





The Government Science and Engineering (GSE) Profession Strategy: One Year On

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FOREWORD



The case for high quality government science and engineering has never been stronger, with the Government Science & Engineering (GSE) profession offering a breadth and depth of expertise unrivalled by any other Civil Service profession. Every day, government scientists and engineers make valuable contributions to critical policy areas such as health, welfare, poverty, disease, safety & security, climate change and terrorism - tackling the global challenges of today and of the future.

12 months on from publishing our GSE Strategy, we have achieved a great deal. The GSE community is more engaged than ever and our departmental Heads of Science and Engineering Profession (HoSEPs) are working hard on acclimatising the strategy inside their departments. We have also established a good profile and strong reputation in Whitehall; with the strategy being resoundingly well-received across Whitehall. This is an exciting time to be leading the profession.

I welcome this one year on report and we will all be encouraged to read about the many successes and achievements in all of the workstream areas. The publication of the strategy last year, has served to galvanise a profession spanning hundreds of professional disciplines; creating a common and ambitious framework for government scientists and engineers to work towards, and which firmly places the future of the profession in the hands of its members.

Over the past 12 months, we have witnessed many outstanding initiatives led by the GSE community to raise the profile and build pride; demonstrating that they are willing to be proactive, and care about its future success. A good example has been the inspiring rise of the GSE Champions. Numbers have grown substantially since the Champions' Network was launched in July last year, there are now 184 champions working across 28 departments. These enthusiastic volunteers have embraced the challenge to build a departmental network, and raise the profile of the profession within their organisation. Thanks to their hard work, we now have a series of self-sustaining, self-managing GSE networks spanning the UK.

The GSE Profession Board, which supports the GCSA in overseeing the profession, has grown in stature and credibility. We have welcomed a number of new departments to the table, with several more eager to join. The board has played a pivotal role in driving forward the profession's agenda, taking ownership of the strategy and adapting it to meet the needs of their respective departments. I'm delighted that a number of HoSEPs have responded positively to feedback from their own staff to be more visible, now operating with a new found confidence and enthusiasm. I would like to see this approach being adopted by all members of the board in the upcoming year.

If there was one area where I think we are yet to reach our full potential, it is in our relationship with the policy world. I appreciate that over the last 12 months there has been an unprecedented level of collaboration between the two communities. But, I think there is still more to do. There is a chance for us to think creatively and to find new ways to improve our presence and impact. We need to make sure that government decision making is routinely underpinned by the best science and engineering advice and evidence available.

We should all be pleased with the good progress that is being made to redress the balance in diversity and inclusion (D&I) for gender, BAME, LGBTO, with the figures for our GSE Champions showing early promise. However, there is still room for improvement, and I would like to see a greater shift in the figures across all diversity areas in the next 12 months. To achieve fully a culture of diversity and inclusion within the profession, will require each of us to take affirmative action to ensure we are providing the best possible support for our growing community. For that reason it should remain a top priority for the profession.

I congratulate the profession on its impressive achievements over the past year. I am confident that we are on an upwards trajectory, and certain that if we continue to work together, we will achieve our shared vision for a "high profile, proud and effective GSE profession."

Professor Chris Whitty

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Interim Head of GSE Profession and Government Chief Scientific Adviser (GCSA)

November 2017

INTRODUCTION

The GSE Profession Strategy: One Year On

The Government Science and Engineering (GSE) profession launched its strategy¹ in October 2016, with a brand new vision for a "high profile, proud and effective GSE profession that attracts fresh talent and has a secure place at the heart of government decision making." The strategy committed to an ambitious action plan to transform the profession in 5 years, focussing on 10 workstreams that were important to government scientists and engineers, and which impact upon their continuing professional development (CPD) and careers.

The strategy and its action plan, was a culmination of nine month's work by the GSE team, working closely with scientists and engineers across government and with the departmental Heads of Science and Engineering Profession (HoSEPs). We wanted to understand the key challenges faced by the profession and to invite the community to generate ideas to overcome these challenges in the short, medium and long-term.

The strategy has received widespread support from senior leaders across Whitehall; Civil Service Professions, departments, GSE members and the wider science and engineering community. Many of these stakeholders have been supporting us with the strategy implementation, while others are using the GSE strategy as a model for developing and reshaping their own work programmes.

In the last 12 months, our focus has been on implementation of the strategy and we have made good progress in all areas of the action plan. The GSE Profession Board² has taken ownership of the strategy and work continues at pace to embed it within departments. For example, HoSEPs have been developing departmental action plans, tailored to meet their staff's needs and which are aligned to their department's business priorities. A number of cross-departmental working groups have been set up to coordinate and join up activity in workstreams such as diversity and inclusion, reward and recognition, talent management and leadership and capability and skills.

The GSE Champions' network³ which was set up in July 2016 to raise the profile of the profession and to support strategy implementation, has grown from strength to strength. These enthusiastic ambassadors have wasted no time in setting up their own active departmental networks; finding new and innovative ways to support and grow the profession.

One year on from the publication of the strategy, we felt it was important to share progress that we are making with our members and stakeholders inside and outside of government. To give them a sense of how we are doing, to highlight the successes and achievements to date, and to identify those areas where we need to focus our attention in the next 12 months. We recognise that we need to press on with our work on secondment and interchange and there is still a lot more work to do in the capability and skills area. We believe we are making excellent progress. We want to build on these achievements and with your assistance, crack on with the next phase of delivery. Finally, we wanted to use this report as an opportunity to say thank you to our members, for their ongoing support and hard work; and for helping to make the strategy happen.



The GSE Team Government Office for Science (GO-Science) November 2017

^{**} If you would like further information about the GSE profession, including how to join, become a champion or how to get involved in your departmental GSE network, please contact GSE@go-science.gsi.gov.uk

Aims and Objectives of this Report

This one year on report provides a high level update on the progress that has been made by the GSE profession in each of the 10 workstreams of the GSE Strategy Action Plan. They include:

- 1. Raising the Profile & Building Pride
- 2. Reward & Recognition
- 3. Science & Policy Engagement
- 4. Capability & Skills
- 5. Talent Management & Leadership
- 6. Secondment & Interchange
- 7. Diversity & Inclusion
- Mentoring
- 9. Collaborating & Networking
- 10. GSE Outreach

We wanted to provide a quick snapshot of the activity across the GSE profession in the last 12 months; demonstrating what can be achieved when a community made up of government scientists and engineers works together with each other and with partners inside and outside of government. There are so many good examples that we have only been able to provide a sample of the many successes and achievements. And so, we have not been able to include every single initiative or departmental case study that is underway or has been completed.

We have also highlighted those areas where there is still more work needed and where we will concentrate our efforts over the next 12 months.

We pledged to share the findings from the regional "have your say" workshops that took place in spring/summer 2016. And so, we commissioned the creative design team behind the GSE Story, 4 to take the raw comments from the workshops and turn them into a series of images depicting the main challenges faced by the profession. These illustrations are included in this report and help to set the scene for each workstream.

^{**} A summary of the high level goals in the GSE strategy action plan is included in Annex A

^{**} A summary of who we are and what we do can be found in Annex B

^{**} Our Vision and Mission Statement can be found in Annex C

^{** &}quot;What's in it for me?" a summary of benefits of joining GSE can be found in Annex D

^{**} GSE Members Pen Pictures can be found in Annex E

^{**} A full breakdown of our short, medium and long-term commitments can be found in the GSE Strategy¹

"We need to speak about our work with **pride** so that it resonates with the public"



RAISING THE PROFILE & BUILDING PRIDE

1) RAISING THE PROFILE & BUILDING PRIDE

Aspiration – what good looks like in this area

The skills, knowledge and expertise of the GSE profession are recognised, understood & used effectively by Ministers and other leaders to support government decision making.

Civil Servants working in government are proud of their science and engineering backgrounds.

HoSEPs are ambassadors for the GSE profession supported by GSE members in their department, who in turn feel valued for their contribution. New talent is motivated to pursue a career in GSE.



Short-term (6-12 months): What have we achieved?

- In November 2016 we opened up the profession to crown servants and public servants.
- The former Government Chief Scientific Adviser (GCSA) and Head of Profession Sir Mark Walport wrote to Permanent Secretaries of Ministerial Departments and Chief Executives of Arms Length Bodies (ALBs), to formalise the HoSEP role within their department and make it more accountable.
- HoSEPs should now have a specific job objective which covers their role as an ambassador for the GSE profession and commits to delivery of the GSE Strategy.
- Welcomed new members to the GSE Profession Board: Public Health England (PHE), Medicines and Healthcare Products Regulatory Authority (MHRA), GCHQ, Cabinet Office and Scottish Government.
- We have worked with the Central Government Geographers Group (CGGG) and the Royal Geographical Society (RGS)⁵ to appoint a new pan-government Head of Profession for geography. This important role will ensure that there is a strong voice for geography in government leading the agenda to professionalise geography within GSE.
- Updated our corporate and governance information on our GSE GOV.UK page. This includes a section on the GSE Profession Board² with a list of departmental HoSEPs. We shared a departmental breakdown of members and champions with our HoSEPs to help them understand GSE numbers and composition inside their organisation.
- Launched a new GSE Blog⁶ in July 2016. It is now our main way of communicating with members and the wider science and engineering community. It was ranked no. 1 out of 94 assessed on GOV.UK by the Government Digital Service (GDS). It has featured case studies highlighting the valuable work undertaken by our members every day, and includes a number of guest blogs to showcase our work with external partners. It has had 36,000 views since its launch.
- Provided regular updates on strategic discussions and decisions being made at the senior level by the GSE Profession Board via quarterly blogs from the Head of GSE Profession.
- Published the GSE Story celebrating successes and achievements of scientists and engineers through history. It has been viewed 3000 times and featured in Issue 12 of Civil Service Quarterly, the most read edition.
- Building on the success of the GSE Story, we released a 60 second video animation "We are GSE," illustrating how the work of scientists and engineers in government succeeds in achieving global impact.7
- Launched a new GSE registration survey,8 with c.3000 new recruits and published "What's in it for me?" a handy one-pager explaining the benefits of joining GSE, which can be found in Annex D.

What we still need to do:

- Continue to raise the profile of HoSEPs within departments and across the GSE community. Encourage them to contribute to the GSE blog and participate in a series of GSE leadership events.
- Retain our top ranking position by continuing to publish and source high quality content for the GSE blog. Ensure it continues to meet the needs of its audience, regularly seeking feedback from members and the wider science and engineering community.

Case Study 1: Public Health England (PHE)

PHE employs 2400 scientists across the UK, delivering specialist public health services through world class science. Plans are underway to relocate staff from Porton. Colindale & London HQ functions to a new centre of excellence at Harlow Essex beginning 2021. Ahead of any planned moves, PHE have been finding new and exciting ways to market GSE and bring their diverse science community together. A good example was the release of a video9 featuring Chief Executive Duncan Selbie in conversation with Sir Mark Walport, explaining the benefits of joining and encouraging sign up. Another strong example of their ongoing commitment to growing the GSE network within the organisation, is the appointment of a new PHE HoSEP in the New Year.

REWARD & RECOGNITION





LET'S USE THE



ACHIEVEMENTS

LET'S PROMOTE



ACADEMIA & INDUSTRY

WE ARE REVIEWING



ACROSS THE GSE COMMUNITY

2) REWARD & RECOGNITION

Aspiration – what does good look like in this area

Good visibility of the total reward packages for specialists across GSE, members understand the tangible and subtle benefits to working in GSE. Tailored pay scales exist to recruit and retain suitable candidates in line with business needs, accounting for local market conditions.

Access to good quality turnover data and information from exit interviews, which is being used strategically to improve recruitment and stem the flow of those leaving the GSE profession. There is a clear succession plan, good knowledge transfer across the GSE profession and the ability to source and replace lost/diminishing skills.



Short-term (6-12 months): What have we achieved?

- Redefined the "Use of Evidence" 2017 award, 10 working closely with Civil Service Awards organisers and successfully negotiated the introduction of new criteria to better reflect the work of scientists and engineers. There were 43 entries for the 2017 awards, with 25 entries from the GSE community. The Home Office CAST Body Armour work succeeded in making the final shortlist for the 2017 awards, in what was a very competitive field.
- Established a GSE Strategy Delivery Reward & Recognition Working Group chaired by the Home Office, with representation at all grades from the GSE profession. Civil Service Employer Policy (CSEP) in the Cabinet Office and a number of departmental HR professionals. This group is leading the strategy commitment to review pay and reward across the GSE profession. We are working closely with PROSPECT trade union to ensure they are well sighted on this work.
- The working group is finalising a survey to capture pay and reward data from departments on which specialist and deep specialist posts are required to be filled by GSE staff, at what grade and pay range. This work will be linked to critical skills gaps and to a potential benchmarking exercise against industry and academia. Please see Annex E for a summary of GSE roles and pen pictures.
- Established good links with CSEP to support the pay and reward review, and keeping a close eye on how the Data, Digital and Technology (DDaT) professions work on specialist pay progresses so lessons learnt can be fed into our
- Completed a top-up review of critical skills gaps across the GSE profession to support the pay and reward work.

What we still need to do:

Begin a separate piece of work on recognition, to help us understand what local recognition frameworks already exist in departments, and to share best practice led by the working group. The group will also examine how to best support staff wishing to publish their work and what more can be done to publicise individual's achievements and qualifications.

Case Study 2: Home Office Centre for Applied Science & Technology (CAST)

The changes made to the criteria in the 'Use of Evidence' Civil Service Award have already had a positive impact; improving the recognition of the work undertaken by GSE members, across the Civil Service. The Home Office CAST body armour project was successfully shortlisted in this category. It is an excellent example of high quality science & engineering in action: Collaborating with partners in the MoD and police end-users to understand the changing requirement of an increasingly diverse police force, resulting in the design of a new standard with better fitting body armour for female officers. Read more on the GSE blog.

"Let's tailor our science & engineering advice..."



"... so that it's effectively fed into the policy cycle"



SCIENCE & POLICY ENGAGEMENT

3) SCIENCE & POLICY ENGAGEMENT

Aspiration – what does good look like in this area

Science, engineering and technology input is embedded in the policy cycle, GSE members understand their role as government science and engineering practitioners, they are deployed in the policy cycle at the right time and they respond in a timely manner with effective advice in a userfriendly format.



Short-term (6-12 months): What have we achieved?

- Former Head of GSE Profession, Sir Mark Walport was invited to present at the Policy Profession Board, chaired by Head of Policy Profession, Sir Chris Wormald in June 2017. He presented an overview of the profession, the strategy and challenged the board to think about how the professions can work more closely together.
- A list of "go-to" people in the GSE profession consisting of departmental Chief Scientific Advisers (CSAs), HoSEPs and GSE Champions has been shared with Policy Profession board members.
- Ran our first joint GSE and Policy Profession L&D event; a policy masterclass led by interim GCSA, Professor Chris Whitty on "Science Advice in an Emergency" in July 2017. The event was well attended and received a high Civil Service Learning (CSL) feedback score of 8.7/10. We have continued to advertise a number of Policy Profession events on our GSE blog to encourage GSE participation.
- This year's annual Royal Society Pairing Scheme¹¹ which pairs academics working in science and engineering with civil servants or MPs, will for the first time be jointly supported by the GSE and Policy Professions.

What we still need to do:

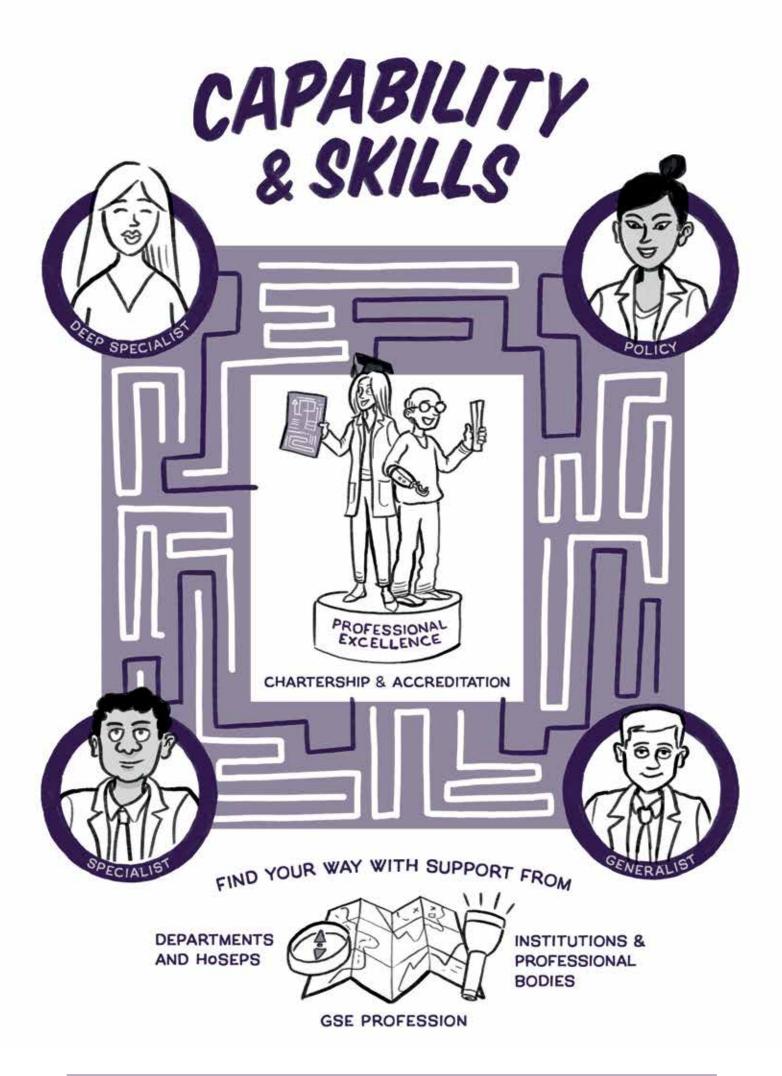
- Continue to support the Royal Society with their development of an "Evidence Synthesis" tool, which will help scientists and engineers to communicate and tailor their research findings more effectively to policy makers.
- Continue to run joint GSE & Policy Profession L&D events, and open up GSE training and networking events to the Policy Profession and other CS Professions.
- Work with the Policy Profession to develop L&D material in "science and technology" for the use of analysis and evidence skills in the policy career pathway. 12
- Work with the Policy Profession to identify and encourage senior leaders from the GSE profession to apply for the 2018 cohort of the Executive Masters in Public Policy run by the London School of Economics (LSE).

Case Study 3: Department for the Environment, Food & Rural Affairs (Defra)

The Science for Defra conference was a two-day conference jointly organised by Defra and the Royal Society, which brought together nearly 300 academics, government scientists and policymakers for an open and collaborative discussion about how science and technology can best inform environmental, food and rural policy. It featured a keynote from Permanent Secretary Clare Moriarty, who spoke about her vision for an 'open' Defra with no barriers where better decisions can be made when evidence is combined and communities work together. With a mixture of presentations, panel discussions and 'futures' workshop sessions; delegates explored ideas beyond their usual specialisms, resulting in a rich dialogue between academic and policy communities. Read more on the GSE blog.

Case Study 4: Health & Safety Executive (HSE)

The HSE Chief Scientist and Head of Profession, Professor Andrew Curran has been working very closely with his counterpart in the Policy Profession at HSE, to help mainstream collaboration. Andrew regularly delivers updates and insights to policy makers on the importance of science and how it can present innovative challenges for protecting the health and safety of workers. He recently gave a keynote speech at the Policy Profession's 'Policy Jamboree'. These engagements have helped policy and operational colleagues source possible science based solutions, drawing from a strong HSE scientific evidence base. Read more on the GSE blog.



4) CAPABILITY & SKILLS

Aspiration – what does good look like in this area

Our members have the right skills, knowledge and expertise, and are able to deliver against the government's priorities and meet their department's business needs.



Short-term (6-12 months): What have we achieved?

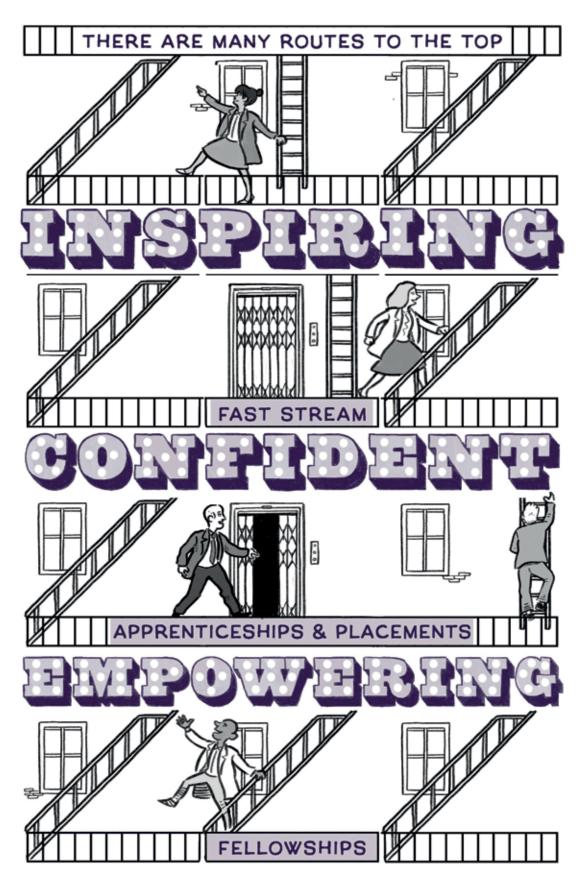
- Established a GSE Strategy Delivery Working Group on Capability & Skills, jointly chaired by BEIS & HSE, with representation at all grades from the GSE profession. This group will lead the strategy commitment to review existing departmental training resources and to assess what material could be made available across the GSE profession.
- A review of the existing GSE Professional Skills Framework¹³ is underway. We have sought views from HoSEPs, The Engineering Council and The Science Council. The consensus is that while it contains a lot of good information, it could be simplified and made more user-friendly. We have sought advice from the Project Delivery¹⁴ and Policy Professions¹² to get some tips on how they developed their capability frameworks.
- Launched "GSE Bitesize" a bespoke collection of L&D opportunities including events, training, workshops and visits open to all GSE members.1
- Ran a number of GSE seminars & workshops including: "Science Communication Jim Al-Khalili in conversation with Sir Mark Walport,"16 and the "Future of Research Culture 2035" with the Royal Society.17
- Initiated a project with the Science Council and Dstl, supported by the Engineering Council, to develop a routemap to chartership and accreditation for the GSE profession. This will map all the different routes to chartership that are on offer through large professional bodies and Professional Engineering Institutes (PEIs), so that GSE members can make an informed choice about which route is best for them.

What we still need to do:

- Continue with the review of the GSE Professional Skills Framework, consulting with other professions to see if we can learn from their experience.
- Work with Civil Service Learning (CSL) to update the learning portal, the current content needs to be refreshed.
- Publish a draft route map to chartership and accreditation, and invite feedback from the GSE community, Professional Bodies and PEIs.
- Explore the appetite for and feasibility of setting up a parallel route to chartership for GSE members working in policy and generalist areas.
- Continue to develop the core/shared curriculum for the GSE profession working with other CS professions to identify areas of common interest.
- Empower the Capability & Skills Working Group and encourage them to drive forward the work outlined above.

Case Study 5: Intellectual Property Office (IPO)

IPO senior patent examiners use GSE competencies to underpin their job objectives. They lead by example by actively maintaining their own CPD and participating in external professional networks and events. Last year over 100 senior examiners participated in CPD activities with external organisations and the IPO reciprocates by providing IP training for academics in the "IP for academia programme," with Cardiff and South Wales Universities. These activities have enabled senior examiners to keep up to date with their specialist fields, supported their work when searching and examining patent applications, and provided leadership opportunities for those managing these exchanges.



TALENT MANAGEMENT & LEADERSHIP

5) TALENT MANAGEMENT & LEADERSHIP

Aspiration – what does good look like in this area

The Senior Civil Service (SCS) has good representation from across the GSE profession. There is a clear succession plan in place for CSAs and HoSEPs. The Civil Service leadership statement is embedded across the GSE profession.

GSE members across the profession are able to access support and training to enable them to progress in their careers, irrespective of whether they are working in specialist, policy or managerial



Short-term (6-12 months): What have we achieved?

- Established a GSE Strategy Delivery Working Group (WG) on Talent Management & Leadership jointly chaired by National Security & PHE, with representation at all grades from the GSE profession. This group will lead the strategy commitment to review existing career paths available for specialist and non-specialists, to understand what schemes are in place to support "twin-track" careers e.g. Fellowship schemes. The group will assess the feasibility of rolling out these schemes across the GSE profession.
- 17 departments in the GSE profession contributed to cross-analytical profession data collection on 9-box talent orid information. This analysis will support the Analytical Talent Group (ATG) which aims to join up and improve talent management across the analytical professions. It will also support the work of the newly established Analysis Function.18
- Continued to grow the Science & Engineering Fast Stream (SEFS)¹⁹ with numbers rising from 10 entrants (2015 & 2016) to 16 entrants (2017). We are putting measures in place for the GSE Profession Board to have greater oversight of the SEFS scheme. For example, HoSEPs were invited to sit on the Final Selection Boards and participated in the induction programmes for the 2017 cohort.

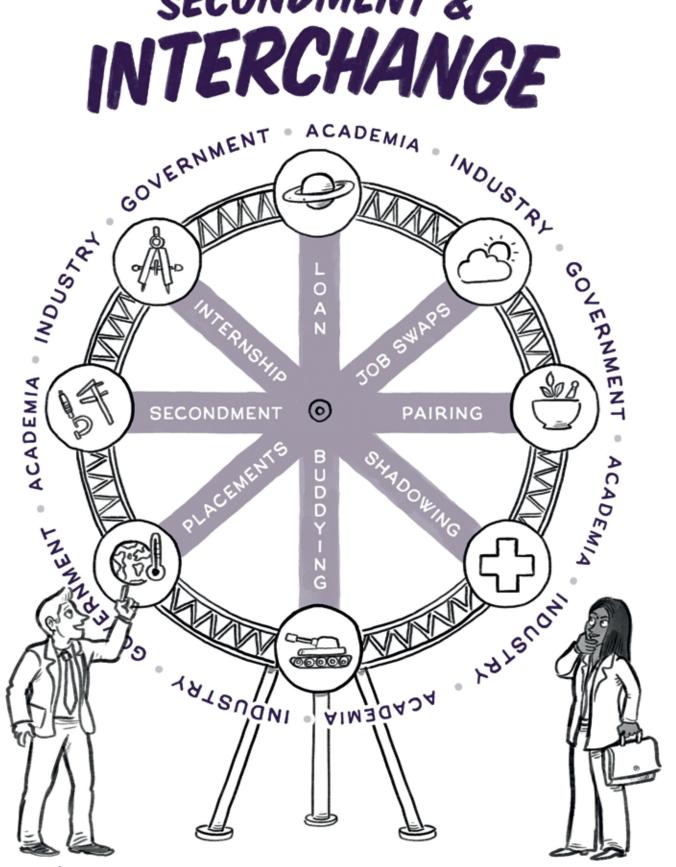
What we still need to do:

- Complete and publish the review by the Talent Management & Leadership WG on twin track careers.
- Continue to identify opportunities for the HoSEPs to support the SEFS scheme. For example, promoting the scheme within their departments and externally, assisting with postings and the development of SEFS specific L&D.
- Run a series of leadership seminars led by HoSEPs and CSAs for the GSE community and other CS Professions.
- Improve departmental participation for the annual cross-analytical profession 9-box grid data gathering exercise.
- Scope whether there is further work needed to support specialists in the profession with their career progression using the existing 9-box talent grid system.

Case Study 6: Medicines and Healthcare products Regulatory Agency (MHRA)

MHRA are involved in a number of activities to develop and nurture talent across the organisation. They have developed a "Talent & Succession Strategy" to improve succession planning for senior roles and to develop their future leaders. An adapted "9-box grid" marking model has been introduced in 2017, for general leadership, management and technical experts. All senior staff have been included on the grid, with a view to including additional grades in 2018. Plans are also underway to map career pathways; to support staff promotion internally, improve staff retention and boost morale.

SECONDMENT & INTERCHANGE



We want secondment & interchange to be the norm

6) SECONDMENT & INTERCHANGE

Aspiration – what does good look like in this area

GSE members are able to move seamlessly across departments and sectors e.g. industry and academia, to upskill, learn new skills and strengthen existing skills to support their CPD and to increase the number of career options that are currently available to them. This movement of staff enables cross-sector skills gaps to be filled.



Short-term (6-12 months): What have we achieved?

- Progress against this workstream has been slow. However, we have now identified a chair for the Task Force on Secondment & Interchange, and a number of departments have nominated representatives to sit on the group. We anticipate that the work as outlined in the GSE Strategy can now proceed in earnest.
- Published a number of internship and secondment opportunities on our fortnightly "GSE Opportunities" blog.²⁰

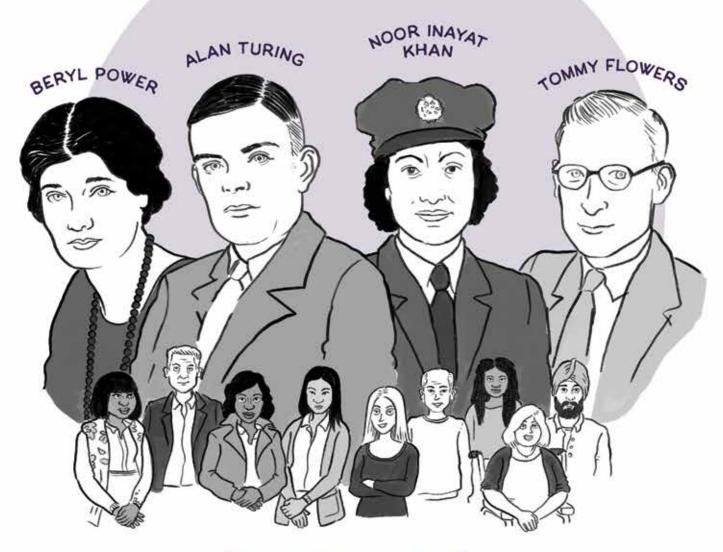
What we still need to do:

- Crack on with the establishment of the Task Force and commence work against the commitments outlined in the GSE Strategy.
- Understand what other Civil Service Professions are doing in this area and feed into centrally managed Civil Service workforce planning on secondment and interchange.

Case Study 7: Department for Transport (DfT)

To help DfT engage with and make the most of the external research community, DfT's Office for Science have seconded a relationship manager from EPSRC into DfT. The aim is to provide DfT with visibility of the data held by RCUK and help DfT engage with the portfolio of research being undertaken across academia. The secondment has forged new links between the DfT and the Alan Turing Institute, and the Quantum, Cybersecurity, and various energy related, research Hubs, leading to new funding calls and research focused on departmental objectives. Work is also ongoing to identify new ways of seconding academic staff into the department.

" We want visible, authentic & inspiring role models across the whole of the GSE profession



DIVERSITY & INCLUSION

7) DIVERSITY & INCLUSION

Aspiration – what does good look like in this area

The GSE profession is diverse and inclusive, with its membership reflecting society in terms of age, ethnicity, gender, sexual orientation, disability and socio-economic background. We are an exemplar for the Civil Service Talent Action Plan.

* Please see Annex F for a breakdown of the GSE profession's diversity & inclusion data. Including a breakdown of diversity data for GSE champions.



Short-term (6-12 months): What have we achieved?

- Established a GSE Strategy Delivery Action Group on Diversity & Inclusion chaired by MoD, with representation at all grades from the GSE profession and with the Royal Society, acting as a "critical friend". This group have agreed to become the centre of expertise for the GSE profession on D&I issues and will drive forward the work in the GSE strategy action plan.
- Visible improvements to the D&I content on our GSE blog (-approximately one third of our blogs focus on D&I), we have actively sought contributions from women and BAME, and publicised good practice being adopted by departments.
- Published our diversity and inclusion (D&I) data on our GSE blog, reaffirming our commitment to be open about the challenge we face.²¹ In addition, there have been a series of blogs from Sir Mark Walport, former Head of Profession, emphasising the importance of diversity and inclusion and how it remains a top priority for the GSE profession.2
- Published our D&I pledge²³ our commitment to addressing underrepresentation across all areas. We still have particularly low figures for Women and BAME compared with the Civil Service as a whole.
- Good progress has been made with identifying good, inspiring role models. The numbers for GSE Champions are promising, 49% are Women, 12% BAME and 8% LGBTO, higher than figures from the profession as a whole.
- Collected D&I data from members and champions signing up on the new GSE registration survey. This quantitative data did not previously exist. There is still an issue with completion rates, with members choosing not to disclose their D&I data.

What we still need to do:

- Publish a GSE Privacy Policy for how we handle GSE survey data to reassure individuals that we are protecting their personal information. We hope this will encourage individuals to fill in the D&I section of the survey.2
- Continue to drive forward the work on D&I and identify how the GSE profession will contribute to the Civil Service Diversity & Inclusion Strategy published in October 2017,25 tapping into the expertise of existing Civil Service
- Continue to work with D&I organisations such as Athena Swan²⁶ and Stonewall.²⁷ together with external partners in the science and engineering community e.g. National Academies to promote the importance of D&I.
- Continue to improve data collection, drive up numbers signing up to our GSE membership survey.
- Publish a "Diversity Calendar" listing a small number of national events throughout the year. Inviting our champions to write blogs and organise events to mark these occasions.

Case Study 8: Met Office

The Met Office will be submitting an application for the Athena SWAN charter mark in November 2017. This has involved a detailed assessment looking at the demographics, career transition, career development and culture across the organisation. A voluntary self-assessment team have analysed a wide range of data to provide the evidence of how the Met Office has been addressing issues around gender balance and they have also developed an action plan, with Executive approval, for how the Met Office can continue to address these issues. For example, a specific action relates to gaining a better understanding of any barriers that may exist preventing female staff gaining promotion into senior roles.

MENTORING

Get the most out of mentoring



8) MENTORING

Aspiration – what does good look like in this area

The GSE profession leads the way in championing the benefits of mentoring, promoting best practice, ensuring access to resources and a consistent mentoring offer across the GSE profession.

The GSE profession recognises and rewards valuable contributions made by mentors in target areas such as diversity, CPD and career pathways.



Short-term (6-12 months): What have we achieved?

- Launched a pilot mentoring scheme in partnership with MentorMatch, which allowed GSE members to tag their profiles, and search for members based on specific skills and experience and whether they are part of the GSE "specialist" or "generalist" categories.28
- Produced guidance for GSE members to help them fill in their profiles and get the most from the mentoring experience.29

What we still need to do:

- Continue to work with MentorMatch to make improvements to the current system. Promoting sign up across the profession and encouraging our members to share their feedback on the existing platform, to improve the next iteration
- Work with HoSEPs and GSE Champions to develop strong career case studies to promote the importance of mentoring across the profession.
- Develop best practice guidance for mentors, working with other CS Professions to understand if there are existing products available which can be shared with the GSE community.

Case Study 9: Defence Science and Technology Laboratory (Dstl)

Dstl promotes and supports mentoring through its staff networks including the Gender Equality Network and on development programmes. Mentoring enables:

- Growth of personal confidence which facilitates the development of new skills and for people to successfully transition into a new role or start a new project.
- Development of networks through mentors and peer groups, this results in enhanced information sharing.
- Working effectively and supportively with a diverse group tailored support is offered to individuals.

Mentoring is a key component of the Dstl Chartership and Accreditation Scheme, which supports scientists and engineers aiming for professional accreditation.



9) COLLABORATING & NETWORKING

Aspiration – what does good look like in this area

Networking opportunities across the GSE profession exist, promoting exchange of information and expertise, providing peer-review and raising awareness of the work undertaken. The networks are self-organising, self-managing and self-sustaining and include other CS professions.

An increase in the number of people signing up to become GSE Champions, which are embedded within every Civil Service department including arms-length bodies.



Short-term (6-12 months): What have we achieved?

- In July 2016 we launched the GSE Champion's Network, which has grown in strength and numbers. At the time of the strategy launch there were 48 champions. Now there are 184 champions deployed across 26 departments (including the Devolved Administrations), energetically working to raise the profile of GSE. HoSEPs are official sponsors of Champions within their department; channelling their enthusiasm to help build a GSE community within their organisation.
- To strengthen their role as ambassadors for the profession, Science and Engineering Fast Streamers (SEFS) are now auto-enrolled as GSE Champions.
- The first GSE Champion's Networking Event was held at the Met Office HQ in Exeter in May 2017. It was a great opportunity to bring Champions from different departments together, to share their personal experiences working as a government scientist or engineer. They were encouraged to share what they wanted from the Champion's role and to let us know what support they needed.
- In response to feedback from our champions, we revised and simplified the Champion's Guidance. We also produced a series of GSE posters, postcards and other useful information to help them with their departmental campaigning.
- Offered our Champions special access to L&D opportunities, including a chance to become an Independent Panel Member and participate in the GSE Strategy Delivery Working Groups to shape the profession. They have been invited to share their career journeys at New Scientist Live 2017, with the Biochemical Society³⁰ and Tomorrow's Engineers.3
- Contributed to 19 departmental events and seminars including APHA, BEIS, CAST, Defra, DfT, DstI, HSE, IPO, Nat Security and PHE, to raise the profile and improve the understanding of the profession.
- Initiated a new project with HSE to develop a "GSE Digital Directory of Expertise" to foster collaboration and networking across the GSE community. Members will be able to use it to identify and source skills, knowledge and expertise which exist across the profession. It will help Policy Professionals locate the right "go-to" person in GSE; someone with the right science, engineering or technology expertise to advise them on their policy questions.

What we still need to do:

- Continue to grow the network of Champions, supporting them to set up their own GSE networks or special interest groups to meet their specific needs. Encouraging these groups to self-organise and self-manage.
- Publish the GSE Digital Directory and invite feedback from the GSE community. Continue to modify and improve the tool, so that it meets user needs.

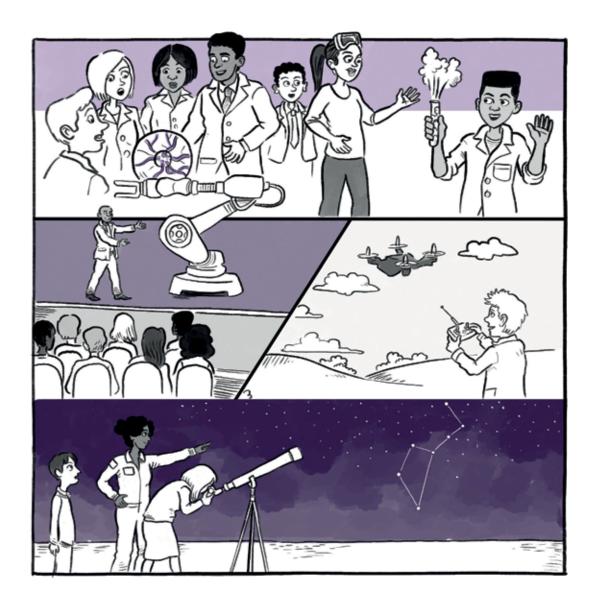
Case Study 10: Department for Business Energy and Industrial Strategy (BEIS)

The BEIS Science and Engineering Network (B-SEN) was launched in March 2017 by BEIS HoSEP and CSA, Professor John Loughhead and Permanent Secretary Alex Chisholm. Its aim is to create a thriving, challenging and energetic community; working with partner organisations to identify & tackle common issues and share best practice. In just 6 months, B-SEN has over 500 members, has doubled the number of GSE Champions and scoped out BEIS actions to be delivered against the GSE Strategy. Their monthly science speaker series has included distinguished speakers from across the wider science and engineering communities discussing thought provoking topics relating to how academics can contribute to evidence based policy making, and how the STEM professions can become more diverse.

Case Study 11: Department for International Trade (DIT)

Despite the challenges of identifying potential GSE members in an emerging and rapidly expanding department, and at the time when there was no formal HoSEP or CSA in place, DIT's enthusiastic bottom-up organisation has built a flourishing GSE network. With 8 Champions operating across the department, they have raised GSE's profile in DIT through regular newsletters, meet and greets and networked with the wider GSE profession through an article on the GSE blog and attended the first GSE Champions' event. In the wider scientific community, their networking and collaboration efforts have seen them at New Scientist Live, outreach activities in schools and the Royal Society Pairing Scheme. A new CSA and HoSEP, Dr Mike Short has now been appointed. He inherits a thriving network which is self-organising, well-motivated and ready to take on new challenges posed by the department. Read more on the GSE blog.

GSE PROFESSION OUTREACH



"People can access unique & exciting roles in government which tackle issues of global importance like no other profession"

10) GSE OUTREACH

Aspiration – what does good look like in this area

A new generation of scientists and engineers are motivated to pursue a career within the GSE profession and GSE membership increases. Existing skills gaps across GSE are filled and succession planning and knowledge management are no longer a problem.



Short-term (6-12 months): What have we achieved?

- Reached out to a wider Civil Service audience by supporting our HoSEPs to deliver the GSE Story at nine Civil Service Live 2017 events in five different cities across the UK. We staffed the exhibition space at London and Birmingham, sharing information on the profession. Interestingly, many delegates were parents hunting for career information for their children, who were interested in science and engineering.
- Encouraged departments to share their vacancies, so we can publish them on our "GSE opportunities blog." Feedback from departments is that the number of applications overall has increased with more applications from across the GSE community.
- Established a partnership with STEM Learning³² that oversees the STEM Ambassador Scheme and Tomorrow's Engineers³¹ who run the national and regional Big Bang Fairs.
- Invited to attend a series of career events to share experiences of working in government science and engineering with students and schoolchildren, run by University of Sheffield, Newcastle University, Bath University, University College London, Open University and Women in Westminster.
- Shared over 1500 hard copies of both the GSE Story & GSE Strategy at over 32 events around the country. The GSE Story has been particularly popular with young people and students, who have praised its innovative design and inspiring and accessible content.
- Supported a PHE led initiative to set up an information exchange for the GSE community on STEM outreach, to share best practice and join up activities across government.

What we still need to do:

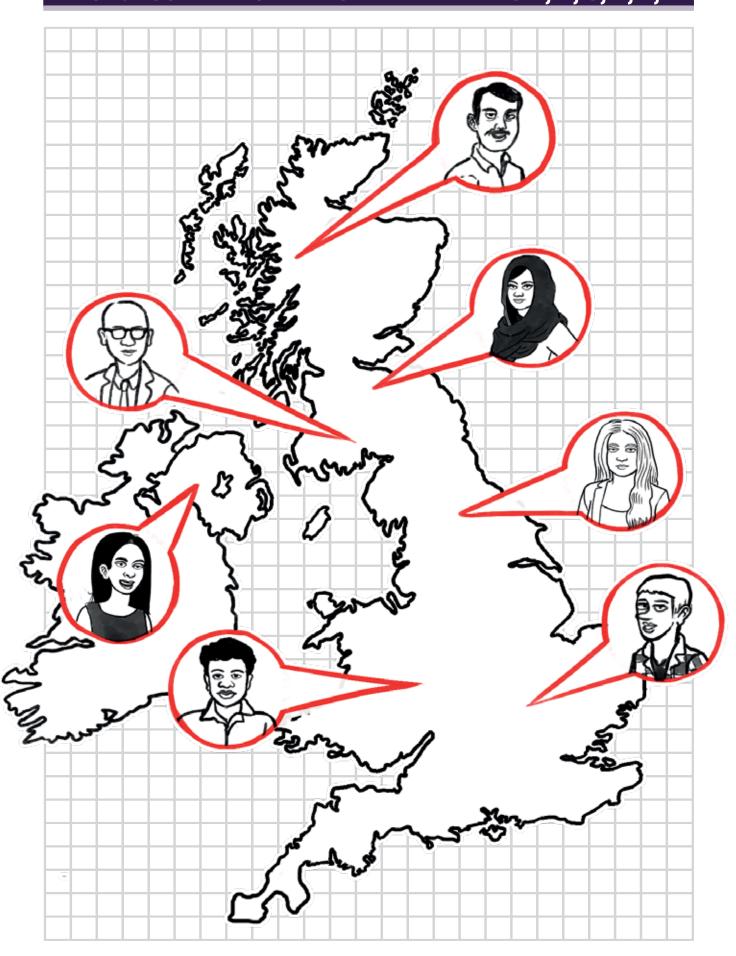
- STEM Ambassadors are enthusiastic role models who inspire the next generation of scientists and engineers. We would like to encourage our GSE members to sign up to become a STEM Ambassador, and we are keen for the champions to lead the way. We will be hosting free pilot STEM Ambassador Training Event for our champions in December 2017. If this pilot is successful, we will run a series of national events, open to all GSE members in 2018.
- Continue to have a strong presence at career's fairs and Big Bang Fairs across the UK and publicise these events via our blog.
- Work with external partners to pool ideas and share best practice on STEM engagement. For example, The Crick Institute, The Wellcome Trust, National Academies and The Alan Turing Institute.
- Continue to engage with, support and leverage assistance from the MoD led STEM Youth Engagement Implementation Working Group. This group has buy-in at senior level and is focussed on joining up STEM engagement activities across the whole of the MoD.
- Identify opportunities to promote and support the Year of Engineering 2018 being led by the Department for Transport (DFT).

Case Study 12: National Physical Laboratory (NPL)

NPL's outreach team consists of manager, Andrew Hanson, his full-time assistant and around 150 staff members volunteering each year to 'funnel the enthusiasm of scientists who are bursting to tell the world about their work, and let it loose on diverse audiences'. Over the last decade they have reached over 300,000 people through a diverse range of activities including talks, exhibition stands, training materials, lab tours and much more. An engaging and entertaining GSE blog shared outreach efforts and experiences, to advise and inspire other GSE members in their own outreach activities, and NPL have contributed to the GSE information exchange on STEM Outreach. Read more on the GSE blog.

THE GSE PROFESSION: BACKGROUND INFORMATION

ANNEXES A, B, C, D, E, F



	Our aspiration – what good looks like in the GSE profession				
Workstream	6-12 months	12 months-2 years	2-5 years		
1) Raising the Profile & Building Pride	Publicise HoSEP role Formalise the HoSEP role & ensure it is captured in individual's job objectives Publicise mythbuster blog GSE mythbuster blog	New CS Awards category Strategic comms plan Open-house events	Monitor & develop ideas		
2) Reward & Recognition	Commission an external review of pay & reward Review critical skills gaps across GSE Best practice guidance using local frameworks Promote CS Awards: Use of analysis and Evidence & Innovation	Develop best practice for pay & reward Collate exit interview & turnover rate	Develop guidance on publications for GSE members		
3) Science & Policy Engagement	Identify "go-to" people Publicise policy L&D opportunities e.g. policy schools Build on the GSE Story	L&D offer for GSE members – Policy awareness Series of L&D events for Policy Profession – understanding value of science advice and evidence Feasibility study – apprenticeship for GSE members to enable career transition Develop training offer for "go-to" people Publicise horizon-scanning and futures work	Roll-out L&D offers across GSE		
4) Capability & Skills	Core-curriculum for GSE profession Update CSL portal Review current GSE Professional Skills Framework Promote benefits of professional accreditation & importance of achieving chartered status & other professional standards CPD awareness campaign – making the most of 5 days a year	Develop parallel route to chartership for those in policy or generalist roles in the GSE profession Roll-out core curriculum Set up a "network of specialist trainers" Support the establishment of a virtual National Security Academy	Develop bespoke courses for specialists, if requirement exists. Review professional skills framework		
5) Talent Management & Leadership	Review existing career paths for technical & non-technical roles and publish best practice Incorporate specialist skills retention & development into your review of the professional skills framework Continue to grow the Science and Engineering Fast Stream (SEFS) Embed the CS Leadership Statement Leadership Seminars	Manage & maintain a GSE profession talent pool using 9-box talent grid information from departments Create GSE Talent Programme – enhancing SET skills at different career stages Feasibility of Fellows, Distinguished Scientists/Engineers equivalent to SCS	Roll-out the talent programme and the new specialist roles		
6) Secondment & Interchange	Advertise existing opportunities Establish Taskforce for Secondment & Interchange Work with CS HR to link with CS secondment and interchange strategy	Implement Task Force recommendations Develop strong case studies Feasibility study – visiting Fellowships & Professorships Feasibility – cross-sector secondments	Continue to embed & review outputs from Task Force		
7) Diversity & Inclusion	Improve data collection: Link with wider CS & new registration survey Capture diversity data on new GSE registration survey Identify good role-models, develop case studies & publicise via GSE comms	Annual diversity data drive Diversity & inclusion awareness campaigns e.g. autism awareness Achieve external recognition of being an inclusive, diverse, and supportive employer Best practice – ways of working in GSE profession	Set-up networks and link with existing CS networks		
8) Mentoring	Publish a review of existing schemes Best practice guidance for mentors Benefits of mentoring case studies Develop a pilot with Mentor Match	Develop a GSE profession mentoring scheme	Review for consistency, accessibility & best practice		
9) Collaborating & Networking	Publish findings from GSE "have your say" regional & departmental workshops Publicise external networking opportunities Grow the GSE champion network Develop cross-profession networks Produce a GSE map	Support development of specialist networks Training material for GSE Champions Regional events, CS Live and CS Local Develop an Associate Membership scheme	Monitor & develop ideas		
10) GSE Profession Outreach	Working group on case studies Publicise volunteering days Publicise job opportunities, secondments & internships Support STEM Futures Publicise RS Pairing Scheme	Assess feasibility of apprenticeships Presence at career fairs Extend pairing and buddy schemes	Develop policy awareness course at universities		

WHO WE ARE AND WHAT WE DO

The Government Science and Engineering (GSE) profession is one of five government analytical professions in the Civil Service that provides evidence for policy. It is managed by the GSE Team in the Government Office for Science (GO-Science), on behalf of the interim Government Chief Scientific Adviser (GCSA) and Head of Profession, Professor Chris Whitty.

It is made up of over 10,000 civil servants with a background or an interest in science and engineering, who work in a range of specialist, deep specialist, policy, analytical and operational roles that are located in Whitehall and in labs and institutes across the UK. In November 2016, we opened up our membership to include crown and public servants.

Our skills, knowledge and expertise are grounded in science and engineering and covers many areas, for example:

- We undertake research to drive forward the advice and services that government requires.
- We apply systems thinking and provide evidence based advice to support operational delivery, and to inform policy decisions.
- We fulfil an important function as an intelligent supplier and customer for science and engineering in government, providing a 'transmission mechanism' function between expert scientific and engineering communities working in academia, industry and government, and government policy makers.
- In some areas, we provide the core underpinning national science capability on which others, including academia,
- We respond rapidly in emergencies to protect public safety. We provide technical support to assist policing and prevent crime.
- We use science and technology to help solve defence and security issues.
- We encourage innovation, and carry out cutting edge research.

Our work has an enduring national and global impact, tackling problems such as poverty, disease, climate change, crime and terrorism for the public good. It is this breadth and depth of expertise that is unique to the profession and that government relies on every day to provide the important evidence and analysis that underpins its work.

Our greatest asset is our people. Through our members, government is able to access the vital skills, knowledge and expertise that will protect, support and enhance our nation today and in the years to come.

GSE VISION & MISSION STATEMENT

The GSE Vision

A high profile, proud and effective GSE profession that attracts fresh talent and has a secure place at the heart of government decision making.

The GSE Mission Statement

To achieve our vision we will:

- Lead the way in developing, high-performing, adaptable and skilled people as part of the wider Civil Service vision for a "Brilliant Civil Service".
- Ensure our members have access to the skills and training they need to do their jobs effectively.
- Provide access to a wide choice of careers, and the ability to move across departments and sectors.
- Ensure there is opportunity for all in a diverse and inclusive profession.
- Be a voice for all in the GSE profession, ensuring that policy makers know who we are, what we do and the vital role that our evidence and advice must play.

GSE What's in it for me?



5 good reasons to join the GSE profession

1) It's free to join! Open to civil, crown & public servants with a background in science & engineering.



- 2) Be part of a dynamic, fast growing, cross-government professional network, that is diverse, inclusive, and member driven.
- 3) Support your CPD link with professional bodies/institutes, access L&D opportunities, such as mentoring, networking events, visits, seminars/talks, and STEM outreach activities.
- 4) Improve visibility and recognition of your work in your department, by supporting your departmental Heads of Science & Engineering Profession (HoSEP).
- Improve access to flexible career paths input into the design of the new professional skills framework and improve mobility across departments and sectors.

A profession which is member led

The GSE Strategy was published in October 2016. It sets out how we want to achieve our vision in the next 5 years. Our mission statement commits to change in profession areas such as diversity & inclusion, mentoring, talent management and leadership, reward and recognition.



By registering with the GSE profession, you will play an important role in supporting this change.

You will have the opportunity to get involved in GSE activities to shape the future of the profession. Sign up to GSE here

Our Vision

Help us to achieve our vision:

"A high profile, proud and effective GSE profession that attracts fresh talent and has a secure place at the heart of government decision making."



Our Mission Statement



We will achieve our vision by:

- Ensuring our members have access to the skills and training they need to do their jobs effectively
- Provide access to a wide choice of careers, and the ability to move across departments and sectors
- Ensure there is opportunity for all in a diverse and inclusive profession
- Be a voice for all in the GSE profession, ensuring that policy makers know who we are, what we do and the vital role our evidence and advice must play.

If you have any questions, contact the GSE team: GSE@go-science.gsi.gov.uk

GSE MEMBER'S PEN PICTURES

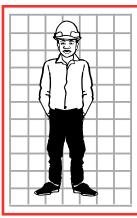
We have developed the following pen pictures to demonstrate the diversity in the roles that exist across the GSE profession.

Deep Specialist:

They are individuals with deep specialist skills, knowledge and expertise, in a niche domain or subject area, which may have been built up within their organisation, academia or industry. They will usually have a strong affiliation to a professional body or institution and good ties to academia and industry.

Roles can include lab based research, senior technical supervisory roles, designing, building developing, testing new products and systems. Depending on their field of expertise, they may also identify with operational research, government social research and other analytical professions.





Specialist:

They are individuals with specialist knowledge and expertise in a particular area, they could in principle become deep specialists if they continue to work in their chosen subject area or could perhaps use their transferable skills to work in a range of government science and engineering organisations. Depending on their background and expertise, many will have an affiliation to a professional body or institution.

Roles include: as above for deep specialists, technical project management & performing intelligent supplier and customer functions. They may identify with project management, security, operational research, government social research and other analytical professions.

Policy Roles:

Policy makers who use their scientific understanding or domain knowledge to add value in the areas they work in. Depending on their background and expertise, some will have an affiliation to a professional body or institution, but, many will not, for example, those working in cross-disciplinary areas.

Roles include: "policy for science" working on policies for things like research funding, universities and innovation policy and "science for policy", where research evidence can help to deliver better policies in a wide range of areas. They may strongly identify with the Policy Profession.





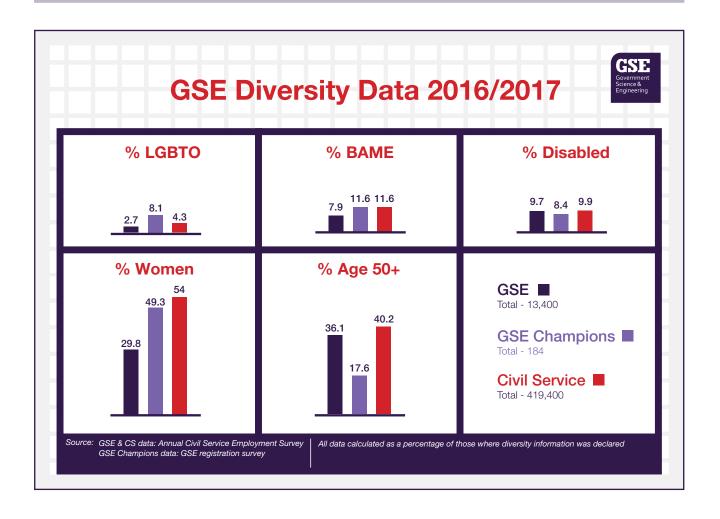
Generalist:

Those who have qualifications in science/engineering, but do not necessarily use them in day-to-day work. They undertake roles across the whole of the Civil Service in corporate services, operational delivery, policy, and regulatory organisations, they may identify with several of other Civil Service professions. Depending on their background and expertise, some will have an affiliation to a professional body or institution, but, many will not, for example, those working

in cross-disciplinary areas.

A BREAKDOWN OF THE GSE PROFESSION'S **DIVERSITY & INCLUSION DATA**

ANNEX F



Abbreviations

ALBs	Arms-Length Bodies	GSE	Government Science and Engineering
APHA	Animal and Plant Health Agency	HoSEP	Head of Science and Engineering
ATG	Analytical Talent Group		Profession
BAME	Black, Asian, & Minority Ethnic	HQ	Headquarters
BEIS	Department for Business, Energy, and	HR	Human Resources
	Industrial Strategy	HSE	Health and Safety Executive
B-SEN	BEIS Science & Engineering Network	IP	Intellectual Property
CAST	Centre for Applied Science and	IPO	Intellectual Property Office
	Technology	L&D	Learning and Development
CGGG	Central Government Geographers Group	LGBTO	Lesbian, Gay, Bisexual, Transgender, &
CPD	Continual Professional Development		Other
CS	Civil Service	LSE	London School of Economics
CSA	Chief Scientific Adviser	MHRA	Medicines and Healthcare Products
CSEP	Civil Service Employer Policy		Regulatory Authority
CSL	Civil Service Learning	MoD	Ministry of Defence
D&I	Diversity and Inclusion	MPs	Members of Parliament
DDaT	Data, Digital, and Technology	NPL	National Physical Laboratory
Defra	Department for Environment, Food, and	PEIs	Professional Engineering Institutes
	Rural Affairs		(PEIs)
DfT	Department for Transport	PHE	Public Health England
DIT	Department for International Trade	RCUK	Research Councils UK
Dstl	Defence Science and Technology	RGS	Royal Geographical Society
	Laboratory	RS	The Royal Society
EPSRC	Engineering and Physical Sciences	SCS	Senior Civil Service
	Research Council	SEFS	Science & Engineering Fast Stream
GCHQ	Government Communication	SET	Science, Engineering & Technology
	Headquarters	STEM	Science, Technology, Engineering,
GCSA	Government Chief Scientific Adviser		Mathematics
GDS	Government Digital Service	WG	Working Group

Acknowledgements

- Analytical Talent Group (ATG)
- Cabinet Office
- Central Government Geographers Group (CGGG)
- Civil Service Employer Policy (CSEP)
- COGNITIVE
- Crick Institute
- Defence Science and Technology Laboratory (DSTL)
- Engineering Council and its licensed Professional Engineering Institutions (PEIs)
- Girton College, Cambridge
- GSE Members
- GSE Champions
- GSE Profession Board (and Heads of Science and Engineering Profession)
- GSE Team (Shabana, Greg, Jenni, Ollie & Rosie)
- MentorMatch
- Ministry of Defence (MoD)
- Newcastle University
- Open University
- Policy Profession
- Project Delivery Profession
- Digital, Data and Technology (DDaT) Profession
- Jim Al-Khalli OBE
- Sir Mark Walport
- PROSPECT Trade Union
- Royal Geographic Society (RGS) with The Institute of British Geographers (IBG)
- Royal Society
- Science Council and its members and licensed bodies
- STEM Learning
- Tomorrow's Engineers
- University College London
- University of Sheffield
- Women in Westminster
- Speakers, participants, and organisers of Civil Service Live "Visualising Policy Impact – a pictorial history of how science and engineering improves outcomes" 2017 sessions; in particular:
 - Andrew Curran (HoSEP for HSE)
 - Anthony Finkelstein (HoSEP for National Security)
 - Carey Fraser (HoSEP for Scottish Government)
 - lain Williams (Deputy CSA for Defra)
 - John Loughhead (HoSEP for BEIS)
 - Phil Blythe (HoSEP for DfT)
 - Julyan Elbro (IPO)
 - Sir Mark Walport (Former GCSA and Head of GSE Profession)
 - Chris Whitty (Interim GCSA and Head of Profession)

- Working Group and Information Exchange members and participants; in particular the HoSEP chairs:
 - Chair, Reward and Recognition WG Alan Pratt (Home Office)
 - Chair, Diversity and Inclusion Action Group Jonathan Lyle, (former CEO Dstl)
 - Co-Chair, Talent Management and Leadership WG Christine McCartney (PHE)
 Anthony Finkelstein (National Security)
 - Co-Chair, Capability and Skills Working Group Andrew Curran (HSE)
 John Loughhead (BEIS)
 - Chair of STEM Outreach Information Exchange Christine McCartney (PHE)
- Organisations that have provided case studies for this publication:
 - Public Health England (PHE)
 - Centre for Applied Science and Technology (CAST)
 - Department for Environment, Food, and Rural Affairs (DEFRA)
 - Health and Safety Executive (HSE)
 - Intellectual Property Office (IPO)
 - Medicine and Healthcare Products Regulatory Agency (MHRA)
 - Department for Transport (DfT)
 - Met Office
 - Defence Science and Technology Laboratory (Dstl)
 - Department for Business, Energy and Industrial Strategy (BEIS)
 - Department for International Trade (DIT)
 - National Physical Laboratory (NPL)

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- 2 The GSE Profession Board governance. Available at: https://www.gov.uk/government/organisations/civil-service-government-science-engineering/about/our-governance
- 3 The GSE Champions Guidance. Available at: https://governmentscienceandengineering.blog.gov.uk/government-science-and-engineering-gse-champions/
- 4 The Government Science and Engineering Story, September 2016. Available at: https://www.gov.uk/government/news/the-story-of-government-science-and-engineering

RAISING THE PROFILE

- 5 The Royal Geographical Society (RGS): http://www.rgs.org/HomePage.htm
- 6 The GSE blog: https://governmentscienceandengineering.blog.gov.uk/
- 7 "We are GSE" video animation: https://www.youtube.com/watch?v=WUClixRGFbs
- 8 GSE registration survey: https://www.surveymonkey.co.uk/r/CRL289S
- 9 Duncan Selbie in conversation with Sir Mark Walport: https://www.youtube.com/watch?v=UyX34a_mmX4&feature=youtu.be

REWARD AND RECOGNITION

10 Civil Service Awards: http://www.civilserviceawards.com/

SCIENCE AND POLICY ENGAGEMENT

- 11 Further information on the Royal Society Pairing Scheme can be found at: https://royalsociety.org/grants-schemes-awards/pairing-scheme/
- 12 The Policy Profession Career Pathway, February 2017. https://civilservicelearning.civilservice.gov.uk/node/495599

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- 13 Science and Engineering Professional Framework, August 2014. Available at: https://www.gov.uk/government/publications/government-science-and-engineering-skills-framework
- 14 Project Delivery Capability Framework. Available at: https://www.gov.uk/government/publications/project-delivery-capability-framework-for-civil-servants
- 15 'Launching GSE Bitesize' GSE blog: https://governmentscienceandengineering.blog.gov.uk/2017/06/16/launching-gse-bitesize/
 - And: https://governmentscienceandengineering.blog.gov.uk/2017/11/01/presenting-gse-bitesize-2/
- The "Science Communication Jim Al-Khalili presented by Sir Mark Walport," can be viewed on YouTube: https://www.youtube.com/watch?v=vdYJ2XTmdxc&t=2134s
- 17 'The Future of Research' GSE blog: https://governmentscienceandengineering.blog.gov. uk/2017/09/12/1225-the-future-of-research/

TALENT MANAGEMENT & LEADERSHIP

- 18 The Heads of Analysis Board (HoA) which traditionally had representation from the five Civil Service analytical professions became the Analysis Function Board in June 2017. This new board is chaired by UK National Statistician and Head of Government Statistical Service (GSS), John Pullinger.
- 19 Civil Service Fast Stream: Science and Engineering. Available at: https://www.faststream.gov.uk/science-engineering/

SECONDMENT & INTERCHANGE

20 The latest GSE Opportunities Blog. October 2017: https://governmentscienceandengineering.blog.gov.uk/2017/10/06/gse-opportunities-dstl-natural-england-and-public-health-england-vacancies/

DIVERSITY & INCLUSION

- 21 Read our blog on building on our success together, February 2017: https://governmentscienceandengineering.blog.gov.uk/2017/02/15/building-on-our-success-together/
- 22 'Welcome from Sir Mark Walport' GSE blog: https://governmentscienceandengineering.blog.gov.uk/2016/07/25/introducing-the-government-science-and-engineering-profession-blog/
- 23 GSE Diversity & Inclusion Pledge: https://governmentscienceandengineering.blog.gov.uk/gse-diversity-inclusion-pledge/
- 24 GSE Privacy Policy: https://governmentscienceandengineering.blog.gov.uk/gse-privacy-policy/

- Civil Service Diversity & Inclusion Strategy. Available at: https://www.gov.uk/government/ publications/a-brilliant-civil-service-becoming-the-uks-most-inclusive-employer
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- Stonewall: http://www.stonewall.org.uk/

MENTORING

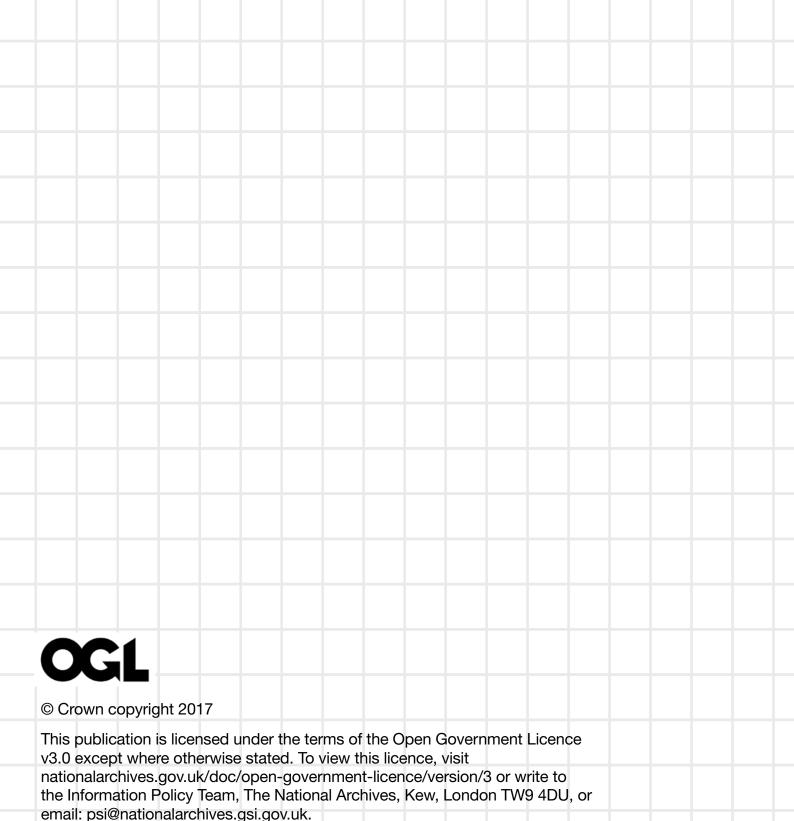
- 28 'Meet your match' GSE blog: https://governmentscienceandengineering.blog.gov.uk/2017/04/03/meet-your-match/
- GSE Mentor Match: Guidance. Available at: https://governmentscienceandengineering.blog.gov.uk/ gse-mentor-match-guidance/

COLLABORATING & NETWORKING

- Biochemical Society: https://www.biochemistry.org/
- Tomorrow's Engineers: http://www.tomorrowsengineers.org.uk/

GSE OUTREACH

32 STEM Learning: https://www.stem.org.uk/



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Design and Production: www.wordlink.co.uk