On 6 September 2017, the Academy released the results of a unique study of culture and inclusion across the engineering profession. Launched at the Academy’s annual Diversity and Inclusion Programme event in central London, the study gives an insight into how engineers describe the culture of engineering and the extent to which it is inclusive.

Based on responses from 7,000 UK engineers, the research confirms that there is a strong business case for inclusion within the profession. Respondents to the survey who felt included reported increased motivation (80%), increased performance (68%) and increased commitment to their organisation (52%). The responses showed that the more included engineers feel in an organisation, the more likely they are to understand business priorities, see a future for themselves in the profession and be confident about speaking up about improvements, mistakes or safety concerns. These benefits were not only reported by women and ethnic minority engineers, but also by white male engineers who make up the majority of the profession.

In order for the profession to create a more inclusive future, engineers

continued over...
reported that the factors that lead to feelings of inclusion are openness, respect, relationships, support for career development, flexibility, leadership and diversity. To make progress, the report highlights the need for action by engineering leaders, managers, and human resources and communications staff, as well as by individual engineers. This is needed in areas such as: prioritising inclusion; better articulating the benefits of inclusion; increasing awareness of how different groups perceive workplace culture; monitoring data on the delivery of career support and talent management; and leveraging the strengths of engineering culture to maximise the likelihood of progress.

However, to make real progress, underlying barriers identified through the study need to be addressed. These include: ‘inclusion privilege’, which suggests that those who already feel included are least likely to take action; the perception that there is no ‘crisis of inclusion’ to drive action, but a consistent pattern of lower levels of inclusion for ethnic minority and women engineers; and a perceived need to deliver progress on intangible outcomes related to perception and experience that may be at odds with engineering culture. There is no reason why the engineering profession cannot rise to the challenge of developing a more inclusive future and reap the benefits of inclusion.

To read the full report and watch an animation on the findings, please see here.

Progression Framework - collective benchmarking

In July 2017, professional engineering institutions and Science Council members took part in events to kick-start a collective benchmarking exercise, based on the D&I Progression Framework, to set a baseline for diversity and inclusion activity across engineering and science professional bodies.

Launched in December 2016, the D&I Progression Framework provides a tool for science and engineering professional bodies to discuss, plan and progress diversity and inclusion.

For the collective benchmarking exercise, all professional bodies were invited to submit completed frameworks to a third party to produce aggregated engineering and science benchmarks and reports. Participating organisations will also receive individual reports indicating action that can be taken to progress diversity and inclusion, and will have the opportunity to benchmark against reports that will be available in late 2018.

The Academy has used the Framework to develop action plans in a number of areas: governance and leadership; Fellowship; conferences and events; education and training; prizes, awards and grants; communications, marketing, outreach and engagement; and employment. Plans have been signed off by directors and will be followed-up with progress reports over the coming weeks and months.

Academy internal diversity and inclusion work

The Academy has made good progress in adopting the Diversity and Inclusion (D&I) Progression Framework into its own work. To date, all Academy departments have used the framework to produce individual action plans signed off by directors. These plans will enable teams across the Academy to track and progress diversity and inclusion in a way that is relevant to their activities. The diversity and inclusion team will support the directorates in delivering their agreed actions, which will be monitored regularly by directors.

The Academy will also be taking part in the D&I Progression Framework benchmarking exercise and will submit its framework along other professional bodies by the end of September 2017.
Welcome to the second news update for the Diversity and Inclusion Leadership Group (DILG).

Since the December update, the action groups have made good progress in each of their areas, with clearer routes to deliverables now forming. We look forward to sharing progress from the groups at our plenary gathering on 6 September.

DILG Steering Group

Chair: Allan Cook CBE FREng

The DILG Steering Group meets quarterly. It has 16 members, which include the current action group chairs and support from the Academy team.

Its primary role is to maintain oversight of the action groups, their direction and their progress. In addition, the steering group is challenging itself around the role that leaders must take in making progress in diversity and inclusion, including how best to capitalise on the outputs of the action groups in stimulating change.

If you would like to raise any issues for consideration by the steering group, including suggestions for potential future action areas, please email bola.fatimilehin@raeng.org.uk.

Action groups

The action groups drive the DILG community by developing assets and recommendations for use and adoption by organisations in the wider DILG membership and beyond. All action groups have the underlying aim to produce outputs that will challenge the status quo within engineering and drive change with respect to diversity and inclusion practice in the sector.

The progress of each of the five groups is outlined below:

Measurement

Chair: John McCollum (BAE Systems)

The measurement group is developing a set of recommended measures that influence diversity and inclusion in engineering organisations, presented across key areas of activity: leadership; attraction and recruitment; retention; and progression.

For each measure, the guidance will suggest ways in which different populations within an engineering organisation should react or behave in response. Guidance will also include links to supporting information and benchmarking frameworks that exist in the public domain.

Inclusive recruitment

Chair: Paul Oatham (Bechtel)

The inclusive recruitment group is developing a toolkit for the engineering community to capture recruitment practices that encourage inclusion, including a set of case studies that demonstrate good inclusive recruitment examples.

Three key areas of focus have been identified as:
1. data gathering and measurement
2. approaches to recruitment and assessment
3. cultural preparation of an organisation for inclusive recruitment.

Case studies in these areas are now being identified. If you believe your organisation has an example of good practice to share, please contact bola.fatimilehin@raeng.org.uk.

Procurement

Chair: Dr Nelson Ogunshakin OBE (ACE)

The procurement group is developing guidance to influence action on diversity and inclusion through consistent procurement levers and approaches in the highways and transportation supply chain.

The guidance will be aimed at client-level organisations and will draw on existing examples of progressive approaches from areas such as Transport for London, Crossrail and the Olympics Development Authority. It will address issues such as the regulatory environment that governs public procurement and the need for large clients and contractors to support smaller contractors in increasing their capacity for action.

Output material is expected to be available by late 2017/early 2018 and key clients will be invited to endorse the approach proposed.

Communications

Chair: Pete Price FREng (Rolls-Royce)

The communications group is developing guidance and assets that will support a consistent approach for communicating within and beyond the DILG. This includes the creation of key messages for different audiences, useful communications resources and KPIs for communications activity. Particular consideration is being given to making the approach accessible and useful to SMEs.
The group is producing a communications plan to promote continued use and visibility of existing and future DILG publications and research. To this end, the group is also redesigning the Academy DILG web pages, which will be launched at the plenary on 6 September.

Inclusive cultures Chair: David Jenkins (Atkins)
The inclusive cultures group has completed its first phase of work: the Academy report from its Inclusive Cultures Project (ICP), which will be launched at the plenary event on 6 September.

The ICP is based on three phases of work: a literature review; focus groups with engineers from 10 engineering companies of different sizes, operational environments and sectors; and a ground-breaking survey that collected almost 7,000 engineers’ experiences of workplace culture in the engineering profession.

The next phase of work for this area will focus on putting the report recommendations into action.

The action groups report to each steering group meeting and actively identify areas of interaction or information flow between the groups. Action group members are volunteers drawn from the wider DILG membership and are supported by occasional expert input from external guests on topics relevant to the group’s focus. The table below lists the organisations already represented on the groups:

<table>
<thead>
<tr>
<th>Group</th>
<th>Member organisations (at July 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement</td>
<td>BAE Systems, Rolls-Royce, Mott MacDonald, Thales, WSP, MoD, UK Power Networks, WES, EEF, Towards Vision</td>
</tr>
<tr>
<td>Communications</td>
<td>Rolls-Royce, CGL Ltd, BAE Systems, Engineering Council, the Academy, Semta, Mott MacDonald, EEF, National Grid, EngineeringUK</td>
</tr>
<tr>
<td>Inclusive cultures (now concluded)</td>
<td>Atkins, Amey, MoD Defence Equipment and Support, Mott MacDonald, BAE Systems, Rolls-Royce, Semta, the Academy, For business sake, Amec Foster Wheeler, Airbus, KBR, Network Rail, Scott White &amp; Hookins, Byrne Bros</td>
</tr>
<tr>
<td>Inclusive recruitment</td>
<td>Bechtel, Leonardo, BAE Systems, Atkins, Laing O'Rourke, Mott MacDonald, Rolls-Royce, Thales, Airbus, EEF, EU Skills, Clear Company</td>
</tr>
<tr>
<td>Procurement</td>
<td>ACE, Department for Transport (Procurement), Network Rail, Morgan Sindall, Highways England, Atkins, Mott MacDonald, Northumbrian Water, Leonardo, Transport for London, HS2, Action Sustainability, Rail Supply Group</td>
</tr>
</tbody>
</table>

Anyone who is not yet involved but is interested in joining a particular action group should contact diversityteam@raeng.org.uk

Gender pay gap forum

On 29 June, a dozen DILG member companies took part in a discussion forum to explore the issues, challenges and opportunities presented by gender pay gap reporting. The participating organisations shared their current data, under coverage of a non-disclosure agreement (NDA), to enable an anonymised aggregate picture to be built and discussed.

Legislation now requires that organisations who have more than 250 employees must publish against a number of gender pay gap measures by April 2018. The high male representation in engineering, particularly at senior levels, will necessarily lead to a significant gender pay gap in some areas.

The Academy will use the forum output to develop a DILG position and commentary on gender pay gap reporting. It is keen to develop this position using a bigger sample size and would encourage any other companies that are willing to share their data, under the same NDA basis, to contact bola.fatimilehin@raeng.org.uk
International Women in Engineering Day

On 23 June, the Academy sponsored the very first International Women in Engineering Day (INWED), under the patronage of UNESCO. INWED, which was established as a national day by the Women’s Engineering Society (WES) in 2014, celebrates the achievements of women in engineering from all backgrounds on an international scale. It encourages more girls to consider a career in the field.

To mark the celebrations, the Academy launched a video profiling five women engineers under the age of 35 from Mozambique, Uganda, Palestine, Germany and the UK. All five role models have been actively involved with the Academy through its international programme, the Queen Elizabeth Prize for Engineering, Enterprise Hub, and other activities and have followed varied routes into their careers in STEM. The video also highlights the important role that both men and women can play to help improve gender diversity in the sector.

The video is available on Academy’s website at www.raeng.org.uk For more information on INWED, please visit www.inwed.org.uk

Employer engagement with refugee engineers

On 22 February, the Academy hosted an event in partnership with Transitions London, Arcadis and Network Rail to share good practice on employer engagement with refugee engineers.

More than 40 people from the engineering profession came together to learn about the challenges that refugee engineers face in the UK and find out how employers could support them through collaboration with Transitions London, a not-for-profit organisation that provides specialist refugee talent acquisition services.

The event highlighted that, at a time when the UK is experiencing a skills shortage, it is missing out on this talent pool of engineers: all people granted refugee status in the UK have full employment rights. Arcadis has recognised the opportunities that working with refugees can bring and has developed a highly successful traineeship programme for 10 refugee engineering professionals in partnership with Transitions London.

To find out more about Transitions London and its work to support refugee engineers, visit www.transitions-london.co.uk
On 19 June, almost 400 people attended a screening of Hidden Figures at the Science Museum’s IMAX cinema to mark International Women in Engineering Day and celebrate the release of the Oscar-nominated film.

The screening was sponsored by the Academy in partnership with Queen Elizabeth Prize for Engineering and EDF Energy. The film tells the story of Katherine Johnson, Dorothy Vaughan and Mary Jackson, three African American women who worked at NASA during the 1950s and early 1960s as part of a team of ‘human computers’. Their job was to calculate the launch and landing coordinates for the experimental rockets being built at the dawn of the space race.

Professor Dame Ann Dowling OM DBE FREng FRS, President of the Academy and Trustee of the Science Museum, welcomed everyone to the event and gave an inspiring speech about the importance of encouraging more young people into engineering.

A panel discussion took place before the film began. The members of the panel were: Roma Agrawal, Associate Director of AECOM; Anita Bernie, Director of Spacecraft Platforms and Demonstration Missions at Surrey Satellite Technology Limited; Abbie Hutty, Senior Spacecraft Structures Engineer at Airbus; and Dr Nelson Ogunshakin OBE, President and CEO of the Association for Consultancy and Engineering. The event was chaired by Dr Maggie Aderin-Pocock MBE, host of the BBC’s The Sky at Night, and discussions highlighted the importance of mentorship and visible diverse role models in engineering.
Diversity and inclusion in the engineering startup ecosystem

On 23 June 2017, the Enterprise Hub at the Royal Academy of Engineering hosted a breakfast meeting as part of its Innovators’ Network event series to mark International Women in Engineering Day (INWED). The breakfast meeting entitled, #INWED: How can we improve D&I in the engineering start/scale-up ecosystem, was chaired by Elspeth Finch MBE. Sophie Jarvis from the Entrepreneurs Network delivered a keynote speech, Untapped Unicorns, which focused on the challenge faced by female entrepreneurs, generating a lively response from the audience and the panel members: Maureen Taylor, CEO of SNP Communications, Harry Briggs, BGF Ventures, and Dr Hayaatun Sillem, Deputy CEO and Director of Strategy at the Academy. The focus of the discussion was firmly on making the difference by identifying what more can be done to support female entrepreneurs.

Panel members spoke passionately about the need for all members of the innovation and entrepreneurship ecosystem to play their part by challenging stereotypes, overcoming biases, promoting diversity, showcasing successful female founders, providing funding, coaching and mentoring support to female entrepreneurs.
Other news of interest

A number of relevant reports and consultations have been released during 2017, which may be of interest:

1. **Parker Review - a report into the ethnic diversity of UK Boards**
   This consultation draft, from the committee chaired by Sir John Parker GBE FREng, has examined ethnic representation on FTSE100 and FTSE250 Boards and found that it is disproportionately low. The review put forward a series of recommendations covering increased Board representation, a more robust pipeline, and greater transparency and disclosure, which are now under consultation. The DILG Steering Group discussed the report findings and recommendations at its December meeting and was supportive of them. The Academy subsequently responded to the consultation draft.

   The full report can be found [here](#).

2. **Hampton-Alexander review into FTSE women leaders**
   This report moves on from the work of Lord Davies on women on Boards and looks at the gender representation within the Board, Executive Committee and its direct reports for FTSE100 and FTSE250 companies. As well as strengthening the pipeline leading to Board positions, the review sought to identify mechanisms to increase female representation in executive positions. The review makes recommendations for specific voluntary targets for FTSE100 and FTSE250 companies by 2020, combined with government guidance and increased scrutiny by investors and search firms. The DILG Steering Group also discussed this report and its recommendations at the December meeting.

   The full report can be found [here](#).

3. **Publication of BS76005 Valuing people through diversity and inclusion - Code of practice for organizations**
   Following public consultation, a British Standard for diversity and inclusion was published in June. A number of the Academy’s stakeholders have been involved in the working group that developed the consultation draft and the measurement action group considered its content as part of its work.

   The full report can be found [here](#).

4. **Race in the workplace: the McGregor-Smith review**
   This report was commissioned by Baroness Ruby McGregor-Smith to lead a review of issues faced by business in developing black and minority ethnic (BME) talent. The review was tasked with: identifying the imperative for change; identifying obstacles faced by BME people in progressing through the labour market; bringing together existing data to illustrate the scale of the issue; highlighting and promoting best practice and successful interventions; and making cost-effective recommendations that advance BME progression across all organisations.

   The full report can be found [here](#).
Diversity and Inclusion Programme newsletter – September 2017

Diversity events calendar and notable dates

**OCTOBER 2017**

**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. For more information, visit www.blackhistorymonth.org.uk

**11 October 2017**

**Higher Education Employer Diversity Pilot Project - steering group meeting (by invitation only)**
A meeting of engineering companies collaborating to attract undergraduates from diverse backgrounds into engineering employment. The project is being delivered in collaboration with SEO London. If you are an employer and would like to get involved, email diversityteam@raeng.org.uk

**16 to 17 October 2017**

**Engineering Engagement Programme - London event**
Location: Royal Academy of Engineering, 3 Carlton House Terrace, London SW1Y 5DG
This the first in a series of events as part of the Higher Education Employer Diversity Pilot Project. This project aims to connect female engineering students and those from ethnic and socially disadvantaged backgrounds with engineering employers through workshops, speed networking sessions and support activities.

**30 to 31 October 2017**

**Engineering Engagement Programme - Birmingham event**
Location on 30 October: Amey International Design Hub, 20 Colmore Circus Queensway, Birmingham, B4 6AT
Location on 31 October: University of Birmingham
This the second in a series of events as part of the Higher Education Employer Diversity Pilot Project.

**NOVEMBER 2017**

**8 to 9 November 2017**

**Engineering Engagement Programme - London event**
Location: CH2M, 43 Brook Green, London W6 7EF
This the third in a series of events as part of the Higher Education Employer Diversity Pilot Project.

**16 November 2017**

**International Day for Tolerance**
In 1996, the UN General Assembly invited UN Member States to observe the International Day for Tolerance on 16 November. This action followed up the UN Year for Tolerance in 1995, proclaimed by the UN General Assembly in 1993 at the initiative of UNESCO, as outlined in the Declaration of Principles on Tolerance and Follow-up Plan of Action for the Year.

The UN has launched a new campaign to promote tolerance, respect and dignity across the world. TOGETHER is a global campaign that aims to reduce negative perceptions and attitudes towards refugees and migrants, and to strengthen the social contract between host countries and communities, and refugees and migrants. For more information, see here.

**19 November 2017**

**International Men’s Day**
The objectives of International Men’s Day include a focus on men’s and boy’s health, improving gender relations, promoting gender equality, and highlighting positive male role models. It is an occasion for men to celebrate their achievements and contributions, in particular to community, family, marriage, and child care, while highlighting the discrimination against them.

The theme for 2017 is Celebrate Men and Boys. For more information, see here.

**21 to 22 November 2017**

**Engineering Engagement Programme - Northampton event**
Location: Siemens National Training Academy for Rail, Unit 5 Heathfield Way, Kingsheath, Northampton NN5 7QP
This the fourth in a series of events as part of the Higher Education Employer Diversity Pilot Project.

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**DECEMBER 2017**

**7 December 2017**

**DILG Steering Group meeting (by invitation only)**
A meeting of engineering employers and employer-led organisations collaborating to increase diversity and inclusion across employment. Participation is by invitation only but if you would like to get involved, email diversityteam@raeng.org.uk

**11 December 2017**

**Arab International Women’s Forum - Young Arab Women Leaders: The Voice of the Future**
**Location:** Royal Academy of Engineering, 3 Carlton House Terrace, London SW1Y 5DG
The Royal Academy of Engineering is delighted to host the 10th conference of the Young Arab Women Leaders series powered by the Arab International Women’s Forum. This follows on from the successful Young Arab Women Leaders: The Voice of the Future conferences that were held in Amman, Beirut and Dubai in 2012, Palestine in 2013, London in 2011 and 2014, Doha in 2015, Kuwait in 2016, and Fez, Morocco in April 2017. This conference aims to recognise and explore the contribution of Arab businesswomen and other key change agents in the STEM sectors. For more information, contact elena.fatisi@raeng.org.uk

**FEBRUARY 2018**

**6 February 2018**

**Higher Education Employer Diversity Pilot Project - steering group meeting (by invitation only)**
A meeting of engineering companies collaborating to attract undergraduates from diverse backgrounds into engineering employment. The project is being delivered in collaboration with SEO London. If you are an employer and would like to get involved, email diversityteam@raeng.org.uk

**7 February 2018**

**Dissemination of collective benchmarking report event**
**Location:** Royal Academy of Engineering, 3 Carlton House Terrace, London SW1Y 5DG
**Time:** 12.30pm to 4.00pm
This event is to disseminate the aggregated report based on the completed D&I Progression Frameworks received from professional engineering institutions. Each participating organisation will receive confidential individual reports indicating actions that they can take to progress diversity and inclusion, and will also have the opportunity to benchmark against the aggregated report. For more information, contact bola.fatimilehing@raeng.org.uk

**13 February 2018**

**SEO London advance programme event**
**Location:** Royal Academy of Engineering, 3 Carlton House Terrace, London SW1Y 5DG
The Royal Academy of Engineering is delighted to host an ‘Engineering Insight Day’ for 50 of SEO London’s advance programme Year 11 students to explore the engineering world at this crucial time when they are making academic and professional choices. The day will allow them to make well-informed choices about their future career paths, equipping them with the tools, skills and knowledge required to excel in the industry.

**MARCH 2018**

**8 March 2018**

**International Women’s Day**
International Women’s Day is a global day celebrating the social, economic, cultural and political achievements of women. The day also marks a call to action for accelerating gender parity. For more information, visit www.internationalwomensday.com

*continued over...*
Diversity events calendar and notable dates continued

21 March 2018
DILG Steering Group meeting (by invitation only)
A meeting of engineering employers and employer-led organisations collaborating to increase diversity and inclusion across employment. Participation is by invitation only but if you would like to get involved, email diversityteam@raeng.org.uk

MAY 2018

16 to 22 May 2018
Mental Health Awareness Week
Founded in 2001, Mental Health Awareness Week is a UK event supported by the Mental Health Foundation. The aim of this week is to educate the public about mental health issues and to promote better mental health. For more information, see here.

17 May 2018
International Day against Homophobia, Transphobia and Biphobia (IDAHOT)
IDAHOT was created in 2004 to draw the attention of policymakers, opinion leaders, social movements, the public and the media to the violence and discrimination experienced by LGBTI people internationally. 17 May was chosen to commemorate the World Health Organization’s decision in 1990 to declassify homosexuality as a mental disorder. For more information, visit www.dayagainsthomophobia.org

JUNE 2018

23 June 2018
International Women in Engineering Day
Held on 23 June each year, International Women in Engineering Day celebrates the achievements of women in engineering and encourages more girls to consider engineering careers. To get involved, visit www.inwed.org.uk

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