IEE	53	£35,333	£33,180
Institution of Incorporated Engineers	103	£32,962	£31,000
Society of Operations Engineers	50	£29,972	£28,825

16. Which of the following were significant factors in your initial decision to join your Institution?

This question was not included in 2003.

Respondents could give more than one answer at this question.

	(N=3,446)
I felt it would be helpful in my career development	78.9%
I felt it would be helpful in keeping up to date with the profession	44.0%
I was encouraged to do so by my employer	21.1%
I was encouraged to do so by colleagues/friends	12.7%
None of the above	2.2%

More than three in four respondents, when asked to name the significant factors in their initial decision to join their institution, answered that they felt it would be helpful to their career development (78.9%). Over four in 10 indicated that they felt it would be helpful in keeping up to date with the profession (44.0%).

	Chartered Engineer (N=2,487)	Incorporated Engineer (N=736)	Engineering Technician (N=223)
I felt it would be helpful in my career development	81.8%	72.2%	69.1%
I felt it would be helpful in keeping up to date with the profession	41.4%	49.5%	54.4%
I was encouraged to do so by my employer	23.7%	15.4%	11.2%
I was encouraged to do so by colleagues/friends	11.2%	16.6%	17.5%
None of the above	2.3%	2.1%	1.5%

Analysis of these responses by section of registration shows that 81.8% of Chartered Engineers felt that a significant factor in their initial decision to join their institution was that they felt it would be helpful in their career development, while the same reason was mentioned by 72.2% of Incorporated Engineers and 69.1% of Engineering Technicians.

Conversely, 54.4% of Engineering Technicians mentioned that a significant factor for them joining their institution was that they felt it would be helpful in keeping up to date with their profession. This reason was given by a smaller proportion of Chartered Engineers (41.4%) and Incorporated Engineers (49.5%).

The table on the following page shows that in each of the institutions there are varying degrees of importance placed on the significant factors respondents gave in their initial decision to join their institution. The most likely group to have stated that they felt it would be helpful in their career development are those who previously stated that their Institute of Civil Engineers membership is *most* relevant to their work (86.6%), while the group least likely to have stated the same are those who previously indicated that their Institute of Marine Engineering, Science and Technology membership is *most* relevant to their work (59.0%).

On the other hand, those who previously stated that their Institution of Civil Engineers membership is *most* relevant to their work are the least likely group (24.2%) to have stated that they felt it would be helpful in keeping up to date with the profession as a significant factor in their initial decision to join their institution, while the group most likely to have stated the same are those who previously indicated that their Society of Operations Engineers membership is the *most* relevant to their work (63.6%).

16. Which of the following were significant factors in your initial decision to join your Institution? ...Cont.

	N	I felt it would be helpful in my career development	I felt it would be helpful in keeping up to date with the profession	I was encouraged to do so by my employer	I was encouraged to do so by colleagues/friends	None of the above
British Computer Society	149	78.1%	48.4%	10.0%	6.4%	4.6%
Chartered Institution of Building Services Engineers	112	80.5%	50.3%	14.4%	10.6%	4.4%
Chartered Institution of Water and Environmental Management	56	74.9%	36.7%	17.0%	21.4%	0.0%
IEE	675	79.4%	43.1%	19.6%	14.5%	2.7%
Institute of Marine Engineering, Science and Technology	70	59.0%	50.9%	14.3%	12.9%	1.9%
Institute of Materials, Minerals and Mining	87	83.1%	49.4%	28.6%	12.2%	0.8%
Institution of Chemical Engineers	159	79.1%	49.1%	21.4%	6.4%	1.7%
Institution of Civil Engineers	439	86.6%	24.2%	28.3%	9.6%	2.3%
Institution of Gas Engineers and Managers	56	81.0%	50.0%	39.0%	22.8%	0.0%
Institution of Incorporated Engineers	270	74.1%	51.9%	12.0%	20.3%	2.4%
Institution of Mechanical Engineers	446	81.8%	41.2%	25.3%	9.0%	1.1%
Institution of Structural Engineers	107	81.5%	31.9%	26.2%	15.1%	5.1%
Royal Aeronautical Society	80	68.9%	51.9%	28.2%	14.1%	2.6%
Society of Operations Engineers	72	65.6%	63.6%	11.3%	10.9%	4.8%

17. Which one of the following is your preferred means for your Institution to contact you?

This question was not included in 2003.

(N=3,350)	
Your institution journal	46.7%
Occasional direct paper-based mail	21.7%
Electronic-based direct mail	22.1%
Electronic magazine (e-zine)	2.9%
A web-site	1.8%
Telephone contact	0.4%
No view	4.5%

Over 9 in 20 of all respondents (46.7%) stated that their preferred means for their institution to contact them was via their institution journal. Roughly 1 in 5 respondents (22.1%) selected electronic based direct mail and a similar proportion (21.7%) opted for occasional direct paper-based mail, as the preferred means for their institution to contact them.

	Chartered Engineer (N=2,433)	Incorporated Engineer (N=702)	Engineering Technician (N=215)
Your institution journal	43.9%	53.7%	55.3%
Occasional direct paper-based mail	22.1%	21.2%	17.6%
Electronic-based direct mail	24.4%	16.3%	13.9%
Electronic magazine (e-zine)	3.0%	2.4%	3.8%
A web-site	1.7%	1.7%	3.1%
Telephone contact	0.2%	1.0%	1.0%
No view	4.6%	3.7%	5.3%

Across the sections of registration, Engineering Technicians are the most likely to mention the institution journal as their preferred means of contact (55.3%) with Chartered Engineers being the least likely (43.9%).

Another notable difference between these two groups is evident. Chartered Engineers are the most likely group to have stated a preference for electronic based direct mail (24.4%), while Engineering Technicians are the least likely group to have stated the same means of communication (13.9%).

17. Which one of the following is your preferred means for your Institution to contact you? ...Cont.

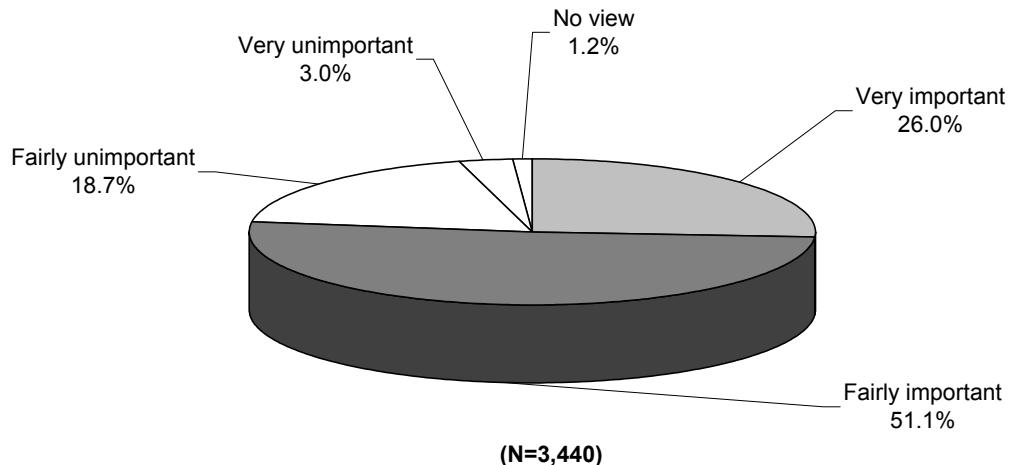
The table below shows that across the membership institutions respondents indicate different levels of preference for the means by which their institution contacts them.

Respondents who previously mentioned that their membership of the Institution of Incorporated Engineers is the *most* relevant to their work are most likely to prefer to be contacted via their institution journal (59.4%). Respondents who previously mentioned that their membership to the Institute of Materials, Minerals and Mining is the *most* relevant to their work are the most likely to prefer to be contacted by occasional direct paper based mail (34.8%). Respondents who previously mentioned that their membership of the British Computer Society is the *most* relevant to their work are most likely to prefer to be contacted by electronic based direct mail (32.0%).

	N	Your institution journal	Occasional direct paper-based mail	Electronic-based direct mail	Electronic magazine (e-zine)	A web-site	Telephone contact	No view
British Computer Society	142	24.2%	26.1%	32.0%	7.2%	4.8%	0.0%	5.7%
Chartered Institution of Building Services Engineers	111	51.4%	19.1%	22.9%	1.8%	2.2%	0.0%	2.6%
Chartered Institution of Water and Environmental Management	54	31.1%	22.2%	26.5%	10.1%	2.5%	0.0%	7.6%
IEE	659	42.9%	19.2%	28.1%	3.3%	1.3%	0.3%	4.9%
Institute of Marine Engineering, Science and Technology	67	47.6%	32.1%	9.4%	1.6%	4.6%	0.0%	4.7%
Institute of Materials, Minerals and Mining	87	45.8%	34.8%	11.7%	1.6%	1.7%	0.0%	4.4%
Institution of Chemical Engineers	159	53.4%	15.8%	21.4%	3.4%	1.7%	0.0%	4.3%
Institution of Civil Engineers	428	41.2%	30.6%	18.7%	2.6%	0.6%	0.4%	5.9%
Institution of Gas Engineers and Managers	54	52.3%	19.1%	22.1%	3.3%	0.0%	0.0%	3.3%
Institution of Incorporated Engineers	262	59.4%	18.6%	13.9%	1.9%	1.8%	0.8%	3.6%
Institution of Mechanical Engineers	435	41.4%	18.9%	28.0%	3.7%	1.7%	0.5%	5.8%
Institution of Structural Engineers	105	47.6%	21.3%	25.9%	0.7%	1.9%	0.0%	2.6%
Royal Aeronautical Society	78	55.4%	27.9%	12.4%	1.0%	0.5%	0.0%	2.8%
Society of Operations Engineers	68	52.1%	24.3%	17.5%	1.6%	1.0%	1.2%	2.2%

18. How important to you is your Institution membership?

This question was not included in 2003.



Over three in four respondents (77.1%) indicated that their institution membership is at least fairly important to them.

The table below shows that this is also true for each section of registration, although some small difference can be seen when comparing the groups. Incorporated Engineers are most likely to attach importance to their institutional membership (81.0%) while Chartered Engineers are slightly the least likely within the three groups (75.8%).

	Chartered Engineer (N=2,482)	Incorporated Engineer (N=735)	Engineering Technician (N=223)
Very important	25.9%	26.2%	26.3%
Fairly important	49.9%	54.8%	51.8%
Fairly unimportant	20.2%	14.3%	16.7%
Very unimportant	3.3%	2.3%	2.6%
No view	0.8%	2.4%	2.6%

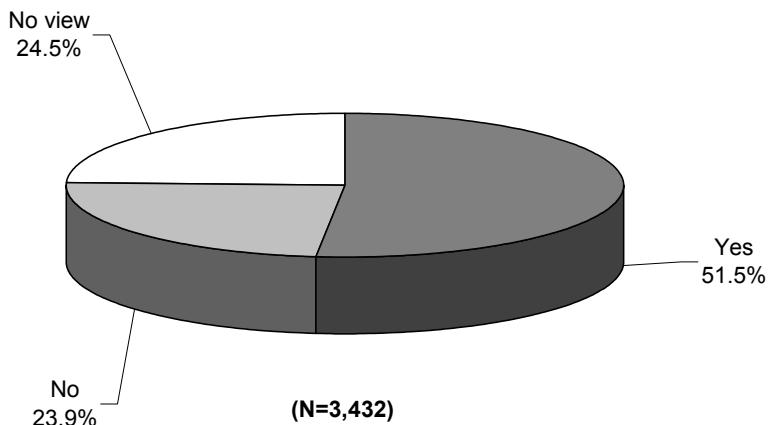
18. How important to you is your Institution membership? ...Cont.

	N	Very important	Fairly important	Fairly unimportant	Very unimportant	No view
British Computer Society	149	21.4%	55.0%	19.0%	3.6%	0.9%
Chartered Institution of Building Services Engineers	112	41.7%	51.4%	3.3%	0.6%	3.1%
Chartered Institution of Water and Environmental Management	56	26.8%	47.0%	23.1%	2.4%	0.7%
IEE	672	20.4%	53.4%	22.5%	2.7%	1.1%
Institute of Marine Engineering, Science and Technology	70	20.1%	59.8%	20.1%	0.0%	0.0%
Institute of Materials, Minerals and Mining	87	18.7%	51.1%	29.4%	0.8%	0.0%
Institution of Chemical Engineers	158	22.8%	56.9%	18.5%	1.7%	0.0%
Institution of Civil Engineers	440	23.1%	50.4%	22.1%	3.1%	1.3%
Institution of Gas Engineers and Managers	56	32.8%	48.3%	15.2%	2.4%	1.2%
Institution of Incorporated Engineers	270	25.5%	56.5%	14.4%	1.6%	2.0%
Institution of Mechanical Engineers	445	24.5%	47.1%	23.0%	4.8%	0.6%
Institution of Structural Engineers	107	45.9%	34.9%	10.9%	5.1%	3.2%
Royal Aeronautical Society	80	21.3%	51.5%	23.6%	2.7%	0.9%
Society of Operations Engineers	72	37.9%	49.2%	1 0.0%	1.0%	1.9%

The table above shows importance of institution membership broken down by the institution that is *most* relevant to the members work. It shows some variance in the level of importance placed by the respondent on the institution membership. The institutions whose members among our respondents are most likely to consider their institution membership to be important are the Chartered Institution of Building Services Engineers (93.1%), the Society of Operations Engineers (87.1%) and the Institution of Incorporated Engineers (82.0%).

19. In principle, might you be prepared to take part in a campaign to encourage more engineers to register?

This question was not included in 2003.



Just over half of all respondents (51.5%) stated that they might be prepared to take part in a campaign to encourage more engineers to register, with just under one in four (24.5%) stating that they have no view.

As can be seen in the table below, analysis across the sections of registration shows little difference in the proportion agreeing, but the Chartered Engineers are the most likely group to actively state that they would not be prepared to do so (25.4%), with the Engineering Technicians being the least likely group to state the same (18.9%).

	Chartered Engineer (N=2,481)	Incorporated Engineer (N=730)	Engineering Technician (N=222)
Yes	51.3%	52.5%	51.6%
No	25.4%	20.6%	18.9%
No view	23.4%	26.9%	29.6%

19. In principle, might you be prepared to take part in a campaign to encourage more engineers to register? ...Cont.

When looking at the breakdown of potential campaign participation and membership of institutions there are some notable difference between the institution memberships. The members of the Society of Operations Engineers (67.6%) are the most willing, in principle, to take part in a campaign to encourage more engineers to register followed by the members of the Chartered Institution of Building Services Engineers (61.7%) and the Institute of Marine Engineering, Science and Technology (60.6%). The respondents that are least likely to be prepared to take part in a campaign are members of the Institution of Civil Engineers (39.7%), the Institution of Gas Engineers and Managers (41.7%) and the Chartered Institution of Water and Environmental Management (43.3%).

Institutions with less than 50 responses are not shown here

	N	Yes	No	No view
British Computer Society	149	56.1%	21.7%	22.2%
Chartered Institution of Building Services Engineers	112	61.7%	13.0%	25.3%
Chartered Institution of Water and Environmental Management	56	43.3%	38.9%	17.9%
IEE	671	51.8%	22.3%	25.9%
Institute of Marine Engineering, Science and Technology	69	60.6%	15.4%	24.0%
Institute of Materials, Minerals and Mining	87	48.1%	21.1%	30.8%
Institution of Chemical Engineers	159	53.9%	20.5%	25.6%
Institution of Civil Engineers	437	39.7%	32.4%	27.9%
Institution of Gas Engineers and Managers	56	41.7%	33.1%	25.3%
Institution of Incorporated Engineers	269	57.7%	16.3%	25.9%
Institution of Mechanical Engineers	446	51.3%	25.2%	23.5%
Institution of Structural Engineers	107	52.4%	28.5%	19.2%
Royal Aeronautical Society	78	60.2%	22.8%	17.0%
Society of Operations Engineers	72	67.6%	15.5%	16.9%

CONTINUING PROFESSIONAL DEVELOPMENT

20. How important to you is Continuing Professional Development (CPD) in maintaining your professional qualifications, ensuring that your skills and expertise are relevant and up-to-date?

	2005 (N=3,425)	2003 (N=4,376)
Very important	26.3%	29.4%
Fairly important	42.0%	34.6%
Not very important	21.2%	20.9%
Not at all important	6.8%	12.0%
No view	3.7%	3.1%

Just over two thirds of all respondents (68.3%) stated that CPD is at least fairly important in maintaining their professional qualifications, which is a small increase on the figure from 2003 (64.0%).

The table below shows this increase is consistent across all the sections of registration. The largest rise is among Incorporated Engineers, with an increase of 7.8%. Interestingly at least three quarters of Incorporated Engineers (76.2%) and Engineering Technicians (78.4%) stated that CPD is at least fairly important in maintaining their professional qualifications which compares to under two thirds of Chartered Engineers (65.1%).

	2005 Chartered Engineer (N=2,472)	2003 Chartered Engineer (N=3,320)	2005 Incorporated Engineer (N=730)	2003 Incorporated Engineer (N=819)	2005 Engineering Technician (N=223)	2003 Engineering Technician (N=238)
Very important	23.8%	28.6%	31.2%	30.3%	38.3%	37.6%
Fairly important	41.3%	33.5%	45.0%	38.1%	40.1%	36.9%
Not very important	23.2%	21.7%	16.6%	19.7%	14.0%	14.6%
Not at all important	8.1%	13.2%	3.6%	8.4%	2.6%	7.3%
No view	3.6%	3.0%	3.6%	3.5%	5.0%	3.6%

CATALYST

21. In the last 3 months, have you received the ETB's monthly newsletter 'Catalyst'?

This question was not included in 2003.

(N=3,435)	
Yes	7.4%
No	70.1%
Don't know/Can't remember	22.5%

Less than one in every 13 respondents (7.4%) who answered this question stated that they had received the ETB's monthly newsletter 'Catalyst' in the last 3 months. Just over seven in 10 respondents (70.1%) stated they had not received 'Catalyst' and more than one in five stated they did not know or could not remember whether or not they had received 'Catalyst' in the last 3 months.

Less than one in 10 respondents in each of the sections of registration actively stated that they could recall receiving 'Catalyst' in the last 3 months.

	Chartered Engineer (N=2,482)	Incorporated Engineer (N=731)	Engineering Technician (N=222)
Yes	8.6%	4.2%	5.2%
No	67.8%	75.4%	77.3%
Don't know/Can't remember	23.6%	20.5%	17.6%

22. Do you receive Catalyst:

This question was not included in 2003.

Only those respondents who have received the ETB monthly newsletter ‘Catalyst’ in the last 3 months were asked to answer this question.

(N=228)	
Direct from the ETB	30.3%
From your engineering institution	32.2%
Don't know/Can't remember	37.5%

Over one third of respondents (37.5%) who stated previously that they had received ‘Catalyst’ in the last three months stated they ‘don’t know/can’t remember’ where they received it from. Over three in 10 respondents (32.2%) stated that they received it from their engineering institution and slightly less direct from the ETB (30.3%).

	Chartered Engineer (N=193)	Incorporated Engineer (N=24)	Engineering Technician (N=10)
Direct from the ETB	30.3%	31.4%	28.0%
From your engineering institution	31.0%	37.1%	44.0%
Don't know/Can't remember	38.7%	31.4%	28.0%

The table above shows these responses by each type of engineer among the small number of respondents who previously indicated that they have received ‘Catalyst’ in the last 3 months. Engineering Technicians are the most likely to have stated that they received the newsletter from their engineering institution (44.0%), while Incorporated Engineers are most likely to have stated that they received it directly from the ETB. Chartered Engineers are the most likely to have stated that they don’t know or can’t remember where they received it from.

SALARY EXPECTATIONS

23. Which of the following do you believe to be the average annual starting salary for a graduate engineer?

This question was not included in 2003.

(N=3,431)	
Up to £15,000	3.7%
£15,001 - £18,000	28.0%
£18,001 - £21,000	44.1%
£21,001 - £24,000	15.8%
More than £24,000	2.9%
No view	5.5%

Over four in 10 respondents who answered this question (44.1%) believe £18,001 - £21,000 to be the average annual starting salary for a graduate engineer. Just under three in 10 respondents (28.0%) believe £15,001 - £18,000 to be the starting salary.

Across the three sections of registration, respondents from the Chartered Engineers section (47.4%) are most likely to believe that graduate salaries are £18,001 - £21,000, compared to Incorporated Engineers (36.6%) and Engineering Technicians (31.6%). However, Chartered Engineers are also the least likely group (2.0%) to believe that the starting salary of a graduate engineer is more than £24,000, against 4.7% of Incorporated Engineers and 7.2% of Engineering Technicians.

	Chartered Engineer (N=2,481)	Incorporated Engineer (N=730)	Engineering Technician (N=221)
Up to £15,000	3.2%	4.7%	5.6%
£15,001 - £18,000	27.3%	31.1%	25.7%
£18,001 - £21,000	47.4%	36.6%	31.6%
£21,001 - £24,000	15.6%	15.5%	19.3%
More than £24,000	2.0%	4.7%	7.2%
No view	4.5%	7.4%	10.6%

24. Generally, how do you think graduate starting salaries for engineers compare to those for other professions (e.g. Accountancy, Law, Architecture, Medicine)?

This question was not included in 2003.

(N=3,434)	
Very favourably	0.9%
Fairly favourably	7.7%
Similar	23.7%
Fairly unfavourably	44.5%
Very unfavourably	14.2%
No view	9.0%

Less than one in 10 respondents (8.6%) think that graduate starting salaries for engineers compare at least fairly favourably to those for other professions. Nearly six in 10 respondents (58.7%) think salaries compare, at best, fairly unfavourably.

Interestingly, analysis across the sections of registration shows that nearly one in 10 Chartered Engineers (9.5%) think starting salaries are at least fairly favourable compared to Incorporated Engineers (6.5%) and Engineering Technicians (6.0%). It is worth noting that Chartered Engineers tend to be the most highly paid group followed by the Incorporated Engineers and then Engineering Technicians.

Incorporated Engineers (60.2%) are most likely to think starting salaries are at best fairly unfavourable compared to Chartered Engineers (58.5%) and Engineering Technicians (55.8%).

	Chartered Engineer (N=2,479)	Incorporated Engineer (N=732)	Engineering Technician (N=223)
Very favourably	1.0%	0.7%	0.7%
Fairly favourably	8.5%	5.8%	5.3%
Similar	24.4%	22.0%	21.4%
Fairly unfavourably	44.6%	45.2%	40.7%
Very unfavourably	13.9%	15.0%	15.1%
No view	7.6%	11.3%	16.8%

25. Generally, how do you think average mid career salaries compare to those for other professions (e.g. Accountancy, Law, Architecture, Medicine)?

This question was not included in 2003.

(N=3,434)	
Very favourably	0.2%
Fairly favourably	2.6%
Similar	7.7%
Fairly unfavourably	55.1%
Very unfavourably	30.3%
No view	4.1%

Among all respondents who answered this question, just over 17 in 20 (85.4%) think average mid career salaries compare at best fairly unfavourably to those for other professions. Just one in 35 respondents (2.8%) think salaries compare at least fairly favourably.

86.1% of Chartered Engineers stated that average mid career salaries are at best fairly unfavourable, a view taken by 84.1% of Incorporated Engineers and 81.0% of Engineering Technicians.

	Chartered Engineer (N=2,479)	Incorporated Engineer (N=733)	Engineering Technician (N=222)
Very favourably	0.2%	0.3%	0.4%
Fairly favourably	2.5%	3.1%	2.2%
Similar	7.8%	7.5%	7.6%
Fairly unfavourably	54.2%	57.6%	56.3%
Very unfavourably	31.9%	26.5%	24.7%
No view	3.3%	5.0%	8.9%