



Diversity and Inclusion Programme

To find out more, email diversityteam@raeng.org.uk



Diversity and inclusion in engineering employment survey 2018



John McCollum, Engineering Director, BAE Systems and Diversity and Inclusion Leadership Group (DILG) Steering Group

John McCollum, Diversity and Inclusion Leadership Group (DILG) Steering Group member said "I am proud to be a member of the DILG Steering Group. Diversity and inclusion is something that I am passionate about and through working with DILG and the action groups, I am determined that we will make a difference to the culture within engineering to make it more inclusive. Without doubt, an inclusive workplace, where everyone can be fully themselves at work and where difference

is valued, is not only good for business, but also for those that work within them. I would urge everyone to get involved in the work that the Academy and DILG do, as this will help with the pace of change within engineering."

This year, the Diversity and Inclusion (D&I) Programme, in partnership with engineering employers, commissioned Sagacity Research Ltd to deliver a survey to assess the state of D&I across engineering employers. The survey was

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conducted in July, with assistance from for business sake ltd and 300 companies across different engineering sectors and of different sizes have taken part.

Results from the survey will be communicated at the Academy's annual D&I event on the 27 November, Data Driven Culture Change. More detail about the event can be found on page 8.

A similar survey was delivered in 2015 with members of DILG and in conjunction with the Chartered Institute of Highways and Transport.

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Employers

Diversity and Inclusion Leadership Group (DILG) update

The DILG of engineering employers and employer-led organisations steers the employer strand of the Academy's D&I programme. Through it, employers work collaboratively in action groups led by the Academy, with the aim of increasing D&I across engineering employment.

Since the last newsletter in February 2018, three action groups have completed their work with outputs as follows:

Inclusive recruitment action group - the output from this group, an [inclusive recruitment toolkit](#), was launched at an Academy event in June 2018, and is now available on Academy website. It has already received great feedback, which will be used to inform an event in March 2019. The event will share good practice on how engineering employers can make their recruitment and selection more inclusive.

Paul Oatham, Global Head of Talent Acquisition at Bechtel, who chaired the action group said: *"Any organisation that believes creating a more inclusive and diverse workforce is a business imperative will recognise recruitment as a key enabler. Our aim was to create a toolkit that is particularly relevant*



Paul Oatham, Global Head of Talent Acquisition at Bechtel

to the engineering sector and that is as useful to SMEs as the larger organisations. Whether you wish to overhaul your complete process or are looking for ideas about tackling specific challenges, we hope you will find this of practical help."

D&I measurement in engineering action group - the group has developed a set of 16 measures for use by engineering employers of any size. The measures give employers a framework for measuring D&I across key employment activities in a way that reflects their D&I needs and plans. The measures have been tested by both large corporate companies and SMEs, who gave positive feedback with many indicating they will use the measures going forward. The measurement

framework will be available in October and formally launched at the D&I Programme annual event on the 27 November, *Data Driven Culture Change*.

D&I in procurement action group

- this group has contributed to the production of guidelines to support leveraging D&I in the procurement and supply chain of engineering companies in the highways and transportation sector. The report gives examples of good practice, a checklist and recommendations that organisations can adopt to ensure supply chains support their D&I aspirations. The guidelines will be available at the end of 2018.

Implementing recommendations from the *Creating cultures where all engineers thrive*¹ report

- two new action groups were set up in April 2018 to address recommendations from the [Creating cultures where all engineers thrive report](#). The two recommendations the DILG is focused on implementing are 'how to leverage the current culture within engineering to increase inclusion' and 'building a critical mass of allies equipped to support inclusion across engineering'. These groups have met twice since April and are in the process of agreeing and formalising the content of outputs for delivery in 12 to 18 months' time. If you are interested in getting involved in either or both groups, please contact diversityteam@raeng.org.uk

¹ *Creating cultures where all engineers thrive* www.raeng.org.uk/inclusivecultures

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Engineering gender pay gap reporting

During 2017, in the run-up to the gender pay gap reporting deadline of 4 April 2018, the Academy D&I programme convened two roundtables to discuss the implications of reporting the gender pay gap across engineering employment with 15 engineering employers. Based on discussion and analysis of a snapshot of sector data, the following insights emerged:

- There is a risk of confusion between the gender pay gap and equal pay. The former is a calculation of the difference in aggregated pay of women and men across an organisation and at different levels; while the latter is about ensuring women and men are paid the same for work of equal value. The gender pay gap is more a reflection of the distribution of women and men across an organisation – rather than an indication of pay inequality for the same job or role.
- There is a risk that women may be put off entering the sector through a misunderstanding that gender pay

gaps mean they will not be paid equally.

- A primary driver of the gender pay gap in the sector is the lack of women at the top of organisations, as more senior roles attract a higher salary and are more likely to earn larger bonuses.
- A focus on increasing women at entry levels in organisations will increase the pay gap as roles at more junior levels attract lower salaries.
- The inequality in bonus calculation is penalising organisations that are removing barriers to progression by introducing more part-time roles. Part-time working, mostly taken up by women, widens bonus gaps because these are not calculated on a pro-rata basis.
- Some functions within a business, for instance engineering functions, attract higher salaries than other functions, such as customer service. This means that the specific pay gap between female and male engineers is obscured when reporting occurs at company level.

- It was noted that the Office of National Statistics does not report on engineering as a sector. This means a full understanding of the sector pay gap is not possible without further analysis.
- There may be a risk of confusing positive action and positive discrimination – the former being legal in line with the Equality Act 2010 and the latter, in most cases is illegal. Organisations seeking to close the gender pay gap must ensure that it is done transparently and in line with good practice.

In response to the above, the Academy D&I programme is planning its own analysis of gender pay gap data in engineering. This analysis will be used to identify trends or patterns in the data; identify organisations that have small gaps for investigation; and produce an engineering-wide gender equality action plan that makes recommendations concerning recruitment, retention and career progression.

Organisations wanting to reduce gender pay gap and remove barriers to progression may want to find out more about the [industry led ten STEPS campaign](#).

The Academy published a response to [engineering gender pay gap reporting](#) in early April 2018.

For more on D&I programme work to close the gender pay gap, email divesityteam@raeng.org.uk

Only 12% of people working in engineering are female, compared with 47% of the whole UK workforce



The Ten Steps provides a framework to help firms improve recruitment, retention and progression of women

Graduate Engineering Engagement programme

On 25 June, 80 people attended an event at the Academy to launch an employer-led [Graduate Engineering Engagement Programme \(GEEP\)](#). The programme encourages more diverse engineering graduates to transition into engineering employment.

The Academy's focus on graduate recruitment is driven by its data analysis that revealed that while 27% of UK engineering graduates are from ethnic minority backgrounds, only 7.8% are in engineering employment. There is also a shortfall of UK female engineering graduates (16%) entering engineering employment, with only 9.3% working in engineering.

Sixteen engineering employers are signed up to the GEEP and more engineering employers are invited to join.



Delegates celebrate the launch of the Academy's Graduate Engineering Engagement programme

To find out more about the GEEP and Academy work on engineering graduate recruitment outcomes, visit www.raeng.org.uk/GEEP

If you are an employer and would like to know more about how to get involved, please email diversityteam@raeng.org.uk

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Professional engineering institutions



Engineering and science professional body representatives at the first implementation group meeting in May 2018

D&I implementation group for professional bodies

In February 2018, the first benchmarking report on the performance of engineering and science professional bodies was disseminated. The report was based on the [D&I Progression Framework](#)

for engineering and science professional bodies. A steering group of representatives from the professional bodies has been created to ensure that recommendations from the report are implemented.

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The benchmarking report is based on responses from 20 professional engineering institutions (PEIs) and 21 scientific bodies that self-assessed their performance against eight areas of professional body activity: governance and leadership; membership and professional registration; meetings, conferences and events; education and training, accreditation and examinations; prizes, awards and grants; communications, marketing, outreach and engagement; employment; and monitoring and measuring.

The steering group, chaired by Rosemary Cook, CEO of the Institute of Physics and Engineering in Medicine. It mapped the recommendations of the report into a matrix that identifies key issues, and potential practical actions that can help to deliver change. Four subgroups are considering these in more depth over the summer, focusing on communications and language; developing better measures; extending use of the framework; and sharing of resources.

The steering group has set ambitious aims:

- to raise the percentage of PEIs and science bodies using the D&I Progression Framework from 50% to 75% of organisations; and
- to demonstrate positive change in D&I across all eight areas of the framework.

For more on the [engineering and science D&I benchmarking report](#).

For more on the implementation group, email diversityteam@raeng.org.uk

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D&I inside the Academy

Academy D&I team

We are pleased to announce that the Academy D&I team is now complete. Arti Dillon joined the team at the end of April as Project Officer and Monica Stancu joined in June as Programme Manager. Arti plays a key role in coordinating the delivery of D&I communications and engagement events with stakeholders and Monica is leading delivery of the Academy's internal facing programme of work - ensuring actions plans are implemented and to support internal monitoring and report on progress.



Monica Stancu, Diversity and Inclusion Programme Manager; Gill Thomas, Diversity and Inclusion Senior Manager; Bola Fatimilehin, Head of Diversity and Inclusion; Arti Dillon, Diversity and Inclusion Project Officer

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D&I in STEM All-Party Parliamentary Group

The Academy is a sponsor of the All-Party Parliamentary Group (APPG) on D&I in science, technology, engineering and maths (STEM). The group aims to promote the inclusion and progression of people from diverse backgrounds in STEM, and to encourage government, parliamentarians, academics, businesses and other stakeholders to work towards a STEM sector

that is representative of the UK population.

As part of its work on D&I in STEM, the British Science Association acts as secretariat for the Group. The Group is made up of Members of Parliament and Lords, and is a focus for collaboration with businesses and other organisations in the STEM sector.

Academy D&I action plan

The Academy is currently working on reporting departmental progress on action plans.

It is developing greater insight into challenges and how best to support further progress. Information gathered will be used to inform an overall Academy plan to be signed off by directors in autumn 2018.

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Academy reports on gender pay gap

As leaders of the engineering D&I programme, the Academy voluntarily undertook an analysis of the gender pay gap among its own employees.

The analysis has found that there is currently a pay gap in favour of women when considering mean hourly pay, at -2.19%, but in favour of men when considering median hourly pay gap, at 9.19%.

Dr Hayaatun Sillem, CEO and Diversity Champion, Royal Academy of Engineering said *"While these data compare well to many engineering organisations, there is some further work to be done to understand our median pay gap and we are not complacent: we will continue to look for opportunities to reduce any bias and promote inclusion and fairness throughout our organisation. Our work to ensure that employees in our own organisation and across the engineering profession as a whole*



Dr Hayaatun Sillem, CEO and Diversity Champion at the Royal Academy of Engineering

better represent the diversity of UK society, and that bias does not impact pay or career progression, continues to be one of our highest priorities."

Academy D&I in the media

Dr Hayaatun Sillem, Academy CEO, was interviewed by the *Financial Times* in May. The interview can be read [here](#).

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International Women in Engineering Day Leadership Lunch

On 22 June, the Academy hosted a lunch to celebrate International Women in Engineering Day (INWED) 2018, to consider how the profession can address the barriers faced by women seeking senior roles in engineering. It also considered the impact of role models and the extent to which they proactively create opportunities for advancement and inclusion. Professor Dame Ann Dowling OM OBE FREng FRS, Academy President, welcomed the attendees. It was an opportunity for young engineers to network with senior industry leaders, providing a platform to share advice, experiences and encourage participation.



Delegates at the INWED lunch raise questions about the barriers to senior roles in engineering

Professor Dame Ann Dowling OM DBE FREng FRS, Academy President stands with delegates from INWED events



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Diversity events calendar and notable dates

Royal Academy of Engineering events

OCTOBER 2018

Black History Month ▶

Since 1987, Black History Month has been celebrated every October in the UK. The event is formally recognised by the government and highlights black history, culture, arts and contributions to the economic, social and political landscape of the UK.

This year the Academy has invited black, Asian, minority ethnic Fellows and leading engineers to be profiled.

4 October

'Brexit, Engineering and Construction' ▶

The focus of the seminar is skills supply, diversity and inclusion. It aims to explore the impact of Brexit on the engineering and construction skills sectors. It is being held by the Association for Black Engineers and is sponsored by the Academy, Institute of Engineering and WSP. Hayaatun Sillem, Academy CEO, is scheduled to speak at the event.

4 October

Progression Framework Implementation Group

A group of science and engineering professional bodies taking action to increase diversity and inclusion. Additional meetings will be scheduled in 2019.

For more information contact Monica.Stancu@raeng.org.uk at the Academy or b.wagenbach@sciencecouncil.org at the Science Council.

9 October

D&I Committee meeting (by invitation only)

The D&I Committee has the oversight of Academy D&I programme and internal work. The Committee meets on a quarterly basis to discuss progress of activities and projects. If you are Fellow and would like to be involved, please contact diversityteam@raeng.org.uk

9 October

Graduate Engineering Engagement Programme Steering Group (by invitation only)

This event is part of the programme, which aims to increase the transition of diverse engineering graduates from diverse backgrounds into engineering employment. For more information - www.raeng.org.uk/GEEP

10 October

World Mental Health Day ▶

The World Health Organisation marks this day every year to provide an opportunity for all stakeholders working on mental health issues to talk about their work, and what more needs to be done to make mental health care a reality for people worldwide.

17 October

STEMM DAC ▶

STEMM disability advisory committee (STEMM DAC) provide support across science, technology, engineering, mathematics, and medicine for disabled workers, current and aspiring disabled students and their teachers. The committee meets quarterly.

17 October

DILG Steering Group meeting (by invitation only)

Meeting of engineering employers and employer-led organisations that steers the employer strand of the D&I programme. Participation is by invitation but if you would like to know more, please email diversityteam@raeng.org.uk

25 and 26 October

Graduate Engineering Engagement Programme - Birmingham ▶

This is the second in a series of events as part of the programme. It is delivered in partnership with SEO London.

NOVEMBER

8 to 9 November

Engineering D&I - challenging companies to deliver equality on all fronts ▶

Institute of Engineering and Technology event at the InterContinental London - O2.

21 to 22 November

Graduate Engineering Engagement Programme - London ▶

This is the third in a series of events as part of the programme.

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Diversity events calendar and notable dates *continued*

25 November

International Day for the Elimination of Violence against Women ►

The United Nations' International Day for the Elimination of Violence against Women is an occasion for governments, international organisations and non-governmental organisations to raise public awareness of violence against women.

27 November

Data driven culture change

This year, the annual D&I Programme event provides a platform to launch the headlines from the survey that has been looking at D&I in engineering employment and show how data can be effective in driving culture change within engineering. The events are a great opportunity to gain insight, share good practice and network to develop D&I. Please register [here](#) for this event.

For more information about this event please contact diversityteam@raeng.org.uk

DECEMBER

3 December

International Day for Persons with Disabilities ►

It aims to promote the rights and well-being of persons with disabilities in all spheres of society and development, and to increase awareness of the situation of persons with disabilities in every aspect of political, social, economic and cultural life.

11 to 12 December

Graduate Engineering Engagement Programme - Preston

This is the final in a series of events as part of the programme for 2018. For more information visit www.raeng.org.uk/geep

FEBRUARY

LGBT History Month ►

LGBT History Month is celebrated in February in the UK and aims to increase the visibility of LGBT people and their experiences, and to raise awareness of matters affecting the LGBT community.

4 February

Graduate Engineering Engagement Programme Steering Group (by invitation only)

For more information - www.raeng.org.uk/GEEP

14 February

D&I Committee meeting (by invitation only)

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27 February

DILG Steering Group meeting (by invitation only)

Meeting of engineering employers and employer-led organisations that steers the employer strand of the D&I Programme. Participation is by invitation but if you would like to know more, please email diversityteam@raeng.org.uk

MARCH

4 March

Inclusive recruitment (by invitation only)

The Inclusive recruitment workshops aim to develop an understanding of how running an inclusive recruitment process could help employers achieve a more diverse workforce. It will share tools and techniques at a practical level that will help employers develop an inclusive recruitment process. If you would like to take part please email diversityteam@raeng.org.uk

8 March

International Women's Day (IWD) ►

The campaign theme for 2019's IWD is 'Press for Progress'. IWD is a global day that celebrates the social, economic, cultural and political achievements of women. The day also marks a call to action for accelerating gender parity.

For more information on any aspect of the work mentioned in this newsletter,
please contact diversityteam@raeng.org.uk

www.raeng.org.uk/engdiversity

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DIVERSITY AND INCLUSION PROGRAMME

Royal Academy of Engineering

We bring together the most successful and talented engineers from across the profession - our Fellows - to advance and promote excellence in engineering for the benefit of society.

We have three strategic priorities: make the UK the leading nation for engineering innovation and businesses, address the engineering skills crisis, and position engineering at the heart of society.

We are a national academy with a global outlook.

Diversity and Inclusion Programme Strategy 2016-2020

The Royal Academy of Engineering is running a programme to increase diversity and inclusion across the engineering profession.

Vision: An inclusive engineering profession that inspires, attracts and retains people from diverse backgrounds and reflects UK society.

Mission: Leading the engineering profession to challenge the status quo, stimulate cultural change, and improve diversity and inclusion.

The programme has three strategic aims:

1. Understand barriers to increasing D&I in engineering, employment, and professional registration.
2. Engage in partnerships to remove barriers to increasing D&I.
3. Deliver impact through effective communications.

The Academy is a member or supporter of the following organisations:

