The Work of the Civil Service
House of Commons Public Administration and Constitutional Affairs Select Committee
Science Council response

The Science Council

1. The Science Council is a membership organisation representing 40 learned societies and professional bodies drawn from across science and its applications. Collectively our members represent almost 500,000 individuals including scientists, teachers and senior executives in industry, academia and the public sector.

2. In addition to providing a mechanism for the sector to work collectively, the Science Council develops and leads collaborative projects working with member organisations and the wider scientific community: examples include LMI analysis of the UK Science Workforce and Diversity, Equality and Inclusion.[1]

3. The Science Council's principal area of work is to advance the professional practice of science across the breadth of the science workforce, including non-graduate and technical roles in science. A key aspect of this is professional registration with the aim of raising the profile, aspirations and retention of scientists at all levels, including technicians.[2]

Improving Civil Service training and professional development

4. The government has recognised that investment in science and innovation are crucial to increasing national productivity,[3] and has set the goal of making the UK the best place in the world to do science.[4] Given that the Civil Service is a significant employer of scientists and the scale of the government's ambitions, high-level scientific and technical skills across the Civil Service will be essential to achieving this goal.

5. **Scientists across all levels, disciplines and settings within the Civil Service should be encouraged and supported by their employer to achieve and maintain standards for professional registration with the Science Council. This involves undertaking regular continuous professional development (CPD) activities and joining the relevant professional body.**

6. The Science Council is working with the Government Science and Engineering Profession[5], the Engineering Council and the Prospect union to explore whether the same CPD competency framework for its professional registers can be used for scientists, engineers and technicians across government. This will provide current and future Civil Service employees with a clear framework for higher-level skills acquisition and career progression.

7. The Science Council's professional registers[6] provide a benchmark that embrace and uphold standards of excellence in the practice of science. Achievement and retention

[1] http://www.sciencecouncil.org/content/diversity-equality-and-inclusion
[2] http://www.sciencecouncil.org/professional
[3] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443898/Productivity_Plan_web.pdf
[4] https://www.gov.uk/government/speeches/making-britain-the-best-place-in-the-world-for-science
[5] https://www.gov.uk/government/organisations/civil-service-government-science-engineering
[6] http://sciencecouncil.org/scientists-science-technicians/benefits-of-professional-registration/

confirms an individual's commitment to the highest levels of professionalism and competence through ongoing development of their skills and knowledge.

8. Professional registration builds in annual CPD monitoring so all scientists and technicians maintain up-to-date skills and knowledge, and are able to substantiate this with evidence of CPD activities. To maintain professional registration, registrants must:
    - Demonstrate that their CPD activities are a mixture of learning activities relevant to current or future practice
    - Seek to ensure that their CPD has benefited the quality of their practice;
    - Seek to ensure that their CPD has benefited the users of their work (employee, customer, student etc)[7]
9. Professional registration gives colleagues, employers and the wider public the confidence in the ability, conduct and behaviour of scientists and technicians, and should be expected for all those in the Civil Service who can achieve it.
10. Registering all scientists working in the Civil Service confers other benefits. The Science Council will be able to interrogate the data and could use it to enable better future workforce planning. The Civil Service would also be able to coordinate appropriate and necessary training and development opportunities for current employees based on future needs. It would also mean that training within the Civil Service Fast Stream programme can be informed by the economy's long-term needs.
11. Professional registration requires scientists to work to a code of conduct. Along with disciplinary and complaints procedures through an individual's professional body, registration enables action to be taken against publicly employed scientists behaving outside the code. This can help maintain public trust in the practice of science, and in the Civil Service itself.

Investing public money efficiently

12. Public money needs to be invested efficiently, and the public, where possible, should be consulted on decisions about what and where its money is invested; this should include investment in science. Final decisions as enshrined in the Haldane Principle should be in the hands of experts, but the unintended consequence of this can be that departments duplicate research activities that could otherwise be coordinated more efficiently.
13. One solution could be for departments, co-ordinated by the Government Office for Science, to use a model similar to that of the Research Councils,[8] where a harmonised, multi-disciplinary approach is taken to investment in scientific research. This approach has, in the main worked well and we hope that this continues with the proposed restructuring of the UK research landscape.

Public sector apprenticeship standards

14. We welcome the government's focus on raising the quality and quantity of public sector apprenticeships. Public sector bodies should lead by example to encourage greater take-up of science apprenticeships by others across the economy.

[7] http:/www.charteredscientist.org/about-csci/cpd-standards
[8] http://www.rcuk.ac.uk/research/xrcprogrammes/

15. However, there are very few science apprenticeships available.[9] Given the government's ambitions and the increasing demand for science skills across the economy, **the Science Council calls on the government to focus public sector apprenticeship growth in sectors that align with making the UK the best place in the world to do science.**

16. To ensure that science apprenticeships provide high-quality training and career progression opportunities, **the Science Council calls on the government to ensure that all public sector science apprenticeships link to standards for Registered Scientist (RSci) and Registered Science Technician (RSciTech)**.

Access to CPD opportunities

17. Scientists should be entitled to a variety of CPD provision and experiences in order to learn from and share best practice. This should include a mixture of learning activities[10], in-house and inter-departmental activities, as well as regular interactions with different employers and industries.

18. Professional bodies in science are in a strong position to ensure that CPD activities are evidence-based, and provide scientists with opportunities to network, access peer-to-peer learning and share good practice in evidence-based policy making. It is a well-established method of demonstrating an individual is continually refreshing their knowledge and skills in keeping with changing industries, sectors and technologies.

19. To maximise learning opportunities, scientists must be given appropriate time and resources to undertake regular CPD activities, and given time to reflect and review on what they have learned in order to put it into practice.

Diversity across the Civil Service

20. To attract and retain the best talent, it is vital that training and professional development routes into and within the Civil Service demonstrate progression and transferability. The Science Council has built both these into its professional registers to provide a clear route from Technician level through to Chartered status.

21. The Science Council is working, through its member bodies, towards a UK science workforce that reflects society's diversity.[11] We consider it essential that the Civil Service leads by example and collect and report on diversity characteristics of its workforce, in order to measure progress and assess the impact of ongoing schemes and projects. The Civil Service is a significant procurer of goods and services from private sector and charitable organisations, and should use their supply chains to hasten progress. This could include:

    - Writing into procurement contacts and tenders, that goods and services will only be purchased from organisations that demonstrate a commit commitment to the professional development of their scientific workforce preferably by supporting Science Council registration.

[9] https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships
[10] http://www.charteredscientist.org/about-csci/cpd-standards
[11] http://sciencecouncil.org/professional-bodies/diversity-equality-and-inclusion/

- Encouraging organisations to audit and publish their own recruitment and promotion practices for evidence of good practice and good outcomes in terms of diversity at all levels.

22. Through its Employer Champion scheme the Science Council is working with organisations that are committed to the professional development of their science workforce. The scheme is free. Employer Champions commit to professional standards by investing in their staff and having their skills and competence recognised. The National Laboratory Service, a business unit of the Environment Agency, is one of our Employer Champions.

23. **The Science Council is in discussion with a number of public bodies about becoming Employer Champions. The government should encourage all departments and agencies to become Science Council Employer Champions in to demonstrate their commitment to supporting all their scientific staff's continuing professional development.**