A CASE FOR CHANGE.

Institution of
MECHANICAL ENGINEERS

Diversity & Inclusion Strategy
2021–2025

Improving the world through engineering

CONTENTS

MESSAGE FROM
ISOBEL POLLOCK-HULF OBE

President of the Institution of
Mechanical Engineers (IMechE)
2012 – 2013

The D&I Committee soon realised that a structured plan was required to understand the challenges ahead. This developed into a five-year strategy with recommendations and an effective action plan to follow after consultation.

We commissioned an external consultant, Mark McBride-Wright from EqualEngineers, to assist with the research, running focus groups and leading discussions with staff. The purpose was to identify any perceived barriers within the Institution and determine our current position, eg 'where we are now'.

This report outlines where we are now, where we hope to go, and how we might get there. Our journey has started and we are making progress. There is much more to do, to encourage a change in culture and behaviours throughout IMechE.

The Trustee Board endorsed the principles of the strategy that will enable a positive implementation of our recommendations. We hope that everyone involved with IMechE will also play their part to help us achieve our D&I vision of being 'visibly more inclusive to all'.

It has been an inspiration and pleasure to lead IMechE's Diversity & Inclusion Committee since 2018. We now ask for your help and support to achieve our vision for the future.

"

All IMechE activities and campaigns should be inclusive and represent the diversity of the membership and the engineering profession. We must ensure that Diversity and Inclusion sits at the heart of the Institution's core values and business ethics and encourage fairness, trust and transparency.

EXECUTIVE
SUMMARY

The Diversity & Inclusion (D&I) Strategy aims to support our vision, culture, foundations and goals across our employee and membership base.

The Diversity & Inclusion (D&I) strategy aims to support our vision, culture, foundations and goals across our employee and membership base. Diversity is about getting the right mix of people with the right skills and competences. Inclusion is making sure the mix works. It is about people developing a sense of belonging, feeling respected and valued for who they are.

Delivering against this strategy will enable us to foster culture change and ensure greater effectiveness for how we operate, how we support our stakeholder communities, and how we lead the engineering community. By inspiring a groundswell of member support, developing understanding, and forging collaborations that endure far beyond individual projects, IMechE will be able to promote its vision for a future in which all engineers are able to thrive in a diverse and inclusive profession.

With the assistance of EqualEngineers, we led focus group and sector-led discussions, with both employees and members, to determine "where we are now", "where we want to be" and what are some of the barriers and aspirations for the future. Across the board the response was positive and encouraging. There was a genuine intent to accelerate interventions that will lead to lasting meaningful change. However, we also discovered a desire to shift from the UK-centric approach, to recruit diverse volunteers onto committees and boards and be innovative and forward-thinking, to name but a few. The consultation period helped us formulate recommendations listed in the next section. It also helped us identify the five themes that span across 15 IMechE sectors described in section 3.

One key recommendation of this strategy is to embed D&I as part of the Institution's DNA, whereby an inclusivity lens is applied to every decision, campaign and project undertaken. To achieve this we will launch a D&I awareness campaign to get the IMechE community on this journey with us. We need to assign a dedicated staff resource to support the delivery of the strategy, and ensure D&I sits at the heart of the Institution's work ethic. Leadership will

play a vital role in delivering the strategy, such as taking bold and visible steps in championing D&I and leading others by example.

Once an established, consistent and engaged D&I movement has taken root within the Institution, its wider mission to achieve a long-term shift in social norms and behaviours will slowly seep out into the profession. To collectively own and deliver this outcome, it is vital that the IMechE community recognises the benefits diversity and inclusivity bring to engineering: a wider pool of brains and diversity of thought. More diversity means inclusive and innovative designs. Greater inclusivity values everyone's contribution and minimises the risk of groupthink.

The Institution is on a journey of transformation. We want to see a diverse workforce in the membership we support, and within our own employee base that represents the community we serve. Our brand has a global identity and is one that is respected and instantly recognisable by mechanical engineering students and professionals. We need to maintain all our efforts in supporting our membership community, so that we can remain relevant and value-adding to the engineering profession. As part of this journey, we recognise there will be challenges and potential resistance to deal with. We recognise there is no silver bullet to getting the buy-in for building an inclusive organisation. However, by engaging the majority and with the help of a network of dedicated D&I Champions, we hope to make the case as personal as possible. By leveraging the power of a diverse and inclusive community, we will truly *improve the world through engineering* and achieve our vision of **being visibly more inclusive**.

KEY RECOMMENDATIONS AND ROADMAP.

The 15 high-level recommendations below should be considered an integral part of the Institution's wider D&I Action plan for 2021-2025. Detailed recommendations for each of the 15 sectors are listed in section 7.

Not yet started

In progress

Complete

1 To deliver the strategy in a timely and effective manner will require significant staff support, including the appointment of a dedicated D&I Officer to ensure D&I sits at the heart of the Institution and across all 15 sectors.

Additional staff resource allocated by appointing Kristina Korsaks, as the D&I Officer in January 2021.

2 Each sector/department to develop D&I goals for their area of business that links to IMechE's business and strategic objectives.

A detailed D&I three-year action plan was developed in November 2022 that covers all 15 sectors and 15 key recommendations. Key actions have been embedded in the business plan and a public version is available to see here.

3 Apply a D&I lens to all IMechE processes, to ensure that they are inclusive of all groups.

In progress. We are working across the organisation to embed D&I at the heart of our policies, practices and processes (eg the PRI Community, events).

4 Encourage engagement and innovation by increasing the diversity of active volunteers.

The Nominations Committee (NomCo) is responsible for developing and managing inclusive and transparent processes, to support the recruitment, assessment, and nomination of suitably experienced candidates to the Trustee Board, Council and governance boards/committees.

5 Set diversity targets for conference speakers, contributors, and give awards that recognise best practice in Diversity & Inclusion.

The events production team consistently collaborates with a diverse array of stakeholders, including our D&I partners (WES, AFBE-UK, and SheCanEngineer). This ensures that our event programs and speaker lineups cover a breadth of knowledge, perspectives, and representation. Our inaugural Diversity & Inclusion annual event, held on 05th March, commemorated the centenary of Verena Holmes and celebrated the accomplishments of women engineers globally.

6 Ensure the use of inclusive language and imagery is used across all IMechE communications in both printed and online publications.

A revised inclusive communications guide is underway. Diverse images are used more consistently were possible and there is a high level of awareness of the need to show a representative engineering community across our communications channels.

7 Develop a robust data collection process for both employees and members at all stages (eg membership levels, recruitment, promotion, awards, events).

A new system of collecting diversity data at the time of registration is underway with the IT department. Simultaneously, work is underway to collect, analyse and monitor diversity data of our volunteer groups initially focussing on Governance and Operating Boards.

8 Partner with best practice external bodies such as WES, AFBE-UK, EqualEngineers, to seek best practice and foster new collaborations.

In 2023 we signed several key partnerships with Women's Engineering society (WES), Association of Black and Ethnic Minority Engineers (AFBE-UK), Business Disability Forum (BDF) and SheCanEngineer.

9 Establish a network of D&I Champions for both members and employees.

Farah Baksh and Emma Bould have been appointed as employee and member Leads for the Culture Ambassador Network. The network's framework is currently in development and is set to be officially launched in Q2 2024.

10 Plan investment to make One Birdcage Walk and our other operating facilities more accessible and inclusive.

Closed captions are provided as a default across all our online webinars and workshops. A prayer room has been allocated on the 5th floor at OBW. A decision on the future of the building is underway in May 2024.

11 Roll out an integrated suite of training packages to support and embed the understanding that meets the needs of both IMechE members and employees.

We crafted a unique learning program called "Creating Inclusion," which we are offering free of charge to all members and volunteers globally. This program delves into topics such as belonging, inclusive leadership, talent management, disability, allyship, and other areas. Between 2021 and 2024, members and employees were provided with live training sessions too.

12 Promote Diversity & inclusion training as an integral part of CPD (Continuing Professional Development)

The D&I Learning Programme is embedded as part of the CPD guidance and referenced on the CPD website.

13 Embed D&I as part of the accreditation process.

A working group was established at the conclusion of 2023 to review this recommendation.

14 Ensure educational outreach work is appropriately targeted, accessible and co-ordinated.

Outreach efforts have been successful, with initiatives actively engaging Black, Asian, and Mixed Ethnicity communities and those from lower socio economic backgrounds, as well as extending outreach into new UK counties. D&I is a core part of the Education Outreach training engaging a highly diverse cohort of IMechE STEM Ambassadors.

15 Work in collaboration with industry to make calls for change of perception in engineering.

The policy and education teams have dedicated significant effort to challenging stereotypes and perceptions in engineering with a number of initiatives which as a result increased our STEM engagement reach and the diversity of our STEM Ambassadors.

The timeline below demonstrates the key building blocks that will drive the strategy for the next five years. The aim is to launch in early 2021. We will offer a programme of training courses to increase awareness of benefits of a positive D&I culture over the year. In parallel, we will hold discussions with key stakeholders across the 15 sectors, to develop ideas and constructive plans with appropriate KPIs to monitor change. Over the five-year timescale, the D&I Committee will continue to monitor and adapt the strategy as required to reach the goal of *"being visibly more inclusive"*.

Diversity & Inclusion Five-Year Plan

TRACK PERFORMANCE
Benchmark and report on diversity data, set targets, and analyse trends

DEVELOP ACTION PLANS
Collectively develop D&I action plans that support IMechE's business and strategic objectives

EDUCATE
Educate and build awareness across the IMechE community

LAUNCH
Launch and communicate IMechE's Diversity & Inclusion Strategy

2021   2022   2023   2024   2025

IMechE MESSAGE TO OUR MEMBERS AND EMPLOYEES

The Institution is committed to actively addressing all inequalities within our Institution and we are dedicated to welcoming bright and focused minds wherever we can, ensuring that our Institution is a true reflection of the communities where we deliver engineering. 2020 saw world-wide acknowledgement of the need for racial justice and the rise in support for Black Lives Matter. As part of the development of our strategy, we have drawn on support from like-minded organisation and have become a member of the *Association for Black and Minority Ethnic Engineers – UK* (AFBE-UK). This is an organisation that promotes higher achievements in education and engineering, particularly among people from black and minority ethnic (BME) backgrounds. We will adopt its Access. A action plan as part of our strategy moving forward.

"ACCESS.A" asks every company to **A**ccept facts about racial disparity, **E**ducate itself and its employees, create a **S**trategy and **S**afe places, and to be **A**ccountable.

OUR PLEDGE TO BE ANTI-RACIST

The Institution of Mechanical Engineers believes it is not acceptable to take a neutral stance on racism. Racism is systemic; it pervades our communities, and the only way we can challenge it is head-on, together. As an Institution, we stand in solidarity with all those facing and fighting racism. Recognising that engineering is designed and built to benefit all our communities, and that the engineering profession responsible for this should reflect those communities. Currently it does not always achieve this.

It is imperative that we are engaged with all our communities, and gain an understanding of what is preventing colleagues from Black, Asian and ethnic minority backgrounds accessing the Institution and the wider engineering profession.

We are at the beginning of this journey with our Diversity & Inclusion Committee, run jointly by members and Institution employees to support the wider community. We are focusing on implementing a new Diversity & Inclusion Strategy around key areas across our organisation, including:

- **Governance and leadership**
- **Membership and professional registration**
- **Meetings, conferences and events**
- **Education, training and examinations**
- **Accreditation of education and training**
- **Prizes, awards and grants**

- **Communications and marketing**
- **Outreach and engagement**
- **Employment**
- **Commercial businesses**
- **Property**

On its own, this is not enough, and the Institution of Mechanical Engineers is committed to actively addressing the inequalities within our Institution. We are dedicated to welcoming bright and focused minds wherever we can, ensuring that our Institution is a true reflection of the very communities we are delivering engineering in.

As we take these steps together to ensure positive and lasting change in the face of racism, we will truly be living up to our creed of improving the world through engineering.

We welcome thoughts and feedback from you – **diversity@imeche.org**

> **""**
>
> The message is clear and direct and addresses an issue that affects all. For me personally, I'll be proud to be associated with an organisation that makes such an emphatic yet considered statement regarding equality and inclusion and supporting Black Lives Matter.

Jim Cowling, IMechE America's Region Chair

AFBE-UK Women at 2016 Engineering Reception held at Parliament

We have engaged with the AFBE-UK in the past and are aware of their contribution. Several IMechE members and employees were present at the 100 Women at Engineering Reception held at Parliament on 13 July 2016.

A group of AFBE-UK female engineers joined over 100 women engineers from across the UK at the Houses of Parliament, to raise awareness of the importance of women in engineering at a reception held on 13 July 2016.

Jeremy Corbyn MP, the leader of the Labour party, along with Chi Onwurah MP welcomed women engineers, mathematicians and scientists to celebrate the contribution that women make to engineering.

Chi Onwurah, MP for Newcastle Central, is a Chartered Electrical Engineer with over 25 years' experience. She is on AFBE-UK's advisory board and is a chartered female engineer turned politician. Chi is well aware of just how important it is that the realm of engineering better reflects our society. She spoke about the fact that the ratio of women in engineering when she began her engineering career to date remains the same. She stated, "We need to work together to tackle the gender stereotyping challenges in engineering."

The event also set a record for the highest number of women engineers in the Houses of Parliament at any one time.

https://afbe.org.uk/news/afbe-uk-women-at-engineering-reception-held-at-parliament

Image 1: AFBE-UK and IMechE at 2016 Engineering Reception Held at Parliament

OUR VISION

As a global community of mechanical engineers, the Institution is one of the largest network of mechanical engineering knowledge, skill and opportunity in the world.

We are committed to ensuring that engineers are supported and well represented. We support the engineering community to attract and retain diverse talent.

The IMechE vision is **"improving the world through engineering"** and the Diversity & Inclusion Committee vision is to be **"visibly more inclusive"**. Together these shape the first IMechE D&I Strategy. This strategy adopts an inclusive approach to our culture and behaviours. Together we will foster a change of culture, to enable the IMechE community (members, employees and volunteers) to feel valued, heard and to develop a strong sense of belonging. To achieve this, the strategy focuses on **five strategic themes** across membership and employees.

1   **Establish internal support**
2   **Secure external support**
3   **Inspire a change in behaviour**
4   **Drive systemic change**
5   **Track performance**

We recognise that we need to **establish internal support** among our employees, members, volunteers, Trustees and the wider IMechE community, to ensure ongoing and continuous dedication to D&I. We will partner with external bodies to **secure external support** for the work we do, to ensure it has more impact. It is hoped that by working in a more collaborative way, we will together be able to **inspire a change in behaviour** and, by working in this manner over a sustained period of time, we will **drive systemic change** in terms of D&I in engineering. Data collection and analysis will be key, and so baselining and regular reporting of the progress we are making will help us **track performance**.

We will continue to monitor our progress using the Royal Academy of Engineering (RAEng) Progression Framework for Professional Engineering Institutions. Our strategy **has been grouped into 15 key sectors**, which align with 11 of the Progression Framework, and an additional four sectors have been added to cover the wider remit of IMechE activities. The report has a series of recommendations for each of the 15

sectors, and these are detailed in section 7 of this report.

Diversity & Inclusion Strategy – 15 sectors:

1	*Diversity & Inclusion Committee*
2	*Support Network*
3	**Governance and leadership** (including boards/committees)
4	**Membership and professional registration**
5	**Meetings, conferences and events**
6	**Education, training and examinations**
7	**Accreditation of education and training**
8	**Prizes, awards and grants**
9	**Communications and marketing**
10	**Outreach and engagement**
11	**Employment**
12	**Monitoring and measuring**
13	**Publishing and policy**
14	*Commercial businesses*
15	*Property*

This strategy fits with the current Presidential Priorities, and is benefiting from the recommendations and outcomes of the independent reviews conducted by the Institution on Finance, Governance and Code of Conduct.

One important outcome of the Governance Review, is the re-structuring of the boards and committees into Governance, Advisory and Operational groupings, as shown in the diagram below. The D&I Committee reports directly to the Trustee Board, and the D&I Chair has a seat on Council supporting our aim to embed Diveristy and Inclusion across the organisation.

TERRY SPALL – PRESIDENTIAL YEAR PRIORITIES 2020-2021

- **Completing our governance transition** – seeing the completion of the implementation of the reviews, so by May 2021 the process is complete and we are operating to the new protocols. A few highlights...
  - Strategy
  - Nominations

- **Shifting to greater member focus** – I would like to see a proactive leadership team building on our strengths in areas such as:
  - International Engagement
  - Relevance/Engagement
  - Policy/Voice of the Institution
  - Inspiring and preparing the next generation

Image 2: Presidential Year Priorities 2020

IMechE Governance (updated October 2022)
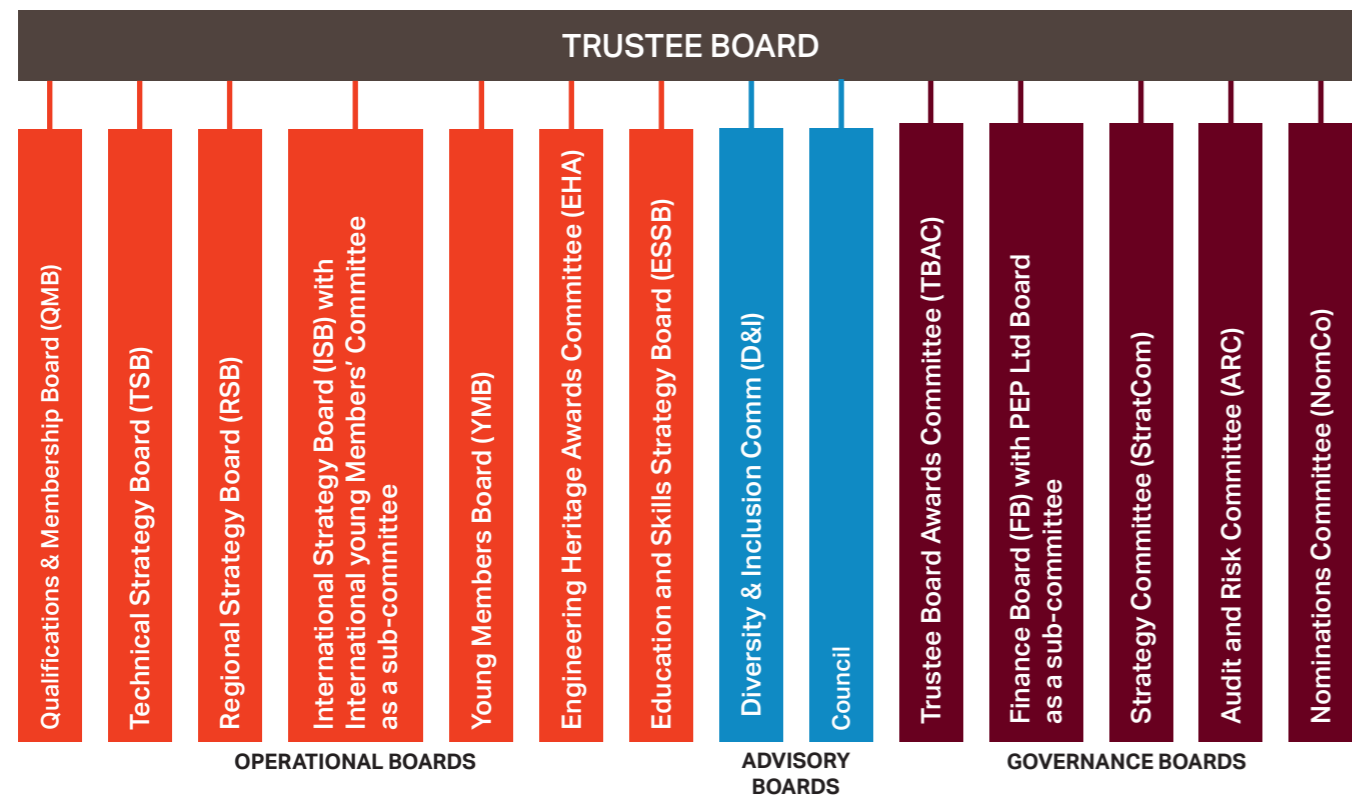
This D&I strategy report sets out our journey to capture where we are now, the process we have gone through to identify where we want to get to, and recommendations on what actions we could implement to achieve this. It presents interconnecting actions from which the total sum will allow the Institution to become visibly more inclusive.

OUR CULTURE

Everyone wants to be treated fairly, and engineering organisations are united by the desire to improve quality of life for society.

These factors are drivers to excel in implementing equality, diversity, and inclusion practice. Setting goals and putting in place activities that promote diversity and make our organisation more representative of society, will ultimately contribute to the creation of a better society. To count on skilled, engaged, and motivated employees, Trustees, members and volunteers, we must foster an inclusive culture in which diverse talent can thrive.

Our Values

Inclusion
We work together as one inclusive team, valuing and respecting diversity by opening up to, and actively listening to the contributions one another have to make.

Integrity
We do the right thing for IMechE and for one another by being honest, truthful, and authentic, acting with integrity in every decision we make and every action we take.

Innovation
We find better ways to get things done, innovating to resolve problems; drive change and move our mission forward by making tomorrow better than today.

Impact
We make a difference and an impact in what we do, taking accountability and ownership for meeting our commitments, making things happen by succeeding together and excelling as individuals.
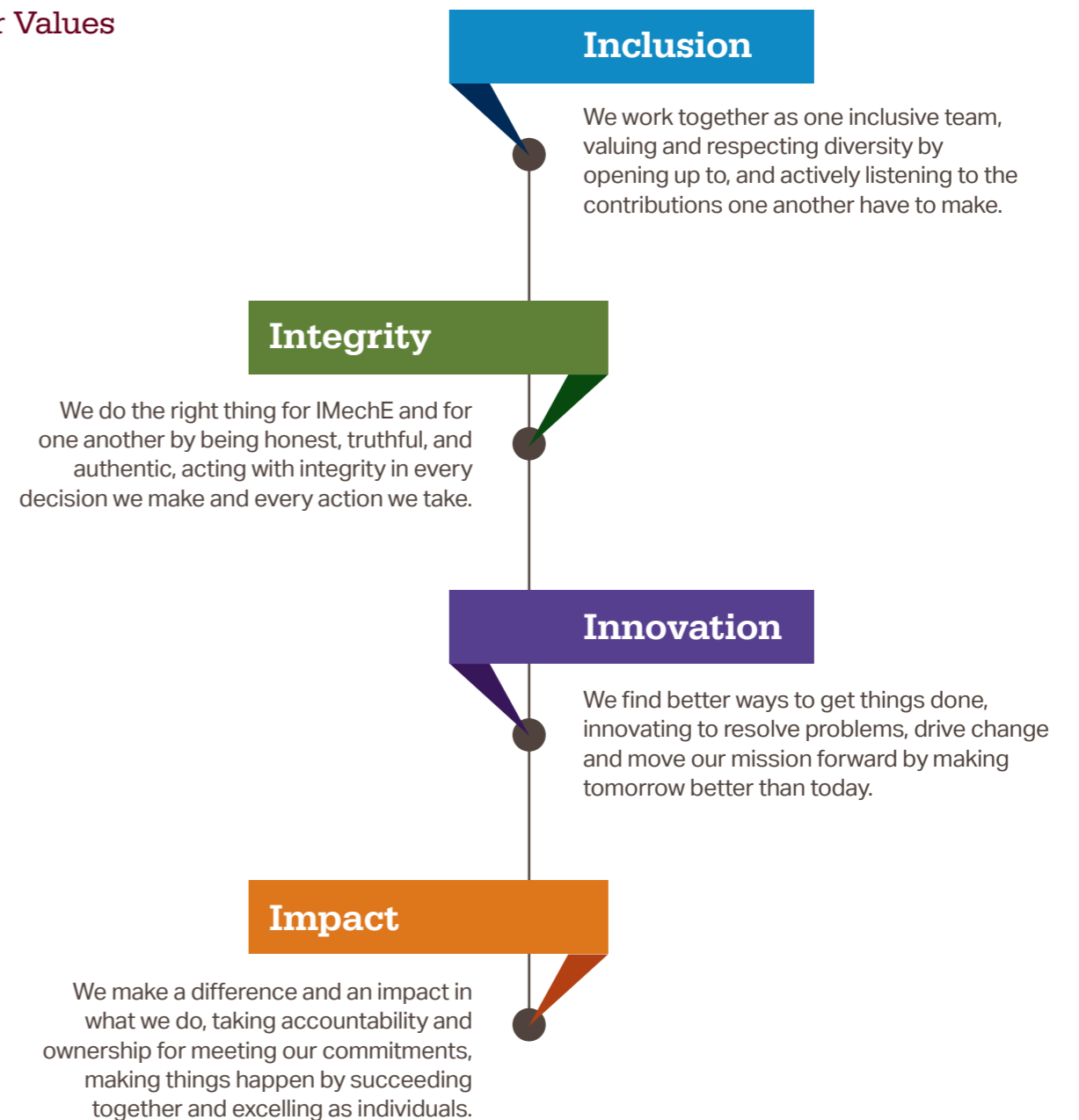
Image 3: IMechE Culture and Values

Culture change requires discipline, persistence, kindness, understanding and practice. It is not enough to build a business case for diversity and raise awareness. We need to understand the tug of war around diversity, educate ourselves on the topic and practise inclusive behaviours. The tone of the organisation, its culture and behaviours of both employees and members are set by leadership. Leaders must ensure that micro cultures are well managed, and managers are held accountable to the organisation's values and vision. An inclusive culture brings a diverse culture and diversity of thought. This strategy will help ensure that the IMechE community feels valued, heard, and develops a sense of belonging. In this report we refer to some of the barriers, such as IMechE being 'London centric', poor HQ accessibility and data collection processes, etc.

According to Acas [1], the cost of social exclusion to organisations has a direct impact on performance and productivity. It has also been linked to:

- Poor morale and poor employee relations
- A loss of respect for managers and supervisors
- Decreased performance
- Lost productivity
- Regular absence
- Frequent resignations
- Long-term damage to company reputation

It is therefore in every employer's interest to promote a safe, healthy and fair environment in which people can work together. This can be done by practising the eight inclusive behaviours listed below:

- Empathy
- Listening
- Mitigating bias
- Valuing difference
- Understanding your own values
- Humility and vulnerability
- Speaking out
- Inclusive language

Everybody wants an Institution that operates more efficiently and effectively, offering more benefit to our members. That is the reality of being a high-performing, truly inclusive organisation.

Not all disabilities look like this, and not all disabilities are visible.

Image 4: TfL Disability Advertisement

Image 5: Disability Sign

Many are not immediately obvious, such as autism, chronic pain, dementia, anxiety and visual or hearing impairments. Living with a hidden disability can make daily life more demanding for many people, but it can be difficult for others to recognise, acknowledge or understand the challenges some of us experience.

The D&I strategy is a key enabler in creating an inclusive culture across the Institution and how we can positively improve our impact on the engineering profession and wider society. Our foundations will be stronger, engineers will feel better supported, innovation will flourish, and our professional standards will have integrity.

THE CASE FOR DIVERSITY & INCLUSION

Diversity is not always visible, and does not encompass only protected characteristics such as race, religion, sexual orientation.

The focus group and sector-led discussions highlighted a sense of urgency and need for change. There was a clear desire to improve the culture of the Institution. The proposed strategy will support the Institution's vision to improve the world through engineering, by developing and promoting engineering, informing opinion and encouraging innovation.

5.1 ROYAL ACADEMY OF ENGINEERING PROGRESSION FRAMEWORK

The Institution signed up to the Royal Academy of Engineering Progression Framework in 2017 [2]. It is guided by a set of priorities and has workstreams in place for working with key partners, of which IMechE is one. The Diversity & Inclusion (D&I) Progression Framework was developed in a collaboration between the Royal Academy of Engineering (Academy) and the Science Council to progress D&I across engineering and science professional bodies. It builds on the Engineering Diversity Concordat and the Science Council's Declaration on Diversity, Equality and Inclusion, with the aim of helping professional bodies track and plan progress on D&I.

In an interview for the RAEng President's Special Awards for Pandemic Service [3] (CV19...), HRH Princess Anne said:

The 2021 RAEng Progression Framework [4] defines the following maturity model for tracking performance:

Level 1: Initiating	Emerging case for change, data and insights just being gathered, action tends to be informal, isolated, bottom-up, one-offs.
Level 2: Developing	Case for change is clear, quantitative, data gathered, responsibility and accountability being formalised, guidelines being developed, activity being launched, connections being made.
Level 3: Engaging	Case for change is well established, qualitative data being gathered and shared, sustained senior-level support in place, skills and capabilities being built, activity catching on, high levels of engagement and collaboration, clear signs of change.
Level 4: Transforming	The approach to change is focusing on transforming the culture and systems of the organisation. Intersectional qualitative and quantitative data is being routinely gathered and used to identify actions for further improvement, high levels of dialogue, collaboration and continuous learning, clear evidence of change in diversity, individual behaviour and organisational culture.

Table 1: Progression Framework 2.0 Guidance.

"

What engineers do, whatever their specialism, is to understand and help solve problems. The diversity of the teams involved is noticeable and shows bringing together people with different perspectives, whether that is their education, experience or identity, increases innovation and creativity and results in better solutions. I hope their success will help inspire many more young people from all backgrounds to consider engineering and the exciting, varied and rewarding careers it offers.

The Institution participated in the 2017 Royal Academy (RAEng) Diversity & Inclusion Progression Framework and our results were compared to other participating Institutions.
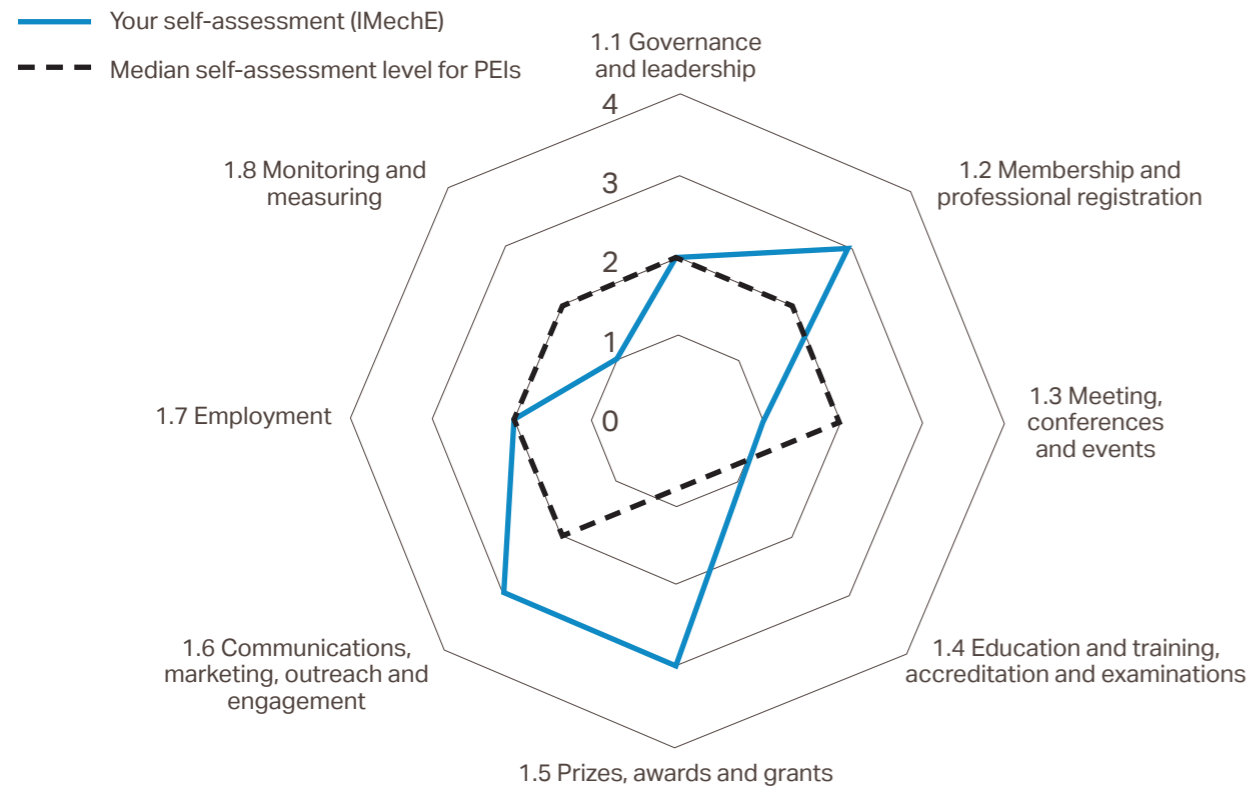

Legend:
— Your self-assessment (IMechE)
- - - Median self-assessment level for PEIs

Diagram axes: 1.1 Governance and leadership, 1.2 Membership and professional registration, 1.3 Meeting, conferences and events, 1.4 Education and training, accreditation and examinations, 1.5 Prizes, awards and grants, 1.6 Communications, marketing, outreach and engagement, 1.7 Employment, 1.8 Monitoring and measuring

Diagram 1: D&I Progression Framework IMechE benchmark results against other PEIs 2017.

In most areas IMechE scored 3 as "engaging" and 1 as "initiating". We hope that the plans outlined in this strategy will move us forward towards a score of 4 as "transforming". The next D&I Progression Framework self-assessment exercise is planned for spring 2021.

	Your self-assessment (IMechE)	Median self-assessment level for all participating organisations	Median self-assessment level for PEIs
1.1 Governance and leadership	2	2	2
1.2 Membership and professional registration	3	2	2
1.3 Meetings, conferences and events	1	2	2
1.4 Education and training, accreditation and examinations	1	1	1
1.5 Prizes, awards and grants	3	1	1
1.6 Communications, marketing, outreach and engagement	3	2	2
1.7 Employment	2	2	2
1.8 Monitoring and measuring	1	2	2

Table 2: D&I Progression Framework IMechE self-assessment results 2017.

The output of the Progression Framework Benchmarking exercise guided the actions of the Institution's D&I committee on three areas of development:

1. Governance and Leadership (equal to median)
2. Communications, Marketing, Outreach and Engagement (above median)
3. Monitoring and Measuring (below median)

The Institution's progress to date, on these and other areas, are laid out in section 6.

5.2 LICENSING BODY

The Institution is licensed by the Engineering Council, to assess candidates for inclusion on the national register of professional engineers and technicians. We are also licensed to accredit academic programmes and professional development schemes.

Licensed institutions are deemed to have sufficient experience, procedures and resources to undertake the following tasks:

- Assess the competence and commitment of candidates for registration
- Monitor the Continuing Professional Development of registrants
- Monitor the conduct of registrants

The UK-SPEC (2014) explicitly now includes reference in the Engineering Technician Standard, Incorporated Engineer Standard and Chartered Engineer Standard under sector D on interpersonal and communication skills that *"applicants shall demonstrate that they have awareness of diversity and inclusion issues"*.

Therefore, the Institution has a key role in ensuring engineers are supported in achieving this competence for professional registration and that it is reviewed in the registration assessment process.

We want to better attract a more diverse talent pool, encourage progression into engineering upon completion of education, and cultivate inclusive design thinking and practice from source.

5.3 STATUTORY REQUIREMENTS OF A CHARITY

The Institution will continue to meet its core statutory responsibilities, by ensuring that we are compliant with the Equality Act [5].

The Equality Act legally protects people from discrimination in the workplace and in wider society. The Institution does not tolerate direct or indirect discrimination, victimisation or harassment of any form, and particularly in relation to the below protected characteristics:

- age
- disability
- gender reassignment
- marriage and civil partnership
- pregnancy and maternity
- race
- religion or belief
- sex
- sexual orientation

The Charity Commission suggests the following as good practice:

- Internal policies and procedures remain up to date, are compliant with the law and reflective of best practice, where achievable.
- Clear and well-communicated procedures are in place explaining how to raise concerns or complaints. All issues are taken seriously, no matter who they are from or who they are involve. They will be considered and acted upon with a focus on independence, timeliness and impartiality. Organisations will ensure that appropriate support is in place for those who raise complaints. Lessons are learnt from complaints and learnings for the individuals involved is also encouraged.
- Raise awareness of equality duties specifically around protected characteristics and organisation's wider commitment to equality and inclusion; ensuring that all employees are aware of their responsibilities and the behaviours expected through use of training and consistent messaging and role modelling from directors and the board.

The Institution as a charity is required to comply with the Public Sector Equality Duty when carrying out our public functions. We will comply with the Public Sector Equality Duty, which requires public authorities, in carrying out their functions, to have due regard to the need to achieve the objectives set out in the Equality Act to:

- eliminate discrimination;
- advance equality of opportunity; and
- foster good relations between different people when carrying out their activities.

We believe the above represent good practice when carrying out all functions of our activities.

5.4   LEGAL REQUIREMENTS

The Equality Act 2010 [5] applies to all employers in England, Wales and Scotland, and prohibits discrimination and unfair treatment of people on the grounds of: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation. We recognise that the Equality Act may differ outside UK, therefore we will work with stakeholders in other countries to ensure our values and behaviours are well represented and embedded in all the work we do.

5.5   BUSINESS CASE BENEFITS

Clearly, the business case for D&I is no longer an emerging object of research, but an established reality. The Boston Consulting Group [6] (Forbes, 2018) found that companies with more diverse management teams have 19% higher revenues. This is especially seen in technology companies, start-ups and industries such as engineering, where innovation is the key to growth. D&I is not a box-ticking exercise for the Institution: it is essential to our future success.

Rebekah Bastian, a vice president of culture and community at Zillow Group [7] said that the superior business outcomes often associated with having diverse teams can't be achieved without a sense of belonging (World Economic Forum, 2019). It is not enough to simply include people at the table, she said, we must "amplify everyone's voices, clear barriers and appreciate each other for our unique

backgrounds". Developing a sense of belonging means that people can bring their full selves to work, and not feel that they are a different person there from at home.

As an example, the latest Engineering Council's report, *Mapping the UK's Engineering Workforce [8]*, published in September 2020, shows that 18% of the working UK population work in engineering, which equals to approximately 5.8 million people.
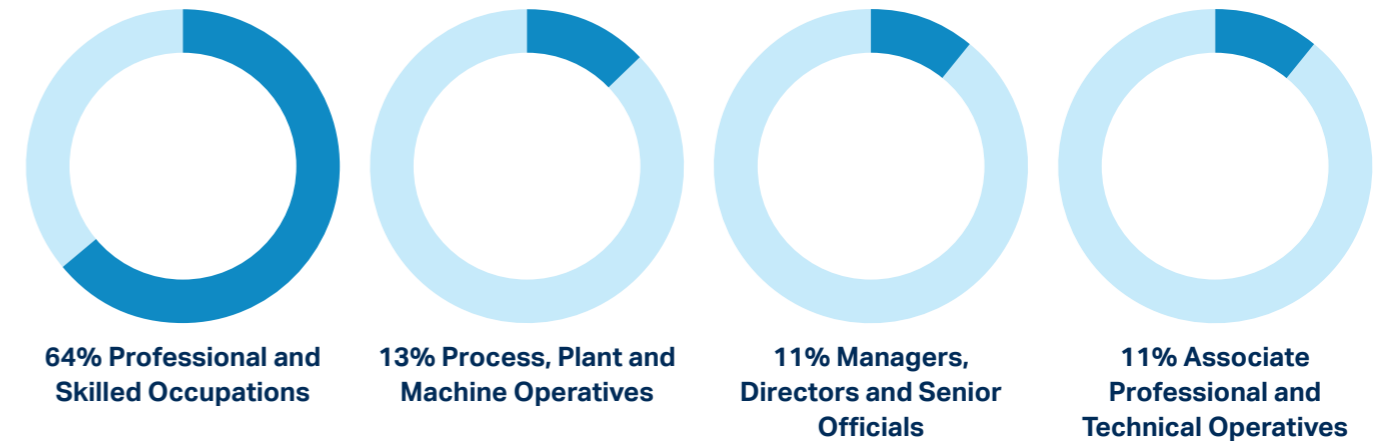
CHART 1 Total UK working population, by engineering and non-engineering jobs
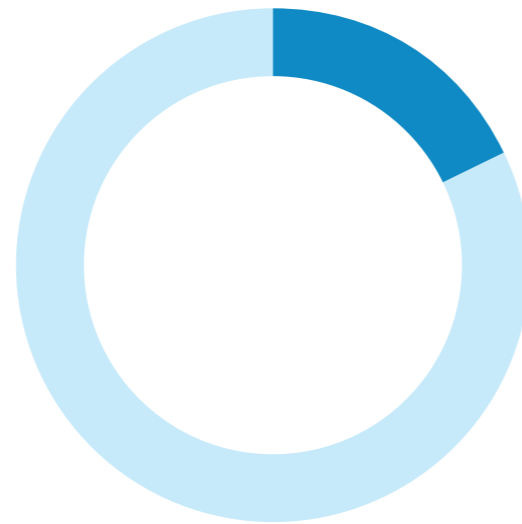
18% of the working population work in engineering

This shows that almost a fifth of the UK's working population – 5.8m people – are in engineering jobs, which may or may not be in engineering organisations. Engineers work in all sectors and for a huge range of different types of employers.

CHART 2 Types of jobs within the engineering workforce

64% Professional and Skilled Occupations   **13% Process, Plant and Machine Operatives**   **11% Managers, Directors and Senior Officials**   **11% Associate Professional and Technical Operatives**
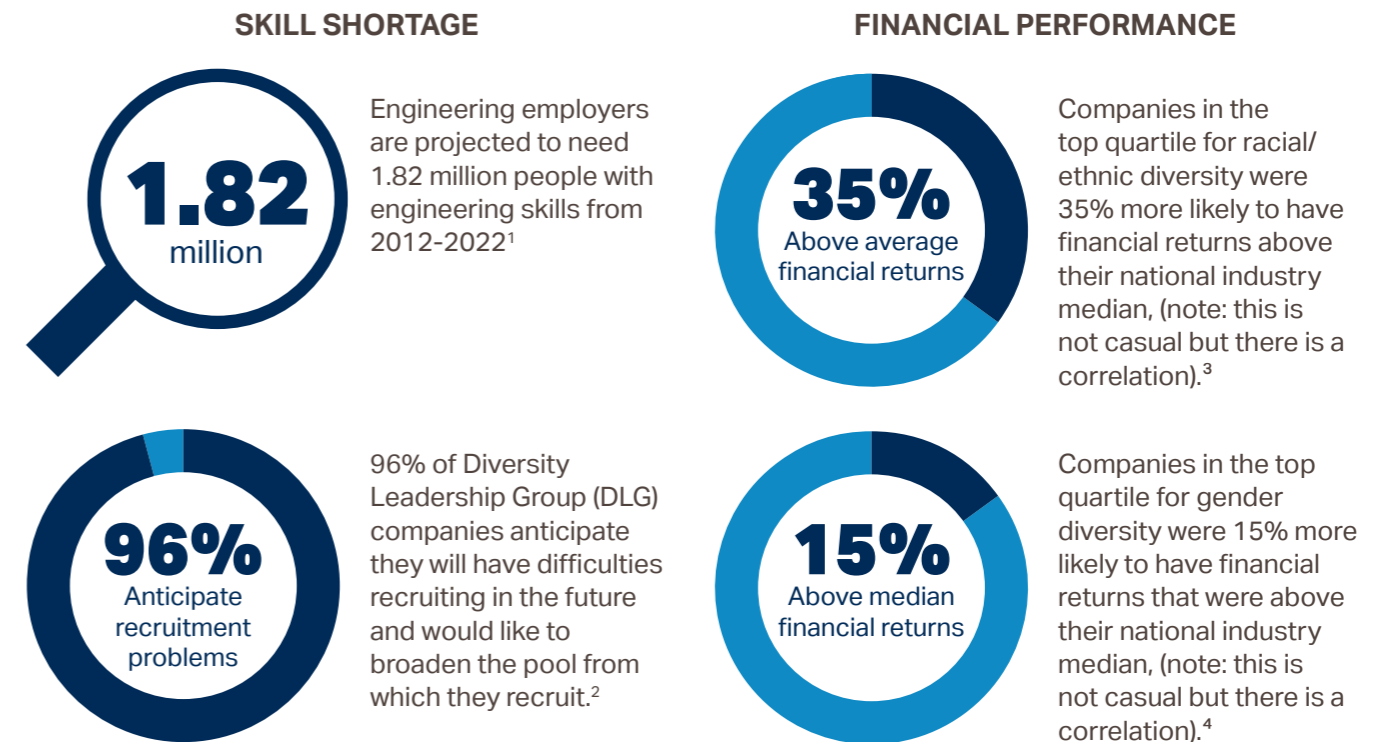
The largest of these major groups is professional and skilled trades occupations, which makes up 64% of the total. This group includes welding trades, IT engineers, electrical and electronic trades and plumbing and heating engineers. A further 11% of people in the engineering workforce have roles as Managers, Directors or Senior Officials.

However, there is still a shortage of engineering professionals, and it is projected that 1.82 million extra workers will be needed in UK by 2022.

CHART 3 Engineering Skills Shortage (source: RAEng website)

SKILL SHORTAGE

1.82 million

Engineering employers are projected to need 1.82 million people with engineering skills from 2012-2022[1]

96% Anticipate recruitment problems

96% of Diversity Leadership Group (DLG) companies anticipate they will have difficulties recruiting in the future and would like to broaden the pool from which they recruit.[2]

FINANCIAL PERFORMANCE

35% Above average financial returns

Companies in the top quartile for racial/ethnic diversity were 35% more likely to have financial returns above their national industry median, (note: this is not casual but there is a correlation).[3]

15% Above median financial returns

Companies in the top quartile for gender diversity were 15% more likely to have financial returns that were above their national industry median, (note: this is not casual but there is a correlation).[4]

1   Key facts Engineering UK 2015, www.engineeringuk.com/Research/Key_facts_infographic_2015
2   Diversity and Inclusion in Engineering Survey Report 2015 http://tinyurl.com/owqukyc
3   Mc Kinsey, Why diversity matters http://tinyurl.com/oljjcbc
4   Mc Kinsey, Why diversity matters http://tinyurl.com/oljjcbc

Leadership should regularly highlight the importance of D&I efforts, framed as the tangible risk of losing high-achieving talent, excellency, and a leaky pipeline towards other institutions. This makes up a central part of IMechE's Business Case for D&I. In 2018 Deloitte published the Deloitte Millennial Survey [9], which showed that 74% of millennials believe their organisation is more innovative when it has a culture of inclusion. Moreover, in 2016, this survey showed that 47% of millennials are actively looking for diversity and inclusion when considering an employer. Diverse leaders may also just make better leaders. Therefore it is essential that as an Institution we increase the diversity of the members of our boards and committees, as pointed out in recommendation 12 of the 2018 IMechE Governance Review. Backing the potential of this, a study by Pew Research Centre [10] lists areas where women are stronger in key areas of both politics and business:

34% better at working out compromises;

34% more likely to be honest and ethical;

25% more likely to stand up for their beliefs;

30% more likely to provide fair pay and benefits;
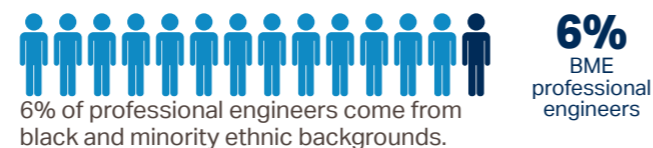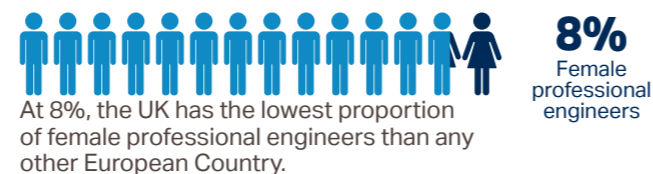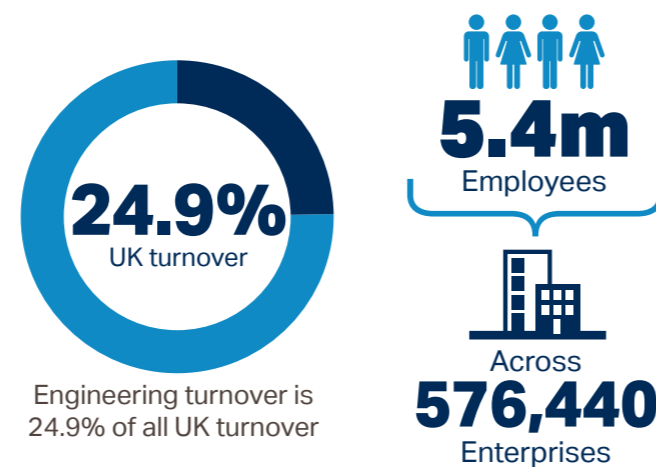
25% better at mentoring.

Diversity is correlated with both being profitable and creating value. Research by McKinsey [11] shows that gender, ethnic and cultural diversity, particularly within executive teams, is correlated to financial performance across multiple countries worldwide (Delivering through Diversity report, January 2018). Its theories about what drives this correlation, include the facts that they may be able to better attract high-achieving talent; improve their customer focus, employee satisfaction and decision-making; and to secure the regulation required for them to operate.

We live in an increasingly interconnected world with a diverse population. As an example, 14% of the UK population have an ethnic minority background and 25-29% of the school population are BME.

Engineering, as part of the STEM family, has a very specific and tangible lack of diversity. There have been significant improvements in engineering, but largely the sector remains non-diverse. Most management roles are still held by the white male demographic (EqualEngineers, 2020) [12]. Generally, an organisation should strive to have diverse representation at all levels, and for an institution this indicates having diverse employees and active members on committees.

Over 94% of the engineering workforce are white. Fewer than 1 in 25 BAME apprentices entered engineering in 2011/2012, and BME men are 28% less likely to work in STEM than white men. All of this builds up to the final stark statistic: only 6% of employed engineers come from BME backgrounds [13], and this has a high impact too on the ability from households with more deprived backgrounds to improve their income. People in ethnic minority households are almost twice as likely to live in relative poverty as white people.

UK Engineering Workforce
(source: RAEng website)

24.9% UK turnover

Engineering turnover is 24.9% of all UK turnover

5.4m Employees

Across **576,440** Enterprises

8% Female professional engineers

At 8%, the UK has the lowest proportion of female professional engineers than any other European Country.

6% BME professional engineers

6% of professional engineers come from black and minority ethnic backgrounds.

14.2% First degrees in engineering are female

14.2% of those who achieve First Degrees in engineering are female.

26% Engineering students from BAME backgrounds

26% of UK domiciled engineering students come from Black Asian and Minority Ethnic backgrounds.

Women make up only 1 in 8 of those in engineering occupations and fewer than 1 in 10 of those in an engineering role within an engineering company. Women remain severely under-represented in engineering: just 12% of those working in engineering are female. This compares with 47% of the overall UK workforce who are female.

About 2% of the population are estimated to be lesbian, gay or bisexual, and it is estimated that up to 500,000 (about 0.7%) of the UK population are transgender. In the UK workforce, an estimated 45% of lesbian, gay or bisexual workers are open to everyone about their sexual orientation in the workplace (National LBGT Survey, 2018). However, 17% are open to a few trusted people, 10% to some people, 11% open to most people and 17% not open to anyone [14]. 46% have witnessed or experienced homophobia in their current workplace simply not being open can be a significant drain on an individual's productivity (estimated at 32% less) and mental health.

Badenoch & Clark [15] estimates that 3 in 5 (60%) of UK employees with a disability have experienced bias in the workplace, compared to 35% of those without a disability (Recruitment International, August 2017). 51% of employees with a disability have concealed it from an employer when applying for a job. 48% of disabled candidates have left a job due to workplace bias.

Diversity & Inclusion cannot be a one-time campaign or a one-off initiative. Promoting it in the workplace is a constant work in progress, and should be maintained and nurtured to guarantee effectiveness. Empathetic leadership is key to this transformation. For real change to happen, every individual leader needs to buy into the value of belonging – both intellectually and emotionally.

5.6 DIVERSITY STATISTICS OF IMECHE

IMechE **employee data** shows that the split between female and male employees is equal about equal, 105 and 95 respectively (April 2020). In terms of ethnicity and nationality, the spread is not as vast, with 119 employees being of a British nationality of which 89 are white: English/Welsh/Scottish/Northern Irish background. On average 70% of employees have completed the diversity monitoring form, but this could be improved.

Organisations have proved that data has been one of the most effective tools to raise awareness among employees and managers. For instance, if data identifies a pattern of hiring in favour of men, managers who influence the hiring process become aware of the unconscious trend and become actively involved in addressing the issues by insisting on more diverse shortlists.

The data below comes from the membership database. Members are encouraged to complete their diversity profiles every year.

Data shows that female members make up only 9.6% of the IMechE membership. This has improved slightly but not significantly over the years.

Membership data (April 2020)

Have not ticked any box or unknown	1,593
Female	11,258
Male	104,538
Total Members	**117,388**

1.4% Unknown
9.6% Female
89% Male
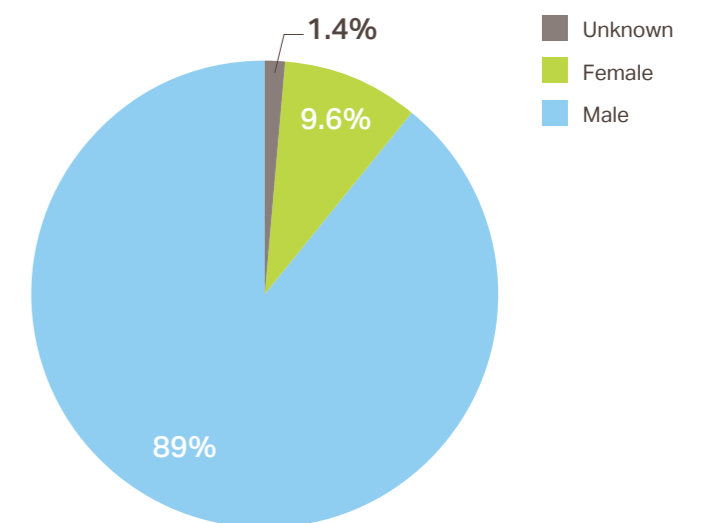
However, the gender split among younger members of the Institution is slightly better, with 12.5% being female. IMechE members classified as Young Members are any Affiliate, Associate or member who become professionally registered within the last ten years. It is worth noting that there is no age restriction to being a Young Member.

IMechE Young Members gender data (April 2020)

Have not ticked any box or unknown	1,567
Female	10,235
Male	70,155
Total Members	81,957
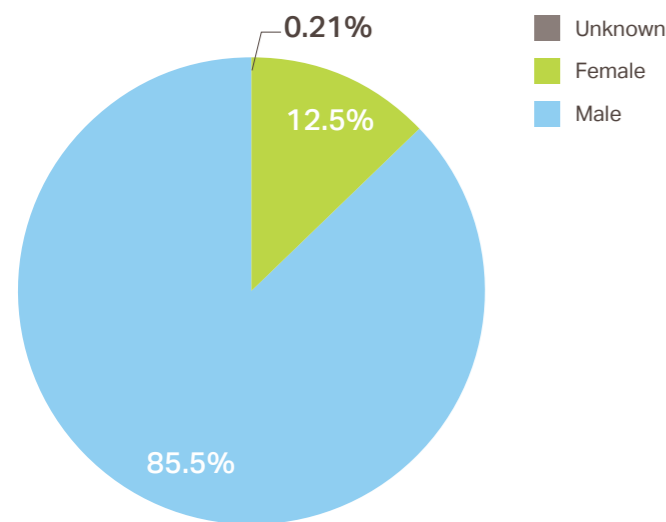
As per the table above, share of members of mixed and BAME background is significantly lower than that of White background. Significantly over 70% of members have chosen not to disclose their diversity data and we hope to improve on this as part of the strategy.

Of the ~30% who have disclosed their personal information, we gathered data on ethnic origin, disability, religion, sexual orientation and gender reassignment. The low completion rate indicates that more work needs to be done to educate the IMechE community on why data is being collected, how the data is being used, and how it can help build a more sustainable and inclusive community. Data collection is important to be able to estimate baseline diversity demographic of the Institution.

By increasing trust in data collection, we can effectively measure and monitor the impact of our interventions on increasing diversity among our membership and employees base.

Member background data (April 2020)

Mixed & BAME Background	5,956
White Background	28,239
Any Other	608
Have not ticked any box or unknown	82,585
Total Members	117,388
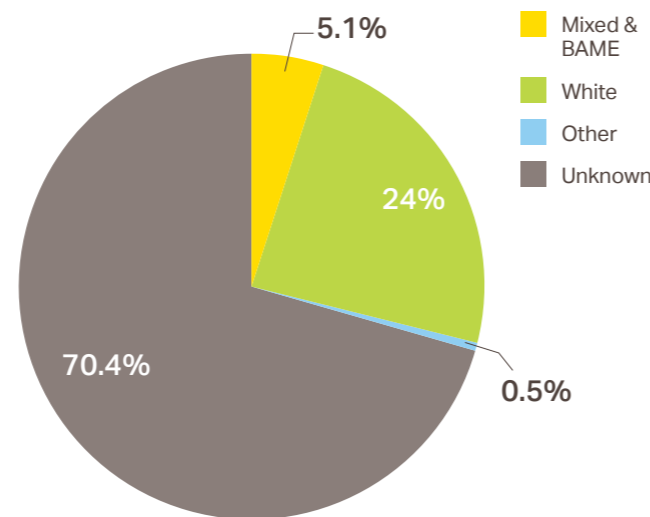
INSTITUTION'S PROGRESS TO DATE

## The Institution has been more proactive on diversity and inclusion over recent years.

Since the appointment of IMechE Past President Isobel Pollock-Hulf as Chair of the D&I Committee in November 2018, the Terms of Reference and membership of the group have been reviewed and recommendations to the independent Governance Review have been submitted. The group has been active on many fronts in support of a wide range of IMechE activities to progress on the RAEng Diversity & Inclusion Progression Framework.
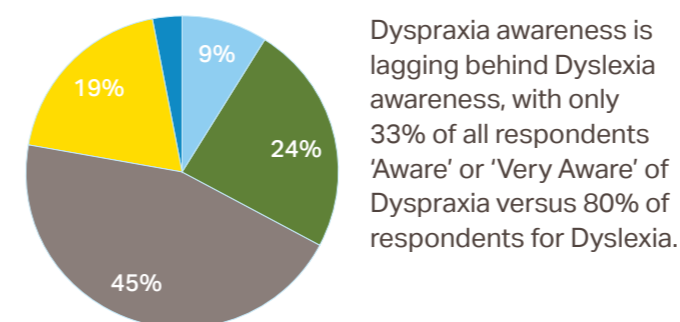
6.1   DYSLEXIA AND DYSPRAXIA

In 2018, the D&I Committee in collaboration with IMechE Support Network led by a listen and learning exercise for members and employees via an online survey on the topic of Dyslexia and Dyspraxia.

Dyslexia and Dyspraxia Survey Results

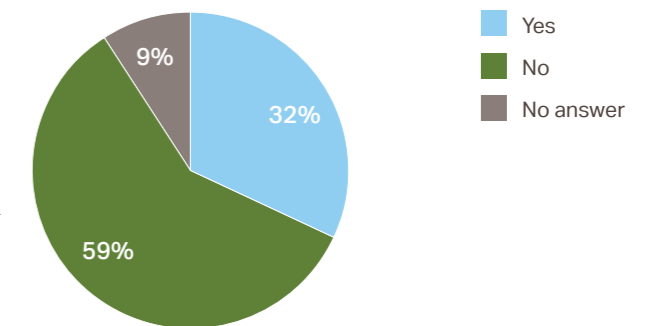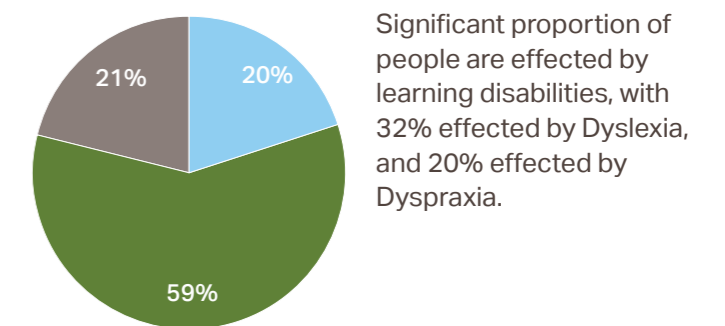**Dyslexia Awareness**
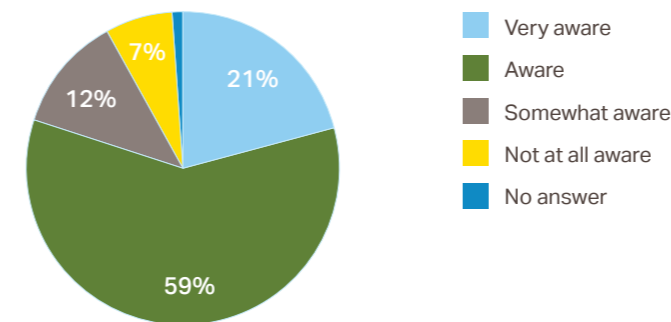
Dyspraxia Awareness

Dyspraxia awareness is lagging behind Dyslexia awareness, with only 33% of all respondents 'Aware' or 'Very Aware' of Dyspraxia versus 80% of respondents for Dyslexia.
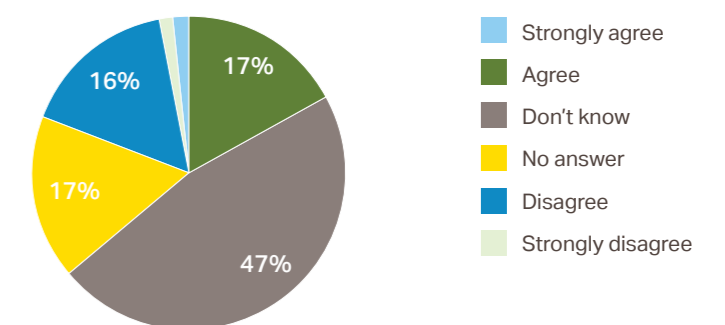
Effected by Dyslexia?
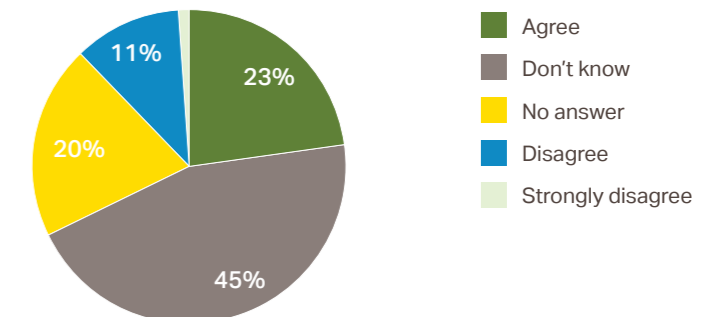

Effected by Dyspraxia?

Significant proportion of people are effected by learning disabilities, with 32% effected by Dyslexia, and 20% effected by Dyspraxia.

IMechE is accessible for Dyslexic/ Dyspraxic members

IMechE is accessible for Dyslexic/ Dyspraxic employees

The survey results provided an understanding of the level of awareness of dyslexia and dyspraxia among the IMechE community, gathered feedback and comments on the matter, and helped build a focus group to explore the learnings further.

One of the questions included in the survey was:

"What could the Institution do to make services more accessible for members and employees who are dyslexic or dyspraxic?"

Most responses largely fell in two categories: reading and non-reading adaptations.

To address one of the main findings in the survey, new inclusive branding guidelines and an accessibility widget has been implemented.

6.2   ACCESSIBILITY WIDGET

The Institution has invested in a widget for the website, which allows for greater accessibility.

The accessibility widget aims to increase engagement by fostering a more accessible digital space for the IMechE community. It offers a broad selection of functions that users can mix and match to meet their individual accessibility needs. Each function can be turned on or off, or set at an exact interim value. Settings for each user are automatically saved for future site visits, making the site's accessibility smart, effortless and effective
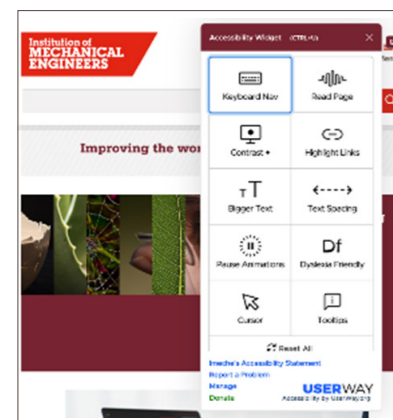

Image 6: IMechE Accessibility Widget

Functionality includes but is not limited to: screen reader, dyslexia-friendly font, text size, text spacing, pause animations, change to dyslexia-friendly font and highlight the cursor.

6.3   IMECHE BRAND

The updated branding guidelines make all written communications easier on the eye for all IMechE website visitors and readers.

IMechE updated its typography by adding a new font, called Aktiv, to the existing Serifa and Verdana fonts. Aktiv has been identified to be dyslexia-friendly and easy to read on digital and printed marketing materials.
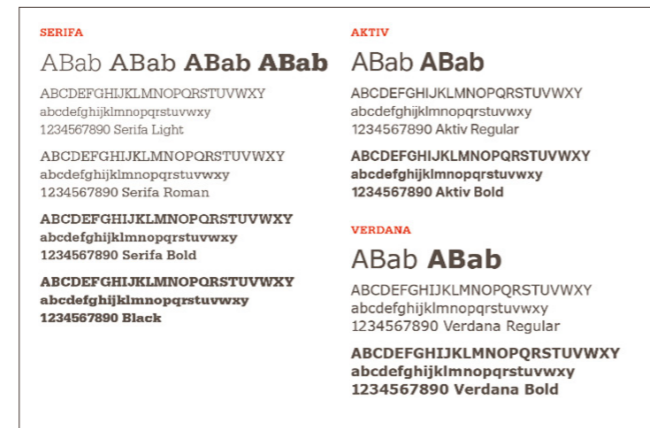

Image 7: IMechE Fonts

The colour palette was also reviewed, to include pastel colours that help soften the overall appearance and serve as a better background to read off text.

Image 8: IMechE Brand Colours

6.4   INCLUSIVE COMMUNICATION GUIDE

The D&I Committee purchased an Inclusive Communications Guide from ENEI [16] (Employers Network for Equality & Inclusion), which will help IMechE communicate effectively, reach a wider audience, and avoid unintentionally excluding people from communications.

Adopting a thorough approach to D&I in communications is necessary for understanding how to best communicate with, to, and for, a richly diverse British culture in which (ENEI Inclusive Communications Guide 2018):

- 51% of the UK population is female, 49% is male.

- 1/5 or 12 million people in the UK identify as having a disability.

- 1/7 or 9 million people in the UK are deaf or have a hearing impairment.

- The average reading age in the UK is 9 years old.

- 15% of the UK population have dyslexia.

- 6% of the UK population identify as gay, lesbian or bisexual.

- 87% of the UK population is white, 7% is Asian/British Asian, 3% is black/British black, and 3% are British mixed race.

As a global membership organisation with members in over 140 countries, IMechE must ensure that all written and verbal communications are clear, including for people with leaning disabilities or whose first language is not English.

This ENEI Inclusive Communication Guide aims to help the IMechE community to:

- communicate using inclusive language and know which words to use and avoid when writing about protected characteristics;

- present communications visually, which is an important component of the overall campaign;

- choose and use appropriate communication channels to reach a wider audience; and

- audit communications and planning for future needs.

6.5 EQUALITY & DIVERSITY TRAINING

IMechE has delivered free online to members and volunteers since 2018. It aimed to raise awareness of unconscious bias and other barriers to D&I, as well as motivate positive behaviours and attitudes – essential to maintain and create an inclusive and respectful environment. This online training is being replaced with an improved and comprehensive D&I training due to be launched in 2021.

Extract from the IMechE-sponsored training course

Positive and Negative Discrimination

POSITIVE discrimination means treating someone in a MORE favourable way BECAUSE they have one of the protected characteristics. For example if a man and a woman have applied for the same job, and both have a similar level of qualifications and experience, it would be positive discrimination to give the job to either of them SIMPLY to even up the male/female ratio in a workplace, or because it was felt that one sex would get on better with colleagues.

However it's NOT illegal to use POSITIVE ACTION in a workplace. This means that it IS lawful for employers to take positive steps to ENCOURAGE people with protected characteristics.

There are four main types of NEGATIVE discrimination – direct, indirect, associative and perceptive.

DIRECT discrimination means treating someone less favourably than someone else because of differences that are protectwed characteristics. On the most basic level this could mean that someone isn't given the same opportunities, respect or conditions of employment because of a characteristic they have. For example if someone is refused a job because of their sex or age.

INDIRECT discrimination is not quite so clear-cut, but it means that people with a protected characteristic are put at a disadvantage because a rule, policy or procedure in an organisation or workplace effectively excludes them.

For example if an employer sets a minimum height requirement for a role, this is likely to indirectly discriminate against women, as they are typically shorter than men. Or, if a job ad requires ten years' previous experience – this would indirectly discriminate against a young person.

ASSOCIATIVE discrimination means treating someone less favourably than someone else, not because of anything about themselves, but simply because someone ASSOCIATED with them has a protected characteristic. For example not awarding a promotion to an employee because his wife is pregnant.

PERCEPTIVE discrimination means treating someone less favourably than someone else because you THINK they have a protected characteristic, whether or not they actually do.

Unconscious biases

Unconscious biases can influence a person's judgement without them being aware of it. Unconscious bias training in the workplace aims to make people aware of potentially harmful unconscious biases and to reduce the impact of those biases.

A long list of the different biases is available on Wiki **https://en.wikipedia.org/wiki/List_of_ cognitive_biases**

Source: iHasco Equality and Diversity Online Training.

Mental health awareness (half-day course)
Understand what mental health is, learn to recognise some common mental health issues and how you can support someone going through some of these.

Mental health champion (one-day course)
Build you knowledge of mental health, become an advocate for positive mental health and supporting positive wellbeing.

Mental health first aid (two-day course)
Become a certified Mental Health First Aider and learn how to spot the signs and symptoms of mental ill health to provide help on a first aid basis, even in a crisis situation.

The Learning & Development team at IMechE offers training courses on mental health, accredited by Mental Health First Aid England. Having good mental health means realising your own abilities, coping effectively with the normal stresses of life, working productively, and making a contribution to your community (WHO, 2018). Mental health can affect how we think, feel and conduct ourselves in daily life.

With mental health issues being so prevalent these days, the Institution has decided to support the engineering community by launching two mental health courses, (see green boxes).

For more information or for any questions, email **training@imeche.org**

6.6 EVENTS LED BY THE D&I COMMITTEE

The D&I Committee has made a collaborative effort to mark the importance of several dates in the calendar year by delivering awareness campaigns and events for INWED, Social Mobility, Inclusion Week, Dyslexia and Dyspraxia Awareness Week to name a few.

A few examples of outreach and engagement successes are listed below:

4 July 2018	*Art and Engineering in the Fashion Industry*	The event opened with the launch of a short IMechE report on Engineering out Fashion Waste.
16 November 2018	*Inspirational Talks by Australian Women Engineers STEM event*	Held in Whyalla, South Australia this event was aimed at providing engineering exposure to female students studying at local high schools.
3 December 2018	*Dyslexia and Dyspraxia Awareness Workshop*	Delivered for IMechE employees.
30 April 2019	*Getting back into the workplace conference*	Organised by the Women in Physics Group.
21 June 2019	*INWED STEM event*	At IMechE with over 100 school children attending.
		Supported Greater London region Young Members Committee in organising a STEM INWED event.
24 June 2019	*INWED event*	An evening discussion, joint event at IET with over 300 attendees.
		Supported Greater London region Young Members Committee in organising an INWED evening discussion.

The D&I Committee organised regular events to celebrate International Women in Engineering Day on 23 June each year. In June 2020 IMechE celebrated six outstanding members of the Institution who were named as winners in **2020 Top 50 Women in Engineering** (Dr Kerry Mashford, Martha Hart, Adele Carey, Dr Claire Lucas, Laura Bishop, Kusum Trikha). The WE50 awards, organised by the Women's Engineering Society, are now in their fifth year. They aim to showcase female talent in the profession. The 2020 awards announced on the International Women in Engineering Day focused on work in sustainability, with the "Shape the world" theme running through.

The Committee has focussed on the use of on line webinars as a way of becoming more inclusive and connecting across the globe.

A recent collaboration with the Institution's Yorkshire Region, has initiated the launch of a series of webinars focusing on D&I in engineering. The umbrella title of *Futureproofing the Institution* aims to explore a range of topics to help create discussion as well as inform the D&I strategy and plan of action.

The first webinar launched on 19 June 2020, to celebrate the International Women in Engineering Day. The webinar launched with a keynote speech delivered by IMechE President Terry Spall, and explored how the Institution can support and improve gender diversity within the organisation and the wider engineering industry, what practices and mindsets/biases perpetuate an unequal environment, and what can be done to dismantle and change these.

The series continued with a collaboration between IMechE's Yorkshire Region and the London Young Members Panel on Social Mobility and Accessibility webinar on 30 September. The event explored the importance of fairness, accessibility and social mobility in today's society, including how we engage with where the world is going, what the COVID-19 impact is to date, and how we make events, meetings and professional membership accessible to all.

Digital engagement, such as webinars, is an inclusive way of getting the message out to a wider audience globally. Recordings of the above webinars can be accessed here **https://www.imeche.org/about-us/imeche-governance/committees/diversity**.

6.7   EMPLOYEE INITIATIVES

The killing of George Floyd and the resulting protests, led to a greater spotlight on race relations not only the US, but also all over the world. Many people who had been affected by race inequality issues had a platform to speak and for the first time the world stopped to listen. IMechE employees from a BAME background in their own words were left horrified and traumatised by the events in the US and started to share about their experiences closer to home. They asked the leadership for a safe place to discuss these issues with their colleagues in order that everyone could be educated and learn how to create a more respectful inclusive environment within the Institution.

This led a number of Listen & Learn sessions open to all staff which were primarily about starting a conversation about race and the experiences of staff within IMechE. The groups were split into BAME employees and mixed group employees, to ensure everyone had a chance to participate in a safe environment: Both groups were asked a series of questions which led to the opportunity share experiences form all sides in an honest and respectful way. The session concluded with suggestions as to the type of support, education and initiatives, IMechE could offer to staff. The outcomes of the group sessions were used by the external facilitator to draw up a report which IMechE could use in furtherance of advancing its D&I agenda.

In addition, for National Inclusion Week, IMechE asked its staff to share what inclusion meant to them. A few key words that were associated with inclusion on a regular basis were: **empathy, understanding** and **listening**. Sharing, promoting and inspiring inclusion practices and culture will help us build and develop the inclusion momentum, every day.

What Inclusion means to us?

Image 9: What Inclusion means to IMechE Employees

Further contributions are summarised below:

"

- *Everyone matters*
- *I would say inclusion means giving everyone the chance to be heard and share their thoughts*
- *Being welcomed into a team*
- *Showing respect to all regardless of class, gender, religion etc*
- *Taking the time to understand another person's perspective, to feel empathy and to demonstrate compassion*
- *Being able to put yourself into someone else's shoes*
- *Seeing ourselves as all part of one big team*

- *Have open conversations about discrimination*
- *Inclusion is acceptance of difference and not toleration of difference*
- *That no-one is left out*
- *Being grateful and showing appreciation*

The HR team also started a new initiative known as Wellbeing Wednesday -a weekly resource and advice briefing; signposting employees and help them with all aspects of wellbeing, whether it be mental health, financial, physical etc.

IMechE will continue to explore and implement new initiatives through the values and behaviours work using the employee engagement and management forums in addition to the HR function and leadership to ensure the D&I strategy is fulfilled.

6.8 CODE OF CONDUCT

As part of the Institution's Governance Review, the Code of Conduct and Disciplinary Regulations are being reviewed and revised to align the regulations with the Human Rights Act 1998 as well as prioritise public interest over the rights of individuals. The aim is to also actively encourage a positive culture across the organisation and to publish clear guidance to support members. It is anticipated that this will be completed by May 2021.

IMechE Code of Conduct Review Report - Principle Recommendations (2019)

> **Twenty-nine recommendations were detailed in the Report which can be summarised as:**
>
> **General principles:**
> - Align regulations with the Human Rights Act 1998 where possible.
> - Prioritise public interest over the rights of individual members.
>
> **Code of Conduct Regulations:**
> - Identify the key principles that underpin Code of Conduct Regulations and present them in shortened form supplemented by guidance documentation.
>
> **Disciplinary Regulations:**
> - Ensure fairness and transparency by:
>   - Appointing non-members as well as Institution members to apply the process
>   - Broadening the range of Institution members who are involved in the process
>   - Selecting those involved in the process on the basis of competence and experience
>   - Providing those involved in the process with regular training
>   - Publishing the names of those involved in processes (but not cases)
> - Adopt a three-stage process that includes:
>   - Triage
>   - Investigation
>   - Hearing
>
> **Actively encourage a positive culture in which:**
> - Members and staff understand the importance of mutual respect
> - Expectations of behaviour for members and staff are aligned
> - Support is available for senior members and senior staff who experience conflict
>
> **Develop and publish a suite of guidance documents covering matters such as:**
> - The nature of the relationship between volunteer members and the institution
> - Bullying and harassment
> - Standards of behaviour expected from members, staff, visitors and contractors
> - Whistleblowing
>
> **Require annual reporting and regular auditing of processes**

D&I STRATEGY AND RECOMMENDATIONS

The D&I strategy plan for 2021-2025 will help communicate a unified message and voice of the Institution's proactive stand for Diversity & Inclusion, as well as fulfil the D&I Committee's vision and objectives.

By inspiring and channelling a groundswell of member support, developing their understanding, and forging collaborations that endure far beyond individual projects, IMechE will be able to promote its vision for the future *in which all engineers are able to thrive in a diverse and inclusive profession.*

To achieve this, the strategy focuses on **five strategic themes** that span across **15 key sectors** covering both IMechE employees and members. Each of the 15 sectors include feedback from the focus group discussions and one to one conversation with IMechE senior management followed by a list of recommendations made by the D&I Committee.

1   **Establish internal support**
2   **Secure external support**
3   **Inspire a change in behaviour**
4   **Drive systemic change**
5   **Track performance**

Diversity & Inclusion Strategy – 15 sectors:

1   ***Diversity & Inclusion Committee (D&I)***

2   ***Support Network (SN)***

3   **Governance and leadership (GL)**
     (including boards / committees)

4   **Membership and professional registration (MPR)**

5   **Meetings, conferences and events (MCE)**

6   **Education, training and examinations (ETE)**

7   **Accreditation of education and training (AET)**

8   **Prizes, awards and grants (PG)**

9   **Communications and marketing (CM)**

10   **Outreach and engagement (OE)**

11   **Employment (E)**

12   **Monitoring and measuring (MM)**

13   **Publishing and policy (PP)**

14   ***Commercial businesses (CB)***

15   ***Property (P)***

Five Themes of D&I Strategy

Strategic Themes	Description
Establish Internal Support (EIS)	There must be strong, coherent support for D&I throughout the Institution. Gaining and maintaining internal backing must be part of the Trustees' and Board's agenda, as well as sharing the articulated case for D&I in the Institution. This includes highlighting the need to collect data and set targets. To achieve this, identifying and engaging risk-averse people within the organisation is essential. Supporting Board and Committee Chairs, engaging people and functions, identifying obstacles and barriers, and leveraging the current culture of talent and excellence must be part of the regular tasks of governance and leadership.
Secure External Support (SES)	To be able to drive transformational change at scale, the Institution will benefit from partnering with organisations that can supply complementary skills, expertise, resources and networks. Carefully selecting them will ensure a good fit on goals, processes, budget and activities. Partnering with NGOs and Government allows the Institution to gain not only legitimacy, but fresh perspectives and inputs. In doing this, the Institution will be able to galvanise innovation and real-world knowledge into opportunities, new career paths, and appeal to a wider, more diverse talent pool. Benefits could include greater impact of budgets, making activities more feasible, double reputability/respect, well-connected industry-leading appearance, faster implementation working with more agile organisations fostering innovation.
Inspire Change in Behaviours (ICB)	Behavioural change requires leadership, expertise, resources and membership goodwill to create an effective and scalable programme of culture change. What behavioural change can we promote that will most effectively support IMechE's D&I mission statement and how can we encourage these behaviours?
Drive Systemic Change (DSC)	Lasting change will come when individuals see the benefits of the changes we put in place, and when behaviours start to change. Pursuing and maintaining a relentless drive to establish and embed and inclusive culture will lead to systemic changes in how engineers are perceived, who can be an engineer and, ultimately, the composition of our workforce and the positive impact on engineering design.
Track Performance (TP)	IMechE needs to develop, articulate and share the case for collecting data with membership. The organisation needs to follow through data collection and sharing of key indicators, as well as develop accountability procedures for the success of targets. Tracking the resources devoted and success of different areas will help the Institution identify the most cost-effective strategies.

7.1 RESEARCH PROCESS – FOCUS GROUPS AND SECTOR-LED DISCUSSIONS

In early 2020, the D&I Committee took the steps to prepare a more extensive D&I strategy for IMechE. To provide better focus, EqualEngineers were appointed to conduct an independent research into the IMechE current processes and practices to help guide this report and its recommendations.

EqualEngineers conducted a series of 12 virtual focus group sessions with both employees and members (Focus Group Questionnaire and Feedback – Appendix).

Across the board the response was positive and encouraging. A desire to learn and understand D&I within the Institution transpired throughout the groups. The discussion was framed around three questions:

Where are we now?
Where do we want to go?
How are we getting there?

Separately, discussions were held with Heads of Departments and senior management to explore progress and opportunities in each sector, which included aspirations for the future, positive steps made to date and barriers to progression.

Details of these sector discussions have been incorporated in section 7.2.

7.2 SECTOR SUMMARY

7.2.1 Diversity & Inclusion Committee (D&I)

The role of the D&I Committee is to provide leadership and oversee the implementation of this strategy. Guidance and counsel will be provided, everyone is encouraged to consider the proposed recommendations and take leadership on D&I in their area. The committee is also encouraged by the many D&I recommendations included in the Institution's Independent Governance Review Report and that it will remain a key Committee within the Institution and report directly to the Trustee Board. The Chair has a seat on Council.

Going forward, the D&I Committee intends to have further discussions with each of the leaders of the 15 sectors, to encourage further actions to achieve the desired impact. The role of the D&I Committee is to support and enable all those involved with IMechE to become more inclusive in the role that they play in the functioning of the Institution. It is for the Committee to collect the data at defined intervals to report on aggregate progress to the Board.

With the volume of work to be done and in the spirit of ensuring comprehensive support and oversight, the single most important thing that IMechE could do to support and enable D&I, would be to appoint a full-time, permanent D&I Officer to take this area forward in depth. At present, there is insufficient IMechE direct support for to D&I activities and the work of the committee.

The D&I Committee will focus on the five strategic themes and monitor progress across all 15 sectors as follows:

- **Establish Internal Support**
  Build a network of diversity champions comprising passionate staff and members who can act as points of contact, embedding the strategy and educating their peers.

- **Secure External Support**
  IMechE cannot do this alone. To be able to drive transformational change at scale, the Institution will partner with organisations that can supply complementary skills, expertise, resources and networks. Carefully selecting them will ensure a good fit on goals, processes, budget and activities. Partnering with experienced organisations allows the Institution to gain not only legitimacy, but fresh perspectives and inputs, eg working with EqualEngineers and AFBE-UK.

  In doing this, the Institution will be able to galvanise innovation and real-world knowledge into opportunities, new career paths and appeal to a wider, more diverse talent pool.

- **Inspire Change in Behaviours**
  It is essential to adopt a "we say, we do" behaviour. Leadership will set the tone for inclusive behaviour, which in turn will foster culture change. We will start by educating the IMechE community about inclusive behaviours and practise them collectively. We know we will experience resistance, and are ready to remove any barriers to making the IMechE community truly inclusive.

- **Drive Systemic Change**
  It is our belief that by engaging with the majority groups and getting them to understand their diversity story, is a quick step in reducing adversity which can be experienced when using a demographic based approach. A focus on demographic diversity should follow quickly in succession to show that the Institution has its under-represented group members' needs at heart, be they women engineers, ethnic minority engineers, LGBT+ engineers, engineers with disabilities, and so forth.

- **Track Performance**
  We are committed to develop, articulate and share the case for collecting data with membership. We need to follow through data collection and sharing of key indicators, as well as develop accountability procedures for the success of targets. Tracking the resources devoted and success of different areas will help the Institution identify the most cost-effective strategies.

The D&I Committee encourages the 15 sectors to develop a D&I action plan that encompasses the recommendations listed in sections 7.2.2 to 7.2.15.

Ref	Action Output	D&I KPI	Priority/ timescale	Action owner
1	Roll out a variety of D&I training including but not limited to unconscious bias, bystander training, inclusive communications, and inclusive STEM outreach.	Comprehensive training programme is set up and being taken up by employees and members.	Q1 2021	D&I Committee
2	Establish a D&I Champion Network to allow enthusiastic employees and members to become vocal advocates for the D&I work of the Institution.	Set up the D&I Champion Network.	Q3 2021	D&I Committee

Recommendations:

1. Work with the 15 sectors to develop a sustainable D&I action plan that will link to IMechE's overall strategic and business objectives.
2. Establish a D&I Champion Network for both members and employees to become vocal advocates for the institution's D&I work.
3. Roll out a variety of D&I training packages for both employees and members, including but not limited to: unconscious bias, direct and indirect discrimination, inclusive leadership, etc.
4. Reach out to, connect and maintain relationship with external partners to support the Institution's D&I agenda, gather best practice and collaborate on D&I projects.
5. Benchmark and regularly report on membership diversity data, set targets, and analyse trends to implement actions that address areas of concern.
6. Provide regular updates to the Trustee Board on the progress of this strategy.
7. Recruit new volunteers to the D&I Committee. Agree on the organisational chart for the committee and what requirements each role has.
8. Lead on the RAEng D&I Progression Framework exercise due to be submitted in April 2021.

7.2.2 Support Network (SN)

The IMechE Support Network (SN) is a separate charity closely aligned with the Institution and the the Institution's D&I strategy. The remit of SN is principally prevention and relief of poverty, and to directly assist individuals who are either members of IMechE, or the relatives of an IMechE member.

SN provides disability support regarding dyslexia and autism through purchasing individual or family memberships to the BDA (British Dyslexia Association) and NAS (National Autistic Society) respectively, plus additional diagnostic, specialist resources grants. SN also purchases membership for female engineers to the mentorship programme MentorSET, offered through the Women's Engineering Society (WES). All SN's services are available on a worldwide basis and grants are also provided internationally. Disabled students are prioritised in the student grant programme. A social visiting service operates to link isolated members, and/or those at risk of experiencing depression.

SN can only help members once they have joined the Institution, and so cannot influence diversity at the recruitment stage. The work SN offers is key in supporting diversity of those members who stay with IMechE, thus impacting retention of engineers. Support Network is now able to fund projects as well as individuals, and these fall within the themes of education of disadvantaged young people; international development; and engineering innovation.

SN offers advice, practical support and financial assistance to help with a range of life circumstances, and to therefore reduce stress and promote wellbeing and positive mental health.

Going forward into 2021, Support Network will prioritise offering a greater range of mental health responses to help our wider IMechE community of members.

Recommendations:

Work in collaboration with the D&I Committee to promote the Support Network's work on mental health, dementia, dyslexia/dyspraxia.

Image 10: Support Network Article in PE Magazine Spring 2020

7.2.3　Governance and Leadership (GL)

The Trustee Board is responsible for the governance and leadership of the Institution. The Council is responsible for tendering advice to the Trustee Board concerning the direction and strategy of the Institution and communicating the representative views of the membership on these and other matters. Throughout 2019, the Institution underwent a rigorous Governance Review, to establish the future governance of the Institution. The Review resulted in a set of 21 key recommendations, the implementation of which began in late 2019 and is scheduled for completion in 2021.

The D&I Committee is encouraged by the many D&I recommendations included in the Governance Review report. This will ensure we are well set up for positively responding and implementing this D&I strategy and embedding it within our core practices. As part of the restructure, the D&I Committee now reports directly to the Trustee Board, has a detailed Terms of Reference, and is chaired by Past President, Isobel Pollock-Hulf OBE FIMechE.

The Implementation Group (IG) is tasked with implementing the recommendations of the Governance, Finance and Code of Conduct/ Disciplinary Reviews, which were reported to members in 2019. As Chair of IG, Dr Kerry Mashford OBE continues to report on the progress being achieved by the Group. One example of the changes proposed is the new Code of Conduct Regulations, which re-state the core ethical obligations and practices of members including to support and encourage equality, diversity, and inclusion. Once live, they will be kept under close review, to capture any lessons learnt that arise requiring further development action. Various participants as part of the D&I focus groups asked for a clear, concise, and authentic ethical code for the Institution. One that is both proactive and reactive in shaping member actions.

D&I discussions led by EqualEngineers brought up an underlying theme among the membership that IMechE is "old school and old fashioned", and not being at the forefront of thought leadership. This theme arose in organisational structure, the "feel" of One Birdcage Walk, and the lack of diversity in board and committee leadership. Some members believe that talent and prestige must always come before D&I efforts.

The Institution has a greater diversity of representation in committee membership at the younger end. Membership of senior committees has to date comprised engineers who have been working a long time, and these committees generally reflect the characteristics of that membership cohort.

A diverse committee is one that reflects the diversity of the community it serves. First steps can be taken from a visible-identity basis, which involves having greater gender and ethnic diversity. Greater depth comes from understanding hidden identities such as disability status, sexual orientation, historical/current socio-economic status and life experiences.

This has been addressed by the Governance Review Recommendation number 14 that prompted the formation of the new Nominations Committee (NomCo). Its objective is to promote greater involvement of the Institution's members in all volunteer capacities. NomCo aims to reach the wider membership in its recruitment process and encourage candidate selection based on a skills gap analysis. This will hopefully lead to greater diversity on boards and committees across IMechE. All boards and committees are encouraged to follow NomCo best practice guidelines for inclusive recruitment practices.

Other focus D&I group sessions highlighted the feeling of a culture of "ins and outs". Some are very keen to take part and help the Institution but feel there are barriers for them to overcome. This was echoed by the high disengagement with election processes. Many volunteering members feel they can sometimes be "taken for granted". Some volunteers are discouraged by this, as well as a feeling that they can be assigned and encouraged to take roles based on their diversity characteristics, rather than their voice being heard to shape institutional policy. Mandatory diversity training for employees and committee members will align and orientate leaders towards a common goal.

It is expected that future committee meetings will involve the adoption of an "inclusion moment", whereby the start of each meeting is spent briefly discussing an aspect of diversity and inclusion. This will be an effective engagement tool where someone can share their individual perspective and can spark a conversation and raise awareness about different aspects of diversity. Since July

2020, Trustee Board meetings commenced with an inclusion moment to consider different aspects of Diversity & Inclusion in our push towards excellence in this area. The focus for the July 2020 meeting was unconscious bias. A Trustee commented, *"This was a great initiative; it only takes a few minutes and it certainly made us all stop and think, and I would certainly recommend adoption of this practice."*

The Trustees have also agreed to create a new Values & Behaviours Trustee position for a member, with specific experience in delivering cultural change in organisations, to advise the Trustee Board and work across the Institution in helping us to bring about cultural change.

Recommendations:

1. Appoint a D&I Officer to support the implementation and delivery of the D&I strategy and ensure D&I sits at the heart of the Institution's work ethic.
2. Work in collaboration with the D&I Committee to develop a robust data collection process for both employees and members at all stages (eg membership levels, recruitment, promotion, awards, events).
3. Ensure "collective responsibility" for D&I across the Institution. Encourage, track and monitor D&I progress across the board. Explicitly link D&I objectives to the broader strategic and business objectives for the Institution. Benchmark and regularly report on diversity data, set targets, and analyse trends to implement actions that address areas of concern.
4. Consider a mechanism whereby members, volunteers and employees can report on non-inclusive behaviour such as bias, discriminatory practices, racism, language. Any such behaviour should be treated as any other breach of Code of Conduct. This will instil a sense of respect and value among the IMechE community and lead to an improved and safer working environment.
5. Ensure that committees and boards commit to D&I (eg adopt an inclusion moment at the start of the meeting). Consider induction of new committee members on D&I to instil a sense of commitment and accountability.
6. Promote committee roles to the wider membership and actively encourage minority group members to join boards and committees.
7. Ensure, internal policies and procedures remain up to date, are compliant with the law and reflective of best practice, where achievable.

IMechE Diversity & Inclusion Strategy

NOMCO WILL BE RESPONSIBLE FOR CREATING A MORE INCLUSIVE AND WELCOMING "FRONT DOOR" FOR ANY MEMBER

During the 2019 Governance Review, we analysed the thousands of responses we received from the member survey investigating the effectiveness of our governance. Problems and issues raised by members included the issue that the NomCo process was seen as opaque and distrusted:

- members did not think it cast its net wide enough or made the effort to search thoroughly enough;
- members did not feel that it had sufficient support/resources to fulfil its responsibilities properly.

Having considered Charity Commission and other relevant best practice guidance, the Governance Review report concluded an improved NomCo should have an important, enhanced role moving forward. It should be responsible for providing an improved, fair, rigorous and transparent process for nominating Trustee candidates and Honorary Fellowships, also more widely across Council and other boards and committees.

In overseeing the development of a diverse pipeline for effective succession planning in the Institution, the committee will attract and provide experience pathways for members to serve at various levels of governance. For our Institution to be effective for the future, NomCo should itself have a combination of skills, experience and knowledge, be properly constituted with a clear remit and identified authority, with its membership regularly refreshed.

The committee will be chaired by a Past President, who left office at least three years ago. The Trustee Board has appointed Isobel Pollock-Hulf OBE to carry out this important task, and I will continue to provide support during the early phase to get the committee up and running. Isobel will be supported by a Trustee, and four independent members or non-members with relevant HR/recruitment experience, of which at least one should be an international member. The Institution's Chief Governance Officer Maria Powell will be the secretary, and the Chief Executive Colin Brown and HR Director Bims Alalade will attend (no voting rights).

NomCo will be responsible for creating a more inclusive and welcoming "front door" for any

member expressing an interest in getting more deeply involved. It will post opportunities on the website and proactively encourage members to put themselves forward. When assessing the eligibility of candidates, NomCo will consider candidates on merit and against objective criteria, having due regard to the benefits of diversity and taking care that candidates have enough time available to devote to the position, while respecting the privacy of individuals.

NomCo will publicise more widely what it does, with the details of its members and the Terms of Reference posted in the members-only area of the IMechE website. Engagement with members will be key to encourage greater member involvement and support people wishing to explore standing for elected office, as well as volunteering specialist skills.

The committee Chair will report to the Trustee Board after each meeting, and a section of the Institution's Annual Report will describe the work of NomCo, and how this supports the development of a diverse pipeline. A periodic evaluation of NomCo's own performance will also be carried out.

We see NomCo as a real agent of both cultural and operational change, enabling wider participation and ensuring that the Institution can benefit more effectively from the diverse skills, expertise and outlook of our members. Hopefully from this short article, you will see that we intend NomCo to establish a paradigm shift in its operation, ensuring this is enabled by having members with the skills, expertise and competence required for the role.

We are looking to identify potential members of the newly refreshed NomCo to ensure its independence and effectiveness. If you have relevant skills and experience and would be interested in helping us to improve our Institution in this or other roles, please get in touch by emailing **nominations@imeche.org**

GILES HARTILL
Vice President and member of the 2019 Governance Review Implementation Group.

7.2.4   Membership and Professional Registration (MPR)

The Institution provides a broad range of membership, accreditation, and professional development services to support the engineering community.

Employees and active volunteers work closely together to offer a range of career and professional development support including professional registration aligned to the license requirements of the Engineering Council and Society for the Environment.

The Institution has a volunteer base of ca. 1,125 people active on Membership Committees and supporting assessment activities. A further 5k members participate as MPDS Mentors appointed through the accredited company programmes.

Progress has been made over the last few years to achieve a broader range of diversity of volunteers from all career stages and profiles.

In order to ensure a steady intake of fresh talent, but without endangering loss of the critical and valuable experience and knowledge of the current active members, succession planning processes are in place for all membership functions. Recruitment is undertaken with a view to increasing diversity in all activities, and to appeal to the widest range of the membership who wish to volunteer their time.

There are 850 trained and active Professional Review Interviewers (PRIs) in the UK and internationally. Members who conduct PRIs are required to undertake training every 2 years to remain active.

In 2020, 33 training sessions were provided for ca. 475 member volunteers, both on the Engineering Council requirements of UK-SPEC, but also to support them in the transition to fully virtual PRIs using online software. Specific sessions dealing with diversity and inclusion and Code of Conduct best practice are included within the training modules offered, although these can always be strengthened with the development of our culture and work around our values.

The move in 2020 to all virtual activities has been complex and challenging but as processes bed in, feedback has been that this approach does enable levels of flexibility in participation which may not be possible if required to attend a physical site for meetings or interviews.

IMechE offers reduced subscriptions fees for which members can apply if their circumstances change in certain ways. This is aimed at continuing to support members at a point of need during their careers.

IMechE in partnership with EAL is currently applying for End Point Assessment (EPA) Recognition with Ofqual. As an End Point Assessment Organisation (EPAO) for the advanced manufacturing and engineering sector the Institution is committed to ensuring the same wider D&I policies and practices are adopted throughout the EPA process.

During the focus group discussions some members perceived a mismatch in understanding of the Engineering Council requirements between accreditation and registration outputs. Focus group members reflected on the definition of a mechanical engineer in the 21st century. It was highlighted that IMechE needs to continue to ensure that both accreditation and registration requirements reflect the multi-disciplinary roles mechanical engineers are fulfilling.

Recommendations:

1. Consider support programmes to assist return to employment after time away for example: maternity/paternity leave or career break.
2. Review marketing communication around reduced membership during maternity/paternity leave that encourage members to maintain their professional status and return to their engineering career.
3. Ensure members can update their personal details easily to be able to modify their profiles that reflects their background.
4. Ensure that all communication with members, including membership application process, reach minimum standards for accessibility and use inclusive language and imagery.
5. Apply a D&I lens over the End-Point Assessment policies and procedures. Ensure active members involved in the assessment process are supported through the provision of D&I training.
6. Work in collaboration with the D&I Committee to ensure the training and support for all involved in the peer review processes are provided with the latest D&I training.
7. Ensure all membership application forms and processes have an inclusive design and are easily accessible for all.
8. Ensure the definition of a 'mechanical engineer' is reviewed regularly and remains inclusive to the profession.

7.2.5   Meetings, Conferences and Events (MCE)

The Institution organises a wide range of events comprising of webinars, lectures, seminars, one-day conferences, multi-day challenges, student competitions and many more. This is in addition to the range of Board and Committee meetings which take place both at the London Headquarters and locally throughout the member networks. In 2020 the transition to virtual meetings and events during COVID-19 speeded up what had been a gradual move towards digital events in the Learned Society.

Events are a team effort between employees, members and committees. A more concerted effort should be made by all to be proactive in considering the diversity aspects of what is being planned. As part of the Institution's learned society programme, efforts are being made to diversify content to extend beyond technical content, for example running sessions on mental health. Speakers and contributors from diverse backgrounds should also be actively encouraged to contribute to the Institution's events. A policy on representation at events and public-facing activities as well as guidance on what is defined by an inclusive event, will be a useful tool for both volunteers and members that organise events in their regions.

In following the D&I strategy, we need to clearly define what this means, and be clear on the consequences if they are not followed. As an example, the Institution contacted a large company to provide a speaker for an event, and the organisation refused as the panel in question was all-male. This was an organisation living by its values and extending its expectations onto IMechE.

Recently a suggestion was made by a member for closed captions on webinars, which we are looking to adopt for live broadcasting. This will ensure that members whose first language is not English or have a learning disability, feel welcomed and have a better understanding of the content.

Providing closed captions and transcripts would support the Institution's Diversity & Inclusion vision and major objectives. Our aim is that all IMechE activities and campaigns should be inclusive and represent the diversity of the membership and the engineering profession. To achieve this, we need to identify and address any perceived barriers within the Institution.

An extract of the request for closed captions:

As a minimum, the following benefits apply when providing closed captions.

1. People who are deaf or hard of hearing can now be included.
2. People with other impairments find it easier to focus and engage with the content. These include people with Attention Deficit Hyperactivity Disorder (ADHD) (as it helps to focus), dyslexia, dyspraxia, auditory processing disorders and Alzheimer's.
3. People with noise sensitivities such as those with autism or ME mute their devices and use subtitles instead. They can now participate.
4. People with English as a second language find it much easier to get the full context and understanding of what is being said, so they engage better. There are people from all over the world listening to the IMechE webinars. This service would be useful to them.
5. People who are listening to the webinar in an environment when there is a high background noise (such as travelling home from work sitting on public transport) find it easier to understand.
6. People with no obvious need for the service say it helps them:
   a. if they drift off and miss what someone is saying;
   b. if there is someone with an accent they can't quite catch;
   c. if someone is talking too fast;
   d. to make the information stick in their heads, almost as if they are getting the information twice.
7. Uploading a transcript with the YouTube video gives a more accurate and synchronised service, and it helps with search engine optimisation results, both in YouTube and on Google.

A transcript can help users who can neither hear the audio nor see the video. According to Sense there are approximately 390,000 people in the UK who are deafblind. Transcripts may be provided by the captioning service.

There are 11 million people in the UK who are deaf or hard of hearing. The figure is set to increase with an ageing population. 40% of people over 50 have a hearing loss and 7.1 million people in the UK are living with tinnitus. Additionally, a survey by Scope found that 80% of disabled people have experienced accessibility issues with online streaming services.

Recommendations:

1. Ensure a diverse mix of speakers for all events and conferences.
2. A D&I and accessibility statement should be visible in the event booking process.
3. Monitor the number of queries for accessibility for all conferences and events (eg sign language interpreters, catering, etc).
4. Provide closed captions during live event broadcasting.
5. Run a dedicated D&I programme of events and activities addressing the challenges and barriers to engineering.
6. Consider free or reduced ticket prices for members on maternity/paternity leave or on a career break. Review marketing communication around reduced fees for students and retired members.
7. Ensure all marketing materials use inclusive imagery and language. Create an inclusive event guide for internal use and for volunteers.

IMechE Diversity & Inclusion Strategy

7.2.6   Education, Training and Examinations (ETE) *(Learning and Development team)*

Members need access to technical and personal development training at all points of their career. IMechE's Learning and Development team has over 25 years' experience and runs 600 courses a year across six UK locations. Courses range from personal development to more technical and specific training course. In response to the pandemic, a lot of training courses moved online, however interest in F2F courses persisted. Looking forward the team is planning to provide a portion of training and development programmes virtually for those who cannot attend in person post Covid-19.

D&I sits high on the Learning and Development team agenda. For instance, the team provided 100 in-depth unconscious bias trainings throughout the year. More recently the team released several paid and free mental health trainings, including a course on how to become a qualified Mental Health First Aider in the workplace.

The training programme is decided based on competitor analysis, member survey on the learning and development plan, training providers and customers. The team is looking to develop a comprehensive D&I training package. A potential further training course could be to highlight the skills and benefits of male and female engineering leaders.

Historically, extending the training and development portfolio to international membership has been difficult. The reasons range from high cost for international customers to courses being specific to UK regulations/practices. However, this is an area that has potential to develop, as the team moves some of its trainings online.

Recommendations:

1. Provide training to members returning to work after maternity/paternity leave or career break.
2. Develop CPD programmes for under-represented groups.
3. Consider reduced/no fees for members on maternity/paternity leave or having a career break. Make it more accessible to members of this group to maintain their professional qualifications and connection to their career.
4. Ensure all training providers comply with the IMechE D&I vision, culture and policy. This needs to be clearly communicated to attendees via marketing materials, direct mail, etc.
5. Ensure Diversity & Inclusion training readily available as part of the CPD (Continual Professional Development) offering.
6. Consider adopting an inclusive moment at the beginning of a training course.

7.2.7   Accreditation of Education and Training (AET)

The Institution holds license from the Engineering Council to accredit academic programmes from universities, colleges and companies that support young engineers towards professional registration. Previously, no specific requirements from Engineering Council or in UK-SPEC were detailed on measuring D&I as part of the accreditation process for education providers or companies. However, the most recent version of the Accreditation of Higher Education Programmes (AHEP4 IEng and CEng) [16] published as of September 2020 do include D&I requirements as part of the learning outcomes.

IMechE will need to develop mechanisms on the assessment of D&I as part of the accreditation process by the end of 2021. This could include how educational institutions make students aware of D&I standards, how they encourage a diverse pool of applicants, and whether D&I is part of the academic curriculum. IMechE will also need to develop a way to measure D&I within companies. Consideration will be required as to the most appropriate ways to communicate and embed the D&I strategy to take into consideration the global nature of the profession and appreciate international differences.

The IMechE accreditation process is supported by a diverse range of dedicated volunteers and professional development consultants. D&I awareness training is currently minimal and includes protected characteristics, unconscious bias and direct/indirect discrimination. The free Equality and Diversity training provided by the D&I Committee to date has been helpful, but going forward, comprehensive D&I training package should be made available to support key groups, committees and boards.

The Academic Accreditation team took the initiative to implement a number of D&I actions as part of its work. For example, the make-up of the interview panel for professional membership interview has a diverse mix of volunteers, of which 25% are female members.

Equality, diversity and inclusion Learning Outcomes for IEng	F11. Recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion	Learning outcome achieved at previous level of study.	B11. Recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.
Equality, diversity and inclusion Learning Outcomes for CEng	C11. Adopt an inclusive approach to engineering practice and recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.	Learning outcome achieved at previous level of study	M11. Adopt an inclusive approach to engineering practice and recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.

Recommendations:

1. Ensure the active members involved in the Institution's accreditation services are supported through the provision of and D&I training packages provided by the D&I Committee.
2. Implement mechanisms to assess D&I as part of the accreditation process.
3. Through the accreditation prograqmmes consider encouraging companies to engage with local schools and colleges as well as IMechE activities to inspire the next generation of young engineers (eg STEM initiatives or by becoming governors of local schools to influence decision making).
4. Raise awareness of organisations such as Athena Swan with Universities to encourage further engagement with gender equality. For example the Athena Swan Charter is used across the globe to support and transform gender equality within higher education and research.
5. Encourage Universities to consider inclusive engineering design concepts in courses as part of their curriculum.
6. Consider Universities to support different learning styles for assessment routes (eg neurodiverse people).

7.2.8 Prizes, Awards and Grants (PAG)

The Institution, through the Trustee Board Awards Committee, awards a wide and diverse range of approximately 230 prizes, awards and scholarships each year. These awards are funded from four main trust funds, and each fund can have conditions attached to the awards, specifying what they can be used for.

Most awards are open to all members, although some have certain conditions and criteria, these tend to be either geographical or technical. Awards are open to everyone provided they meet the criteria. The Committee feel it is important to have a diverse group of volunteers supporting to ensure it is representative of the wider membership and ensure that all voices are heard, listened to and reflected.

In addition, the requirement for applicants o travel to our London Headquarters for some of the awards has been removed, resulting in the improvement in access to a more open and inclusive audience including international members.

The Institution is also looking at a range of ideas and initiatives to support the D&I agenda including introducing diversity monitoring within the application process.

It is recommended that IMechE collects diversity data of applicants and encourages women and people from diverse backgrounds to apply for awards as a first step. It is worth noting that the proportion of scholarships awarded to female and minority applicants is higher than the average representation for the Institution.

There are no awards specifically for under-represented groups, or awards recognising D&I work in engineering. However, the Verena Winifred Holmes award (previously known as the Equality and Diversity Award) recognises individuals who achieved by undertaking a unique challenge or experience.

VERENA WINIFRED HOLMES AWARD

Verena Holmes joined the Institution as the first female member in 1924, representing a welcome breakthrough for equal rights in early 20th-century Britain, and a significant moment in the Institution's history.

Previously known as the Equality and Diversity Award, it is intended to recognise those individuals who have achieved by undertaking a unique challenge or experience, perhaps to benefit people from groups with different needs, or with a past record of disadvantage or low participation. They have stretched the normal boundaries of expectation for the benefit of the wider society. Embarking upon this approach often requires persistence and courage, which may also be attributes demonstrated by candidates for this award.

The fundamental attribute for this award is that candidates have demonstrated that they "value difference". They recognise that innovation is stimulated by embracing diversity, by listening to and respecting the perspective of others, and by constructive engagement and dialogue. The definition for this award is intentionally broad, to allow for a wider pool of potential candidates, who in the widest remit, will have approached these attributes in a variety of situations.

Recommendations:

1. Establish awards that promote inclusivity (eg for promoting diversity and inclusion in their work and applying inclusive practices in engineering). This type of award should be open to all members who work on a project that promotes diversity.
2. Improve the visibility, promotion and awarding of the Verena Winifred Holmes Award.
3. Review the nominations process to ensure it encourages and attracts a diverse range of applicants for all IMechE awards.
4. Measure and monitor the diversity of applicants for any award and the diversity of award recipients to make recommendations for improvements.
5. Support the selection of judging panels for prizes, awards and grants to be as diverse as possible.
6. Ensure active members are supported through the provision of the D&I training package.

7.2.9 Communications and Marketing (CM)

The Institution adopts many different communication methods to engage its membership and wider engineering community, including webinars, podcasts, YouTube, LinkedIn, Twitter, Microsoft Teams, as well as email communications. COVID-19 required IMechE to expedite this and transition to significant online communications in all aspects of its activities. Experience has shown that virtual meetings and events have improved overall the feeling of inclusiveness and has been welcomed particularly by international members and employees working from home pre-COVID-19.

The Institution's content has significantly diversified, including in the breadth and type of articles and features in Professional Engineer. A conscious effort is being made to talk to a wider variety of people about different parts of their careers, and to focus on the less obvious hidden aspects of diversity such as disability. The central communications team operates as a service provider to other areas within the Institution, and further encouragement is being made to collaborate earlier on projects, to maximise the support the team can provide.

Investment in an Inclusive Communications Guide has been a key focus area, and the implementation of dyslexia-friendly fonts and widgets on the website. Further work is required to ensure greater use of these tools and provision of relevant training for employees and active members to improve consistency and demonstrate the Institution's commitment to the D&I agenda.

IMechE also needs to consider improvements to ensure that user-experience is firmly at the heart of content delivery. The central communications team has been active and supportive in communicating the D&I message and looks forward to doing more to illustrate a positive message on the benefits of Diversity & Inclusion. However, greater consistency and collaboration are needed to make IMechE visibly inclusive across all communications and publications.

In the focus groups, a significant number of members (many of whom had never been to London HQ) mentioned the London-centric nature of IMechE. It was suggested that consideration should be given to communications marked as coming from "Birdcage Walk" as opposed to IMechE. It was felt that the Institution brand and affinity to it should sit at the forefront as it was recognised and well known within the membership. Members also want to develop a better platform to ensure their voices from outside London are heard, both from UK and international members. *Note: One Birdcage Walk is a brand and identity in its own right, focussed on London HQ events and venue hire.*

Members during the focus groups, highlighted that a significant barrier to the public's perception of an engineering profession comes from the image portrayed in the media. Society can come to associate engineering with problems, and engineers consider themselves problem solvers. By modifying the message to "engineers create solutions" will significantly improve the branding of the profession and portray a positive and attractive message.

Recommendations:

1. Ensure all marketing communications (digital, soft copy, emails, etc) and communication suppliers use inclusive language and imagery. Use a broader diversity of role models in publications that reflects our membership as well as our aims as as Institution.
2. Publish the Inclusive Communications Guide to members and volunteers, and signpost to external tools such as Textio software and gender decoder.
3. Consider renaming communications marked from One Birdcage Walk to come from IMechE.
4. The term "serving members" could misguide members about their role and position against an employee. Change the language to "supporting" rather than "serving".
5. Develop consistent D&I content that targets under-represented groups. Consult with staff and members from under-represented groups on the content development.
6. Ensure D&I values and objectives are ingrained in main membership communications (eg renewal campaign).

7.2.10   Outreach and Engagement (OE)

Diversity & Inclusion is at the forefront of IMechE's educational outreach activities. The Institution's educational strategy considers D&I to be of critical importance in encouraging young people to become the engineers of the future. The IMechE employees and active members deliver a comprehensive educational programme, which includes educational resources and activities catering to young people of all ages and backgrounds.

This includes the IMechE Student Challenge Portfolio, which is open to undergrads (of all years), graduates, apprentices and early-year career professionals worldwide, in addition to a catalogue of educational resources provided freely to the IMechE membership and wider public.

The Institution recently developed a range of free digital educational resources (STEM at Home) which can be used in a classroom/home setting, individually or as part of a team and in the UK/internationally. The new STEM resources include engaging practical hands-on activities complete with curriculum linked downloadable worksheets and instructional "how-to" videos. The shift to digital engagement illustrates IMechE's aim to remove barriers linked to access to hard-copy materials, and its commitment to enable better access to education for all young people. All online materials are accessible from a smartphone for those who do not have access to a computer at home. Activities from the STEM at Home collection were used for a standalone IMechE collection which featured on BBC Bitesize.

We are committed to developing relevant and inclusive educational resources for all age groups, as well as engaging in campaigns and initiatives that will put IMechE members at the forefront of influencing and developing the engineers of the future. As part of the Government's Take a Closer Look campaign [18], which seeks to encourage

more young people to consider engineering careers, IMechE actively encourages its members to become school governors and trustees. IMechE members are encouraged to take part in the Inspiring Governance programme [19], and join local school governing boards to make a positive impact on the lives of young people. School governors are uniquely placed to show young people how rewarding, enjoyable and relevant a career in engineering can be.

IMechE also supported the I'm an Engineer, Stay at Home campaign [20] in summer 2020. Through a moderated online chat facility, students were able to engage with engineers and learn about STEM and routes into engineering. The platform engaged with 55 IMechE members out of 113 active engineers. Another positive collaboration was the partnership with EqualEngineers to deliver the COVID-19 Student Challenge. This was a global competition calling on innovative solutions from across the world to help tackle the effects of COVID-19. The competition received over 100 unique entries. However, these initiatives do not reach children impacted by digital poverty.

The Institution has dedicated members who do STEM outreach on behalf of the Institution. It is hoped that the diversity of active members will grow to support the educational outreach work. A greater push on the emotional connection to D&I in STEM outreach to Ambassadors will be helpful, and their contribution acknowledged and celebrated. Further support services such as training on methods of engagement with different types of schools would be beneficial.

There have been various past reports with recommendations that have influenced the Institution's activities, such as the Five Tribes, Big Ideas and Stay or Go: It's Never Too Late. It is advised to review these recommendations and put them into action.

The Institution also runs a portfolio of student and apprentice competitions, which involve over 7,000 students and apprentices globally.

The Student Challenge Portfolio

- The Unmanned Aircraft Systems (UAS) Challenge
- The Railway Challenge
- The Home Automation Challenge (HAC)
- The Design Challenge
- Formula Student

It is essential that student and apprentice challenges continue to encourage a sustainable and inclusive approach to engineering. Continued encouragement of apprentice participation in the IMechE student challenges will help highlight different routes in engineering for the next generation and the inclusive nature of the profession regardless of socio-economic backgrounds.

Diversity & Inclusion in engineering education has for many years been translated loosely as the need for more students, especially women, from under-represented groups to join and thrive. We need to ensure that the outputs (eg products, designs, devices, AI) we produce as engineers are accessible and relevant for all. Engineering should address the "leave no-one behind" agenda of the Sustainable Development Goals.

Recommendations:

1. Run education outreach campaigns that break the stereotype of who can do mechanical engineering and how mechanical engineers are involved in current issues. Frame engineers as engineers "create solutions" rather than "solve problems".

2. Ensure that all Regional Education Officers undergo mandatory D&I training and are familiar with the Institution's culture, vision and values. Where possible, it is recommended that all IMechE STEM Ambassadors complete D&I training too.

3. Ensure educational outreach work is appropriately targeted, accessible and co-ordinated. Consider actions that increase attraction of under-represented groups in engineering, and target schools from lower socio-economic areas.

4. Review that the language and imagery used in outreach materials are inclusive. Ensure outreach material reflects the diversity of engineering professionals of the Institution.

5. Consider joining up outreach activities with big issues that engineers provide a solution to, eg vaccine production, climate change. The UN Sustainable Development Goals provide hooks for this.

6. Consider promoting inclusive engineering design and sustainability as part of the student and apprentice challenge portfolio.

7.2.11 Employment (E)

The Institution has improved the awareness and engagement of employees in the past three years around diversity and inclusion. Well-received articles have been published which have employees to share their experiences around diversity. There has been a gradual opening and increased comfort amongst employees talking about inclusion, more recently with the "Lets talk about race" conversations.

The appointment of the Talent Acquisition Manager in 2018 has also led to positive changes within the Institution. Bringing the recruitment in-house and minimising the reliance on agencies significantly reduced recruitment costs but also led to a visible changes in the diversity of staff appointments and opened the Institution up to exploring what benefits diversity brings, which in turn has enabled a more equitable way of recruitment.

The IMechE benefits package is generous and focused on wellbeing and flexibility which according to feedback is an attraction to applicants. The recruitment function have encouraged hiring Managers to look beyond traditional candidates with prior experience in membership are more to open to transferable skills.

A diverse workforce cannot be recruited if they do not apply for jobs. Currently, the following statement is added to job vacancies:

"

Webrecruit and the Institution of Mechanical Engineers are equal opportunities employers, value diversity and are strongly committed to providing equal employment opportunities for all employees and all applicants for employment. Equal opportunities are the only acceptable way to conduct business and we believe that the more inclusive our environments are, the better our work will be.

Actions that encourage a more diverse range of applicants may boost the number of diverse applicants, particularly now there is less requirement to travel to office locations. It is recommended the above statement is refreshed to encourage applicants to communicate their accessibility needs prior to interview. Using inclusive language in job adverts, providing training to hiring managers and ensuring a more diverse interview panel will all help increase the diversity pool.

The gender pay gap legislation and gender diversity index require employers with 250 or more employees to publish gender pay gap information in a bid to ensure transparency and equality in the areas of remuneration. Although the Institution is not legally required to do this, inclusion of this information in the Annual Report would demonstrate its commitment to provide pay equality amongst the workforce. In addition, the publishing of reports that measure and record diversity figures in different grades and positions within the organisation with the possibility of setting targets where needed would be welcomed by employees and will demonstrate the Institution's commitment to diversity & inclusion.

A report drawn from the HR Management information system, showed that 50% of IMechE employees had completed their diversity data prior to the pandemic. This rose to a 70% completion rate during the pandemic where employees, due to Covid-19 entered data resulting in increased declarations the need to shield or self-isolate and feeling safe enough to declare other vulnerabilities such as declaring mental health issues.

With the remote model currently in place for the majority of employees, it is important not to underestimate the toll on employees which the lack of in-person connectivity has brought. Working away from colleagues for so long can be a strain and lead to a disconnect. In addition, there is the added challenge to the managers in terms of virtual management. The Institution is looking to introduce more opportunities for staff to share and receive support for their mental health. The HR team welcomes constructive feedback from staff in any area of diversity and inclusion where improvements can be made within IMechE.

The Institution already offers core hours and flexible working but is now moving towards a hybrid work model. Employees will be able to work from home for a significant part of their working week to enable them to fit work around other responsibilities and maintain their wellbeing.

The D&I employee focus group discussions highlighted that the current language used in relation to membership "to serve", may be misguiding members about the nature of their interactions with staff. A reframing of this language is necessary to ensure employees feel their voices are heard and respected within the Institution in line with the revised values and behaviours that the Institution

is aiming to reach. To bring together the staff and members as one Institution, facilitating more cross-coverage and the use of a common language within our Members and staff communications. Members and staff profiles and their experiences around diversity and inclusion could also be featured within the Professional Engineer magazine to aid awareness and engagement form both sides.

The focus groups and conversations around race also show that IMechE should engage more with minority-group employees to help guide the work of the Institution, and to celebrate successes and milestones.

Recommendations:

1. Ensure diversity data is regularly gathered on the demographics of employment (beyond gender and age) and is shared internally. Communicate clearly how data is being used to take action and drive progress on Diversity & Inclusion in employment.

2. Consider collecting data on:
   - Recruitment journey
   - Employee make-up (including data on leadership)
   - Employee turnover
   - Data on progression

3. Ensure senior leadership have visibility of the employee diversity data and are encouraged to increase diversity (eg track progress in each department and set targets for improvement).

4. All those involved in decision-making in recruitment have been made aware of the organisation's ambition to increase diversity and inclusion in employment, and have been given training and guidance to avoid unconscious bias.

5. Ensure inclusive recruitment practices, (eg CVs are anonymised and applicants are asked about their access needs). Aim to have a diverse interview panel to minimise bias too.

6. Consider a support process for employees that sits outside the organisational chain of command, working independently to resolve complaints from other employees or members (eg sexual harassment, discrimination, unacceptable and unfair behaviour).

7. Consider tailoring employee surveys to gain a greater insight from the workforce on D&I *(eg My leader demonstrates inclusion in our work/I feel comfortable being at work and communicating with colleagues).*

8. Make use of employee feedback from Listen and Learn sessions to implement actions that address employee concerns.

9. Gain external recognition by winning a significant award, (eg Investors in People highest award).

7.2.12 Monitoring and Measuring (MM)

"Where are we in comparison to where we want to be?"

"If you do not measure it you cannot improve it"

Under the General Data Protection Regulation (GDPR), it is possible to gather and analyse information about employees, applicants, membership etc for diversity monitoring purposes, as long as the organisation has the legal basis for processing the data and, where applicable, is able to meet the rules that relate to processing Special Categories of Personal Data (eg race, sexual orientation).

Diversity data should be used to monitor impact and outcome for different groups at all stages of the employee life cycle, eg recruitment, measuring the diversity of people receiving awards, measuring the diversity of registering, measuring the diversity of registrants. This information can then be used in promoting the work we are doing to achieve a diverse and inclusive membership base and employee make-up. It is recommended that IMechE publicises the data publicly on a yearly basis, for example including in the Annual Report, social media, within publications linked to the organisation both internally and externally. This will have an impact on the IMechE brand, by demonstrating its commitment to Diversity & Inclusion.

Data collection is important to be able to estimate a baseline diversity demographic of the Institution. The low completion rate of the membership diversity monitoring form indicates the need to increase trust in data collection. By driving the completion rates up, we can effectively measure and monitor the impact of our interventions on increasing diversity among our membership and employees. Organisations have proved that data has been one of the most effective tools to raise awareness among employees and managers. For instance, if the data identifies a pattern of hiring in favour of men, the managers who influence the hiring process become aware of the unconscious trend and become more actively involved in addressing the issues, by insisting on more diverse shortlists. It is worth noting that outside the UK, legislation relating to diversity monitoring is different in each country. It is advised that IMechE seek guidance from within the country that it is operating in as to what is legally and culturally acceptable within that country.

IMechE needs to develop, articulate and share the case for collecting data with membership. The organisation needs to follow through data collection and sharing of key indicators, as well as developing accountability procedures for the success of targets. Tracking the resources devoted and success of different areas will help the Institution identify the most cost-effective strategies.

Examples

Employee Level: Are there diversity bottlenecks in the Institution's staff hierarchy? Are purpose and performance sustaining the project teams' motivation? Are they engaging with members and helping recruit and retain diverse talent at staff and member level? Are there complaints about discriminatory behaviour on a staff-staff/staff-member level?

Membership level: Are members actively creating welcoming spaces for diverse entrants? Is the Institution recruiting and retaining diverse talent? Is funding being made available to members for D&I projects? What is the success of these? What are the diversity characteristics of the different registration levels of the membership, prizes and awards nominees, prizes and awards winners, event attendees, etc?

Public level: is IMechE receiving continued support from business, Government and Non-Governmental Organisation (NGO) partners? Is IMechE building trust and attracting favourable recognition such as awards, or praise from NGOs and the media for its D&I work?

An example of a D&I/GDPR statement recommended by Royal Academy of Engineering [21]

"

(Name of organisation) is committed to ensuring that it is accessible to everyone regardless of gender, ethnicity or nationality, disability, religion, sexual orientation, gender reassignment, socio-economic background or age. We aim to foster an environment free from harassment, unfair and unlawful discrimination where everyone is treated fairly. We gather and analyse diversity data to assess the extent to which we are achieving our diversity and inclusion aims. We use this information to review our processes to ensure they are fair and transparent, and do not have an adverse impact on any particular group.

All information provided will be treated as strictly confidential in accordance with (name of organisation)'s Privacy Notice in line with the General Data Protection Regulation (GDPR) 2018. The information will be used for statistical purposes only with access restricted to staff involved in processing and monitoring the data. It will not be seen by anyone involved in any decision-making during selection processes. No information will be published or used in any way that allows individuals to be identified. We recognise that some people may regard this information as private and have therefore included the option of 'prefer not to say' in all categories. You do not have to complete the form, but it will help us improve our services and processes if you can complete as much as possible.

Recommendations:

1. Implement a robust data collection process for both employees and members at all stages (eg membership levels, recruitment, promotion, awards, events). Benchmark and regularly report on diversity data, set targets, and analyse trends to implement actions that address areas of concern. Consider alternatives such as membership diversity data survey.

2. Ensure a D&I/GDPR statement is visible across all data collection processes, including recruitment.

3. Legislation relating to diversity monitoring is different in each country. Seek guidance from within the country IMechE operates in as to what is legally and culturally acceptable within that country.

4. A report showing progress and challenges on Diversity & Inclusion against the agreed indicators is shared inside the organisation to adjust the plan of action.

5. Look at qualitative indicators that help monitor and measure culture/experience as well as numbers.

7.2.13 Publishing and Policy (PP)

Extract from the RAEng Diversity & Inclusion Progression Framework 2.0:

In November 2019 the Royal Society of Chemistry published a report called "Is publishing in the chemical sciences gender biased?". The report led to the recognition that every decision-making point in the publishing process is vulnerable to biases introduced by authors, reviewers, editors and publishers; systemic or individual biases can creep in at any point of the publishing process.

Subsequently, the Royal Society of Chemistry produced a Framework for action that maps out steps to minimise bias in the process of publishing academic journals.

The tool has been made freely available for others to download and use:
https://www.rsc.org/new-perspectives/talent/framework-for-action/

Rather than duplicate this work here, we will use the recommended framework.

7.2.14 Commercial Businesses (CB)

IMechE provides training services, consultancy and test samples in corrosion control and Non-Destructive Testing (NDT) through wholly owned commercial entities IMechE Argyll Ruane and Sonaspection. The businesses benefit from diversity in the student population and from international learners who come to the UK to study these programmes. The businesses are aware that they could do more to achieve greater diversity internally, and to reflect the diversity of regions in which they are based.

Greater diversification can be achieved by ensuring job descriptions are written so that they appeal to a wide range of people, and also through targeted recruitment into communities which may not readily think of us as an employer. For example, there is a large Asian and Eastern European community near the Sheffield/Rotherham operations, but is not reflected in employee composition.

Recommendations:

1. Based on experience of being an SME, publish brief checklist/guidance on what Small-Medium Enterprise (SME) business owners who are members of IMechE can do on D&I.
2. Use networks to raise awareness of other services of the Institution within the businesses it owns and promote principles of D&I.
3. Consider the use of inclusive language, imagery in all communications.
4. Review the appearance of operating facilities to be accessible and appear visibly inclusive to visitors (eg wall poster to display D&I values, IMechE culture and D&I vision).
5. Ensure inclusive recruitment practices are in place to attract diverse applicants.

7.2.15 Property (P)

The Institution has a portfolio of properties, of which One Birdcage Walk (BCW) is the headquarters. Other properties in Sheffield and Lancaster are newer in age and are in compliance with accessibility needs.

BCW was purpose-built in 1847 for the Institution and has been our home ever since. It represents our heritage, but can it represent our future? It should be noted that both employee and member focus group sessions highlighted that BCW has significant accessibility issues and questioned its suitability for a 21st-century Institution. The building is in the heart of Westminster, London, which has a prime real-estate value. The age of the building means the upkeep of the building through simple maintenance is expensive, and accessibility to and around the building is poor (steps, narrow corridors and lack of lifts).

The Facilities team commissioned an Access Audit, which produced a comprehensive report with recommendations, which is referred to when doing operational projects. However, any further major changes to BCW will require major investment for improving access. There has been minimal significant investment in the building for over 30 years. There is a Real Estate Group made up of members and employees who are reviewing all options for the future of IMechE HQ.

The team at IMechE is ready and equipped to do what needs to be done for the Institution and has the skills, knowledge and experience to work on a large project. The team is committed to showcasing diversity across the estate. Further actions could extend beyond mobility impairments, and cover adaptions for people with restricted hearing, vision and dyslexia.

Focus group feedback indicated that the visual representation around BCW has portraits which are old fashioned and hark back to what the Institution once was. Although important to recognise our heritage, we should also represent a modern, inclusive, and future-looking institution. The Institution has been looking at ways in which heritage can be retained and a more modern feeling created. As an example one of the meeting rooms at BCW has been renamed after the first IMechE female President, Pam Liversidge, OBE.

Recommendations:

1. Ensure all IMechE buildings communicate the Institution's commitment to D&I, eg through wall posters that display IMechE values and behaviours and D&I vision.
2. Establish the case for, plan and invest to make One Birdcage Walk an accessible building. This should include accessibility beyond mobility impairments, capturing other types of accommodating facility for disabilities such as hearing or visual impairments, as well as virtual accessibility (capacity to livestream and videoconference lectures and board meetings).
3. Consider improving the visual representation of engineers and engineering at HQ through changing the names of rooms, complementing the portraits with exhibitions on current, diverse engineers, to allow for a more motivating experience for visitors to Birdcage Walk.

THE CHALLENGES AHEAD, DEALING WITH POTENTIAL RESISTANCE

Diverse teams can reap the benefits diversity brings, but only if managed correctly. This also applies to the diversity of thought and opinions offered by a large membership body such as IMechE.

One of the single biggest barriers to radical progression for organisational culture change, is the misconception that the pursuit of Diversity & Inclusion conflicts with achieving engineering excellence. This is, often, a view expressed by majority groups who had minimal barriers to progression and ascension, and so had their privilege to rely upon to build a successful career.

The question is, how do we help others achieve who have not had the benefit of privilege?

A critical success factor in any D&I strategy is to engage the majority, and focus on both cognitive diversity as well as demographic diversity. Both go hand in hand and have to happen together.

Engineering has had great success over time in creating positive safety cultures, and the same methods can apply to inclusion. We need to foster a culture where psychological safety is of equal paramount to physical safety, and this is achieved through inclusive leadership and creating a sense of belonging for everyone in our profession.

The iceberg of biases is a common tool to communicate what is visible on the outside, and that the richness and depth of an individual are invisible unless you get to know them.

An iceberg has buoyancy, and its density changes dependent on the volume of water. The waterline of visibility can represent your organisational culture. How inclusive is it? If it is inclusive, then people are more likely to open up about any turbulence going on beneath their water line.

We recognise that culture change and moving away from the status quo will be disruptive, and may cause some angst and unrest. In order to achieve the changes we are looking for, we need to change the culture of the organisation and the industry. D&I should be part of the Institution's DNA, whereby an inclusivity lens is applied to every decision, campaign or project undertaken. Leadership will play a key role in delivering the strategy, such as taking bold and visible steps in championing D&I and leading others by example.

We hope that members and employees will be empowered by this D&I vision for the Institution. This is an opportunity to attract back people who have left engineering due to a lack of inclusivity; to attract the leaders of tomorrow from different talent streams; and to support the promotion and progression of current members and employees, so we have better diversity and representation at all levels. To collectively own and deliver this outcome, it is vital that each sector, employee and member recognises the importance and need for Diversity & Inclusion, and is ready to tackle any potential challenges ahead.
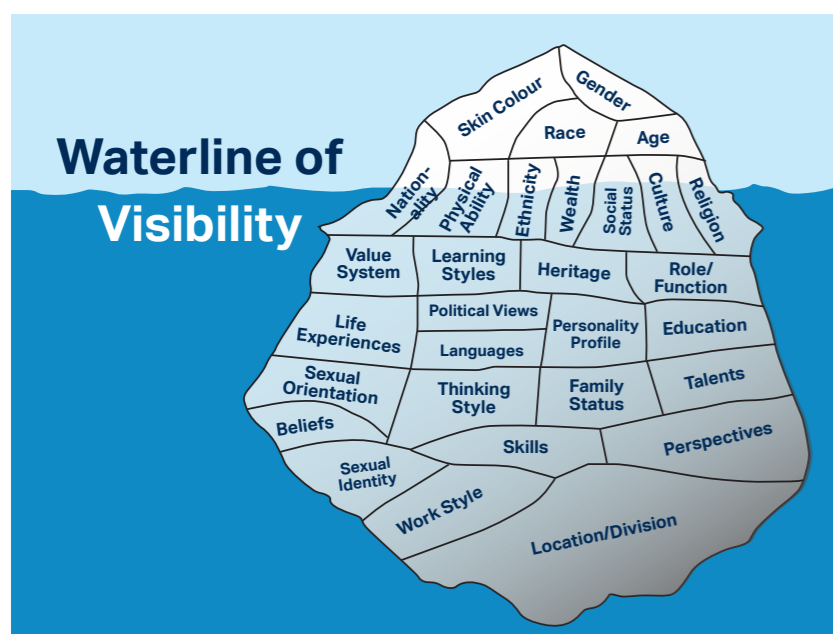

Image 11: The iceberg of biases

APPENDIX

Focus Group Questionnaire and Feedback

A mix of members and employees were invited to join 12 virtual focus groups, which took place in June 2020 (ten member consultations attended by 150 people and two employee consultations attended by 15 people)

Prior to the focus group meetings, members and employees were asked to fill in a short survey.

> **Focus Group – request to join and request to complete a survey**
>
> We are seeking input from you to help inform this body of work. This work aims to examine barriers to creating an inclusive culture and a more diverse population within the Institution, and the impact the Institution has on D&I across engineering more broadly. We want to ensure that D&I sits at the heart of the Institution's core values and business ethics and encourages fairness, trust and transparency.
>
> A series of virtual focus groups have been scheduled. As a participant at a forthcoming focus group, you have been invited to take this survey. Please answer questions honestly, and share any constructive input you can offer.
>
> Taking only a few moments of your time, the results of this survey will help inform the Institution's D&I Strategy for 2020 and beyond. It is your chance to input on how we shape things going forward. We thank you in advance for your participation.

Across the board the response was positive and encouraging. A desire to learn and understand D&I within the Institution transpired throughout the groups.

The live virtual focus group discussion was framed around three questions:

Where are we now?

Where do we want to go?

How are we getting there?

The staff and member responses from the virtual live focus groups are summarised below.

Focus Group Feedback Survey Questions
(completed in advance of the focus group sessions)

1. **Do you feel that your voice is heard, listened to and respected at the Institution of Mechanical Engineers?**

   - Yes
   - Somewhat
   - No

2. **Are you aware of the benefits of a diverse and inclusive working environment?**

   - Yes
   - Somewhat
   - No

3. **Do you feel that your voice is heard, listened to and respected at the Institution of Mechanical Engineers?**

   - Yes
   - Somewhat
   - No

4. **Are you aware of the benefits of a diverse and inclusive working environment?**

   - Yes
   - Somewhat
   - No

5. *"All IMechE activities and campaigns should be inclusive and represent the diversity of the membership and the engineering profession. Ensure that Diversity and Inclusion sits at the heart of the Institution's core values and business ethics and encourages fairness, trust and transparency."*

   To what extent do you agree with the above vision statement in regard to the Institution's D&I Committee?

   - Strongly agree
   - Agree
   - Neutral
   - Disagree
   - Strongly disagree

6. **Do you feel there are barriers to an inclusive working environment across the Institution?**

   - Yes
   - Somewhat
   - No

   Free text response offered

7. **What are the positive things the Institution is doing to enable an inclusive working environment?**

   Free text response offered

8. **What Membership Grade are you?**

   - Apprentice member
   - Affiliate member
   - Student member
   - Associate member
   - Graduate member
   - Full member
   - Corporate member
   - Fellow

Summary of Employee responses from the Focus Groups

1. **The staff-member gap.**

   There is a perceived gap between the stage at which the Institution is in its D&I journey as an employer in comparison to its stage as an institution of members.

   Bridging this gap is essential to avoid staff from disengaging with the membership.

2. **"Serving" members.**

   The "to serve" language might be misguiding members about the role and the nature of their interactions with staff.

   A reframing of this might be necessary to ensure that staff members feel their voices are heard within the institution.

3. **Caged in Birdcage Walk.**

   There were comments around employees that have not visited London HQ, and feeling their voices are not heard outside London, from both internal and IMechE-owned companies.

4. **Accessibility.**

   One Birdcage Walk has significant accessibility issues that staff members feel should be tackled. Questions on its suitability for a 21st-century institution.

   Digital Toolkit has helped staff members not have to go through these issues during the pandemic.

5. **What does IMechE stand for?**

   There is a certain degree of uncertainty about what IMechE stands for.

   Staff feel flexible working, more comprehensive parental leave and staff-member interactions should be looked into.

   Clear guidance on how to deliver on seven areas of the RAEng Progression Framework would help.

Summary of Member responses from the Focus Groups

1. **Prestigious but not forward-thinking**

   There is an underlying theme among the membership that IMechE is "old school and old fashioned", and that it is not a PEI at the forefront of thought-leadership.

   This theme arose in organisational structure, the "feel" of One Birdcage Walk, and the lack of diversity in board and committee leadership. Some members believe that talent and prestige must always come before D&I efforts.

2. **Caged in Birdcage Walk**

   A large number of members brought up the London-centric nature of IMechE.

   Comments on never having been in HQ, and feeling their voices are not heard outside London, were common, from both UK and international members.

3. **Accessibility**

   Accessibility issues of the Institution were brought up in three main areas: physical barriers, career barriers and personal barriers.

   None is blatantly obvious. They are instead subtly ingrained into the nature of the organisation's structure, role requirements and event management.

4. **What makes a mechanical engineer?**

   Focus group members reflected on the definition of a mechanical engineer in the 21st century. It was highlighted that IMechE needs to continue to ensure that both accreditation and registration requirements reflect the multi-disciplinary roles mechanical engineers are fulfilling.

5. **Ins and outs**

   Many members feel there is a culture of "ins and outs". Some are very keen to take part and help the Institution, but feel there are barriers for them to be "in".

   This echoed by the high disengagement with election processes.

6. **Volunteers' engagement**

   Many volunteering members feel they can sometimes be "taken for granted".

   Some volunteers are discouraged by this, as well as a feeling that they can be assigned and encouraged to take roles based on their diversity characteristics, rather than their voice being heard to shape institutional policy.

7. **What does IMechE stand for?**

   There is a certain degree of uncertainty about what IMechE stands for. What is its position on current topics when they arise?

   Various participants asked for a clear, concise and authentic ethical code for the Institution. One that is both proactive and reactive in shaping member actions.

ABBREVIATIONS

D&I	Diversity & Inclusion
CPD	Continuing Professional Development
BCW	Birdcage Walk
BME	Black and Minority Ethnic Groups
HQ	Headquarters
WHO	World Health Organisation
SN	Support Network
IMechE	Institution of Mechanical Engineers
KPI	Key Performance Indicator
NGO	Non-Governmental Organisation
PEI	Professional Engineering Institution
RAEng	Royal Academy of Engineering
SME	Small-Medium Enterprise
STEM	Science, Technology, Engineering & Mathematics

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