Survey of Scientists and Engineers in the Civil Service 2012

1. Is your background mainly in:

		Response Percent	Response Count
Science		**64.8%**	**1,388**
Engineering		23.1%	495
Both science and engineering		12.1%	259
	answered question		2,142
	skipped question		32

2. Which of the following qualifications do you have? (Select as many as appropriate):

		Response Percent	Response Count
Apprenticeship		6.9%	146
Higher National Certificate		10.9%	232
Higher National Diploma		6.3%	133
Undergraduate degree		**65.5%**	**1,387**
Masters		32.6%	690
Combined bachelors /masters		8.7%	185
PhD		33.7%	714
Other (please specify)			178
	answered question		2,119
	skipped question		55

3. Are you a member of a science or engineering professional body?

		Response Percent	Response Count
Yes		**58.2%**	**1,245**
No		41.8%	895
	Please specify		1,064
		answered question	2,140
		skipped question	34

4. Do you hold any professional qualifications? (eg chartered)

		Response Percent	Response Count
Yes		37.2%	792
No		**62.8%**	**1,335**
	Please specify		758
		answered question	2,127
		skipped question	47

5. What is your PRIMARY area of science or engineering expertise? (Please tick only ONE box unless you have more than one area where you maintain and apply your expertise)

		Response Percent	Response Count
Acoustics		0.5%	11
Aerodynamics		0.1%	2
Agricultural and environmental science		2.5%	51
Air Quality		0.8%	17
Analysis and Mathematical Modelling		0.9%	19
Animal and Public Health		1.0%	21
Animal Health and Welfare		1.2%	25
Anthropology		0.0%	1
Archaeology		0.1%	3
Artificial Intelligence		0.1%	3
Astronomy and astrophysics		1.2%	24
Atmospheric physics		1.4%	29
Atomic physics		0.4%	8
Avionics		0.1%	3
Biochemistry		1.3%	26
Bioinformatics		0.3%	7
Biological Sciences		4.2%	84
Biomedical sciences		1.3%	26
Biotechnology		0.7%	14
Botany		0.8%	16
Chemistry		5.1%	102
Chemistry - atmospheric		0.6%	13

Chemistry - inorganic		0.8%	17
Chemistry - polymer		0.2%	5
Chemistry - organic		1.0%	20
Climate science		2.8%	57
Computer Science		2.3%	47
Crop protection		0.4%	8
Cyber security		0.4%	9
Defence Technologies		2.8%	56
Ecology and Ecosystem services		3.2%	64
Ecotoxicology		0.3%	7
Energy technologies		0.7%	15
Engineering - Aeronautical		0.8%	17
Engineering - Aerospace		0.7%	14
Engineering - Automotive		1.0%	20
Engineering - Building Services		1.1%	22
Engineering - chemical		2.1%	43
Engineering - Civil		4.5%	90
Engineering - Communication and Information Systems		1.4%	28
Engineering - Electrical and Electronic		**7.4%**	**150**
Engineering - Manufacturing		1.3%	26
Engineering - Marine		0.5%	11
Engineering - Mechanical		5.4%	108
Engineering - Nuclear		2.7%	55
Engineering - Project Management		3.1%	63
Engineering - Software		2.2%	44
Engineering - Systems		2.3%	46

Engineering - Weapons and Explosives		0.7%	15
Environmental sciences		4.7%	94
Epidemiology		0.8%	17
Ergonomics		0.5%	10
Evolutionary biology		0.3%	6
Experimental Physics		0.8%	16
Explosives		1.7%	34
Fisheries		0.9%	19
Fluid Dynamics		0.5%	10
Food and Environmental Microbiology		0.5%	10
Food science		1.1%	23
Forestry and arboriculture		0.2%	4
Futures analysis		0.4%	8
Genetics		0.6%	12
Genetics - human		0.0%	1
Genetics - plant breeding		0.0%	1
Geographic Information Science		0.5%	11
Geology and earth sciences		2.6%	52
Geophysics		0.4%	9
Human health - Assisted reproduction		0.0%	0
Human health - Nutrition		0.7%	15
Hydrography		0.1%	3
Immunology		0.5%	10
Information Communication Technology		2.1%	42
Instrumentation, Calibration and Metrology		1.0%	20

Knowledge and Information Management		0.9%	19
Laser Physics		0.6%	13
Marine Sciences		2.7%	54
Material Science		1.7%	35
Mathematical Modelling		1.6%	32
Mathematics		1.7%	34
Mathematics - applied		1.2%	24
Mathematics - statistics		1.5%	30
Medical Physics		0.1%	3
Metallurgy		0.5%	11
Meteorology		4.0%	81
Microbiology		3.1%	62
Naval Architecture		0.2%	4
Neuroscience		0.4%	8
Occupational Hygiene		1.3%	27
Operational Research and Analysis		3.7%	75
Optics and Optical Physics		0.4%	9
Pharmacology and Pharmaceuticals		2.2%	44
Physics		5.9%	119
Physiology		0.3%	6
Plant Science		0.8%	17
Psychology		0.8%	17
Public health		1.0%	20
Quality Management		0.9%	18
Radiation Detection and Protection		1.9%	39
Radiochemistry		0.3%	6
Remote Sensing		1.4%	28

Risk Analysis		1.2%	25
Science Policy		1.1%	22
Social Research		0.4%	8
Social Science		0.7%	15
Sociology		0.0%	1
Soil science		0.7%	15
Telecommunications		0.8%	16
Toxicology		1.7%	34
Veterinary science		3.3%	66
Zoological sciences		0.9%	18
Other (please specify)			203
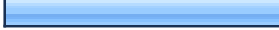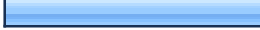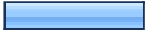
answered question	**2,017**
skipped question	**157**

6. Which of the following skills and capabilities have you applied in your career both outside and within the civil service?

	Outside the civil service	Previous civil service role	In my work now	Response Count
Rigour in framing inquiries and problems	51.1% (828)	30.9% (501)	**92.4% (1,496)**	1,619
Thinking critically, discerning analysis and synthesis	54.2% (990)	32.4% (592)	**93.2% (1,702)**	1,827
Solving wider problems by applying high level cognitive skills	51.8% (859)	31.1% (516)	**87.4% (1,449)**	1,657
Working collaboratively in mixed discipline teams	47.7% (892)	34.0% (636)	**89.7% (1,677)**	1,870
Communicating, advocating and influencing policy	26.6% (393)	31.2% (461)	**88.7% (1,312)**	1,479
Engaging with decision-makers and achieving impact	31.6% (496)	31.9% (502)	**89.0% (1,399)**	1,572
Leading and managing projects and programmes	40.6% (656)	35.3% (570)	**77.6% (1,252)**	1,614
Marketing, fundraising and income generation	**61.5% (370)**	16.4% (99)	42.2% (254)	602
Negotiating, contracting, commissioning commercially	43.2% (394)	34.3% (313)	**61.0% (556)**	912
Self discipline, self-leadership, autonomy	58.2% (1,060)	33.8% (616)	**92.3% (1,681)**	1,822
Supervising, guiding or mentoring others	48.5% (853)	32.6% (573)	**79.9% (1,405)**	1,759
Developing networks and using your connections to seek out expertise	46.4% (742)	35.1% (562)	**89.9% (1,439)**	1,600
Applying knowledge of legislation related to my disciplinary background (e.g. health and safety, copyright)	35.7% (465)	34.2% (445)	**88.4% (1,152)**	1,303
			answered question	**1,967**
			skipped question	**207**

7. Thinking about your answers to the last question, which of the following applies?

		Response Percent	Response Count
As a civil servant I have used other background skills not mentioned above		**44.2%**	**834**
As a civil servant I have background skills mentioned above I think are underused or undervalued		40.9%	773
As a civil servant I have other background skills not mentioned above that are underused or undervalued		29.9%	564
None of the above applies in my case		22.0%	415
	Space for comment		185

answered question	**1,888**
skipped question	**286**

8. At what grade were you first recruited into the Civil Service?

		Response Percent	Response Count
Senior Civil Service		1.0%	15
Grade 6 or equivalent (senior principal level)		2.9%	44
Grade 7 or equivalent (principal level)		9.5%	145
Senior Executive Officer (SEO) or equivalent		15.7%	240
Higher Executive Officer (HEO) or equivalent		28.2%	431
Fast stream		1.0%	16
Fast stream (Science and Engineering)		2.8%	42
Executive Officer (EO) or equivalent		**29.0%**	**443**
Administration Officer (AO) or equivalent		7.1%	108
Administrative Assistant (AA) or equivalent		2.8%	42
Other (please specify)			468

answered question	**1,526**
skipped question	**648**

9. Were you recruited into the civil service because of your science or engineering background?

		Response Percent	Response Count
Yes		**87.6%**	**1,711**
No		12.4%	243
	answered question		1,954
	skipped question		220

10. Which best describes your employment status immediately before you joined the civil service?

		Response Percent	Response Count
Working in non-UK civil service (other country or for an international body)		1.8%	34
Working in the wider public sector (including Research Council, NHS or local government)		12.4%	231
Working in industry		**33.3%**	**623**
Working in academia		12.6%	235
Working in the third sector (including NGO, charity or think tank)		2.6%	48
In full time education (including post-graduate qualifications)		30.3%	566
Unemployed		6.3%	117
Career break		0.8%	15
Other (please specify)			117
	answered question		1,869
	skipped question		305

11. How long have you worked in the Civil Service?

		Response Percent	Response Count
Under 2 years		5.2%	102
Bertween 2 and 5 years		19.8%	388
6-10 years		19.8%	387
11-20 years		27.3%	534
21 or more years		**28.0%**	**547**
	answered question		1,955
	skipped question		219

12. Which of these best describes your FIRST role in the Civil Service? (If your role involved more than one of these functions, please tick all that apply)

		Response Percent	Response Count
Practitioner or topic specialist		**73.4%**	**1,322**
Portfolio holder		5.3%	96
Project and programme manager		13.8%	249
Technical manager or team leader		6.8%	123
Policy maker applying science or engineering background		6.2%	112
Profession issues manager		0.8%	15
Unrelated work (e.g HR, policy).		6.8%	122
Other (please specify)			148
answered question			1,801
skipped question			373

13. Which best describes your role NOW? (If your role involves more than one of these functions, please tick all that apply)

		Response Percent	Response Count
Practitioner or topic specialist		**54.7%**	**1,016**
Portfolio holder		14.4%	268
Project and programme manager		26.5%	493
Technical manager or team leader		23.1%	430
Policy maker applying science or engineering background		15.6%	290
Profession issues manager		4.1%	77
Unrelated work (e.g HR, policy).		5.6%	105
Other (please specify)			106

answered question	**1,859**
skipped question	**315**

14. Which government organisation do you work for?

		Response Percent	Response Count
Devolved administration, agency, non-departmental public body or other		**23.8%**	**463**
Cabinet Office		0.3%	5
Department for Business, Innovation and Skills		9.8%	191
Department for Children, Schools and Families		1.7%	34
Department for Communities and Local Government		0.3%	6
Department for Culture, Media and Sport		0.2%	4
Department of Energy and Climate Change		2.1%	40
Department for Environment, Food and Rural Affairs		7.3%	141
Department for International Development		0.3%	5
Department for Transport		2.8%	54
Department of Health		4.0%	77
Department for Work and Pensions		1.7%	33
Food Standards Agency		3.5%	68
Foreign and Commonwealth Office		0.8%	15
Forestry Commission and Forest Research		0.1%	2
Government Office for Science		1.1%	21
HM Revenue and Customs		0.8%	16
HM Treasury		0.1%	1
Health and Safety Executive		12.3%	239

Highways Agency		3.5%	68
Home Office		3.6%	69
Ministry of Defence		5.4%	104
Ministry of Defence – Atomic Weapons Establishment		0.1%	2
Ministry of Defence – Defence Equipment and Support		2.4%	46
Ministry of Defence – Defence Science and Technology Laboratory		12.2%	238
Ministry of Justice		0.1%	1
		answered question	**1,943**
		skipped question	**231**

15. If you work in a devolved administration, non-departmental public body, agency or other UK headquartered body please say which one?

		Response Percent	Response Count
Animal Health and Veterinary Laboratories Agency		10.6%	30
BIS Partner organisation		8.1%	23
British Library		0.0%	0
Centre for Environment Fisheries and Aquaculture Science		0.4%	1
Drinking Water Inspectorate		0.0%	0
Driver and Vehicle Licensing Authority		0.0%	0
Environment Agency		10.9%	31
Fire Service College		0.0%	0
Food and Environment Research Agency		0.4%	1
Forest Research		0.0%	0
Health and Safety Laboratory		0.7%	2
Health Protection Agency		0.4%	1
Higher Education Funding Council		0.4%	1
Historic Scotland		0.0%	0
HM Forces		0.0%	0
HM Government Communications Centre		0.0%	0
Houses of Parliament (staff)		0.4%	1
Identity and Passport Service		0.0%	0
Intellectual Property Office		1.8%	5
Marine and Fisheries Agency		0.0%	0
Marine Scotland		3.5%	10

Maritime and Coastguard Agency		0.0%	0
Medicines & Healthcare products Regulatory Agency (MHRA)		3.9%	11
Met Office		**34.2%**	**97**
National Measurement Office		1.1%	3
National Offender Management Service		0.0%	0
National Physical Laboratory		0.0%	0
National Policing Improvement Agency (NPIA)		0.4%	1
Natural England		4.2%	12
Natural History Museum		0.0%	0
Northern Ireland Civil Service		0.0%	0
Office for National Statistics		0.0%	0
Office of Manpower Economics		0.0%	0
Office of Rail Regulation		0.4%	1
Ordnance Survey		0.0%	0
Renewable Fuels Agency		0.0%	0
Royal Mint		0.0%	0
Rural Payments Agency		0.0%	0
Science & Innovation Network (SIN) - jointly owned by BIS and FCO		1.4%	4
Scottish Government		5.6%	16
Scottish Natural Heritage		4.9%	14
Serious Fraud Office		0.0%	0
Technology Strategy Board		0.0%	0
Transport for London		0.0%	0
Transport Scotland		0.7%	2
UK Space Agency		0.0%	0
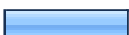
		Response Percent	Response Count
UK Trade & Investment		0.0%	0
Vehicle & Operator Services Agency		1.1%	3
Vehicle Certification Agency		0.0%	0
Veterinary Medicines Directorate		0.7%	2
Welsh Government		4.2%	12
Other (please specify) eg on secondment to a role outside the Civil Service			170
	answered question		284
	skipped question		1,890

16. Have you ever worked in any other department/agency in the civil service?

		Response Percent	Response Count
Yes one other		22.2%	423
Yes between two and five		8.0%	152
Yes six or more		0.1%	1
No		**70.0%**	**1,336**
	answered question		1,909
	skipped question		265

17. Which region do you work in?

		Response Percent	Response Count
East of England		4.3%	82
North East		1.4%	26
North West		11.8%	226
East Midlands		3.1%	60
West Midlands		2.7%	51
South East		19.7%	375
South West		20.0%	381
London		**21.6%**	**412**
Yorkshire and Humber		4.6%	88
Northern Ireland		0.1%	2
Scotland		6.5%	124
Wales		2.9%	56
Overseas		1.3%	25
		answered question	**1,908**
		skipped question	**266**

18. Current Range/Grade

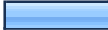|		Response Percent	Response Count
Senior Civil Service		3.1%	51
Grade 6 or equivalent (senior principal)		10.9%	178
Grade 7 or equivalent (principal)		28.5%	467
Senior Executive Officer (SEO) or equivalent		**28.9%**	**474**
Higher Executive Officer (HEO) or equivalent		18.7%	306
Fast stream		0.8%	13
Fast Stream (Science and Engineering)		1.3%	22
Executive Officer (EO) or equivalent		6.2%	102
Administration Officer (AO) or equivalent		1.3%	22
Administrative Assistant (AA) or equivalent		0.3%	5
Other (please specify)			291
	answered question		**1,640**
	skipped question		**534**
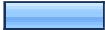
19. Which of these categories best describes the area that you currently work in or provide advice for?

		Response Percent	Response Count
Operational delivery		**54.5%**	**1,009**
Advising on policy and supporting Ministers		21.8%	403
Implementing programmes and projects		23.7%	438
	Please comment if you have a blended role		223

	answered question	**1,850**
	skipped question	**324**

20. Which professional group or groups are you most orientated to?

	My primary group or network	A group or network I also belong to	Response Count
Government Communication Network	21.7% (5)	**78.3% (18)**	23
Government Economic Service	**100.0% (2)**	0.0% (0)	2
Government Finance Profession	**62.5% (5)**	37.5% (3)	8
HR Professionalism and Performance	**55.6% (5)**	44.4% (4)	9
Government Internal Audit profession	**66.7% (4)**	33.3% (2)	6
Government IT Profession	**65.9% (27)**	34.1% (14)	41
Government Knowledge and Information Management Network	32.1% (9)	**71.4% (20)**	28
Operational Delivery Profession	**82.1% (64)**	24.4% (19)	78
Policy Profession	**71.0% (44)**	37.1% (23)	62
Government Procurement Service	47.4% (9)	**57.9% (11)**	19
Government Social Research service	**71.4% (15)**	28.6% (6)	21
Government Science and Engineering	**89.4% (714)**	14.9% (119)	799
Government Statistical Service	**91.7% (22)**	8.3% (2)	24
Property Asset Management	**87.5% (21)**	12.5% (3)	24
Not part of a professional group	**97.5% (516)**	17.2% (91)	529
Not aware of professional groups	**98.1% (569)**	21.7% (126)	580
Other (please specify below)			122

answered question	**1,787**
skipped question	**387**

21. Which of these best describes you as you see yourself now?

		Response Percent	Response Count
Practitioner		**62.6%**	**1,177**
Facilitator		16.4%	308
Informed advocate		15.5%	292
None of the above		5.5%	104
		answered question	1,881
		skipped question	293

22. If you answered 'none of the above', what other words would you use to describe yourself (e.g., advisor, convenor, analyst, consultant)?

	Response Count
	122
answered question	122
skipped question	2,052
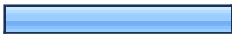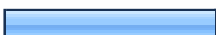
23. How do you maintain and develop your professional knowledge and expertise (tick all that apply)

		Response Percent	Response Count
On the job learning and development		**93.1%**	**1,701**
Training		63.5%	1,160
Membership of a scientific or engineering professional body		54.4%	995
Working towards professional qualifications eg chartered status		12.6%	230
Accredited programme of continuous professional development		14.5%	265
	Other (please specify)		171
	answered question		1,828
	skipped question		346

24. Which best describes your career aspirations in the next 5 years (ie what you would like to happen)? Please tick all that apply

		Response Percent	Response Count
I would prefer to stay in my current role		26.8%	491
I am working actively towards promotion		**50.7%**	**929**
I am working actively towards change in role in my current organisation		17.5%	320
I am seeking to change employer within the civil service		10.9%	199
I am seeking employment outside the civil service		20.5%	375
I plan to leave work force temporarily (career break)		1.4%	26
I plan to leave work force permanently (retirement)		10.5%	193
Other (please specify)			110

answered question	**1,831**
skipped question	**343**

25. Which of the following best describes your career prospects in the next 5 years (what do you expect to happen)?

		Response Percent	Response Count
I expect to stay in my current role		**36.2%**	**659**
I expect to have been promoted		33.9%	616
I expect to have moved to a new role in my current organisation		20.5%	372
I expect to change employer within the civil service		8.5%	154
I expect to have found employment outside the civil service		16.9%	308
I will have left the work force temporarily (career break)		1.0%	19
I will have left the work force permanently (retirement)		9.5%	172
Other (please specify)			115
		answered question	1,818
		skipped question	356

26. In what direction are you looking to develop your career in the future?

		Response Percent	Response Count
Develop new specialist knowledge		31.8%	556
Deepen existing specialist knowledge and expertise		**56.5%**	**988**
Gain broader experience in a science or engineering function		36.1%	631
Gain broader experience in a non-science or engineering function		17.5%	306
Take on greater management responsibility		34.3%	600
	Other (please specify)		120
	answered question		1,750
	skipped question		424

27. How positive do you feel about your career prospects in the civil service?

	Very positive	Positive	Neither positive nor negative	Negative	Very negative	Rating Average	Response Count
	2.3% (42)	24.1% (437)	28.6% (518)	**29.9% (541)**	15.0% (272)	3.31	1,810
				Other (please specify)			41
				answered question			1,810
				skipped question			364

28. What do you anticipate will be the biggest barrier to you fulfilling the career aspirations?

		Response Percent	Response Count
Lack of suitable roles in my field		**50.7%**	**754**
Lack of opportunities to gain wider experience		22.0%	327
Lack of opportunities to develop or maintain science or engineering professional skills		19.8%	295
Not understanding what is required to progress		7.5%	112
Other (please specify)			416
		answered question	1,488
		skipped question	686

29. How influential do you feel you are in your current role?

	Very influential - colleagues routinely seek out, listen and respond to my advice	Often influential - colleagues often seek out, listen and respond to my advice	Somewhat influential - colleagues usually seek out, listen or respond to my advice	Slightly influential - colleagues occasionally seek out, listen or respond to my advice	Not at all influential - colleagues rarely seek out, listen or respond to my advice	Rating Average
	21.4% (404)	**38.6% (729)**	25.9% (489)	11.8% (223)	2.3% (43)	2.35
					answered question	
					skipped question	

30. Thinking about how you answered the last question, when you work with other professions which of the following (if any) applies?

		Response Percent	Response Count
I am always positive in declaring myself to be a scientist or engineer		**61.9%**	**1,150**
I am mostly positive in declaring myself to be a scientist or engineer		28.8%	535
I hold back in declaring myself to be a scientist or engineer		9.1%	170
I find myself apologizing for being a scientist or engineer		0.8%	15
	Comment		96

answered question	1,858
skipped question	316

31. How influential do you feel scientists and engineers are in your wider organisation?

	Very influential	Often influential	Somewhat influential	Slightly influential	Not at all influential	Rating Average	Res C
	18.4% (346)	**31.6% (595)**	26.4% (498)	17.6% (332)	5.9% (112)	2.61	
					answered question		
					skipped question		

32. Each main department has a head of profession for science and engineering? Which of the following most applies?

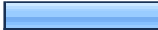|		Response Percent	Response Count
I know who my HoSEP is and have regular contact		8.4%	157
I know who my HoSEP is and have occasional contact		13.7%	257
I know who my HoSEP although have little or no contact		29.8%	559
I do not know who my HOSEP is		**48.1%**	**902**
		answered question	1,875
		skipped question	299

33. What kinds of support from your HoSEP have you found useful or would you find useful?

	Advice in handling a professional question	Advice for sourcing expertise	Help in framing a response to a difficult request	Support or advocacy for your professional judgement	Advice in handling a career issue	Help in finding a professional mentor
Have found useful	41.9% (137)	38.5% (126)	35.8% (117)	**48.0% (157)**	27.5% (90)	10.4% (34)
Would find useful	35.2% (354)	39.1% (394)	31.9% (321)	50.2% (506)	**51.9% (523)**	40.9% (412)

Other (please specify)

answered question	
skipped question	

34. Gender

		Response Percent	Response Count
Male		**69.8%**	**1,305**
Female		30.2%	565
	answered question		1,870
	skipped question		304

35. Age Group

		Response Percent	Response Count
20 - 29		9.1%	171
30 - 39		24.8%	464
40 - 49		**33.1%**	**619**
50 - 59		27.8%	521
60+		5.2%	97
	answered question		1,872
	skipped question		302

36. Ethnic background

		Response Percent	Response Count
White		**89.5%**	**1,672**
Mixed		1.0%	18
Asian or Asian British		2.7%	50
Black or Black British		0.5%	9
Chinese		0.3%	6
Prefer not to say		5.3%	99
Other (please specify below)		0.7%	14
	answered question		1,868
	skipped question		306

37. Do you consider yourself to have a disability?

		Response Percent	Response Count
Yes		4.8%	90
No		**91.3%**	**1,708**
Prefer not to say		3.9%	73
	answered question		1,871
	skipped question		303

38. Do you work part time?

		Response Percent	Response Count
Yes		10.8%	202
No		**89.2%**	**1,675**
	If yes, do you job-share?		126

answered question	1,877
skipped question	297

39. Do you normally follow a flexible working pattern? (please tick all that apply)

		Response Percent	Response Count
No		19.2%	359
Yes, Flexitime (where recorded)		**49.1%**	**919**
Yes, Flexitime (informal, not recorded)		24.2%	452
Yes, Compressed hours (eg 4 day week, 9 day fortnight)		4.0%	75
Yes, Other compressed working pattern (eg Term time working)		0.4%	7
Yes, Regular home/remote working		12.8%	240
Yes, Shift working		0.6%	12
	Other (please specify)		42

answered question	1,871
skipped question	303