THE ENGINEERING AND TECHNOLOGY BOARD 2003 SURVEY OF REGISTERED ENGINEERS

FULL REPORT

Prepared for:

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INTRODUCTION

THE ENGINEERING AND TECHNOLOGY BOARD

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.

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 ETB, visit:

www.etechb.co.uk

BACKGROUND

ERS Market Research has bi-annually since 1995 (and annually since 1997) been commissioned to conduct a major survey of Registered Engineers. In previous years, we have been commissioned to do this by the Engineering Council. This year, the commission has come from the Engineering and Technology Board, following its establishment to work alongside the Engineering Council.

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

This year, the Engineering and Technology Board has been particularly keen to research the views and circumstances of Incorporated Engineers and Engineering Technicians who, in combination, account for around a quarter of ETB 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 Engineering and Technology Board provided us with names and addresses of 15,000 members. All had UK based registered addresses and each was believed to be aged under 65.

The questionnaire took the form of a four-page document and was sent along with a letter of introduction from Mr. Alan Clark, Chief Executive Officer of the Engineering and Technology Board. In his letter, Mr. Clark 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 Market Research was also included in the mailing.

Questionnaires were sent to the sample of Registered Engineers by ERS Market Research on Monday 28th July 2003. By the extended closing date of 29th August, 4,448 completed questionnaires had been received at our offices, giving us a response rate of 29.6%. Unweighted response rates by Sector of Registration were 30.0% (Chartered Engineers), 31.3% (Incorporated Engineers) and 24.8% (Engineering Technicians).

This Full Report shows the overall response to each question together with in-depth question on question analysis 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.

SUMMARY OF KEY FINDINGS

Among our respondents:

- 75.9% are Chartered Engineers;
- 18.6% are Incorporated Engineers;
- 5.4% are Engineering Technicians;

These figures reflect the weightings. The unweighted proportions are 43.5%, 40.5% and 16.0% respectively;

8.8% were unemployed and seeking re-employment at some time during the year ending 5th April 2003;

This is true of:

- 9.2% of Chartered Engineers;
- 7.3% of Incorporated Engineers;
- 7.9% of Engineering Technicians;

Chartered Engineers had average earnings of £49,088 – 5.5% below the 2002 figure;

Incorporated Engineers had average earnings of £37,845 - 5.4% above the 2002 figure;

Engineering Technicians had average earnings of £32,993 - 3.0% below the 2002 figure;

Chartered Engineers had median earnings of £43,477 – 2.3% above the 2002 figure;

Incorporated Engineers had median earnings of £34,000 – no change from the 2002 figure;

Engineering Technicians had median earnings of £29,000 – 1.8% above the 2002 figure;

75.1% would recommend registration to a colleague who was not a registered engineer;

This is true of:

- 74.3% of Chartered Engineers;
- 78.6% of Incorporated Engineers;
- 73.1% of Engineering Technicians;

SUMMARY OF KEY FINDINGS …CONT.

Among those in employment:

46.6% have their subscription and registration fees paid for by their employer;

This is true of:

- 50.4% of Chartered Engineers;
- 38.1% of Incorporated Engineers;
- 26.6% of Engineering Technicians;

57.1% receive financial support from their employer for their professional development;

This is true of:

- 57.5% of Chartered Engineers;
- 56.6% of Incorporated Engineers;
- 53.3% of Engineering Technicians;

Among all respondents:

1.4% became a registered Incorporated Engineer or Engineering Technician in the last 12 months;

This is true of:

- 0.9% of Chartered Engineers;
- 2.1% of Incorporated Engineers;
- 5.5% of Engineering Technicians;

When asked to consider the main reason for their non-registered colleagues being put off registering:

- 55.1% feel that it is because 'they see no career benefits in registration';
- 7.5% feel that it is because 'there is no legal requirement to register';
- 5.0% feel that it is because 'they are not aware of the opportunity';

SUMMARY OF KEY FINDINGS …CONT.

69.2% feel that the title 'Incorporated Engineer' is satisfactory;

This is true of:

- 65.7% of Chartered Engineers;
- 76.6% of Incorporated Engineers;
- 89.3% of Engineering Technicians;

33.1% believe that registered engineers should undergo regular voluntary revalidation in the future;

This is true of:

- 33.4% of Chartered Engineers;
- 30.1% of Incorporated Engineers;
- 39.4% of Engineering Technicians;

36.7% would be prepared to regularly undergo voluntary revalidation if the one-off cost was estimated to be less than £50;

This is true of:

- 37.1% of Chartered Engineers;
- 34.4% of Incorporated Engineers;
- 39.3% of Engineering Technicians;

15.1% would be prepared to regularly undergo voluntary revalidation if the one-off cost was estimated to be between £50-£100;

This is true of:

- 15.9% of Chartered Engineers;
- 11.7% of Incorporated Engineers;
- 15.2% of Engineering Technicians;

SUMMARY OF KEY FINDINGS …CONT.

2.8% would be prepared to regularly undergo voluntary revalidation if the one-off cost was estimated to be more than £100;

This is true of:

- 3.1% of Chartered Engineers;
- 1.9% of Incorporated Engineers;
- 1.3% of Engineering Technicians;

64.0% indicated that Continuing Professional Development (CPD) in maintaining their professional qualifications and ensuring their skills and expertise are relevant and up-to-date is at least fairly important to them;

This is true of:

- 62.1% of Chartered Engineers;
- 68.4% of Incorporated Engineers;
- 74.5% of Engineering Technicians;

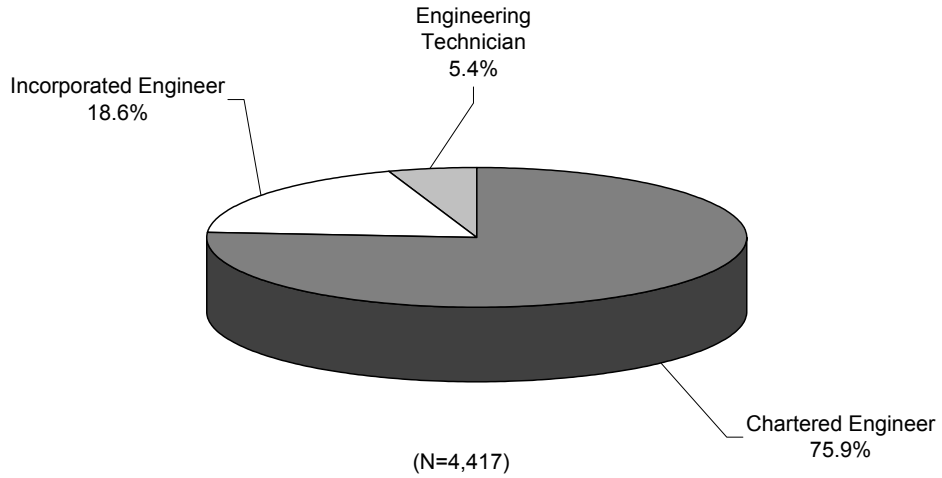
6.2% feel that the formation of the Engineering and Technology Board, working alongside the Engineering Council (UK), has lead to more effective promotion for engineering and engineers; 2.8% feel that promotion has been less effective;

Those feeling that it has lead to more effective promotion include:

- 4.5% of Chartered Engineers (3.1% feel that promotion has been less effective);
- 10.6% of Incorporated Engineers (1.7% feel that promotion has been less effective);
- 13.4% of Engineering Technicians (1.6% feel that promotion has been less effective).

PROFILE OF RESPONDENTS

1. Please indicate your Section of Registration:



The actual proportion of respondents in each of the three sections was markedly different from last year due to over sampling of both the Incorporated Engineers and the Engineering Technicians. To compensate for this over sampling, a weighting was applied to the results to reflect the actual proportions of each section of registration.

These figures are unweighted.

	2003 (N=4,425)	2002 (N=3,660)
Chartered Engineer	43.5%	72.2%
Incorporated Engineer	40.5%	23.4%
Engineering Technician	16.0%	4.5%

The figures for 2003 are weighted.

	2003 (N=4,417)	2002 (N=3,660)
Chartered Engineer	75.9%	72.2%
Incorporated Engineer	18.6%	23.4%
Engineering Technician	5.4%	4.5%

2. Are you:

	2003 (N=4,396)	2002 (N=3,658)
Male	96.4%	96.7%
Female	3.6%	3.3%

This year, as last, the overwhelming majority of our respondents are male – a fact which holds true in each section of registration. This is entirely consistent with the gender profile of registrants as a whole.

	2003 Chartered Engineer (N=3,336)	2002 Chartered Engineer (N=2,639)	2003 Incorporated Engineer (N=821)	2002 Incorporated Engineer (N=854)	2003 Engineering Technician (N=240)	2002 Engineering Technician (N=163)
Male	95.6%	95.9%	99.3%	98.9%	98.4%	98.8%
Female	4.4%	4.1%	0.7%	1.1%	1.6%	1.2%

3. Were you unemployed and seeking re-employment at any time during the year ending 5th April 2003?

	2003 (N=4,356)	2002 (N=3,643)
Yes	8.8%	7.8%
No	91.2%	92.2%

As can be seen above, there has been a slight increase since the 2002 survey in the proportion of respondents who indicated that, during the previous financial year, they have experienced a period of unemployment during which they have been seeking re-employment. This is reflected in the results for both Chartered Engineers and Engineering Technicians. Incorporated Engineers show a decrease in the proportion of respondents indicating this from 8.5% to 7.3%.

	2003 Chartered Engineer (N=3,304)	2002 Chartered Engineer (N=2,629)	2003 Incorporated Engineer (N=814)	2002 Incorporated Engineer (N=850)	2003 Engineering Technician (N=237)	2002 Engineering Technician (N=162)
Yes	9.2%	7.6%	7.3%	8.5%	7.9%	6.8%
No	90.8%	92.4%	92.7%	91.5%	92.1%	93.2%

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

	2003 (N=4,363)	2002 (N=3,627)
An employee	73.3%	72.0%
Self employed (including principal or partner in a firm)	9.4%	9.5%
Contract worker	2.7%	2.2%
Retired early (before expected age)	6.4%	7.3%
Retired or partially retired	6.1%	7.0%
Unemployed and seeking re-employment	1.8%	1.6%
In receipt of long term sickness benefit	0.2%	0.3%
Student receiving a tax-free grant or on reduced pay from your employer	0.1%	0.1%

In figures which are very similar to last year, more than seven in ten respondents (73.3%) who answered this question are found to be employees, one in eight (12.5%) is partially or fully retired, which is down slightly from 2002, and slightly less than one in 10 are self-employed (9.4%).

The table below shows that Engineering Technicians (who tend to be younger) are least likely among all groups to be retired and most likely to be employees.

	2003 Chartered Engineer (N=3,311)	2002 Chartered Engineer (N=2,616)	2003 Incorporated Engineer (N=814)	2002 Incorporated Engineer (N=846)	2003 Engineering Technician (N=238)	2002 Engineering Technician (N=163)
An employee	72.1%	71.3%	76.8%	74.2%	78.1%	73.6%
Self employed (including principal or partner in a firm)	9.7%	9.7%	7.5%	8.3%	10.7%	11.7%
Contract worker	2.9%	1.7%	2.3%	3.5%	1.9%	2.5%
Retired early (before expected age)	6.5%	7.7%	6.5%	7.1%	5.3%	3.1%
Retired or partially retired	6.6%	7.8%	4.9%	4.7%	2.7%	6.1%
Unemployed and seeking re-employment	1.8%	1.6%	1.9%	1.4%	0.7%	1.8%
In receipt of long term sickness benefit	0.2%	0.1%	0.2%	0.6%	0.4%	1.2%
Student receiving a tax-free grant or on reduced pay from your employer	0.2%	0.1%	0.0%	0.1%	0.1%	0.0%

INCOME

5. 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 2003.

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 2002/03 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 2002 and 5th April 2003.

			Average basic income	Median basic income
2003	Chartered Engineer	(N=1,506)	£46,441	£42,000
2002	Chartered Engineer	(N=2,009)	£48,629	£40,000
2003	Incorporated Engineer	(N=1,450)	£35,414	£32,851
2002	Incorporated Engineer	(N= 675)	£34,168	£32,000
2003	Engineering Technician	(N= 590)	£30,609	£27,500
2002	Engineering Technician	(N= 132)	£32,217	£26,750

The table above shows the average and median basic income (i.e. discounting any bonus and/or commission payments) of respondents, analysed by section of registration, from the 2003 and 2002 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.

There is a decrease in average basic income from the 2002 survey among Chartered Engineers and Engineering Technicians of 4.5% and 5.0% respectively. The average basic income of Incorporated Engineers has increased by 3.6%. There is a rise in median basic income for each of the three types of engineer. In the case of Engineering Technicians, however, we need to be cautious about reading too much into this, given the relatively small number of respondents involved in 2002. The increase for Chartered Engineers is 5.0%, Incorporated Engineers 2.7% and Engineering Technicians 2.8%.

6. Please enter all overtime, bonus and commission payments received in the 12 months to 5th April 2003.

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

The table below shows the average 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 a 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
2003	Chartered Engineer	(N=1,506)	£2,647
2002	Chartered Engineer	(N=2,009)	£3,330
2003	Incorporated Engineer	(N=1,450)	£2,432
2002	Incorporated Engineer	(N= 675)	£1,754
2003	Engineering Technician	(N= 590)	£2,384
2002	Engineering Technician	(N= 132)	£1,797

The table above shows the average bonus given by all respondents who indicated that they have been in full time work throughout the year and shows how the averages from 2003 compare with those from 2002. Among Chartered Engineers the average bonus has decreased by 20.5%. This contrasts with the Incorporated Engineers and Engineering Technicians average bonus which have both increased - by 38.7% and 32.7% respectively.

6. Please enter all overtime, bonus and commission payments received in the 12 months to 5th April 2003. …Cont.

The table below shows the average and median bonuses from the 2003 and 2002 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
2003	Chartered Engineer	(N=605)	£6,590	£3,200
2002	Chartered Engineer	(N=875)	£7,645	£4,000
2003	Incorporated Engineer	(N=593)	£5,946	£2,825
2002	Incorporated Engineer	(N=278)	£4,260	£3,000
2003	Engineering Technician	(N=234)	£6,012	£3,000
2002	Engineering Technician	(N= 57)	£4,162	£3,000

The average bonus among those respondents that received a bonus has risen for both Incorporated Engineers and Engineering Technicians by £1,686 (39.6%) and £1,850 (44.4%) respectively. The average bonus among Chartered Engineers who received a bonus has fallen by £1,055 (13.8%). These results show roughly the same percentage changes as the average bonuses amongst all respondents (i.e. not just those who received a bonus). The median bonus among bonus recipients has fallen for Chartered Engineers and Incorporated Engineers by £800 and £175 respectively. The median for Engineering Technicians has remained the same for the third year in a row.

AVERAGE AND MEDIAN EARNINGS

The tables which follow show the average earnings of our 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).

Once 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
2003	Chartered Engineer	(N=1,506)	£49,088	£43,477
2002	Chartered Engineer	(N=2,009)	£51,960	£42,500
2003	Incorporated Engineer	(N=1,450)	£37,845	£34,000
2002	Incorporated Engineer	(N= 675)	£35,922	£34,000
2003	Engineering Technician	(N= 590)	£32,993	£29,000
2002	Engineering Technician	(N= 132)	£34,014	£28,500

The table above shows the average and median earnings (basic income plus bonus/ commission) of respondents in 2003 and 2002, analysed by section of registration.

The average earnings for Chartered Engineers and Engineering Technicians have seen a decrease since last year by 5.5% and 3.0% respectively, whereas the average earnings of Incorporated Engineers have increased by 5.4% since 2002. Nevertheless, there is an increase in median earnings for Chartered Engineers (2.3%) and Engineering Technicians (1.8%) while the median earnings for Incorporated Engineers have remained static.

AVERAGE AND MEDIAN EARNINGS …CONT.

The tables below show the earnings by decile for each section of registration, such that, in the case of Chartered Engineers, the 10% decile figure represents the earnings of the 151st respondent (10% of the 1,509 respondents) and the 90% decile figure represents the earnings of the 1,358th respondent (90% of the 1,506 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.

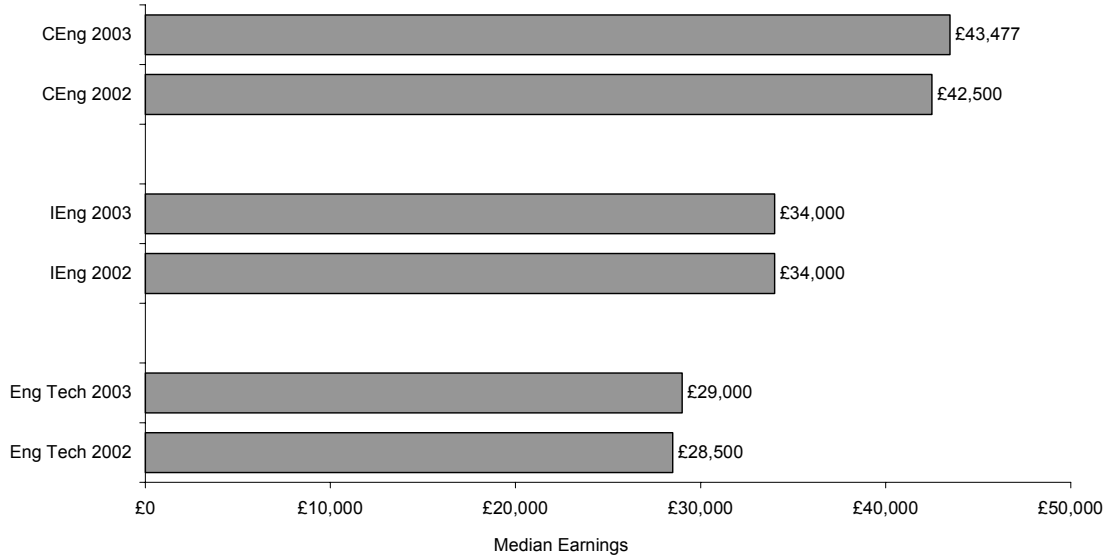
	Chartered Engineer	Incorporated Engineer	Engineering Technician
10% Decile	£28,056	£23,604	£19,309
20% Decile	£32,900	£26,834	£22,009
30% Decile	£36,201	£29,905	£25,000
40% Decile	£40,000	£31,810	£27,000
50% Decile	£43,477	£34,000	£29,000
60% Decile	£48,000	£37,000	£32,000
70% Decile	£53,000	£40,000	£34,000
80% Decile	£62,000	£46,000	£39,080
90% Decile	£76,060	£55,000	£49,000

	Chartered Engineer 2003	Chartered Engineer 2002	Incorporated Engineer 2003	Incorporated Engineer 2002	Engineering Technician 2003	Engineering Technician 2002
10% Decile	£28,056	£29,140	£23,604	£23,074	£19,309	£19,510
20% Decile	£32,900	£32,910	£26,834	£26,000	£22,009	£23,285
30% Decile	£36,201	£36,000	£29,905	£28,500	£25,000	£25,000
40% Decile	£40,000	£39,500	£31,810	£31,000	£27,000	£26,040
50% Decile	£43,477	£42,500	£34,000	£34,000	£29,000	£28,500
60% Decile	£48,000	£46,500	£37,000	£36,079	£32,000	£31,960
70% Decile	£53,000	£52,000	£40,000	£40,000	£34,000	£35,730
80% Decile	£62,000	£60,000	£46,000	£45,000	£39,080	£40,000
90% Decile	£76,060	£75,000	£55,000	£50,700	£49,000	£45,719

The table above shows the deciles for 2003 compared to 2002. Chartered Engineers show an increase on last year's figures for all the deciles from 30% to 90%. The lowest 20% show marginal decreases on the 2002 figures. The pattern for Incorporated Engineers shows figures in each decile that are at least the same as - or an increase on - the 2002 results, the greatest increase being the 90% group or the top ten percent of earners. Engineering Technicians show the greatest fluctuation in figures. At both the 70% and 80% and lowermost 2 deciles there is a decrease in the 2003 results compared to 2002. The middle deciles from 30% to 60% remain the same or increase. Caution should be given to close comparison here due to the low number of Engineering Technicians sampled in 2002.

AVERAGE AND MEDIAN EARNINGS …CONT.

The chart below shows the median earnings for each section of registration from the 2003 survey, alongside those from the survey conducted in 2002.



The table below, showing the change in median earnings from the 2002 survey to the 2003 survey, reveals that for both Chartered Engineers and Engineering Technicians there is an increase in the median of 2.3% and 1.8% respectively. The median for Incorporated Engineers has remained the same.

	Actual change in median earnings	Percentage change in median earnings
Chartered Engineer	+ £977	2.3%
Incorporated Engineer	£ 0	0.0%
Engineering Technician	+ £500	1.8%

The following table shows that the change in average earnings varies across the three sections with Incorporated Engineers increasing by 5.4% and Chartered Engineers and Engineering Technicians decreasing by 5.5% and 3.0% respectively. Again it must be considered that the 2002 sample for Engineering Technicians was very low.

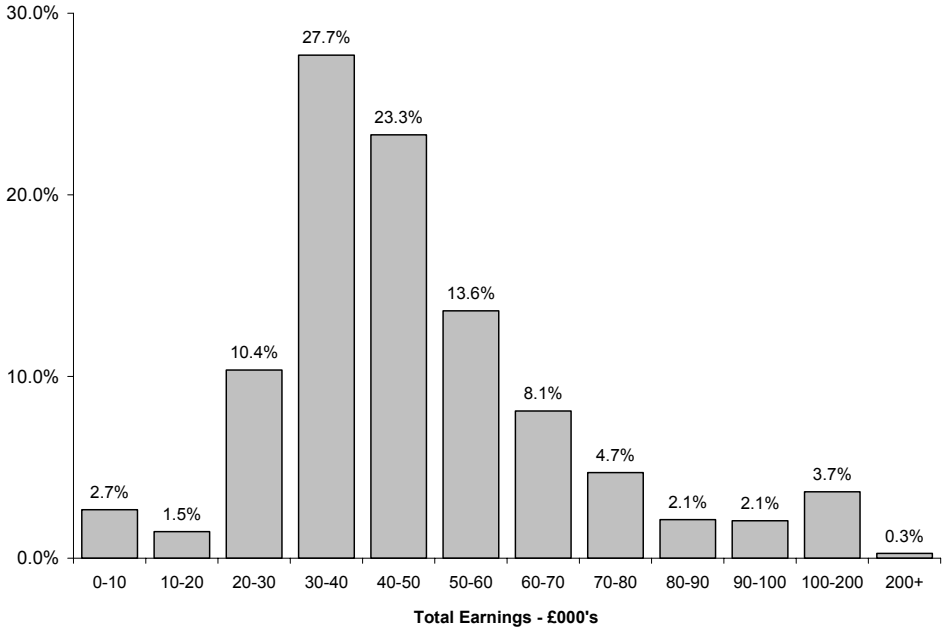
	Actual change in average earnings	Percentage change in average earnings
Chartered Engineer	- £2,872	-5.5%
Incorporated Engineer	+ £1,923	+5.4%
Engineering Technician	- £1,021	-3.0%

AVERAGE AND MEDIAN EARNINGS …CONT.

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

As previously, 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

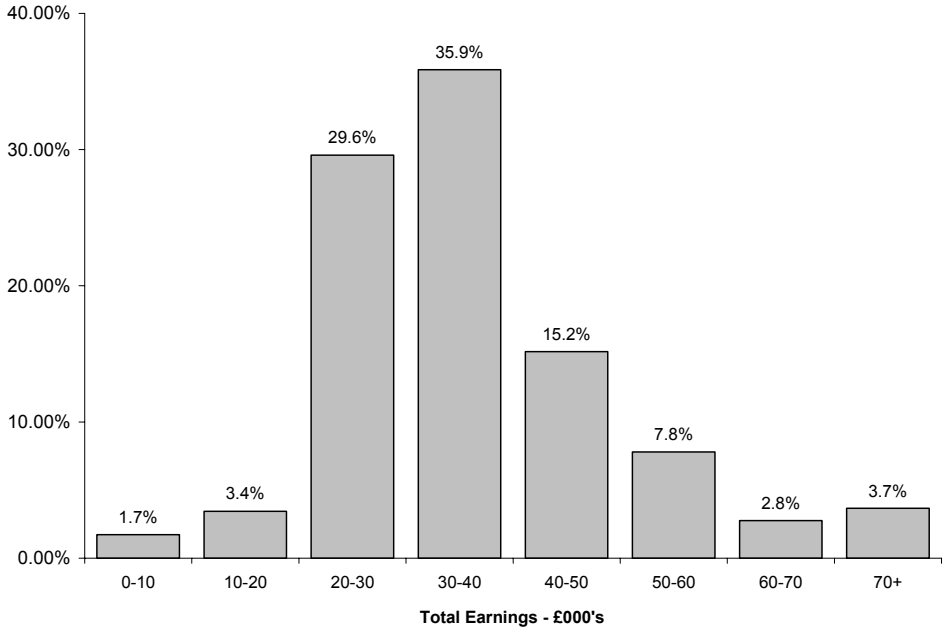


As can be seen above, more than half of Chartered Engineers responding (51.0%) had total earnings in the last financial year of between £30,001 and £50,000. This compares to 54.1% for 2002 with total earnings in the same bracket. Four (just over one in 300) Chartered Engineers have total annual earnings in excess of £200,000.

AVERAGE AND MEDIAN EARNINGS …CONT.

INCORPORATED ENGINEER

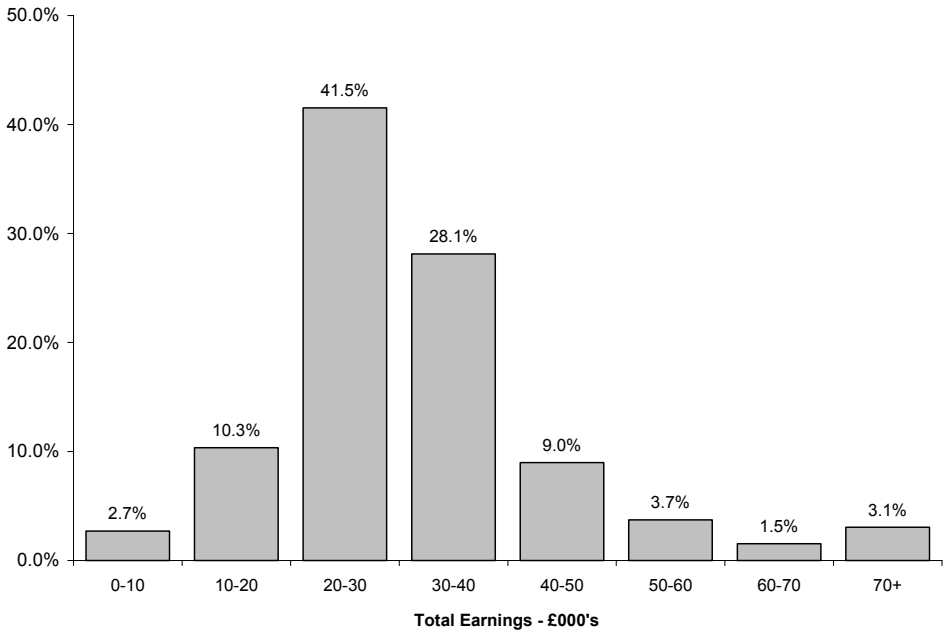
The table below, showing the total earnings of Incorporated Engineer respondents in the year up to 5th April 2003, reveals that the clear majority (65.5%) earn between £20,001 and £40,000. This figure is about the same as last year when 65.0% fell into this bracket.



AVERAGE AND MEDIAN EARNINGS …CONT.

ENGINEERING TECHNICIAN

In 2003 69.6% of Engineering Technicians stated that they earned between £20,001 and £40,000 as can be seen below. This shows a slight increase from 68.2% in 2002.



ETHNIC GROUP

7. Please tick the appropriate box:

The options used in the 2002 survey are too different to allow for any meaningful comparison.

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

As can be seen above, a vast majority (97.3%) of participants gave their ethnic group as White British or White Other. This is true of a minimum of 97.1% of respondents giving each section of registration.

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

FIELD OF WORK

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer.

	2003 (N=4,257)	2002 (N=3,499)
Agriculture, forestry and fishing	0.3%	0.3%
Petroleum, petrochemicals	5.2%	4.7%
Nuclear fuel processing	1.2%	1.0%
Electricity supply and distribution	4.3%	4.7%
Gas supply and distribution	1.5%	1.3%
Other forms of energy-supply/distribution	0.4%	0.2%
Water supply industry	2.8%	2.7%
Mining and quarrying	0.7%	0.7%
Metal manufacturing	1.3%	1.4%
Chemical and pharmaceutical industry	3.3%	3.1%
Man-made fibres production	0.1%	0.1%
Non-metallic mineral manufacture	0.1%	0.1%
Manufacturing systems engineering	0.8%	0.9%
Industrial plant and steelwork	0.7%	0.6%
Machine tools manufacture	0.1%	0.1%
Other mechanical engineering	1.7%	1.7%
Office machinery and computer manufacture	0.3%	0.3%
Information systems engineering	3.7%	4.7%
Electronic and telecommunications equipment manufacture	3.2%	3.3%
Electrical machinery or equipment manufacture	1.3%	1.3%
Motor vehicles and parts manufacture	1.9%	1.8%
Shipbuilding and repair	1.1%	1.0%
Aerospace manufacture	5.0%	3.8%
Instrument engineering	0.6%	0.8%
Other metal goods manufacture	0.7%	0.7%
Food, drink and tobacco manufacture	0.9%	1.1%
Other manufacturing industries	2.2%	2.5%
Construction	7.2%	7.8%
Distribution, hotels and catering	0.2%	0.3%
Repairs of consumer goods and vehicles	0.3%	0.1%
Transport operation and maintenance	3.6%	3.8%
Postal services and telecommunications	2.3%	2.6%
Banking, finance, insurance, business services	1.6%	1.9%
Consultants	16.3%	15.2%
National government administration	2.1%	2.6%
Local government administration	4.2%	4.7%
Higher education	3.6%	3.2%
Further education	1.0%	1.1%
School education	0.5%	0.4%
Research and development	2.0%	2.3%
Hospitals	1.2%	1.1%
Other medically related engineering	0.5%	0.4%
Professional institution/national body	0.5%	0.7%
Armed forces	3.3%	2.5%
Other engineering	4.7%	4.3%

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer. …Cont.

The table below shows further analysis of the responses to this question by section of registration.

	Chartered Engineer (N=3,224)	Incorporated Engineer (N=801)	Engineering Technician (N=232)
Agriculture, forestry and fishing	0.3%	0.2%	0.3%
Petroleum, petrochemicals	5.9%	3.1%	3.1%
Nuclear fuel processing	1.4%	0.8%	0.3%
Electricity supply and distribution	3.7%	6.8%	2.6%
Gas supply and distribution	1.4%	1.7%	1.3%
Other forms of energy-supply/distribution	0.3%	0.4%	0.7%
Water supply industry	2.9%	2.4%	2.3%
Mining and quarrying	0.8%	0.5%	0.1%
Metal manufacturing	1.2%	1.4%	1.2%
Chemical and pharmaceutical industry	3.8%	1.7%	1.0%
Man-made fibres production	0.1%	0.2%	0.0%
Non-metallic mineral manufacture	0.2%	0.0%	0.0%
Manufacturing systems engineering	0.5%	1.5%	2.1%
Industrial plant and steelwork	0.7%	0.5%	0.7%
Machine tools manufacture	0.1%	0.3%	0.0%
Other mechanical engineering	1.3%	2.8%	3.7%
Office machinery and computer manufacture	0.4%	0.1%	0.1%
Information systems engineering	4.3%	1.7%	1.0%
Electronic and telecommunications equipment manufacture	3.5%	2.1%	2.8%
Electrical machinery or equipment manufacture	1.2%	1.8%	1.5%
Motor vehicles and parts manufacture	1.9%	1.7%	1.9%
Shipbuilding and repair	1.1%	1.3%	0.9%
Aerospace manufacture	5.2%	3.7%	5.9%
Instrument engineering	0.6%	0.5%	0.4%
Other metal goods manufacture	0.7%	0.6%	0.3%
Food, drink and tobacco manufacture	0.9%	0.8%	0.9%
Other manufacturing industries	2.2%	2.0%	1.9%
Construction	7.4%	6.1%	7.8%
Distribution, hotels and catering	0.1%	0.5%	0.3%
Repairs of consumer goods and vehicles	0.0%	0.5%	3.1%
Transport operation and maintenance	2.9%	4.9%	9.3%
Postal services and telecommunications	2.2%	2.6%	2.6%
Banking, finance, insurance, business services	1.4%	2.1%	2.2%
Consultants	18.2%	11.7%	6.9%
National government administration	2.1%	2.1%	2.1%
Local government administration	3.5%	7.1%	3.8%
Higher education	4.3%	1.4%	0.4%
Further education	0.5%	2.4%	2.6%
School education	0.3%	0.9%	0.9%
Research and development	2.3%	1.2%	0.9%
Hospitals	0.8%	2.8%	1.6%
Other medically related engineering	0.3%	1.0%	1.0%
Professional institution/national body	0.4%	0.9%	0.9%
Armed forces	2.9%	4.0%	7.5%
Other engineering	3.8%	7.3%	9.0%

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer. …Cont.

As with this survey in previous years, the responses to the question shown on the previous two pages show that registered engineers work across a wide variety of fields and this reflects the diverse nature of the engineering profession as well as the variety of fields it is possible for engineers to work in.

The most prominent area, Consulting, has one in every six engineers (16.3%) indicating it as the most appropriate to their employers. This is most likely to be true of Chartered Engineers (18.2%) followed by Incorporated Engineers (11.7%) and a much smaller group of Engineering Technicians (6.9%). On the other hand, Construction, which is the second most prominent field of work (7.2%), has a more even spread of sections of registration working in it - Chartered Engineers (7.4%), Incorporated Engineers (6.1%) and Engineering Technicians (7.8%).

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer. …Cont.

The tables below and on the following page show the overall proportions of respondents from each of the 11 'Industry Level SIC 92' bands, which section of membership they belong to and how the 45 'employment groups' have been amalgamated into the 11 SIC codes.

	(N=4,257)
Agriculture	0.3%
Mining and Quarrying (Mining)	0.7%
Manufacturing	40.0%
Electricity, Gas and Water Supply (Utilities)	8.8%
Construction	7.2%
Wholesale and Retail Trade	0.4%
Transport and Communication	5.9%
Financial Intermediation (Finance and Business)	19.9%
Public Administration (Public Sector)	9.5%
Education, Health and Social Work	6.7%
Other Services (Other)	0.5%

It is clear from the above table that Manufacturing is the principal industry that our respondents work in, followed by Financial Intermediation (40.0% and 19.9% respectively).

	Chartered Engineer (N=3,224)	Incorporated Engineer (N=801)	Engineering Technician (N=232)
Agriculture	0.3%	0.2%	0.3%
Mining and Quarrying (Mining)	0.8%	0.5%	0.1%
Manufacturing	41.1%	35.9%	38.6%
Electricity, Gas and Water Supply (Utilities)	8.4%	11.3%	7.0%
Construction	7.4%	6.1%	7.8%
Wholesale and Retail Trade	0.1%	1.0%	3.4%
Transport and Communication	5.1%	7.5%	11.9%
Financial Intermediation (Finance and Business)	21.9%	14.9%	10.0%
Public Administration (Public Sector)	8.4%	13.2%	13.4%
Education, Health and Social Work	6.3%	8.4%	6.6%
Other Services (Other)	0.4%	0.9%	0.9%

Manufacturing (41.1%) and Financial Intermediation (21.9%) are the leading industries that Chartered Engineers work in, but we do see a difference in proportions for the other sections of registration.

Among our respondents, the foremost industries for Incorporated Engineers to work in are Manufacturing (35.9%), Financial Intermediation (14.9%), Public Administration (13.2%), and Electricity, Gas and Water Supply (11.3%).

The foremost industries for Engineering Technicians to work in are Manufacturing (38.6%), Public Administration (13.4%), Transport and Communication (11.9%) and Financial Intermediation (10.0%).

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer. …Cont.

Field of Work	Industry Level SIC 92 code
Agriculture, forestry and fishing	**Agriculture**
Mining and quarrying	**Mining and Quarrying (Mining)**
Petroleum, petrochemicals Nuclear fuel processing Metal manufacturing Chemical and pharmaceutical industry Man-made fibres production Non-metallic mineral manufacture Manufacturing systems engineering Industrial plant and steelwork Machine tools manufacture Other mechanical engineering Office machinery and computer manufacture Information systems engineering Electronic/telecommunications equipment manufacture Electrical machinery or equipment manufacture Motor vehicles and parts manufacture Shipbuilding and repair Aerospace manufacture Instrument engineering Other metal goods manufacture Food, drink and tobacco manufacture Other manufacturing industries Other engineering	**Manufacturing**
Electricity supply and distribution Gas supply and distribution Other forms of energy-supply/distribution Water supply industry	**Electricity, Gas and Water Supply (Utilities)**
Construction	**Construction**
Distribution, hotels and catering Repairs of consumer goods and vehicles	**Wholesale and Retail Trade**
Transport operation and maintenance Postal services and telecommunications	**Transport and Communication**
Banking, finance, insurance, business services Consultants Research and development	**Financial Intermediation (Finance and Business)**
National government administration Local government administration Armed forces	**Public Administration (Public Sector)**
Higher education Further education School education Hospitals Other medically related engineering	**Education, Health and Social Work**
Professional institution/national body	**Other Services (Other)**

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer …Cont.

The tables below show the average and median earnings for the 11 SIC 92 groups further analysed by sector of registration.

Only those SIC groups which had more than 50 respondents answering the earnings questions are included in the following tables.

Chartered Engineers

		Average earnings	Median earnings
Manufacturing	(N=625)	£49,873	£44,689
Electricity, Gas and Water Supply (Utilities)	(N=109)	£50,549	£44,875
Construction	(N=113)	£48,944	£44,650
Transport and Communication	(N= 79)	£57,303	£52,000
Financial Intermediation (Finance and Business)	(N=325)	£49,377	£42,000
Public Administration (Public Sector)	(N=126)	£44,456	£41,499
Education, Health and Social Work	(N= 95)	£43,290	£40,000

The highest paying SIC group for Chartered Engineers in terms of both total average earnings and median earnings is Transport and Communication followed by Electricity, Gas and Water Supply. The lowest paid SIC group for Chartered Engineers is Education, Health and Social Work.

Incorporated Engineers

		Average Earnings	Median earnings
Manufacturing	(N=518)	£39,190	£34,150
Electricity, Gas and Water Supply (Utilities)	(N=145)	£42,792	£40,000
Construction	(N= 90)	£40,302	£34,750
Transport and Communication	(N=108)	£39,269	£38,000
Financial Intermediation (Finance and Business)	(N=229)	£38,220	£34,000
Public Administration (Public Sector)	(N=197)	£32,848	£30,407
Education, Health and Social Work	(N=109)	£31,072	£30,000

The Electricity, Gas and Water Supply industry pays the most for Incorporated Engineers both in terms of average annual earnings and median annual earnings. Subsequent to that, Construction offers the second highest average earnings to Incorporated Engineers, while Transport and Communication offers the second highest median earnings. The Education, Health and Social Work sector is shown to pay the lowest average and median earnings.

8. Please read through the following list and select the *one* field of work that is most appropriate to your employer.…Cont.

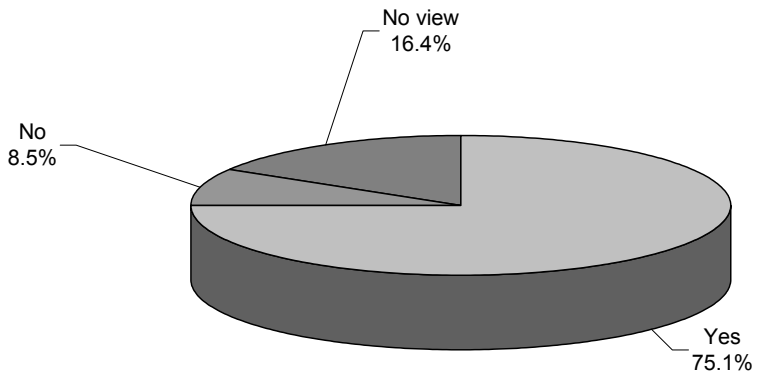
Engineering Technicians

		Average earnings	Median earnings
Manufacturing	(N=223)	£33,929	£29,500
Transport and Communication	(N= 66)	£36,040	£31,500
Financial Intermediation (Finance and Business)	(N= 57)	£33,831	£31,100
Public Administration (Public Sector)	(N= 80)	£28,189	£28,000

For Engineering Technicians, the Transport and Communication industry pays the highest average and median earnings, while Public Administration offers the lowest.

REGISTRATION ISSUES

9. Would you recommend registration to a colleague who was not a registered engineer?



(N=4,373)

This question was not included in 2002.

	(N=4,373)
Yes	75.1%
No	8.5%
No view	16.4%

As can be seen from the above chart, three in four respondents would recommend registration to a colleague who was not already a registered engineer. While around one in 12 respondents (8.5%) actively stated that they would not recommend registration to a colleague, twice that amount had no view on the matter.

This opinion is reflected in generally the same way among all three sections of registration, with the exception of Engineering Technicians having a slightly higher response to the 'no view' option.

	Chartered Engineer (N=3,322)	Incorporated Engineer (N=813)	Engineering Technician (N=238)
Yes	74.3%	78.6%	73.1%
No	9.1%	7.0%	6.4%
No view	16.6%	14.4%	20.4%

9. Would you recommend registration to a colleague who was not a registered engineer? ...Cont.

	N	Yes	No	No view
Manufacturing	**1,679**	74.4%	9.0%	16.7%
Electricity, Gas & Water supply	**375**	75.7%	7.7%	16.7%
Construction	**306**	72.8%	10.0%	17.2%
Transport & Communication	**250**	75.6%	7.7%	16.7%
Financial Intermediation (Finance & Business)	**847**	77.7%	7.1%	15.3%
Public Administration (Public Sector)	**405**	75.4%	6.9%	17.7%
Education, Health & Social Work	**284**	70.1%	14.5%	15.5%

Only those SIC groups which had more than 50 respondents answering this question are included in the above table.

The above table breaks down recommendation of registration by SIC group. We can see that respondents in each of the industries listed have a high likelihood of recommending registration, with those in the Financial Intermediation industry being most likely to do so.

	N	Yes	No	No view
An employee	**3,181**	74.4%	8.8%	16.7%
Self employed (including principal or partner in a firm)	**408**	77.4%	6.2%	16.4%
Contract worker	**117**	75.5%	13.8%	10.7%
Retired early (before expected age)	**272**	78.5%	7.8%	13.6%
Retired or partially retired	**251**	82.1%	5.0%	12.9%
Unemployed and seeking re-employment	**78**	57.0%	12.4%	30.7%

Only those employment groups which had more than 50 respondents answering this question are included in the above table.

When considering the issue of registration recommendation within employment status, again we can see a difference of opinion across the groups. Those respondents who are retired or partially retired are most likely to recommend registration, while those who are unemployed and seeking re-employment are noticeably less likely to do the same. They are also the group with the highest proportion giving ‘no view’ on the matter.

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

This question was not included in 2002.

Only those respondents who are currently an employee were asked to answer this question.

	(N=3,158)
Yes	46.6%
No	53.4%

Just under half of all respondents who are currently an employee have their subscription and registration fees paid for them by their employer.

This proportion is noticeably different when considering the sections of registration. Chartered Engineers are the group most likely to have their subscription and registration fees paid for them by their employer at around one in two (50.4%). However, looking at the other sections of registration, just under 4 in 10 Incorporated Engineers (38.1%) have their subscription and registration fees paid for them by their employer, while around 1 in 4 Engineering Technicians (26.6%) enjoy the same benefit.

	Chartered Engineer (N=2,358)	Incorporated Engineer (N=618)	Engineering Technician (N=183)
Yes	50.4%	38.1%	26.6%
No	49.6%	61.9%	73.4%

When looking at the breakdown of payment of subscription by SIC group codes, there is a clear difference between different industries. Respondents working in Financial Intermediation, Construction and Transport & Communication are the most likely to indicate that their employer offers to pay their subscription and registration fees. In stark contrast, an overwhelming majority of respondents who answered this question and work in the Education, Health & Social Work industry indicated that their employers do not offer to pay for their subscription and registration fees.

	N	Yes	No
Manufacturing	**1,269**	48.9%	51.1%
Electricity, Gas & Water supply	**272**	41.4%	58.6%
Construction	**205**	54.9%	45.1%
Transport & Communication	**207**	53.5%	46.5%
Financial Intermediation (Finance & Business)	**549**	63.8%	36.2%
Public Administration (Public Sector)	**346**	36.7%	63.3%
Education, Health & Social Work	**240**	7.4%	92.6%

Only those SIC groups which had more than 50 respondents answering this question are included in the above table.

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

This question was not included in 2002.

Only those respondents who are currently an employee were asked to answer this question.

	(N=3,139)
Yes	57.1%
No	42.9%

Almost 6 in every 10 employees responding (57.1%) are offered financial support from their employer for their professional development. When looking at the breakdown by section of registration, this varies very little among the groups.

	Chartered Engineer (N=2,344)	Incorporated Engineer (N=614)	Engineering Technician (N=182)
Yes	57.5%	56.6%	53.3%
No	42.5%	43.4%	46.7%

Analysis by SIC code, as in the table below from which groups of less than 50 respondents have not been shown, shows Public Administration to be the sector from which our respondents are most likely to have indicated that their employer offers support for their professional development and Manufacturing respondents to be least likely.

	N	Yes	No
Manufacturing	**1,258**	51.5%	48.5%
Electricity, Gas & Water supply	**268**	55.6%	44.4%
Construction	**205**	58.1%	41.9%
Transport & Communication	**204**	61.8%	38.2%
Financial Intermediation (Finance & Business)	**548**	64.8%	35.2%
Public Administration (Public Sector)	**346**	68.1%	31.9%
Education, Health & Social Work	**238**	54.1%	45.9%

Interestingly, when looking at these results by whether or not respondents have stated that their employer pays their subscription and registration fees, the findings show that those who do are markedly more likely than those who do not to also receive financial support for their professional development from their employer.

	Does your employer pay your subscription and registration fees?	
	Yes (N=1,462)	No (N=1,671)
Yes	70.5%	45.3%
No	29.5%	54.7%

11. Does your employer offer financial support for your professional development? ...Cont.

In total 32.3% of employees responding indicated that their employer pays their subscription and registration fees and offers financial support for their professional development. This is true among employees responding of:

- 34.6% of Chartered Engineers;
- 26.6% of Incorporated Engineers;
- 21.0% of Engineering Technicians.

12. Did you become a registered Incorporated Engineer or Engineering Technician in the last 12 months?

This question was not included in 2002.

	(N=4,309)
Yes	1.4%
No	98.6%

A very small minority of all respondents (1.4%) became a registered Incorporated Engineer or Engineering Technician in the last 12 months. As can be seen below, this is somewhat more likely to be true among Engineering Technicians (around one in 20) than Incorporated Engineers (around one in 50).

	Chartered Engineer (N=3,250)	Incorporated Engineer (N=819)	Engineering Technician (N=240)
Yes	0.9%	2.1%	5.5%
No	99.1%	97.9%	94.5%

13. What was the main reason you became a registered Incorporated Engineer or Engineering Technician in the last 12 months?

This question was not included in 2002.

Only those respondents who became an Incorporated Engineer or Engineering Technician in the last 12 months were asked to answer this question.

Replies to this question have been summarised under the broad headings shown in the table below.

Actual base numbers rather than the weighted base numbers are shown in the table below for ease of understanding.

	Chartered Engineer (N=11)	Incorporated Engineer (N=33)	Engineering Technician (N=30)
For professional recognition/ status - individually/within the profession	63.6%	36.4%	16.7%
Career development prospects	9.1%	33.3%	43.3%
It demonstrates a level of expertise/integrity to (potential) employers	18.2%	18.2%	16.7%
As it is a well recognised qualification	0.0%	9.1%	13.3%
Other	45.5%	30.3%	23.2%

No 'Other' comment was made by more than 5 respondents.
As respondents could make more than one comment, the sum of percentages will inevitably exceed 100.
Base numbers in the table above have not been weighted.

Obviously, the percentages in the table above are of limited value given the very small number of respondents who indicated that they became a registered Incorporated Engineer or Engineering Technician in the last 12 months. The message is clear, however. The belief that registration allows a degree of professional recognition/status is a key reason for joining, particularly for Chartered Engineers. Being conscious of the prospects for career development is also a commonly cited reason though this is more likely to have been the reason given by Incorporated Engineers and Engineering Technicians than by Chartered Engineers.

A second question inviting respondents to identify any other reasons for becoming a registered Incorporated Engineer or Engineering Technician in the last 12 months, which was answered by even fewer respondents, saw the same issues coming to the fore.

13. What was the main reason you became a registered Incorporated Engineer or Engineering Technician in the last 12 months? …Cont.

This question was not included in 2002.

Only those respondents who became an Incorporated Engineer or Engineering Technician in the last 12 months were asked to answer this question.

A number of the answers given to this question are reproduced verbatim below and on the following page.

"Professional standing amongst other engineering fraternity groups. It is also a good indicator to present/future employers as to the academic experience achievement gained to date."

"To keep in touch with changing technology."

"Better job prospects - requirement for promotion to senior positions."

"To try and keep my finger on the button of the ever changing world of engineering."

"To aid my employment prospects and transfer my experience to other European employers."

"Considered registration advantageous to future career prospects."

"Enhancing my professional status."

"Shows I am serious about engineering, and step on progress ladder."

"To assist me, through professional recognition, to move companies, to improve conditions and increase experience."

"Status recognition when leaving army. My military quals may not reflect my actual ability and expertise being of a specialist nature."

"To gain a recognised professional qualification which will help me to further my career on a long term basis."

"To gain professional recognition in the field of engineering at a level that shows my abilities to my colleagues and peers."

"Personal and corporate recognition within the industries in which I work."

"Broaden my outlook."

13. What was the main reason you became a registered Incorporated Engineer or Engineering Technician in the last 12 months? …Cont.

This question was not included in 2002.

Only those respondents who became an Incorporated Engineer or Engineering Technician in the last 12 months were asked to answer this question.

"Keep up to date with current issues."

"Recognise my experience."

"It keeps me abreast of what's new within the Board."

"Mainly to be recognised as a professional person."

"Structured and supported approach to CPD."

"Network with other professionals."
"To share engineering knowledge and promote engineering."

"My employer encourages this, although they do not pressurise individuals to apply. Nor does my employer offer any incentive e.g. no pay rise as a result."

"To continue to meet with like minded people, but on a level footing having gained formal recognition of my own experience and ability."

"A stepping stone to becoming a Chartered Engineer."

14. What do you consider to be the *main* reason that your non-registered colleagues are being put off registering?

This question was not included in 2002.

	(N=4,207)
They are not aware of the opportunity	5.0%
They see no career benefits in registration	55.1%
They are not interested in joining an institution	4.9%
They are happy to be just a member of an institution	3.5%
Their employers do not support them	2.1%
There is no legal requirement to register	7.5%
None of the above	4.1%
No view	17.9%

Easily the most commonly given reason for our respondents believing that their non-registered colleagues are being put off registering is that they can see no career benefits from doing so. This is the reason given by over half of all respondents. Other reasons given were each mentioned by less than one in ten respondents, but include that there is no legal requirement to register (7.5%), that they are not aware of the opportunity (5.0%) and that they are not interested in joining an institution (4.9%). Around one in six, however, had no view.

	Chartered Engineer (N=3,196)	Incorporated Engineer (N=783)	Engineering Technician (N=227)
They are not aware of the opportunity	3.5%	8.5%	14.5%
They see no career benefits in registration	57.3%	49.4%	43.2%
They are not interested in joining an institution	3.9%	8.3%	8.1%
They are happy to be just a member of an institution	3.8%	2.5%	2.5%
Their employers do not support them	1.7%	2.9%	5.1%
There is no legal requirement to register	7.3%	8.2%	7.0%
None of the above	4.0%	4.7%	3.4%
No view	18.6%	15.5%	16.0%

When looking at this question by section of registration, across all three groups the main reason by far given for non-registered colleagues being put off registering is that they see no career benefit from it. Yet this reason is given to varying degrees: 57.3% among Chartered Engineers, 49.4% among Incorporated Engineers and 43.2% among Engineering Technicians. Incorporated Engineers and Engineering Technicians are more inclined than Chartered Engineers to state that the reason is that their colleagues are not aware of the opportunity or that they are not interested in joining an institution; and three times as many Engineering Technicians (5.1%) gave the reason that 'their employers do not support them' than Chartered Engineers (1.7%), although all these percentages are still very much below the main reason given across the board.

14. What do you consider to be the *main* reason that your non-registered colleagues are being put off registering?... Cont.

	N	They are not aware of the opportunity	They see no career benefits in registration	They are not interested in joining an institution	They are happy to be just a member of an institution	Their employers do not support them	There is no legal requirement to register	None of the above	No view
Manufacturing	**1,623**	5.4%	59.9%	5.1%	3.0%	1.6%	6.9%	3.2%	14.8%
Electricity, Gas & Water supply	**354**	4.8%	58.1%	6.2%	4.4%	3.0%	7.0%	2.7%	13.8%
Construction	**297**	6.0%	40.6%	5.3%	6.2%	2.4%	7.7%	4.6%	27.1%
Transport & Communication	**246**	6.7%	57.8%	6.6%	3.0%	2.0%	7.0%	3.5%	13.3%
Financial Intermediation (Finance & Business)	**815**	4.2%	51.3%	3.7%	3.5%	0.5%	8.9%	5.3%	22.6%
Public Administration (Public Sector)	**387**	4.8%	58.6%	4.7%	2.1%	3.4%	6.3%	5.4%	14.7%
Education, Health & Social Work	**269**	4.0%	53.5%	4.6%	1.4%	5.4%	8.4%	5.6%	17.1%

Only those SIC groups which had more than 50 respondents answering this question are included in the above table.

When this question is analysed by SIC codes, the main reason given for their non-registered colleagues being put off registering remains across the board that they see no career benefits – this is particularly true within the Manufacturing, Electricity, Gas & Water Supply, Transport & Communication and Public Administration industries. Those respondents working in the Construction and Financial Intermediation sectors include higher proportions stating that they hold no view (27.1% and 22.6% respectively).

15. Do you think that the title Incorporated Engineer is satisfactory?

This question was not included in 2002.

	(N=4,084)
Yes	69.2%
No	30.8%

Though the very clear majority of respondents indicated that they consider the title of Incorporated Engineer to be satisfactory, a significant minority, both overall and in each section of registration, do not. It is interesting to note that Chartered Engineers are markedly more likely than Incorporated Engineers themselves to regard the Incorporated Engineer title as unsatisfactory.

	Chartered Engineer (N=3,045)	Incorporated Engineer (N=810)	Engineering Technician (N=230)
Yes	65.7%	76.6%	89.3%
No	34.3%	23.4%	10.7%

16. What title would you prefer to be used?

This question was not included in 2002.

Only those respondents who think that the title Incorporated Engineer is not satisfactory were asked to answer this question.

Replies to this question have been summarised under the broad headings shown in the table below.

	(N=929)	(N=929)	(N=4,417)
Chartered Engineer	**201**	21.6%	4.5%
Don't know/no suggestion	**120**	13.0%	2.8%
Professional Engineer	**114**	12.3%	2.6%
Registered Engineer	**113**	12.1%	2.5%
Not sure what the current name means/unclear/meaningless	**69**	7.4%	1.6%
Engineer	**47**	5.1%	1.1%
Needs to change to something more meaningful/title should reflect role(s) we have	**46**	4.9%	1.0%
Technician/Technical Engineer	**41**	4.4%	0.9%
Associate(d) Engineer	**34**	3.7%	0.8%
Certified/Certificated Engineer	**17**	1.8%	0.4%
A system incorporating different grades e.g. Chartered Engineer Grade 1, Grade 2 etc.	**12**	1.3%	0.3%
Chartered Technologist	**11**	1.1%	0.2%
Chartered Incorporated Engineer	**7**	0.8%	0.2%
Existing title seems like a lesser qualification/second rate	**7**	0.8%	0.2%
Incorporated does not reflect the qualifications/experience we have	**7**	0.8%	0.2%
Incorporated does not sound very current/correct	**8**	0.8%	0.2%
Qualified Engineer	**8**	0.8%	0.2%
Something which does not have 'Engineer' in the title	**6**	0.6%	0.1%
Other	**164**	17.7%	3.7%

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

Of all those who indicated that the title Incorporated Engineer is not satisfactory, more than one in five suggested that Incorporated Engineers should be classified as Chartered Engineers. Around one in every eight (12.3% and 12.1% respectively) suggested that either Professional Engineer or Registered Engineer would be appropriate. Several other options were given, but most were not mentioned by large numbers of respondents.

16. What title would you prefer to be used? …Cont.

Actual base numbers rather than the weighted base numbers are shown in the table below for ease of understanding.

	Chartered Engineer (N=431)	Incorporated Engineer (N=347)	Engineering Technician (N=58)
Chartered Engineer	23.4%	14.7%	6.9%
Don't know/no suggestion	14.6%	5.8%	6.9%
Professional Engineer	11.4%	17.6%	5.2%
Registered Engineer	10.7%	18.4%	15.5%
Not sure what the current name means/un-clear/meaningless	8.4%	3.7%	1.7%
Engineer	4.4%	7.2%	12.1%
Needs to change to something more meaningful/title should reflect role(s) we have	5.3%	2.9%	5.2%
Technician/Technical Engineer	4.6%	3.2%	6.9%
Associate(d) Engineer	4.4%	0.9%	0.0%
Certified/Certificated Engineer	1.9%	2.0%	0.0%
A system incorporating different grades e.g. Chartered Engineer Grade 1, Grade 2 etc.	0.7%	3.5%	5.2%
Chartered Technologist	0.9%	2.3%	0.0%
Chartered Incorporated Engineer	0.2%	3.5%	0.0%
Qualified Engineer	0.7%	1.2%	3.4%
Existing title seems like a lesser qualification/second rate	0.7%	1.2%	0.0%
Incorporated does not reflect the qualifications/experience we have	0.7%	1.2%	0.0%
Incorporated does not sound very current/correct	0.9%	0.6%	0.0%
The title is fine, it is the industry's recognition that needs to be amended	0.2%	1.2%	0.0%
Other	16.6%	20.4%	35.0%

No 'Other' suggestion was made by more than 5 respondents.
As respondents could make more than one suggestion, the sum of percentages will inevitably exceed 100.
Base numbers in the table above have not been weighted.

The table above shows the results by section of registration, and again we can see a wide range of suggested alternatives to the title Incorporated Engineer. It is interesting to note that, among those who previously indicated that they do not consider the title Incorporated Engineer to be satisfactory, Chartered Engineers are more likely than Incorporated Engineers themselves to have indicated that 'Chartered Engineer' is an appropriate future classification for Registrants currently classified as Incorporated Engineers.

16. What title would you prefer to be used? …Cont.

In total, 4.5% of respondents indicated that they consider the title of Incorporated Engineer to be unsatisfactory and went on to indicate that they would prefer Incorporated Engineers to be classified as Chartered Engineers. This is true of:

- 5.2% of Chartered Engineers;
- 2.9% of Incorporated Engineers;
- 0.8% of Engineering Technicians.

RECENT DEVELOPMENTS

17. Do you think that registered engineers should undergo regular voluntary revalidation in the future?

This question was not included in 2002.

	(N=4,310)
Yes	33.1%
No	66.9%

Interestingly, one third of all respondents agree that registered engineers should undergo regular voluntary revalidation in the future.

The table below shows that this opinion is reflected in similar proportions with the Chartered Engineers and Incorporated Engineers, but that it is slightly stronger among the Engineering Technicians with almost two in every five agreeing that registered engineers should undergo regular voluntary revalidation in the future.

	Chartered Engineer (N=3,268)	Incorporated Engineer (N=808)	Engineering Technician (N=234)
Yes	33.4%	30.1%	39.4%
No	66.6%	69.9%	60.6%

18. If voluntary revalidation were to take place in the future would you be prepared to undergo it regularly if the one-off cost to you was estimated to be?

This question was not included in 2002.

		Yes	No	No view
Less than £50	(N=4,001)	36.7%	47.7%	15.6%
Between £50-£100	(N=3,587)	15.1%	70.2%	14.6%
More than £100	(N=3,490)	2.8%	84.3%	12.9%

A majority of respondents would not be prepared to undergo voluntary revalidation at each of the one-off cost increments. Unsurprisingly, there is a clear indication that the higher one-off cost prices are much more unacceptable than the lower prices.

Analysing this question by section of registration shows that the overall findings are reflected fairly closely amongst all groups of engineers.

Chartered Engineer

		Yes	No	No view
Less than £50	(N=3,035)	37.1%	46.6%	16.3%
Between £50-£100	(N=2,787)	15.9%	68.5%	15.6%
More than £100	(N=2,721)	3.1%	83.4%	13.5%

Incorporated Engineer

		Yes	No	No view
Less than £50	(N=750)	34.4%	52.8%	12.8%
Between £50-£100	(N=629)	11.7%	77.6%	10.7%
More than £100	(N=606)	1.9%	88.1%	10.0%

Engineering Technician

		Yes	No	No view
Less than £50	(N=216)	39.3%	44.7%	16.0%
Between £50-£100	(N=170)	15.2%	71.5%	13.4%
More than £100	(N=162)	1.3%	85.3%	13.4%

19. 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?

This question was not included in 2002.

	(N=4,376)
Very important	29.4%
Fairly important	34.6%
Not very important	20.9%
Not at all important	12.0%
No view	3.1%

Almost two in three respondents (64.0%) who answered this question suggested that Continuing Professional Development in maintaining their professional qualifications and ensuring that their skills and expertise are relevant and up-to-date is at least fairly important to them. Around one third of all respondents answering this question did not think that CPD was important to them. This is analysed further in the next question (page 49).

	Chartered Engineer (N=3,320)	Incorporated Engineer (N=819)	Engineering Technician (N=238)
Very important	28.6%	30.3%	37.6%
Fairly important	33.5%	38.1%	36.9%
Not very important	21.7%	19.7%	14.6%
Not at all important	13.2%	8.4%	7.3%
No view	3.0%	3.5%	3.6%

As can be seen above, respondents indicating that CPD is important to them in maintaining their professional qualifications include 62.1% of Chartered Engineers, 68.4% of Incorporated Engineers and 74.5% of Engineering Technicians. More than a third of Engineering Technicians answered ‘very’ important here.

19. 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?...Cont.

		Very important	Fairly important	Not very important	Not at all important	No view
Manufacturing	**1,689**	26.5%	33.8%	23.8%	13.3%	2.5%
Electricity, Gas & Water supply	**374**	27.1%	30.2%	24.1%	14.2%	4.3%
Construction	**306**	33.6%	41.6%	16.4%	7.0%	1.4%
Transport & Communication	**247**	26.0%	37.6%	20.7%	13.2%	2.4%
Financial Intermediation (Finance & Business)	**845**	31.3%	35.4%	20.5%	9.7%	3.1%
Public Administration (Public Sector)	**406**	36.2%	38.2%	14.9%	7.9%	2.8%
Education, Health & Social Work	**283**	33.7%	37.7%	16.7%	10.0%	1.9%

Only those groups which had more than 50 respondents answering the question are included in the above table.

	N	Very important	Fairly important	Not very important	Not at all important	No view
An employee	**3,190**	31.1%	37.0%	20.3%	9.9%	1.6%
Self employed (including principal or partner in a firm)	**405**	26.8%	31.2%	26.6%	12.4%	3.0%
Contract worker	**119**	24.0%	30.4%	22.8%	16.3%	6.5%
Retired early (before expected age)	**264**	22.9%	24.8%	17.7%	24.1%	10.5%
Retired or partially retired	**254**	23.6%	26.3%	25.9%	13.9%	10.4%
Unemployed and seeking re-employment	**77**	27.2%	27.8%	15.7%	26.5%	2.8%

Only those groups which had more than 50 respondents answering the question are included in the above table.

Looking at the results by SIC groups and employment status, there are some differences in attitude towards the importance of CPD. CPD is most likely to be thought important by respondents within the Construction and Public Administration industries and least likely among those in Manufacturing and Electricity, Gas & Water Supply.

And respondents are most likely to say that CPD is important if they are an employee and least likely if they are retired or currently unemployed and seeking re-employment.

20. Why is Continuing Professional Development (CPD) not important to you?

This question was not included in 2002.

Only those respondents who indicated that Continuing Professional Development (CPD) is not very important or not at all important to them were asked to answer this question.

Respondents were asked to tick as many answers as applied, so the sum of percentages will inevitably exceed 100.

	(N=1,239)	(N=4,417)
My current job does not require me to update my qualifications	61.2%	17.2%
My employer provides any support I need for CPD	24.5%	6.9%
I am planning a career change	3.8%	1.1%
None of the above	15.7%	4.4%
No view	3.1%	0.9%

In the table above, the percentages in the first column are calculated against the number of respondents who previously indicated that Continuing Professional Development (CPD) is not important to them and who also answered this question. The second column of percentages is against the total number of respondents to the survey.

Of those respondents who claimed that CPD was not important to them, a majority (61.2%) stated that their current job does not require them to update their qualifications. In addition, a quarter of respondents who answered this question (24.5%) stated that it is because their employer provides any support they need for CPD.

	Chartered Engineer (N=1,001)	Incorporated Engineer (N=197)	Engineering Technician (N=42)
My current job does not require me to update my qualifications	60.0%	65.9%	69.1%
My employer provides any support I need for CPD	24.3%	25.9%	21.1%
I am planning a career change	4.0%	2.3%	5.7%
None of the above	16.3%	13.6%	11.4%
No view	3.5%	1.6%	1.6%

These findings are similarly proportioned among the three sections of registration, in terms of which reasons are the most mentioned. However the Incorporated Engineers and Engineering Technicians are somewhat more inclined than Chartered Engineers to answer that 'my current job does not require me to update my qualifications' is the reason for saying why CPD is not important to them.

20. Why is Continuing Professional Development (CPD) not important to you? ...Cont.

	(N=414)	(N=414)	(N=4,417)
I am retired/semi-retired	**90**	21.7%	2.0%
The work I/many engineers do is enough to keep up to date	**71**	17.2%	1.6%
Too old/approaching retirement or semi-retirement	**71**	17.2%	1.6%
Formalised CPD is un-necessary/a waste/just more paperwork	**38**	9.1%	0.8%
The CPD on offer is inappropriate to me/my role	**31**	7.4%	0.7%
I (now) work in a non-engineering/managerial role	**22**	5.2%	0.5%
Lack of time/pressure of work etc.	**19**	4.5%	0.4%
I/my employer arrange(s) useful training and development for me	**18**	4.4%	0.4%
The cost of CPD is high/prohibitive	**10**	2.4%	0.2%
Committed/good engineers keep themselves up to date anyway	**7**	1.7%	0.2%
Other	**73**	17.5%	1.7%

In the table above, the percentages in the first column are calculated against the number of respondents who previously indicated that Continuing Professional Development (CPD) is not important to them and who also answered this question. The second column of percentages is against the total number of respondents to the survey.
No 'Other' comment was made by more than 5 respondents.
As respondents could make more than one comment, the sum of percentages will inevitably exceed 100.

Of those respondents who mentioned that CPD is not important to them for a reason other than those listed, 38.9% indicated that it is because they are retired, semi-retired or approaching retirement, and a further 17.2% indicated that it is because the work they do is enough to keep them up to date.

21. Do you think that the formation of the Engineering and Technology Board, working alongside the Engineering Council (UK) has:

Respondents were asked to tick one box only.

The options used in the 2002 survey are too different to allow for any meaningful comparison.

	(N=4,345)
Lead to more effective promotion for engineering and engineers	6.2%
Had no impact on the quality of promotion for engineering and engineers	38.7%
Lead to less effective promotion for engineering and engineers	2.8%
Too early to say	25.0%
No view	27.4%

Almost four in 10 respondents (38.7%) who answered this question think the formation of the Engineering and Technology Board, working alongside the Engineering Council, has had no impact on the quality of promotion for engineering and engineers, whereas more than half (52.4%) think that it is either too early to say or have no view on the matter. Relatively few respondents think it has led to a change (either positively or negatively) in the effectiveness of this promotion, though those who think that promotion is more effective outnumber those who think it is less so by more than two to one.

	Chartered Engineer (N=3,292)	Incorporated Engineer (N=815)	Engineering Technician (N=238)
Lead to more effective promotion for engineering and engineers	4.5%	10.6%	13.4%
Had no impact on the quality of promotion for engineering and engineers	40.0%	36.1%	30.7%
Lead to less effective promotion for engineering and engineers	3.1%	1.7%	1.6%
Too early to say	23.3%	30.2%	30.7%
No view	29.1%	21.5%	23.6%

An analysis of the response to this question by section of registration shows that, though those who have noticed a change are always in a minority, Incorporated Engineers and Engineering Technicians are markedly more likely than Chartered Engineers to feel that the new body has lead to more effective promotion. In all three cases, those who feel that the change has been positive outnumber those who feel it has been negative.

22. The EC (UK) and the ETB may wish to communicate with you from time to time about their work and what they are doing to support engineers and engineering. If so, what would be your preferred means of communication?

In the 2002 survey, this question was phrased 'The EC (UK) and the ETB may wish to communicate with you from time to time to inform you about their work and what they are doing to support engineers and engineering. If so, what would be your preferred means of communication?'

	2003 (N=4,301)	2002 (N=3,609)
Your institution journal	45.3%	48.5%
Occasional, direct, paper-based mail	23.8%	22.2%
Electronic-based, direct mail	18.2%	14.6%
Electronic magazine (e-zine)	3.2%	3.9%
A web site	5.2%	6.5%
An ETB magazine	1.8%	1.6%
An EC (UK) magazine	1.8%	2.4%
Telephone contact	0.7%	0.3%

As can be seen from the above table, the institution journal is easily the most commonly cited preferred means of communication to registrants (45.3%), although this has decreased slightly from 2002. Just less than one in four (23.8%) indicated that their preference would be occasional direct paper-based mail – up 1.6% from last year. Additionally, there has been a slight increase in preference for electronic-based direct mail from the 2002 survey, which has gone up by 3.6%, and a slight decrease in preference for web site communication (down from 2002 by 1.3%), electronic magazine (down from 2002 by 0.7%) and EC (UK) magazine (down from 2002 by 0.6%).

22. The EC (UK) and the ETB may wish to communicate with you from time to time about their work and what they are doing to support engineers and engineering. If so, what would be your preferred means of communication? ...Cont.

	2003 Chartered Engineer (N=3,264)	2002 Chartered Engineer (N=2,606)	2003 Incorporated Engineer (N=805)	2002 Incorporated Engineer (N=839)	2003 Engineering Technician (N=232)	2002 Engineering Technician (N=161)
Your institution journal	45.2%	47.3%	46.6%	51.7%	42.3%	50.9%
Occasional, direct, paper-based mail	23.4%	23.1%	24.2%	19.4%	27.3%	23.0%
Electronic-based, direct mail	19.7%	14.9%	13.9%	13.8%	13.2%	13.7%
Electronic magazine (e-zine)	3.1%	4.1%	3.6%	3.9%	2.9%	1.9%
A web site	5.1%	6.7%	5.3%	6.0%	6.0%	5.0%
An ETB magazine	1.3%	1.2%	3.1%	2.6%	4.7%	2.5%
An EC (UK) magazine	1.5%	2.3%	2.7%	2.5%	2.2%	3.1%
Telephone contact	0.7%	0.4%	0.6%	0.0%	1.3%	0.0%

There are some interesting differences to be seen for preferred means of communication among the 3 sections of registration and across time. Fewer Engineering Technicians indicated that their communication preference is by institutional journal (42.3%), which is 8.6% down from last year. Indeed, fewer Chartered Engineers and Incorporated Engineers compared to last year have listed this means of communication as their choice (a decrease of 2.1% and 5.1% respectively). Occasional direct paper based mail is most popular among Engineering Technicians (27.3%) and again this is shows a difference in preference to the 2002 study among all three groups – an increase this time of 0.3% among Chartered Engineers, 4.8% among Incorporated Engineers and 4.3% among Engineering Technicians.

APPENDIX:

THE QUESTIONNAIRE