



Diversity and Inclusion

Progression Framework Report 2021

JOINT REPORT FOR PROFESSIONAL ENGINEERING
INSTITUTIONS AND SCIENTIFIC BODIES

Report authors

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Foreword

We are delighted to present the report of the 2021 Diversity and Inclusion (D&I) benchmarking exercise for engineering and science. This is the result of collaborative work between the Royal Academy of Engineering, the Science Council, and their member organisations who assessed progress since the last benchmarking exercise in 2017. It highlights a number of important findings that our community will use to drive further change.

We would like to extend a personal thank you to all the organisations that have taken part and for the collective willingness to share insight and developments so that we can learn and make lasting change together. The commitment to increasing inclusivity across all our activities, and to lead further change, is evident. With the right level of ambition, we are confident we can make even more progress together across the engineering and science community.

Within this year's report, there is a sense that organisations have increased their rigour of assessment. With this, we welcome the significant change in engagement of all science and engineering bodies involved, ensuring strong leadership on change relating to D&I plus the integration of D&I strategies into core activity. This provides firm foundations for action and a collective shift in culture towards further inclusivity.

Whilst there has been a lot of activity to increase diversity and inclusion across our professions for some time now, evidence continues to show that we need to extend this focus beyond gender to the inclusion of all groups, for the benefit of both individual engineers and scientists and the profession as a whole.

Progress is being made in many areas which is to be celebrated, notably in increasing gender representation on boards and in leadership positions. There has also been

some increase in representation of people with minority ethnic backgrounds in these board and leadership positions.

However, the variability in data collection has led to challenges in our understanding of progress.

The report suggests that, as a community, we need to do more to understand the diversity of our membership and teams as a foundation stone for our ability to develop more inclusive activities and benefits for the community we serve, plus our quest to develop inclusive cultures for the teams and volunteers who work with and for our organisations.

What is proving helpful is the consistent sharing of progress and ideas for change across our community, and we welcome the recommendation that we continue to nurture our ability to learn from and support each other to make impactful change through communities of practice.

We recognise the considerable amount of energy and commitment of those who have led D&I development work: thank you! The report raises an important point about recognising and resourcing development activity related to D&I. This will be especially important as more of what we do is embedded, and more challenging areas tackled to ensure sustained progress over time.

So, do read this report with interest and curiosity. We hope that the findings will create further impetus for positive change to support the development of a culture where all engineers and scientists thrive, benefiting individuals, our community, and the wider engineering and science workforce.

Helen Gordon
Chief Executive, Science Council
Dr Hayaatun Sillem CBE
CEO, Royal Academy of Engineering

Executive summary

This report presents the headlines from the combined findings of the 2021 Progression Framework 2.0 benchmarking exercise for UK professional engineering institutions (PEIs) and scientific bodies.¹ In addition to this joint report, more detailed sector-specific reports have been produced on the performance of PEIs and scientific bodies. All participating organisations also received a confidential report containing feedback on the performance of their own organisation in the benchmarking exercise.

1. Participation

Forty separate organisations participated in the 2021 Progression Framework 2.0 benchmarking exercise (five more than participated in the first benchmarking exercise in 2017). Six participating organisations are both PEIs and scientific bodies. 22 submissions were received from scientific bodies (including those that are joint scientific body and PEI), and 24 from professional engineering institutions (including those that are joint PEI and scientific body).

2. Diversity monitoring data

As in 2017, more organisations provided diversity monitoring data on gender (and age) than on other aspects of diversity. Reporting on ethnicity was much less comprehensive than on gender. There was very limited reporting on disability diversity, sexual orientation, and religious diversity.

2.1 Boards and organisational leadership

- There has been an increase in the representation of women on the boards of both PEIs and scientific bodies since 2017. On average, PEIs have 30% women on their boards (compared to 26% in 2017) and scientific bodies have 46% women on their boards (compared to an average of 43% in 2017). There also appears to have been an increase in the representation of people from minority ethnic backgrounds on boards since 2017 but the number of organisations reporting on ethnicity on boards is around half that on gender. On average, PEIs have 18% people from minority ethnic backgrounds on their boards (compared with an average of 10% in 2017), and scientific bodies have 14% people from minority ethnic backgrounds on their boards (compared with an average of 9% in 2017).
- Women comprise 50% of those in senior leadership positions in PEIs (CEO, senior management team etc), and 58% in scientific bodies. People from minority ethnic backgrounds comprise 15% of those in leadership positions in PEIs, and 22% of those in leadership positions in scientific bodies.

¹ In this report, the terms 'PEI' and 'scientific body' also cover engineering and science organisations and their regulatory bodies, such as the Science Council, Royal Academy of Engineering, the Engineering Council and Engineering UK.

- Women are over-represented in the workforces of both PEIs and scientific bodies, comprising on average 67% of the PEI workforce, and 71% of the scientific body workforce. 18% of the PEI workforce is minority ethnic, and 23% of the scientific body workforce. Between 2-3% of the workforces of PEIs and scientific bodies have a disability, and 5-7% are LGBTQ+.

2.2 Diversity in membership and registration

- The data suggests an increase in the representation of women and people from minority ethnic backgrounds in PEI and scientific body membership since 2017. However, given the small number of organisations providing data on ethnicity in membership (four PEIs and five scientific bodies) this trend data must be treated with caution.
- On average women comprise 17% of PEI membership in 2021 (up from 13% in 2017) and 40% of scientific body membership (up from 34% in 2017). On average, people from minority ethnic backgrounds comprise 26% of people in PEI membership (up from 21% in 2017, and 24% of people in scientific body membership (up from 19% in 2017).
- 14 PEIs and 13 scientific bodies provided data on women registrants. On average, women represent 12% of PEI registrants, and 37% of scientific body registrants. Only two PEIs and four scientific bodies provided data on ethnicity in registration and therefore the averages were calculated on the basis of very limited data sets and should be treated with caution: People from minority ethnic backgrounds comprise 21% of PEI registrants, and 19% of scientific body registrants.
- Data was also submitted on age in membership and registration, but beyond this, limited data was provided on other aspects of diversity in membership and registration.

2.3 Diversity in examinations, prizes, awards, and grants

- 21 participating organisations responded that questions regarding examinations were not relevant to their work. Four PEIs and eight scientific bodies provided usable data on gender and examination pass rates. The average pass rate for women in PEIs was 60%, compared to a pass rate for men of 66%. The average pass rate for women in scientific bodies was 57%, compared to a pass rate for men of 58%. One PEI and one scientific body provided data on ethnicity and examination pass rates, the same as for disability diversity.
- 33% of PEI prizes, awards and grants were allocated to women, and 41% of scientific body prizes, awards and grants. People from minority ethnic backgrounds received 35% of PEI prizes, awards and grants, and 16% of scientific body prizes, awards and grants.

3. Progression Framework results

3.1 2021 Results table

Table 1 presents the median self-assessment scores for PEIs and scientific bodies that participated in the 2021 Progression Framework 2.0 benchmarking exercise. It also shows the median self-assessment scores for all participating organisations for comparison.

3.2 Comparison with 2017

Overall, there has been little change in the median self-assessment of participating organisations since 2017. Changes to the Progression Framework between 2017 and 2021 mean only six of the ten sections of the Framework are directly comparable. Only one of the six comparable sections (Section 1.06, Prizes, awards and grants) shows an increase in self-assessment level, with the median moving from Level 1: Initiating, to Level 2: Developing (**Table 2**).

Table 1

| | 1.01 Governance and leadership | 1.02 Membership and professional registration | 1.03 Meetings, conferences and events | 1.04 Education, training and examinations | 1.05 Accreditation of education and training | 1.06 Prizes, awards and grants | 1.07 Communications and marketing | 1.08 Outreach and engagement | 1.09 Employment | 1.10 Monitoring and measuring |
|---|---------------------------------------|--|--|--|---|---------------------------------------|--|-------------------------------------|------------------------|--------------------------------------|
| Median self-assessment level for all participating organisations | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for PEIs | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for scientific bodies | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |

Table 2

| | 1.01 Governance and leadership | 1.02 Membership and professional registration | 1.03 Meetings, conferences and events | 1.06 Prizes, awards and grants | 1.09 Employment | 1.10 Monitoring and measuring |
|---|---------------------------------------|--|--|---------------------------------------|------------------------|--------------------------------------|
| Median self-assessment level for all participating organisations, 2021 | 2 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for all participating organisations, 2017 | 2 | 2 | 2 | 1 | 2 | 2 |
| Median self-assessment level for all PEIs, 2021 | 2 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for all PEIs, 2017 | 2 | 2 | 2 | 1 | 2 | 2 |
| Median self-assessment for all scientific bodies, 2021 | 2 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment for all scientific bodies, 2017 | 2 | 2 | 2 | 1 | 2 | 2 |

4. Strengths, areas for development, future priorities, and challenges

There is considerable similarity across the two professions in terms of their strengths, areas for development, future priorities and challenges. In summary these are:

4.1 Strengths (Table 3)

| | Scientific bodies | PEIs |
|--|-------------------|------|
| Engaging members | * | * |
| Building firm foundations | * | * |
| Establishing good governance | * | * |
| Integrating diversity and inclusion into communications | * | |
| Increased integration into day-to-day work | | * |
| Collective ownership | * | |
| Extending the scope of work beyond gender | | * |
| Inclusive working culture | * | |
| Ensuring inclusive processes | | * |

4.2 Areas for development

Note the similarities between some of the strengths and areas for development. This is because what may be a strength for some organisations (such as extending the scope of work beyond gender) is also an area of development for others (Table 4).

| | Scientific bodies | PEIs |
|---|-------------------|------|
| Data gathering, monitoring and measuring | * | * |
| Integrating diversity and inclusion into core functions and activities | * | |
| Ensuring further integration | | * |
| Securing and sustaining commitment | * | * |
| Strategies, plans and priorities | * | * |
| Formalising the approach | * | * |
| Extending the scope of work beyond gender | * | * |

4.3 Priorities for action

1. D&I governance, strategy and planning
2. Data gathering
3. Developing training and guidance
4. Targeted activities for specific demographics
5. Building external presence

4.4 Challenges

1. Data collection
2. Resourcing the work on diversity and inclusion
3. Securing and sustaining engagement
4. Lack of diversity in the wider context of science and engineering

5. Recommendations

Recommendation 1: Identify and address barriers to data gathering

As in 2017, several organisations have mechanisms in place to gather data on the age and gender of members. Far fewer monitor data on any other aspect of diversity. Monitoring data is key to assessing progress on diversity and inclusion. We recommend that all participating organisations extend data collection and monitoring activity beyond gender and age to cover all aspects of diversity, and in particular ethnicity. The lack of robust data makes it a challenge to properly identify barriers, assess progress, or target action to increase the participation of under-represented groups in engineering and science.

Some of the barriers which organisations identified on data gathering are around making the case for data to be gathered, resourcing, and technology. There may be other challenges too, relating to the relational aspects of gathering data. It is recommended that organisations take steps to share, explore, and fully understand the barriers to data gathering, and prioritise action to expand monitoring activity to cover all aspects of diversity, ensuring that by the time of the next benchmarking exercise, all participating organisations are also able to provide (as a minimum) robust data on ethnicity on the board, in leadership, in membership, and in registration (where relevant).

Recommendation 2: Broaden the focus of activity to other under-represented groups

It is encouraging to see that organisations are beginning to broaden the scope of their work on diversity and inclusion beyond gender, and that a number (eight scientific bodies and seven PEIs) describe themselves as beginning to take an intersectional approach. However, this does not yet go far enough. We would encourage all organisations to broaden the focus of their activity to include other under-represented groups, and in addition to take an intersectional approach to understanding how (for instance) gender and ethnicity intersect to impact the lives of minority ethnic women in science and engineering.

Recommendation 3: Resource and recognise the work

Feedback from the submissions suggests that the work on diversity and inclusion is often under-resourced. To make progress, this work needs to be adequately resourced. We recommend that all organisations review how the work on diversity and inclusion is currently being resourced, and make changes as necessary. As a first step organisations should share how they are resourcing diversity and inclusion in their organisations including the reward and recognition strategies for member volunteers.

Recommendation 4: Use the Framework to plan for progress

As noted in the conclusions above, there is little overall movement in the self-assessment of participating organisations on their work on diversity and inclusion since 2017. Our recommendation is for every organisation to use the Framework to plan for future progress. We also recommend that all organisations consider setting a time-bound goal to demonstrate visible progress across all sections of the Framework that are relevant to them.

Recommendation 5: Establish a community of practice

The ongoing exchange of ideas and practices is strongly encouraged across all participating organisations. Our recommendation is that the Science Council and Royal Academy of Engineering supplement existing best practice exchanges by establishing an ongoing cross-profession 'community of practice', meeting on a regular basis (two or three times a year), with the agenda set by participating organisations, to facilitate peer-to-peer exchange and action learning on priorities, challenges, and solutions on diversity and inclusion across UK science and engineering professions.

Section 1

Introduction

This report presents the headlines from the combined findings of the 2021 Diversity and Inclusion Progression Framework 2.0 benchmarking exercise for UK PEIs and scientific bodies.

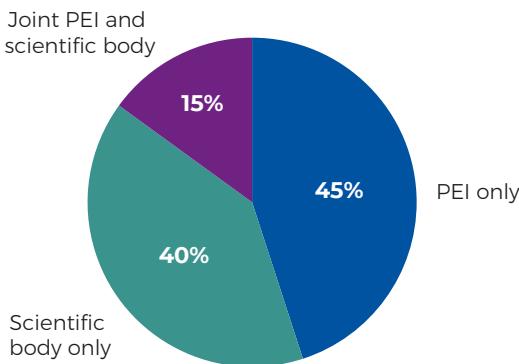
This is the second time that the Royal Academy of Engineering and the Science Council have worked together to support a joint benchmarking exercise for PEIs and scientific bodies based on the Progression Framework. The Framework was first developed in a collaboration between the Royal Academy of Engineering and the Science Council in late 2016. In 2020 the contents of the original Progression Framework were reviewed by a steering group of members of both organisations, to ensure the Framework continued to reflect good practice four years on from its original publication. A small number of changes were made, a summary of which is included in the Appendix to this report.

This report is the third in the series of reports resulting from the 2021 Progression Framework 2.0 benchmarking exercise. In addition to this joint report, more detailed sector-specific reports have been produced on the performance of PEIs and scientific bodies. All participating organisations also receive a confidential report containing feedback on the performance of their own organisation in the benchmarking exercise.

1.1 Participation overview

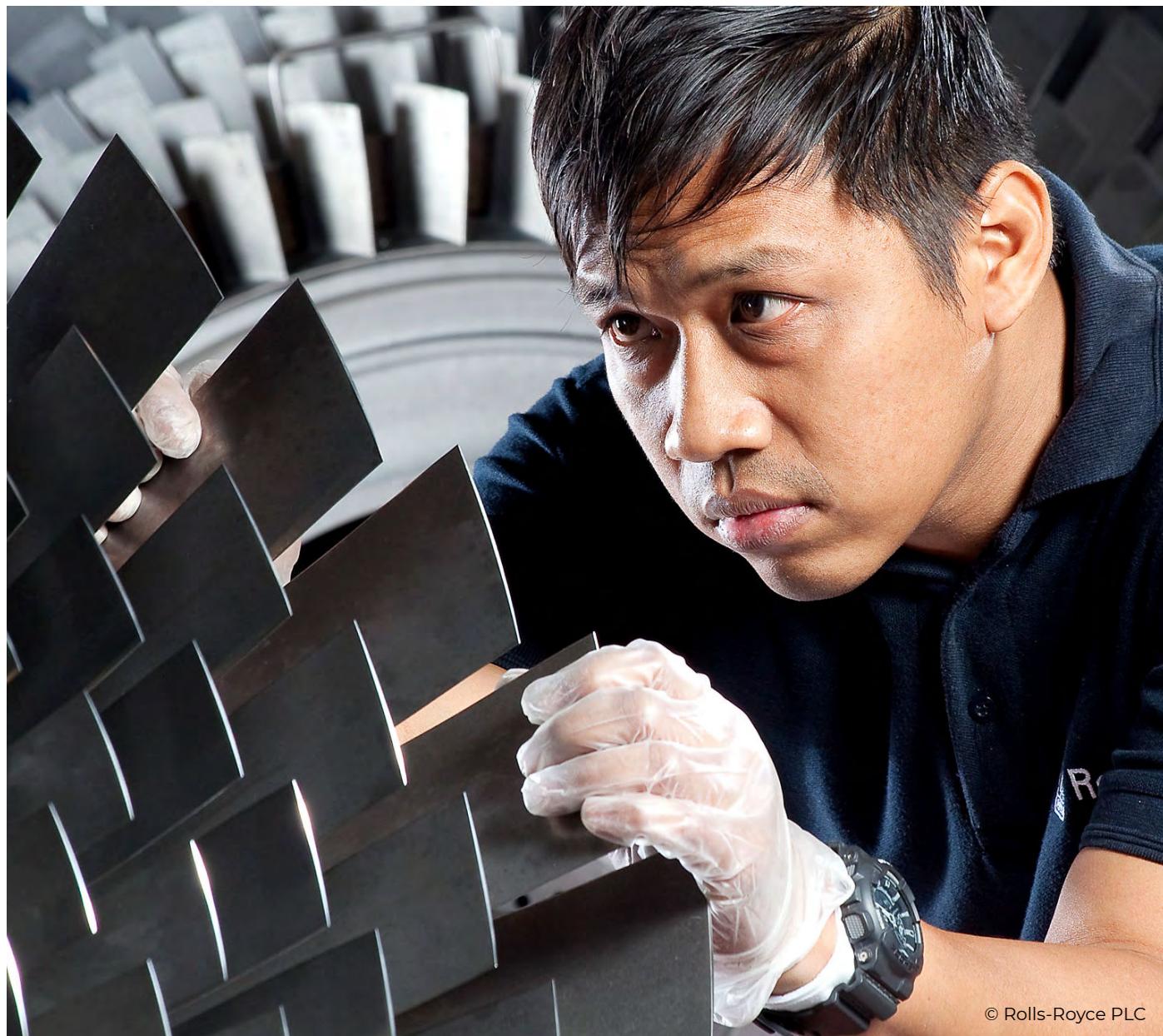
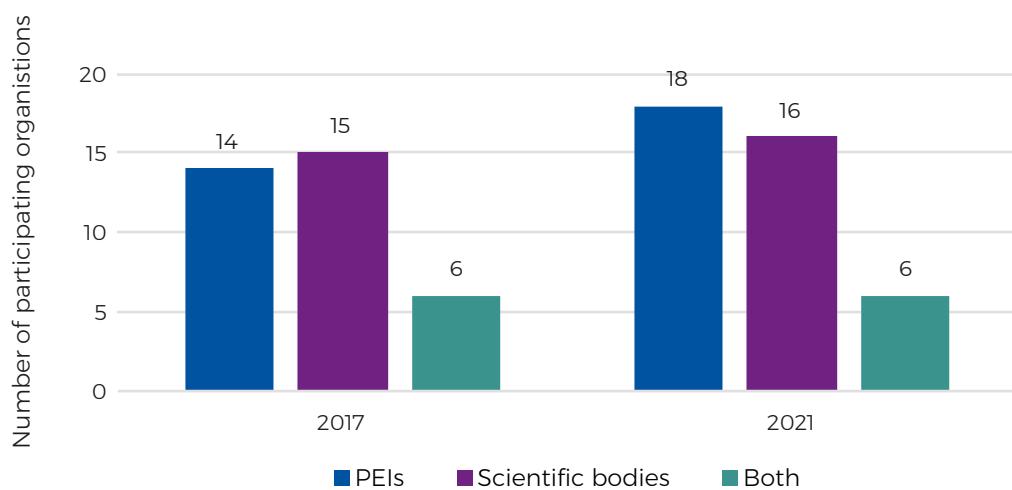
In the 2021 Progression Framework 2.0 benchmarking exercise, 40 separate organisations participated (five more than participated in the first benchmarking exercise in 2017). Six participating organisations are both PEIs and scientific bodies. Submissions were received from 22 scientific bodies (including those that are joint scientific body and PEI), and 24 PEIs (including those that are joint PEI and scientific body) (**Figure 1**).

Figure 1: Participants in the 2021 benchmarking exercise ($n = 40$)



Five more organisations participated in 2021 than in 2017 (**Figure 2**).

Figure 2: Number of participating organisations, 2017 and 2021 (n = 40)



Section 2

Diversity on boards and in leadership

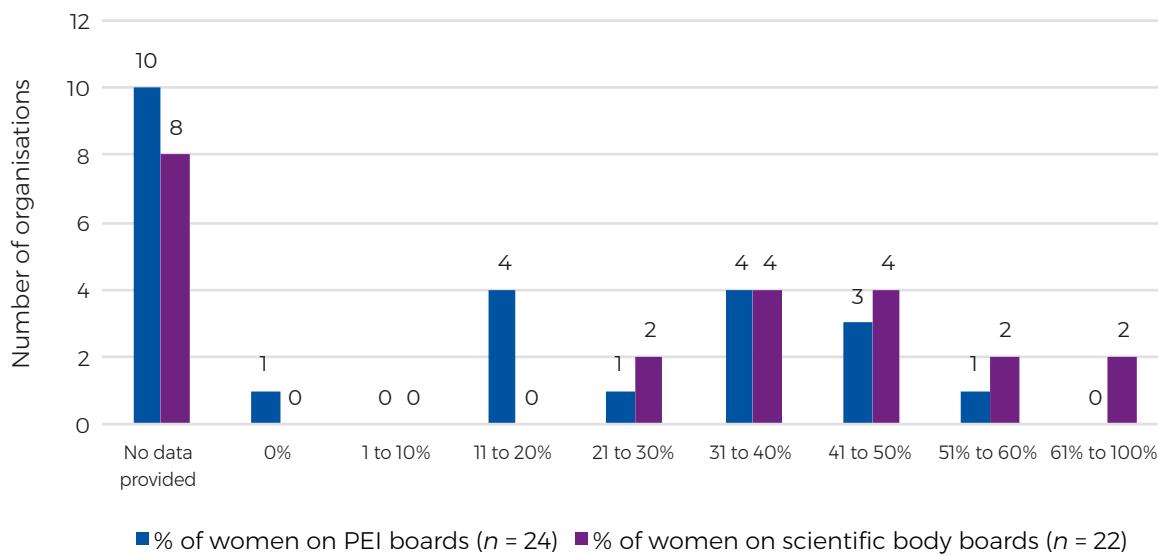
2.1 Diversity on boards

There has been an increase in the representation of women on the boards of both PEIs and scientific bodies since 2017. There also appears to have been an increase in the representation of people from minority ethnic backgrounds on boards since 2017 but the number of organisations reporting on ethnicity on boards is around half that on gender.

Women on boards

14 PEIs and 14 scientific bodies provided data on the representation of women on their boards. As in 2017, women are better represented on the boards of scientific bodies than of PEIs. On average, PEIs have 30% women on their boards (compared to 26% in 2017) and scientific bodies have 46% women on their boards (compared to an average of 43% in 2017). Women also represent 30% of those on all PEI boards and committees, and 43% of those on all science boards and committees (Figure 3).

Figure 3: Women on boards



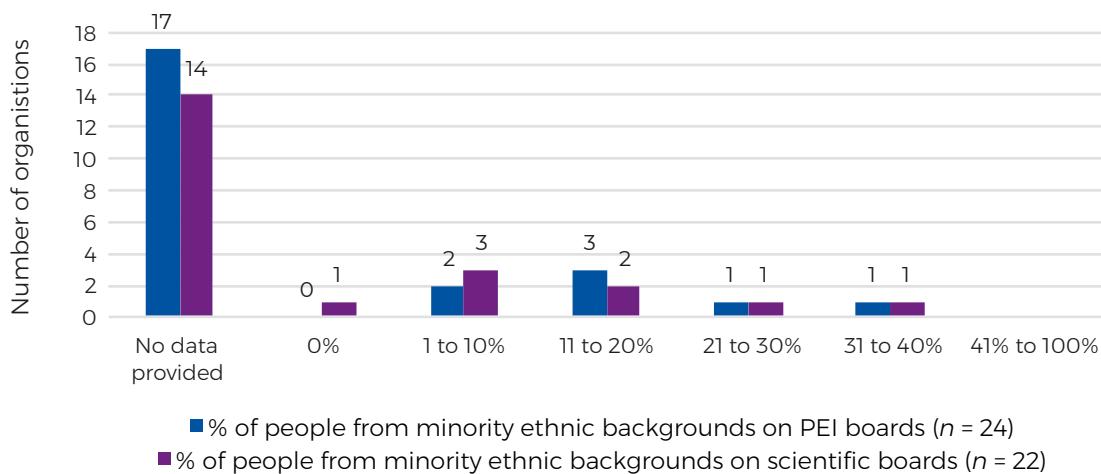
Ethnicity on boards

As in 2017, fewer PEIs and fewer scientific bodies provided data on ethnicity on the board than on gender. Seven PEIs provided data on the representation of people from minority ethnic backgrounds on their boards, compared with 15 in 2017, and eight scientific bodies provided data in 2021, compared with 14 in 2017. It will be important to understand what lies behind the lower numbers of participating organisations providing data on ethnicity in 2021.

Also as in 2017, people from minority ethnic backgrounds are slightly better represented on the boards of PEIs than of scientific bodies. On average, PEIs have 18% people from minority ethnic backgrounds on their boards (compared with an average of 10% in 2017), and scientific bodies have 14% people from minority ethnic backgrounds on their boards (compared with an average of 9% in 2017). However, the small number of organisations providing data on ethnicity at board level means this apparently positive trend must be interpreted with caution.

Notably fewer participating organisations reported having no people from minority ethnic backgrounds on their boards in 2021, compared to 2017. In 2017 four PEIs and six scientific bodies (including joint members) reported having no people from minority ethnic backgrounds on their boards. In 2021 no PEIs reported having no people from minority ethnic backgrounds on their boards, and only one scientific body (**Figure 4**).

Figure 4: People from minority ethnic backgrounds on boards



Other diversity board metrics

- five PEIs and four scientific bodies provided data on disability diversity on the board; all responded that there are no people with disabilities on the board.
- Three scientific bodies and one PEI provided data on the representation of LGBTQ+ people on the board.
- Three scientific bodies and one PEI provided data on religious diversity on the board.
- Nine PEIs and eight scientific bodies provided data on age on the board.

2.2 Diversity in organisational leadership

Between them, scientific bodies and PEIs participating in the benchmarking exercise employ over 4,000 people. The workforce of PEIs is on average larger than that of scientific bodies (90 versus 62 people respectively) but in both cases this average conceals a huge range in size of organisation, from less than 10 to several hundred employees.

- As in 2017, women are over-represented in the workforces of both PEIs and scientific bodies, comprising on average 67% of the PEI workforce, and 71% of the scientific body workforce.
- 18% of the PEI workforce is minority ethnic, and 23% of the scientific body workforce. 2–3% of the workforces of PEIs and scientific bodies have a disability, and 5–7% are LGBTQ+.

At leadership level:

- 18 PEIs and 14 scientific bodies provided data on the representation of women in senior leadership in their organisations (CEO, senior management team etc). Women are slightly less well-represented in senior management than they are across the PEI and scientific body workforce in general. Women comprise 50% of those in senior leadership positions in PEIs, and 58% in scientific bodies.
- 12 PEIs and four scientific bodies provided data on the representation of people from minority ethnic backgrounds in leadership. People from minority ethnic backgrounds comprise 15% of those in leadership positions in PEIs, and 22% of those in leadership positions in scientific bodies.
- Only three PEIs and scientific bodies reported having any people with disabilities in leadership, and none reported having any LGBTQ+ people in leadership (**Figures 5 and 6**).

Figure 5: Women in senior leadership

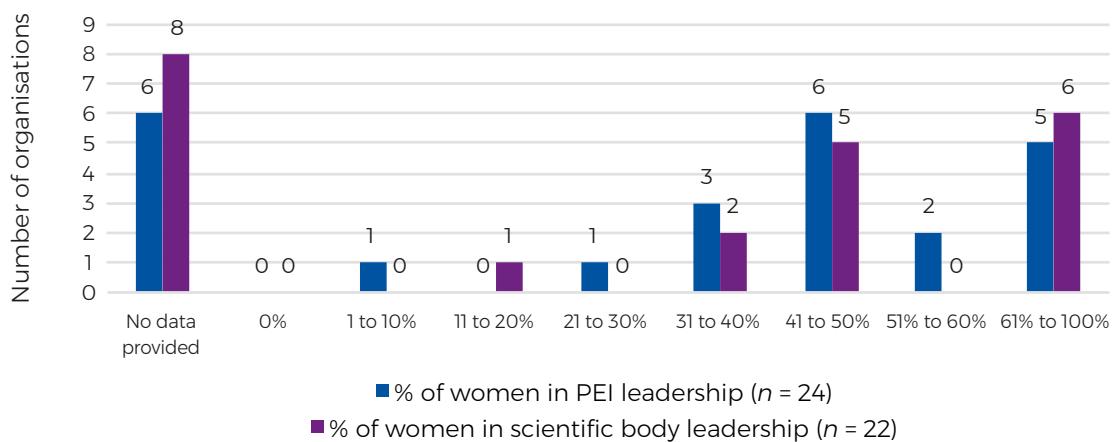
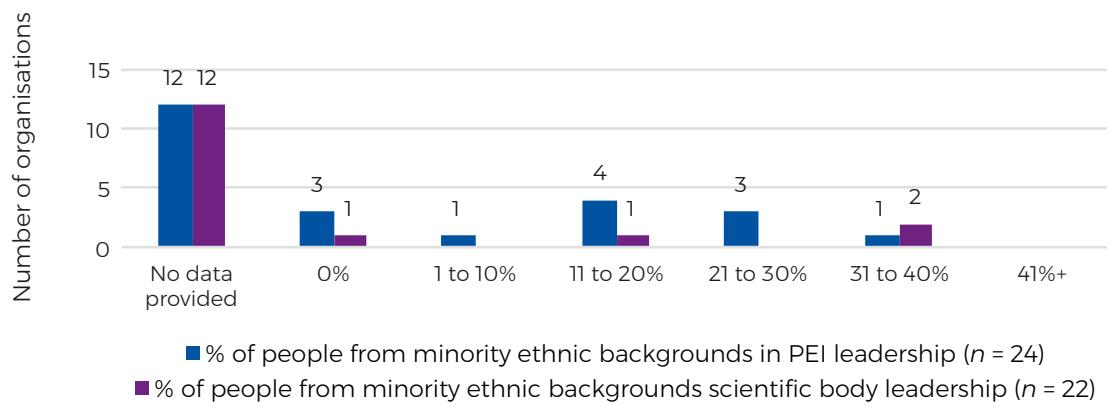


Figure 6: People from minority ethnic backgrounds in senior leadership



Other metrics on diversity in senior leadership

- Nine PEIs and six scientific bodies provided data on the representation of people with disabilities in senior leadership, of which only three reported having any people with disabilities in senior leadership
- Seven PEIs and five scientific bodies provided data on the representation of LGBTQ+ people in senior leadership, of which none reported having any LGBTQ+ people in senior leadership.
- Three PEIs and five scientific bodies provided data on religious diversity in senior leadership.



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Section 3

Diversity in membership and registration

3.1 Diversity in membership

The data suggests an increase in the representation of women and people from minority ethnic backgrounds in PEI and scientific body membership since 2017.

- 16 PEIs and 15 scientific bodies provided data on gender in membership in 2021. In both professions the number of submissions providing data on gender in membership was fewer than in 2017.
- On average women comprise 17% of PEI membership in 2021 (up from 13% in 2017) and 40% of scientific body membership (up from 34% in 2017) (**Figures 7 and 8**)

Figure 7: Women in PEI membership

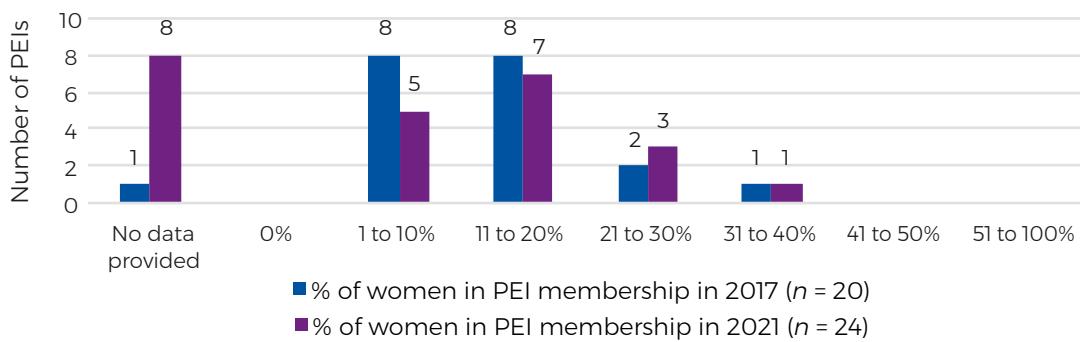
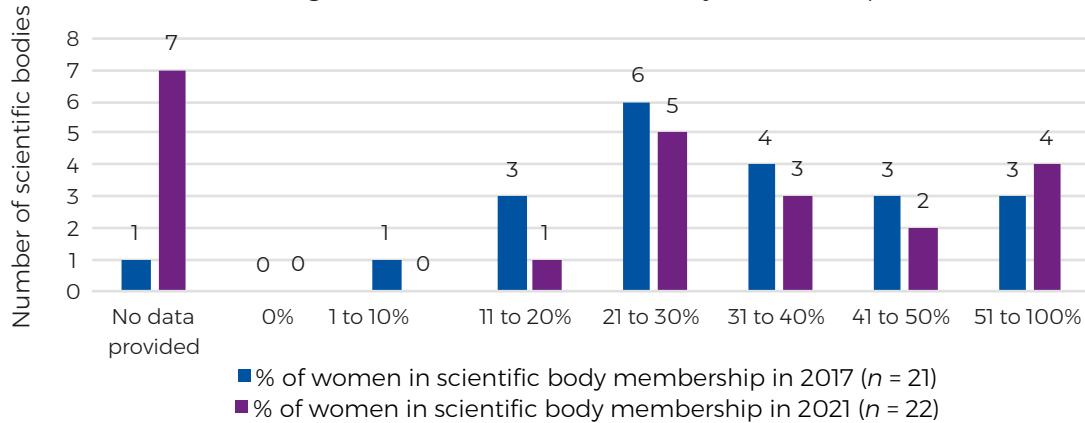


Figure 8: Women in scientific body membership



'No data provided' includes participating organisations which do not have members, and those that have members but did not submit data.

- Both PEIs and scientific bodies are less likely to provide data on ethnicity in membership than on gender. Four PEIs and five scientific bodies provided data on ethnicity in membership in 2021 (compared to seven each in 2017).
- On average, where data was provided, people from minority ethnic backgrounds comprise 26% of people in PEI membership, compared to 21% in 2017, and 24% of people in scientific body membership (up from 19% in 2017). However, given the small number of organisations providing data on ethnicity in membership (four PEIs and five scientific bodies) these averages must be treated with caution (**Figures 9 and 10**).

Figure 9: People from minority ethnic backgrounds in PEI membership

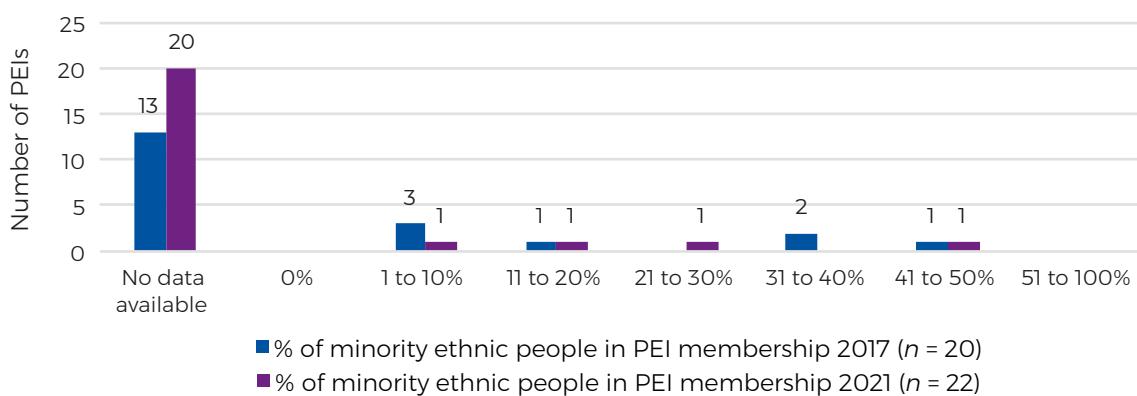
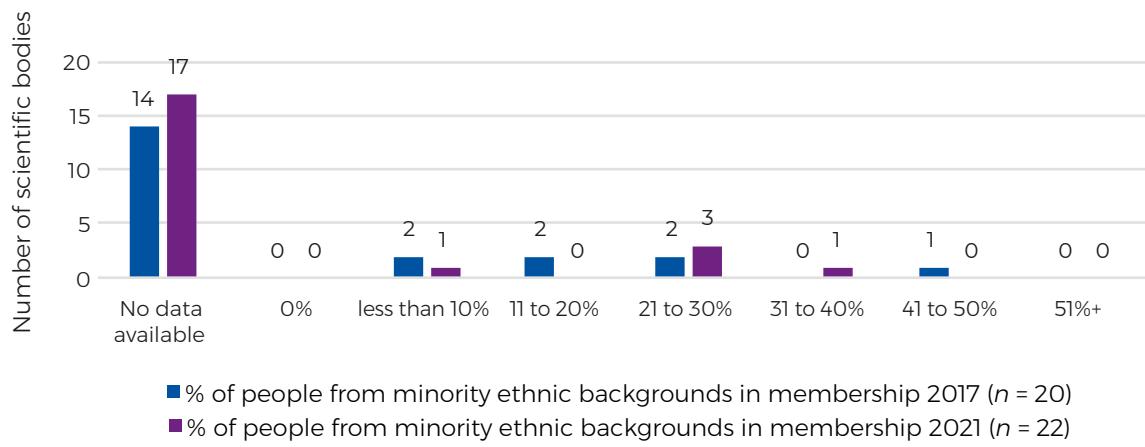


Figure 10: People from minority ethnic backgrounds in scientific body membership



Other membership diversity metrics

- Five PEIs and six scientific bodies provided data on disability diversity in membership, with people with disabilities comprising between 4% and 7% of members (PEIs and scientific bodies respectively).
- Three PEIs and three scientific bodies provided data on sexual orientation in membership, with LGBTQ+ people comprising between 3% and 7% of members (PEIs and scientific bodies respectively).
- 14 PEIs and 15 science bodies provided data on age in membership. The age profile is similar across PEIs and scientific bodies, with a slightly higher proportion of both older and younger people in PEI membership. 23% of scientific body members are aged 29 and below, and 27% of PEI members (**Figures 11 and 12**).

Figure 11: Age of PEI membership

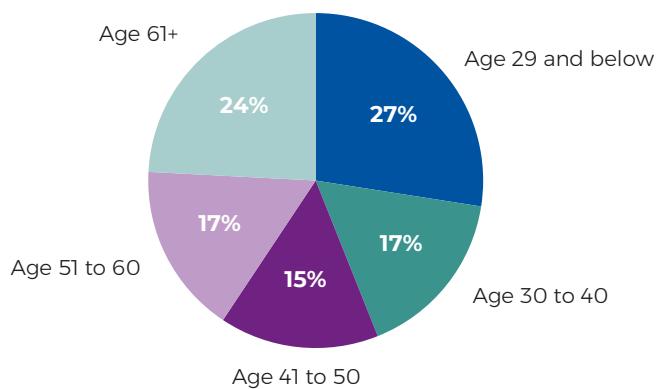
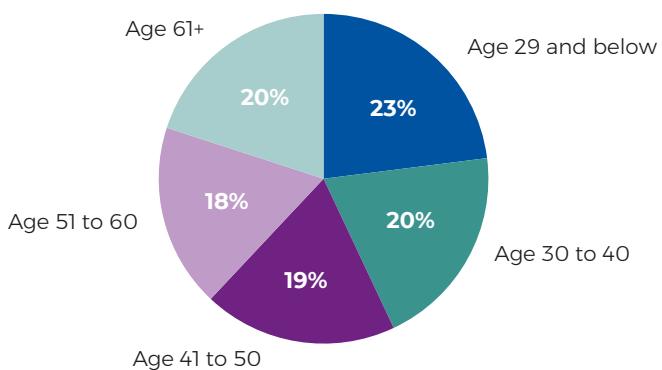


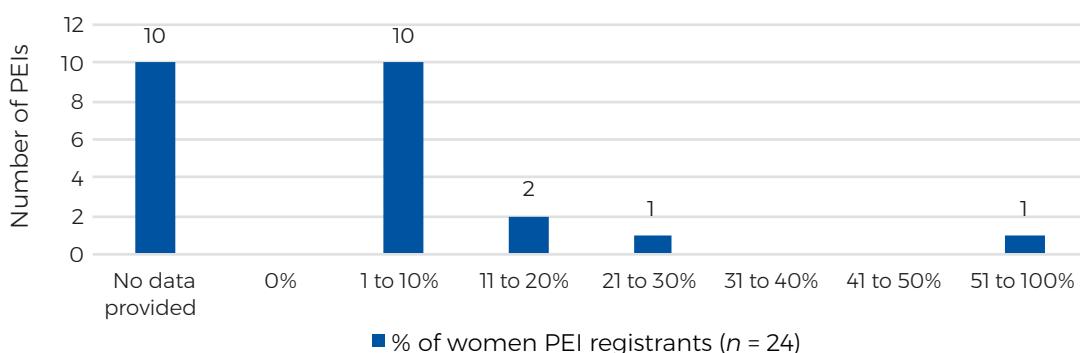
Figure 12: Age of scientific body membership



3.2 Diversity in registration

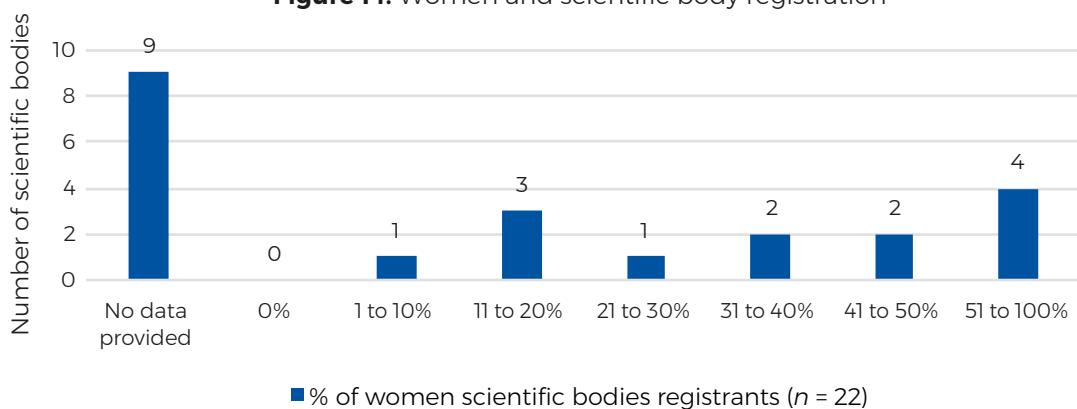
- 14 PEIs and 13 scientific bodies provided data on gender diversity and registration, distinct from membership. On average, women represent 12% of PEI registrants, and 37% of scientific body registrants. A small number of organisations provided data on more than one register. In such cases data from the first register provided was used in calculating these averages (**Figures 13 and 14**).

Figure 13: Women and PEI registration



Note: 'No data provided' includes those organisations that do not have registrants as well as those that do but did not provide any data

Figure 14: Women and scientific body registration



Continuing the trend noticed throughout this benchmarking exercise, there was less robust data provided on ethnicity in registration, compared to gender. Only two PEIs and four scientific bodies provided data on ethnicity in registration. Using this very limited data, people from minority ethnic backgrounds comprise 21% of PEI registrants, and 19% of scientific body registrants.

Other registration diversity metrics

- Two PEIs and four scientific bodies provided data on disability diversity and registration.
- One PEI and two scientific bodies provided data on sexual orientation and registration.
- 12 PEIs and 12 scientific bodies provided data on age and registration. There is a higher proportion of older people amongst PEI registrants, and a higher proportion of younger people amongst scientific body registrants (**Figures 15 and 16**).

Figure 15: Age of PEI registrants

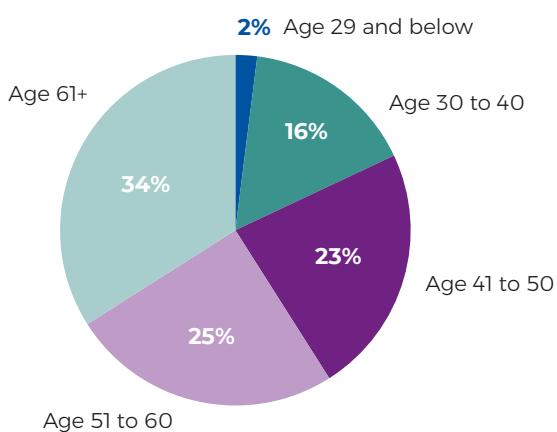
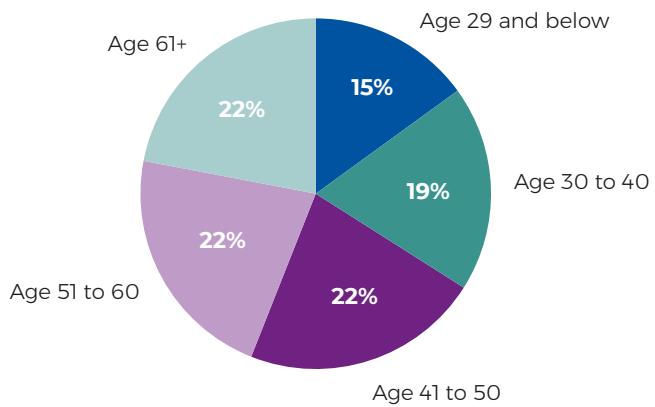


Figure 16: Age of scientific body registrants



Section 4

Diversity in examinations, prizes, awards, and grants

4.1 Diversity in examinations

- 21 participating organisations responded that questions regarding examinations were not relevant to their work. Four PEIs and eight scientific bodies provided usable data on gender and examination pass rates. The average pass rate for women in PEIs was 60%, compared to a pass rate for men of 66%. The average pass rate for women in scientific bodies was 57%, compared to a pass rate for men of 58%.
- One PEI and one scientific body provided data on ethnicity and examination pass rates, the same as for disability diversity.
- Only one organisation of the 40 participating organisations provided data on sexual orientation and examination pass rates.

4.2 Diversity in prizes, awards and grants

Between them, PEIs and scientific bodies awarded around 1700 prizes, awards and grants in the past 12 months.

- 14 PEIs and 11 scientific bodies provided data on the allocation of prizes, awards and grants by gender. 33% of PEI prizes, awards and grants were allocated to women, and 41% of scientific body prizes, awards and grants (**Figures 17 and 18**).

Figure 17: PEI prizes, awards and grants to women, 2017 and 2021

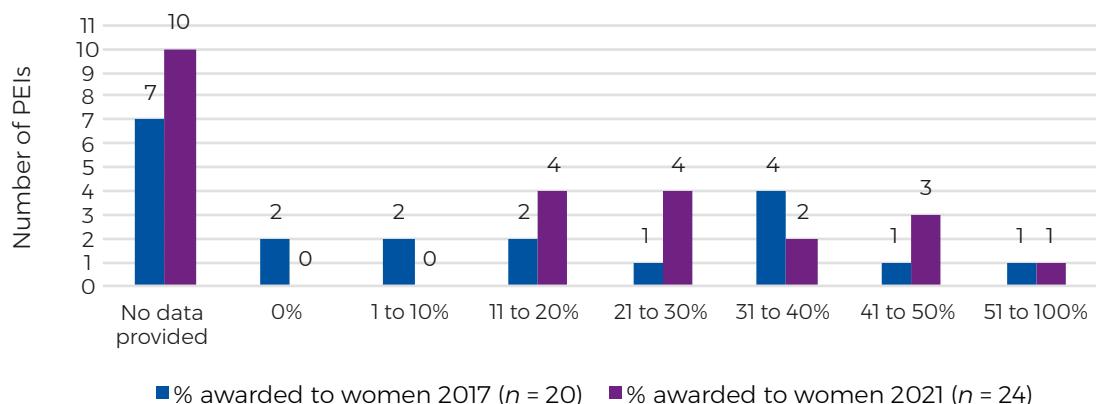
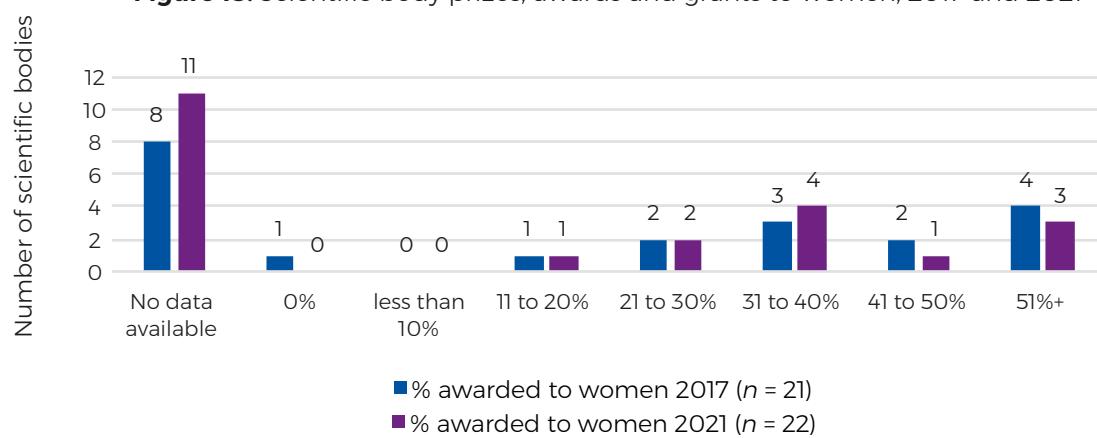


Figure 18: Scientific body prizes, awards and grants to women, 2017 and 2021



- Eight PEIs and four scientific bodies provided data on the allocation of prizes, awards and grants by ethnicity. On average, people from minority ethnic backgrounds received 35% of PEI prizes, awards and grants, and 16% of scientific body prizes, awards and grants (**Figures 19 and 20**).

Figure 19: PEI prizes, awards and grants to people from minority ethnic backgrounds, 2017 and 2020

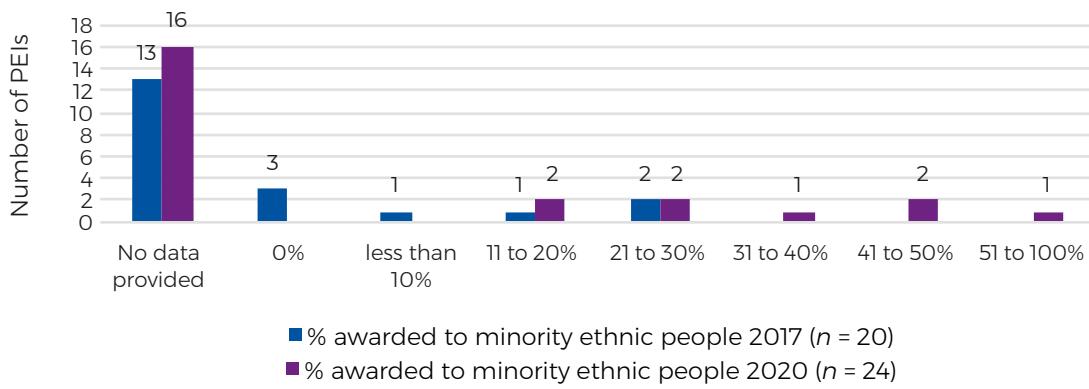
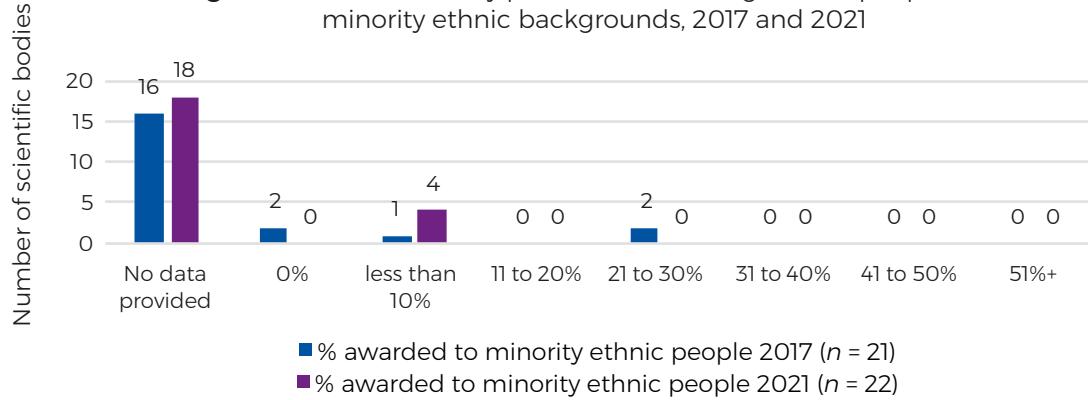


Figure 20: Scientific body prizes, awards and grants to people from minority ethnic backgrounds, 2017 and 2021



- Two PEIs and two scientific bodies provided data on the allocation of prizes, awards and grants to people with disabilities.
- One PEI and two scientific bodies provided data on the allocation of prizes, awards and grants to LGBTQ+ people.
- Two PEIs and one scientific body provided data on religious diversity and the allocation of prizes, awards and grants.
- Eight PEIs and six scientific bodies provided data on the allocation of prizes, awards and grants by age. Over 50% of PEI prizes, awards and grants went to people aged 29 and under, and nearly 35% of scientific body prizes, awards and grants (**Figures 21 and 22**).

Figure 21: PEI prizes, awards and grants by age

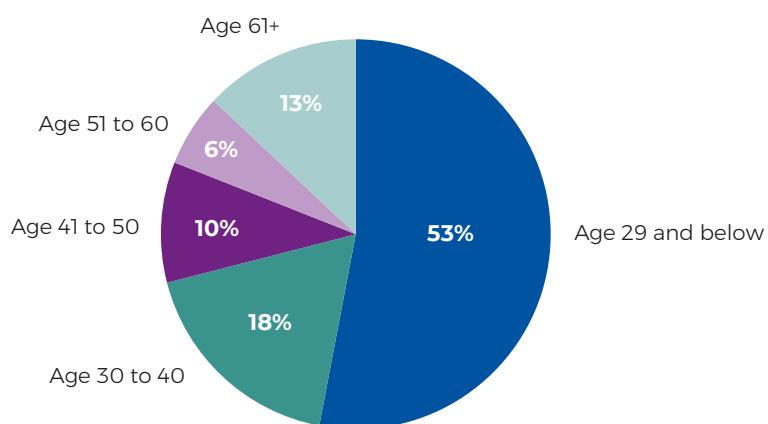
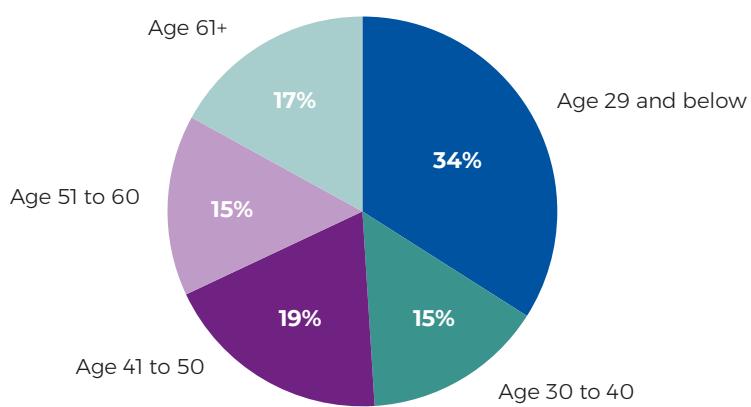


Figure 22: Scientific body prizes, awards and grants by age



Section 5

Progression Framework results

5.1 Introduction

In completing the Progression Framework for the 2021 benchmarking exercise, participating organisations were asked to self-assess their progress against 10 areas of activity of PEIs and scientific bodies, as follows:

1. Governance and leadership
2. Membership and professional registration
3. Meetings, conferences and events
4. Education, training and examinations
5. Accreditation of education and training
6. Prizes, awards and grants
7. Communications and marketing
8. Outreach and engagement
9. Employment
10. Monitoring and measuring

Participants were asked to self-assess their progress in each of the 10 categories of relevance to them, by allocating a score as follows:

- score one where progress is self-assessed to be at Level 1 (Initiating)
- score two where progress is self-assessed to be at Level 2 (Developing)
- score three where progress is self-assessed to be at Level 3 (Engaging)
- score four where progress is self-assessed to be at Level 4 (Transforming).

Participants were not asked to self-assess at Level 0, but some did, so Level 0 is included in the analysis below.

Further details of the Framework including detailed guidance for completion are available via the websites of the Science Council and Royal Academy of Engineering.

This section presents the median self-assessment scores for participating organisations for each of the 10 sections of the Framework. It also compares the 2021 self-assessment with that for 2017, for those sections where comparison is possible.

5.2 Self-assessment overview

Table 5 presents the median self-assessment scores for all participating organisations in the 2021 benchmarking exercise, overall and by sector.

Key findings:

- For nine of the 10 sections of the survey, participants overall assess themselves to be at Level 2: Developing.
- For one section participants overall assess themselves to be at Level 1: Initiating (Section 1.05, Accreditation, education and training).
- Overall, there is very little difference in the self-assessment of PEIs and scientific bodies in terms of progression on diversity and inclusion. However, for one section PEI participants self-assess their performance to be at Level 1: Initiating, and scientific bodies assess their performance to be at Level 2: Developing (Section 1.04: Education, training and examinations).
- PEIs self-assessed their performance to be strongest in Communications and marketing (Section 1.07), with 11 organisations assessing themselves at Levels 3 and 4. Scientific bodies self-assessed their performance to be strongest in Meetings, conferences and events (Section 1.03), Communications and marketing (Section 1.07) and Employment (Section 1.09), with eight organisations assessing themselves at Levels 3 and 4 in these sections.
- More PEIs self-assessed their performance to be at Level 1 in both Accreditation of education and training, and Prizes, awards and grants, than any other section, with 11 organisations assessing themselves to be at Level 1 in both of these sections (Sections 1.05 and 1.06 respectively). More scientific bodies also assessed their performance to be at level 1 in Prizes, awards and grants (Section 1.06) than any other section, with 10 organisations assessing themselves to be at level 1.

The detailed self-assessment results by profession, for each section of the Framework, are included in the Appendix to this report.

Table 5

| | 1.01 Governance and leadership | 1.02 Membership and professional registration | 1.03 Meetings, conferences and events | 1.04 Education, training and examinations | 1.05 Accreditation of education and training | 1.06 Prizes, awards and grants | 1.07 Communications and marketing | 1.08 Outreach and engagement | 1.09 Employment | 1.10 Monitoring and measuring |
|---|---------------------------------------|--|--|--|---|---------------------------------------|--|-------------------------------------|------------------------|--------------------------------------|
| Median self-assessment level for all participating organisations | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for PEIs | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for scientific bodies | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |

5.3 Comparison with 2017

In 2017 the Framework had eight sections, expanded in 2021 to ten, to take into account feedback from participants in the first benchmarking exercise about the distinction between holding and accrediting education, training and examinations (2017 Section 4) and communications and marketing, outreach and engagement (2017 Section 6).

Table 6 below shows how the Progression Frameworks from 2017 and 2021 map onto each other. The six highlighted sections are directly comparable year-on-year.

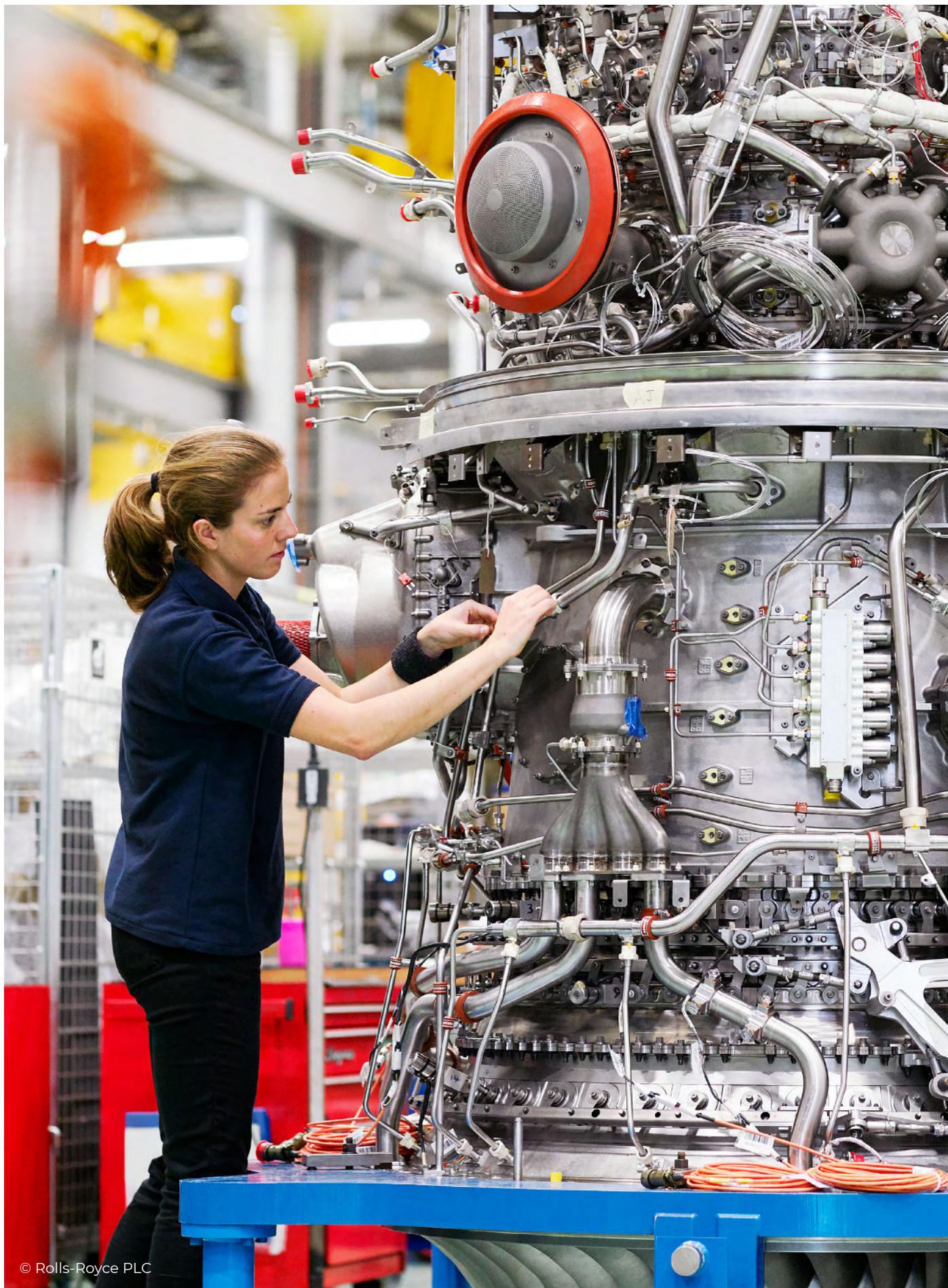
Table 6

| PROGRESSION FRAMEWORK 2017 | PROGRESSION FRAMEWORK 2021 |
|---|---|
| Section 1: Governance and leadership | Section 1: Governance and leadership |
| Section 2: Membership and professional registration | Section 2: Membership and professional registration |
| Section 3: Meetings, conferences and events | Section 3: Meetings, conferences and events |
| Section 4: Education and training, accreditation and examinations | Section 4: Education, training and examinations |
| | Section 5: Accreditation of education and training |
| Section 5: Prizes, awards and grants | Section 6: Prizes, awards and grants |
| Section 6: Communications, marketing, outreach and engagement | Section 7: Communications and marketing |
| | Section 8: Outreach and engagement |
| Section 7: Employment | Section 9: Employment |
| Section 8: Monitoring and measuring | Section 10: Monitoring and measuring |

Overall, there has been very little change in the median self-assessment of participating organisations since 2017. Only one of the six comparable sections (Section 1.06, Prizes, awards and grants) shows an increase in self-assessment level, with the median moving from Level 1: Initiating, to Level 2: Developing (**Table 7**).

Table 7

| | 1.01 Governance and leadership | 1.02 Membership and professional registration | 1.03 Meetings, conferences and events | 1.06 Prizes, awards and grants | 1.09 Employment | 1.10 Monitoring and measuring |
|---|--------------------------------|---|---------------------------------------|--------------------------------|-----------------|-------------------------------|
| Median self-assessment level for all participating organisations, 2021 | 2 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for all participating organisations, 2017 | 2 | 2 | 2 | 1 | 2 | 2 |
| Median self-assessment level for all PEIs, 2021 | 2 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment level for all PEIs, 2017 | 2 | 2 | 2 | 1 | 2 | 2 |
| Median self-assessment for all scientific bodies, 2021 | 2 | 2 | 2 | 2 | 2 | 2 |
| Median self-assessment for all scientific bodies, 2017 | 2 | 2 | 2 | 1 | 2 | 2 |



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Section 6

Strengths, areas for development, future priorities and challenges

This section summarises comparative qualitative findings from the submissions of PEIs and scientific bodies, in relation to strengths, areas for development, future priorities and challenges in making progress on diversity and inclusion. For detailed examples of strengths, development areas, future priorities and challenges from the individual submissions and feedback please refer to the profession-specific reports.

6.1 Strengths

Several areas of strength were identified in the profession-specific reports for both PEIs and scientific bodies. There is considerable similarity across the two professions, with organisations providing examples of good practice across all areas (**Table 8**).

Table 8

| | Scientific bodies | PEIs |
|--|-------------------|------|
| 1. Engaging members Engaging members in the design and delivery of the work on diversity and inclusion | * | * |
| 2. Building firm foundations Putting systems, policies, and practices in place to support progress | * | * |
| 3. Establishing good governance Ensuring robust systems of governance, underpinned by senior leadership engagement | * | * |
| 4. Integrating diversity and inclusion into communications | * | |
| 5. Increased integration into day-to-day work Increased integration of diversity and inclusion into all aspects of day-to-day work | | * |
| 6. Collective ownership Engaging colleagues in the work on diversity and inclusion | * | |
| 7. Extending the scope of work beyond gender Remaining focused on gender, and extending the scope to other areas | | * |
| 8. Inclusive working culture A more inclusive working culture for scientific body employees | * | |
| 9. Ensuring inclusive processes Reviewing and revising core procedures and processes to remove bias | | * |

6.2 Areas for development

A number of areas for development were also identified in the profession-specific reports for PEIs and scientific bodies. Participating organisations are at different stages of their work on diversity and inclusion, so strengths for some organisations are also development areas for others (**Table 9**).

Table 9

| | Scientific bodies | PEIs |
|---|-------------------|------|
| 1. Data gathering, monitoring and measuring Limited data on diversity beyond gender (and age) | * | * |
| 2. Integrating diversity and inclusion into core functions and activities Moving from a stand-alone to an integrated approach | * | |
| 3. Ensuring further integration Continuing to build on the work to move from a stand-alone to an integrated approach | | * |
| 4. Securing and sustaining commitment From board, trustees, senior management, colleagues, members, other stakeholders | * | * |
| 5. Strategies, plans and priorities Developing vision, strategy and priorities on diversity and inclusion | * | * |
| 6. Formalising the approach Moving from an ad hoc to a more formalised approach | * | * |
| 7. Extending the scope of work beyond gender Extending the scope to include other under-represented groups | * | * |

Eight scientific bodies and seven PEIs describe themselves as taking an intersectional approach but there is considerable variation in how the approach is described in practice, from 'thinking about it' to more robust implementation.



6.3 Priorities

Both PEIs and scientific bodies identify similar priorities for their work on diversity and inclusion for the next 12-24 months. Five stand out across both professions:

Priority 1 D&I governance, strategy and planning

- Continuing to build the governance, leadership, strategy, and vision needed to drive change

Priority 2 Data gathering

- Building the systems and processes to gather and use monitoring data on diversity and inclusion

Priority 3 Developing training and guidance

- Building capabilities and support for stakeholders (board, leaders, staff, members) through training and guidance

Priority 4 Targeted activities for specific demographics

- Starting and sustaining activities for specific groups, particularly in relation to membership

Priority 5 Building external presence

- Developing and enhancing external presence on diversity and inclusion, particularly via social media

6.4 Challenges ahead

PEIs and scientific bodies were asked what they saw as challenges to progress on diversity and inclusion, and identified very similar barriers. The challenges also remain very similar to those identified by PEIs and scientific bodies in 2017. They are:

Challenge 1 Data collection

- Lack of access to the technology and resources to collect and use diversity monitoring data

Challenge 2 Resourcing the work on diversity and inclusion

- Limited staff and volunteer time to support the work on diversity and inclusion

Challenge 3 Securing and sustaining engagement

- Challenges in securing and sustaining the engagement of key stakeholders at all levels (board, leadership, staff, membership)

Challenge 4 Lack of diversity in the wider context of science and engineering

- Lack of diversity in science and engineering professions reflected in the membership and activities of professional bodies

Section 7

Conclusions and recommendations

7.1 Conclusions

Forty PEIs and scientific bodies completed the 2021 Progression Framework 2.0 benchmarking exercise. In addition to self-assessing in up to 10 areas of their work, they also shared examples of their strengths, challenges, priorities, and plans for the future. As in 2017, the engagement of PEIs and scientific bodies in this process continues to send a strong signal about the commitment of organisations in both professions to making progress on diversity and inclusion, and to learning from each other about good practices as well as how to overcome challenges and gather ideas for future action.

The 2021 benchmarking exercise reveals some differences between PEIs and scientific bodies in terms of diversity and inclusion, and many similarities. The data suggests greater diversity on the boards of both PEIs and scientific bodies in 2021 than in 2017, though women are better represented on the boards of scientific bodies than on the boards of PEIs. The representation of people from minority ethnic backgrounds has also increased, though people from minority ethnic backgrounds are slightly better represented on the boards of PEIs than of scientific bodies. Both PEIs and scientific bodies have workforces in which the majority of employees are women.

However, both PEIs and scientific bodies have in common a lack of robust data on diversity other than gender (and age) in most areas of the Framework. The reporting of monitoring data is an important feature of the benchmarking exercise, and the lack of comprehensive data compromises the ability to draw robust conclusions on this basis.

The overall self-assessment of PEIs and scientific bodies on the Progression Framework is very similar across the two professions, but in Section 1.04, on Education, training and examinations, the self-assessment of scientific bodies stands one level above that of PEIs. Of the six sections of the Progression Framework that are directly comparable between 2017 and 2021, only one of these shows positive movement in median self-assessment scores. In Section 1.06 on Prizes, awards and grants, the median self-assessment has increased from Level 1 to Level 2 over the four years since the last benchmarking exercise.

Both PEIs and scientific bodies show similar strengths, areas for development, priorities, and challenges in their work on diversity and inclusion. Both have put effort into ensuring good governance and strong leadership commitment on diversity and inclusion, with several sharing with pride their work in this area. Several PEIs and scientific bodies appear to have taken into account the recommendation of the 2017 benchmarking exercise – that professional bodies should do more to engage with, and involve, members in their work on diversity and inclusion – and there is good evidence of member engagement and collaboration from both professions. There is also evidence of movement from an ad hoc approach to a more planned, structured, mainstreamed approach, with greater clarity around vision, strategy and priorities, and the active engagement of colleagues, all contributing to this.

The recommendations build on these concluding themes.

7.2 Recommendations

Given the similarities in terms of strengths, areas for development, challenges, and priorities between scientific bodies and PEIs revealed through this benchmarking exercise, the following five recommendations apply to all participating organisations in both professions.

Recommendation 1: Identify and address barriers to data gathering

As in 2017, several organisations have mechanisms in place to gather data on the age and gender of members. Far fewer monitor data on any other aspect of diversity. Monitoring data is key to assessing progress on diversity and inclusion. We recommend that all participating organisations extend data collection and monitoring activity beyond gender and age to cover all aspects of diversity, and in particular ethnicity. The lack of robust data makes it a challenge to properly identify barriers, assess progress or target action to increase the participation of under-represented groups in engineering and science.

Some of the barriers which organisations identified on data gathering are around making the case for data to be gathered, resourcing and technology. There may be other challenges too, relating to the relational aspects of gathering data. It is recommended that PEIs and scientific bodies take steps to share, explore, and fully understand the barriers to data gathering, and prioritise action to expand monitoring activity to cover all aspects of diversity. They should ensure that by the time of the next benchmarking exercise, all participating organisations are also able to provide (as a minimum) robust data on ethnicity on the board, in leadership, in membership, and in registration (where relevant).

Recommendation 2: Broaden the focus of activity to other under-represented groups

It is encouraging to see that organisations are beginning to broaden the scope of their work on diversity and inclusion beyond gender, and that a number (eight scientific bodies and seven PEIs) describe themselves as beginning to take an intersectional approach. However, this does not yet go far enough. We would encourage all organisations to broaden the focus of their activity to include other under-represented groups, and in addition to take an intersectional approach to understanding how (for instance) gender and ethnicity intersect to impact the lives of minority ethnic women in science and engineering.

Recommendation 3: Resource and recognise the work

Feedback from the submissions suggests that the work on diversity and inclusion is often under-resourced. To make progress, this work needs to be adequately resourced. Committing to a small number of priorities and having a plan in place to achieve these will help PEIs target limited resources more effectively. Where the work on diversity and inclusion is integrated into the work of teams and colleagues, it needs to be recognised. Work of this nature inevitably relies on the contributions of passionate and committed volunteers, and voluntary work too needs to be recognised, particularly in relation to member volunteers. We would recommend all organisations to review how the work on diversity and inclusion is currently resourced, and make changes as necessary. As a first step PEIs and scientific bodies should share how they are resourcing diversity and inclusion in their organisations including the reward and recognition strategies for member volunteers.

Recommendation 4: Use the Framework to plan for progress

As noted in the conclusions above, there is little overall movement in the self-assessment of participating organisations on their work on diversity and inclusion since 2017. Our recommendation is for every organisation to use the Framework to plan for future progress. We also recommend that all organisations consider setting a time-bound goal to demonstrate visible progress across all sections of the Framework that are relevant to them.

Recommendation 5: Establish a community of practice

The ongoing exchange of ideas and practices is strongly encouraged across all participating organisations. Our recommendation is that the Science Council and Royal Academy of Engineering supplement existing best practice exchanges by establishing a cross-profession 'community of practice', meeting on a regular basis (two or three times a year), with the agenda set by participating organisations, to facilitate peer-to-peer exchange and action learning on priorities, challenges and solutions on diversity and inclusion across UK science and engineering professions.



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Appendix 1

About the Royal Academy of Engineering and the Science Council

The Royal Academy of Engineering

is harnessing the power of engineering to build a sustainable society and an inclusive economy that works for everyone. In collaboration with our Fellows and partners, we are growing talent and developing skills for the future, driving innovation and building global partnerships, and influencing policy and engaging the public. Together we are working to tackle the greatest challenges of our age.

What we do

Talent & diversity

We are growing talent by training, supporting, mentoring and funding the most talented and creative researchers, innovators and leaders from across the engineering profession. We're developing skills for the future by identifying the challenges of an ever-changing world and developing the skills and approaches we need to build a resilient and diverse engineering profession.

Innovation

We are driving innovation by investing in some of the country's most creative and exciting engineering ideas and businesses. We're building global partnerships that bring the world's best engineers from industry, entrepreneurship and academia together to collaborate on creative innovations that address the greatest global challenges of our age.

Policy & engagement

We are influencing policy through the National Engineering Policy Centre – providing independent expert support to policymakers on issues of importance. We're engaging the public by opening their eyes to the wonders of engineering and inspiring young people to become the next generation of engineers.

The Science Council

About us

The Science Council's purpose is to promote the advancement and dissemination of knowledge of and education in science, pure and applied, for the public benefit.

To fulfil this purpose, the Science Council advances professionalism in science through the professional registration of scientists and technicians who meet a high professional standard and competence and follow an established code of conduct.

We provide our member bodies with a forum to raise standards through sharing practice and knowledge, and to hold each other to account through a peer-review approach.

Our declaration

By living the values of equality, diversity and inclusion, and critically assessing and acknowledging the inequalities that exist, the Science Council and its member bodies will create greater opportunity for any individual to fulfil their scientific potential, irrespective of their background or circumstances.

In so doing it will also help science to better serve society by attracting the widest possible talent to the science workforce and fostering a greater diversity of scientific ideas, research and technology.

Our commitment

The Science Council is committed to widening participation in science education and the workplace. To this end the Science Council and its member bodies declare a commitment to promote equality, diversity and inclusion throughout their communities and challenge prejudice and discrimination.

As a leading voice in science and the application of science, the Science Council will seek every opportunity to be proactive in promoting and communicating this vision to educators, employers, policy makers, opinion formers and other publics.

Appendix 2

Background to the Progression Framework

The Progression Framework was developed in a collaboration between the Royal Academy and the Science Council with the aim of helping professional bodies track and plan progress on diversity and inclusion. The Progression Framework sets out four levels of good practice on diversity and inclusion. These are organised into 10 areas of activity of PEI and scientific bodies and provides a framework for data collection on diversity and inclusion.

The 10 areas of activity are:

1. Governance and leadership
2. Membership and professional registration
3. Meetings, conferences and events
4. Education, training and examinations
5. Accreditation of education and training
6. Prizes, awards and grants
7. Communications and marketing
8. Outreach and engagement
9. Employment
10. Monitoring and measuring

The four levels of good practice are:

- **Level 1:** Initiating
- **Level 2:** Developing
- **Level 3:** Engaging
- **Level 4:** Transforming

The Progression Framework was first developed in a collaboration between the Royal Academy of Engineering and the Science Council in late 2016. Further details of the Progression Framework, including guidance on completion, can be found on the [Royal Academy of Engineering website](#) and on the [Science Council website](#).

In 2020 the contents of the original Progression Framework were reviewed by a steering group of members of both organisations. The aims of the review were:

- To ensure that the Progression Framework continued to reflect good practice on diversity and inclusion four years on from its original publication.
- To take into account feedback and learning from the 2017 benchmarking exercise, whilst maintaining the continuity necessary to ensure 2017 participants are able to compare their progression on diversity and inclusion over time.

A small number of changes were made to the Framework, as follows:

Section 1:

The 2017 Progression Framework comprised eight sections plus a single data section. Progression Framework 2.0 comprises 10 sections, plus one externally linked section, plus five data sections:

- The 2017 Progression Framework asked participating organisations about progress on diversity and inclusion in a combined section on *Education and training, accreditation and examinations*. Progression Framework 2.0 asks participating organisations separately about *Education, training and examinations*, and *Accreditation of education and training*.
- The 2017 Progression Framework asked participating organisations about progress on diversity and inclusion in a combined section on *Communication, marketing, outreach and engagement*. Progression Framework 2.0 asks participating organisations separately about *Communications and marketing*, and *Outreach and engagement*.
- Progression Framework 2.0 included an external link to The Royal Society of Chemistry's own Framework for Action on Publishing, for professional bodies with a role in scientific publishing. Completion of this section was not required by the submission.

Other changes made to the content of the Progression Framework include:

- The rewording of Level 4 from Evolving to Transforming, reflecting that the highest level of progress on diversity and inclusion requires transforming the systems and culture of an organisation.
- Within each section of the Progression Framework the level indicators are grouped more clearly into three consistent themes:
 - Leadership, Strategy, Planning and Accountability
 - Policies and Procedures
 - Insights and Evaluation
- Updating of the wording in the Progression Framework, to use more active language and include clearer reference to different demographic groups.

Section 2:

Updated to include questions about activity in relation to different protected characteristics and introduce a question about intersectionality.

Section 3:

Reformatted into five sub-sections for Progression Framework 2.0 and including more detailed data requests.

Appendix 3

Benchmarking methodology

In completing the Framework for the 2017 Progression Framework benchmarking exercise, participating organisations were asked to self-assess their progress in each of the 10 categories above, by allocating a score on a simple Excel spreadsheet as follows: score 1 where progress is self-assessed to be at Level 1, score 2 where progress is self-assessed to be at Level 2 etc. Participating organisations were also asked to provide quantitative data measuring and monitoring progress on diversity and inclusion.

Completed Progression Frameworks were returned to [for business sake consulting limited](#), an independent consultant on diversity, inclusion and organisational change. The consultants were commissioned by the Royal Academy of Engineering and the Science Council to develop the original Progression Framework in 2017. They also advised on the development of Progression Framework 2.0.

Once received, the submissions for all participating organisations were combined by the consultants, including both self-assessment and text evidence. Only the participating organisation and the consultants see each submission or have access to the combined information.

The consultants calculated numerical benchmarks and to compare self-assessment levels and qualitative evidence from participating organisations, overall and by profession (PEI and scientific body).

Each participating organisation received feedback on four benchmarks:

- BENCHMARK 1: How the self-assessment in Section 1 of the Progression Framework benchmarked against the self-assessment of all other participating organisations, PEIs and scientific bodies combined)
- BENCHMARK 2: How the self-assessment in Section 1 of the Progression Framework benchmarked against the self-assessment of all other participating organisations in their profession (PEIs or scientific bodies, and including those that are both PEIs and scientific bodies)
- BENCHMARK 3: How the data provided in Section 3 of the Progression Framework on gender and ethnicity on the board and in senior leadership of the organisation benchmarked against the data provided by other participating organisations
- BENCHMARK 4: How the data provided in Section 3 of the Progression Framework on gender and ethnicity in membership and registration benchmarked against the data provided by other participating organisations

Benchmarks 1 and 2 have been simply calculated using a median rather than a mean average. The median calculation generates a benchmark at Levels 1-4, compared to a mean calculation which generates a benchmark at one or two decimal points.

Benchmarks 3 and 4 were calculated using a mean average of organisations providing data on gender and ethnicity on the board, in leadership, in membership, and registration. On registration, a small number of organisations provided information on more than one register. In such cases data from the first register provided was used in calculating these averages. Data on ethnicity and registration was very limited and the benchmark produced must be treated with caution.

Appendix 4

Progression Framework results by profession

1. Self-assessment results: PEIs (Figures 23 to 32)

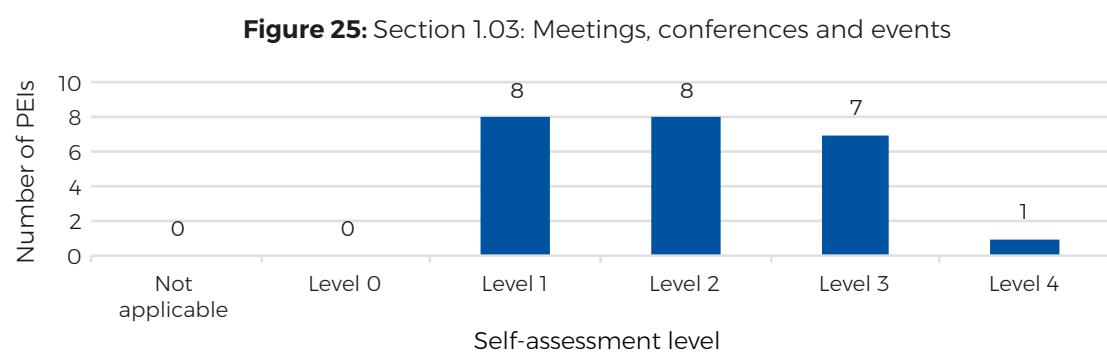
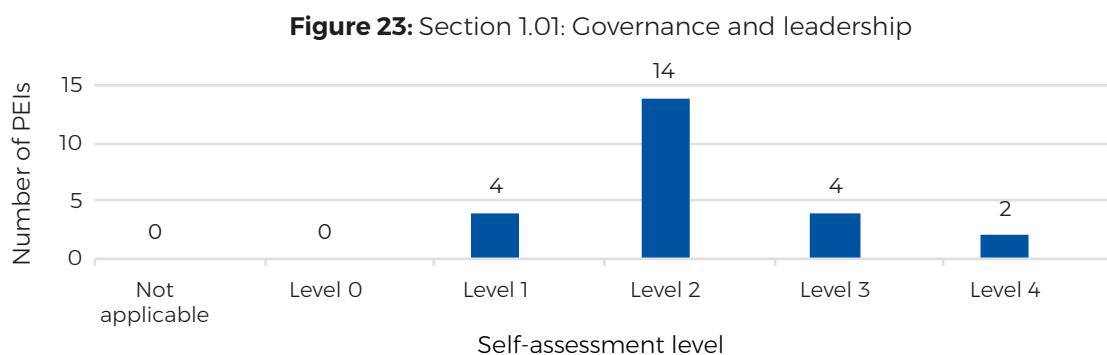


Figure 26: Section 1.04: Education, training and examinations

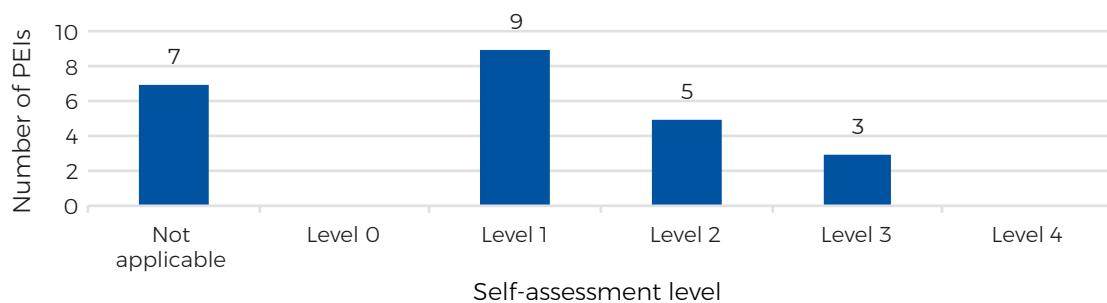


Figure 27: Section 1.05: Accreditation of education and training

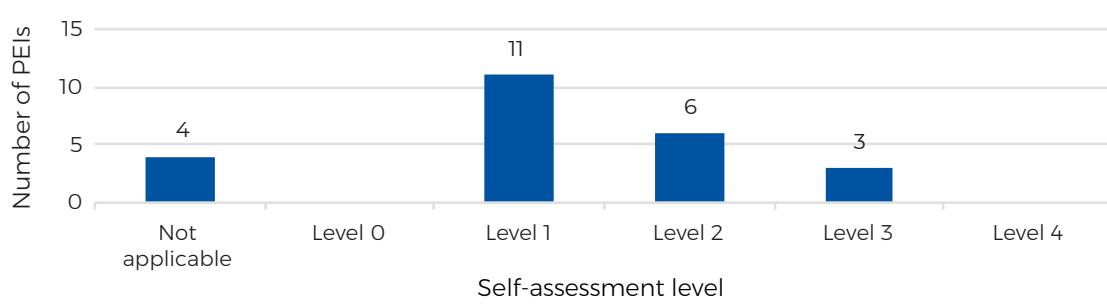


Figure 28: Section 1.06: Prizes, awards and grants

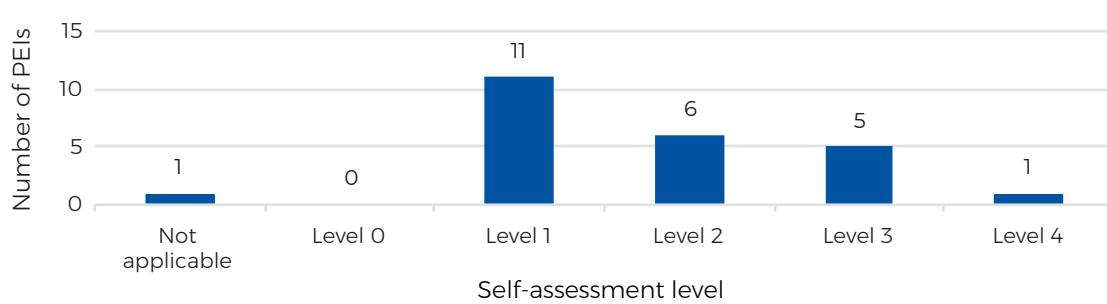
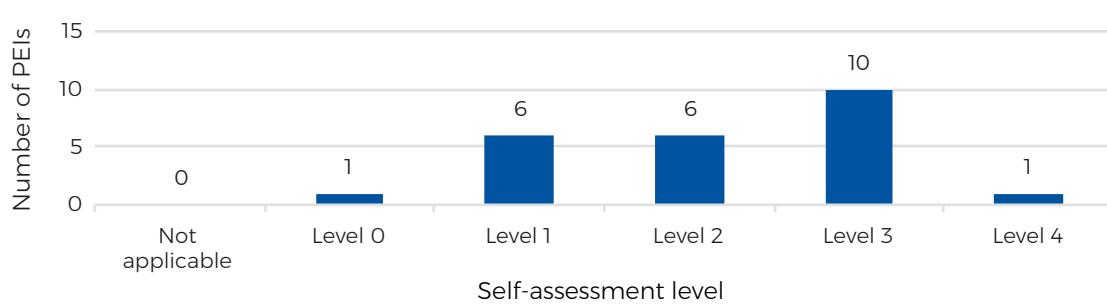
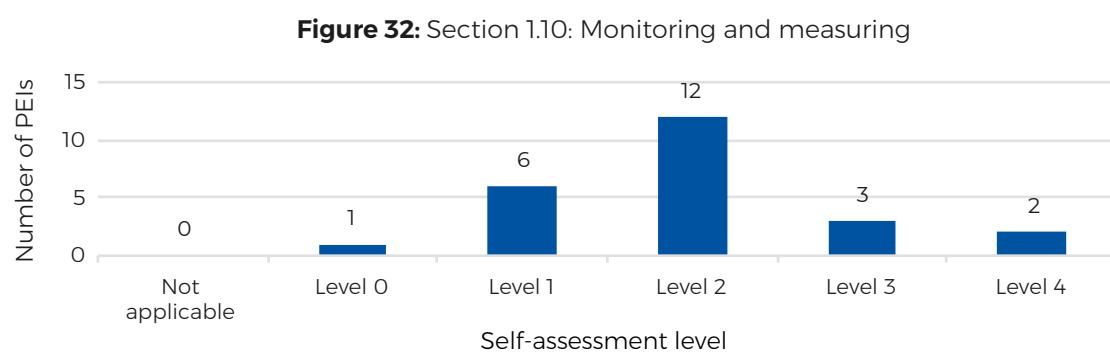
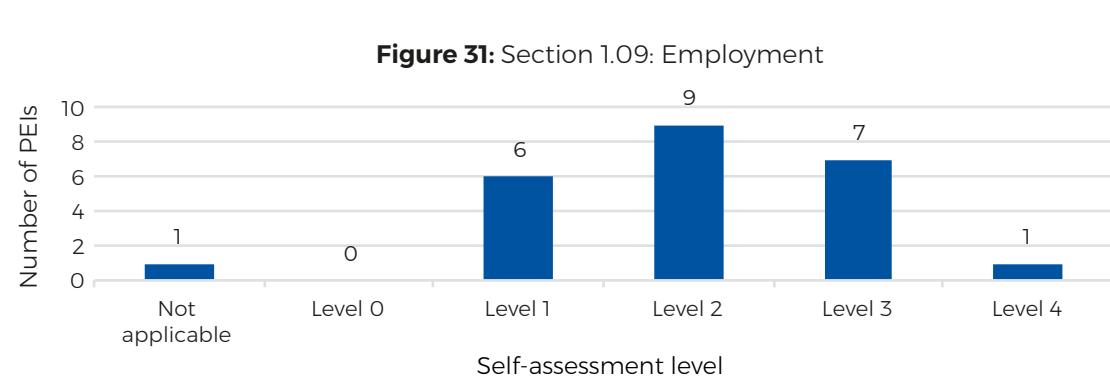
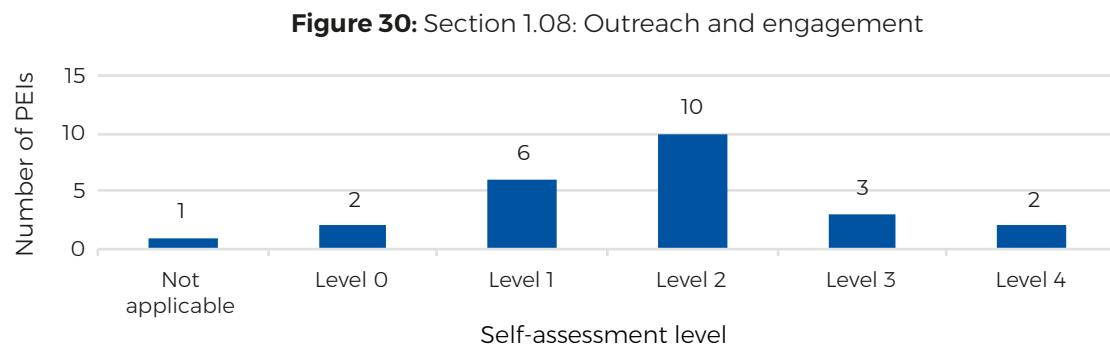


Figure 29: Section 1.07: Communications and marketing





2. Self-assessment results: scientific bodies (Figures 33 to 42)

Figure 33: Section 1.01: Governance and leadership

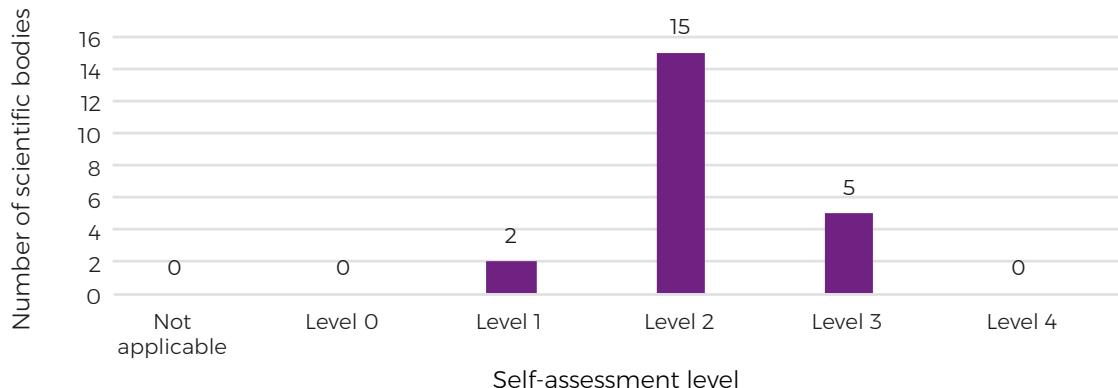
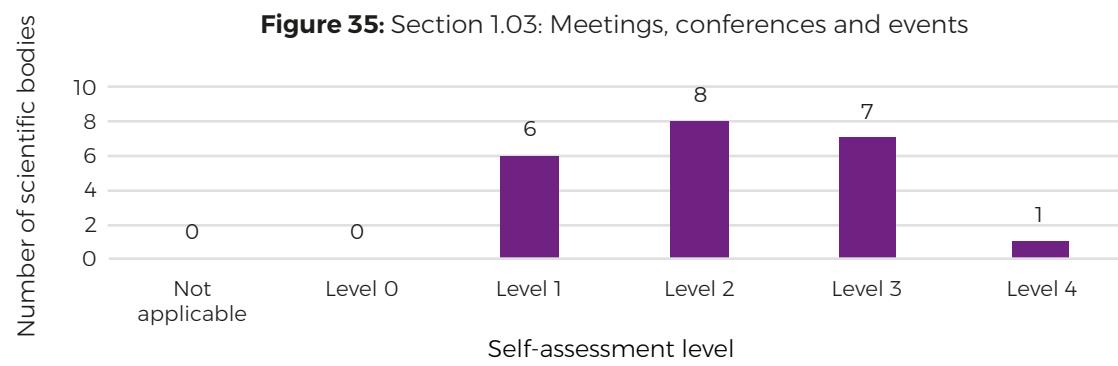
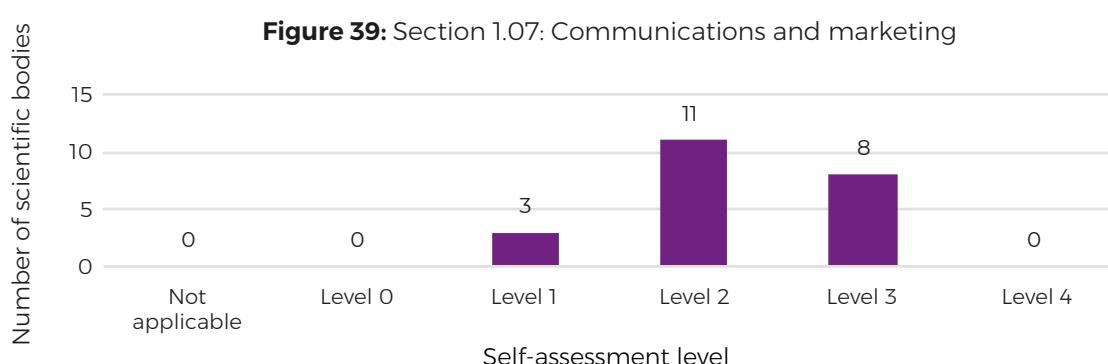
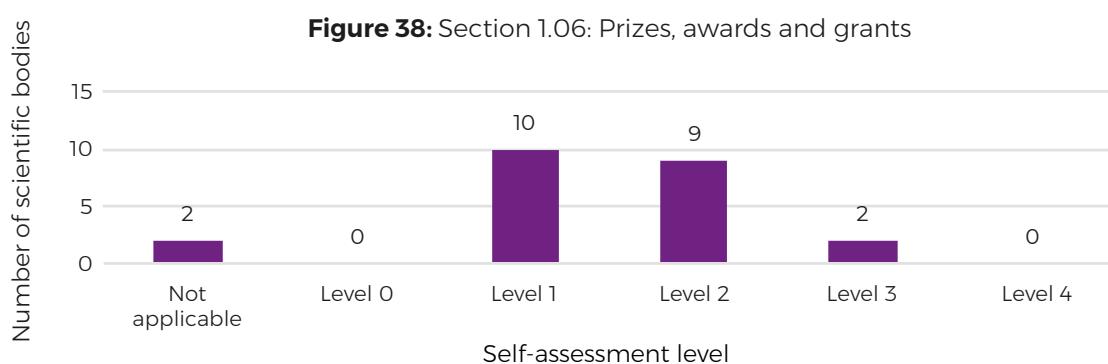
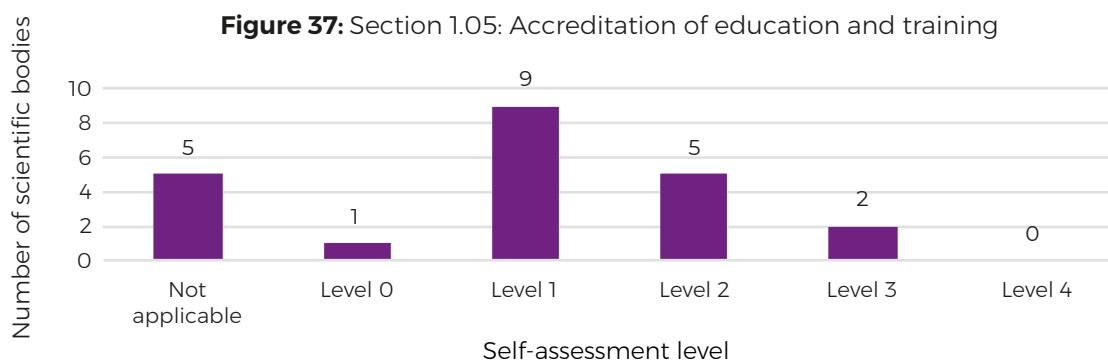


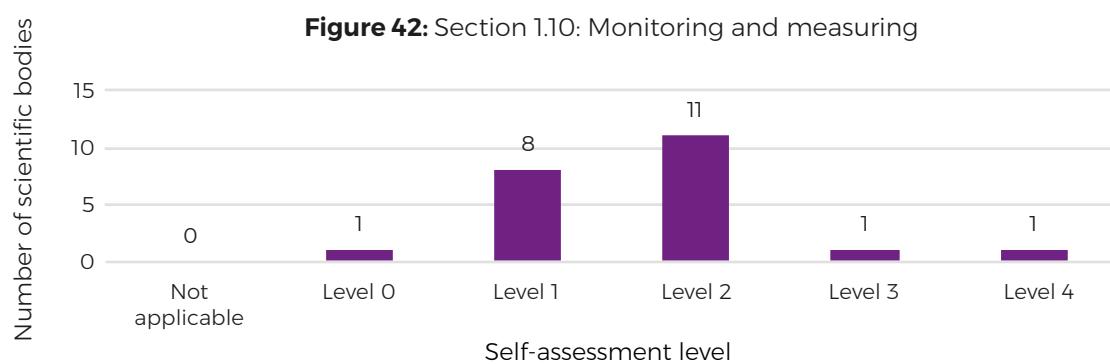
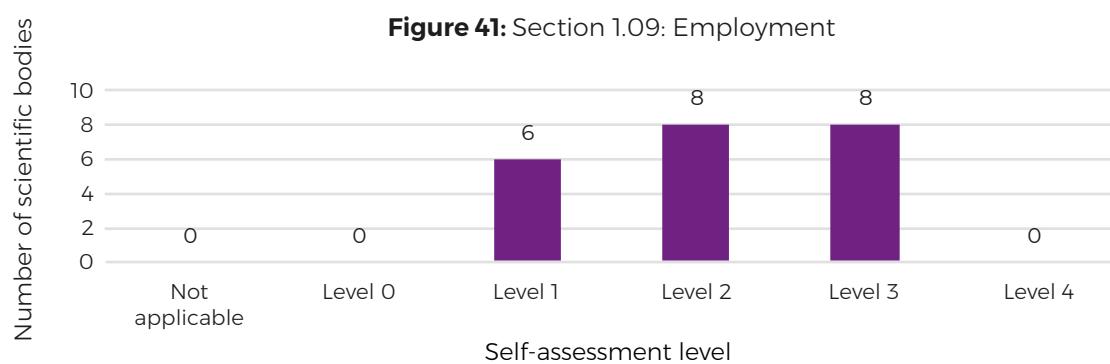
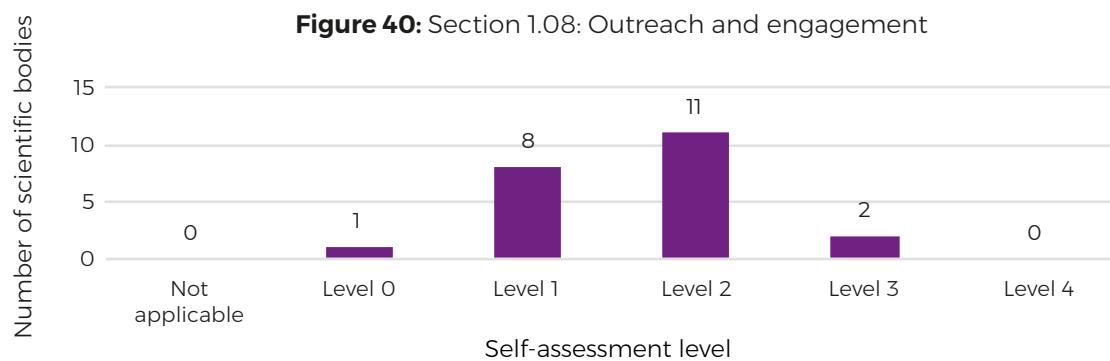
Figure 34: Section 1.02: Membership and professional registration



Figure 35: Section 1.03: Meetings, conferences and events







Appendix 5

List of participating organisations

40 engineering and science professional organisations participated in the 2021 benchmarking exercise. We are grateful for all their input and efforts which have contributed to the findings and recommendations in this report. We wish to thank the following organisations for their participation:

| | |
|-----------|---|
| 1 | Biochemical Society |
| 2 | British Psychological Society |
| 3 | EngineeringUK |
| 4 | Chartered Institution of Water and Environmental Management |
| 5 | Engineering Council |
| 6 | Institute of Biomedical Science |
| 7 | Institute of Food Science and Technology |
| 8 | Institute of Materials, Minerals & Mining |
| 9 | Institute of Physics and Engineering in Medicine |
| 10 | Institute of Physics |
| 11 | Institution of Chemical Engineers |
| 12 | Institution of Civil Engineers |
| 13 | Royal Academy of Engineering |
| 14 | Royal Meteorological Society |
| 15 | Royal Society of Biology |
| 16 | Science Council |
| 17 | Royal Society of Chemistry |
| 18 | The Association for Clinical Biochemistry and Laboratory Medicine |
| 19 | The Association for Science Education |
| 20 | The British Association of Sport and Exercise Sciences |
| 21 | The British Society of Soil Science |
| 22 | The Geological Society of London |
| 23 | The Institute of Water |
| 24 | The Institution of Environmental Sciences |
| 25 | The Institution of Structural Engineers |
| 26 | The Operational Research Society |
| 27 | The Organisation for Professionals in Regulatory Affairs |
| 28 | The Welding Institute |



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