Space Scotland

Advancing Diversity and Inclusion in the Scottish Space Sector: Insights from Stakeholder Focus Group Discussions

New Voices in Space Working Group

Written by:

Dr Athina Frantzana

April 2026

UK SPACE AGENCY

Contents

Executive summary 2
1. Introduction 4
2. Methodology 7
3. Key findings 8
4. Recommendations 13
5. Next steps 15
6. Limitations of the findings and impact statement 17
7. Acknowledgements 18
References 19

Executive summary

The UK space sector is one of the fastest-growing industries in the country, generating approximately £18.6 billion annually and employing more than 55,550 people. Scotland plays a central role in this ecosystem and has emerged as a leading European hub for small satellite manufacturing and emerging launch infrastructure.

Despite this growth, the sector continues to face persistent challenges related to workforce diversity and inclusion. According to the UK Space Census (2025), women currently represent approximately 35% of the UK space workforce, while representation of ethnic minorities, individuals with disabilities, and those from lower socioeconomic backgrounds remains comparatively low.

To explore these challenges, a stakeholder engagement event was organised by the New Voices in Space Working Group - Space Scotland bringing together professionals working across academia, government, and organisations connected to the space sector in Scotland. Two focus group discussions were conducted to examine perspectives on diversity, recruitment practices, career pathways, and workforce development.

Overall, the discussion highlights that the space sector is undergoing rapid expansion and transformation, creating significant opportunities to embed inclusive practices from an early stage of sector development. However, persistent structural, cultural, and perceptual barriers continue to limit equitable access to careers and progression within the sector.

A key theme is the strong recognition that diversity is not only a social or ethical priority - but a strategic driver of innovation, productivity, and workforce resilience. Participants agreed that organisations with more diverse teams benefit from improved problem-solving, broader talent access, and stronger retention outcomes. Despite this recognition, Equality, Diversity and Inclusion (EDI) is still frequently treated as a secondary consideration within organisational priorities, often positioned below immediate concerns such as technical skills shortages and funding pressures.

The findings also highlight a persistent disconnect between the perceived "skills shortage" in the space sector and the underlying structural issues affecting talent supply. Participants argued that many challenges attributed to skills shortages are in fact linked to limited awareness of career pathways, narrow recruitment practices, and barriers to entry that exclude large segments of the potential workforce. This includes underrepresentation of women, mid-career returners, individuals from non-traditional educational pathways, and those from less advantaged backgrounds.

Early education and exposure emerged as critical factors shaping participation. Many young people, parents, and educators lack awareness of the breadth of roles within the space sector, often associating it primarily with physics, engineering, or astronaut roles. Participants stressed the importance of introducing space-related content earlier in the curriculum and

providing educators with tools to demonstrate real-world applications of various disciplines within the sector.

Leadership and organisational culture were identified as key enablers of change. While some progress is evident, particularly within newer and more entrepreneurial organisations, EDI is still often inconsistently embedded at leadership level. Participants highlighted the importance of reframing EDI as integral to business performance, workforce sustainability, and talent competitiveness rather than as a standalone initiative.

1. Introduction

Growth of the UK Space sector

The United Kingdom has developed one of the most dynamic space sectors in Europe. According to the UK Space Agency's Size and Health of the UK Space Industry Report 2024, the sector:

- Generates approximately £18.6 billion annually
- Employs over 55,550 people
- Supports a large supply chain across manufacturing, telecommunications, research, and data services.

The UK government has identified space as a strategic industry and aims to expand its share of the global space economy in the coming decades.

Scotland's role in the Space economy

Scotland has become a major centre for space activity within Europe. The Scottish space ecosystem includes:

- Satellite manufacturing and engineering
- Emerging space launch facilities and infrastructure
- Space operations and services
- Data, Earth observation, and downstream applications
- Ancillary services and supply chain support
- Universities with strong space research programmes
- Research, innovation, and commercialisation organisations
- Government, regulatory bodies, and policy organisations supporting sector growth.

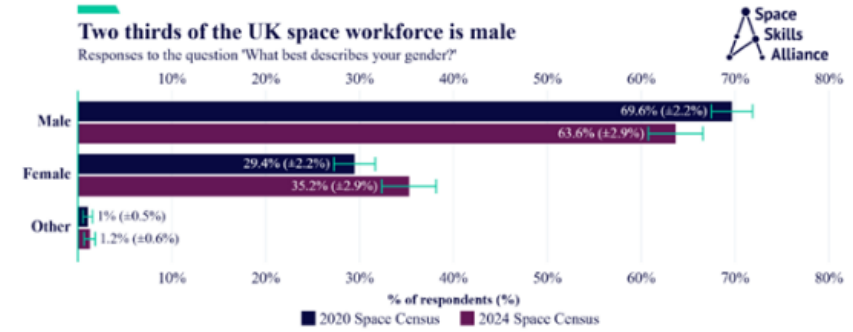
Scotland currently manufactures more small satellites than any other country in Europe and plays a key role in the UK's national space strategy. Scotland's space sector employs approximately 8,500 people across the country, which represents around 13% of all UK space jobs, demonstrating the country's significant contribution to the national space industry.

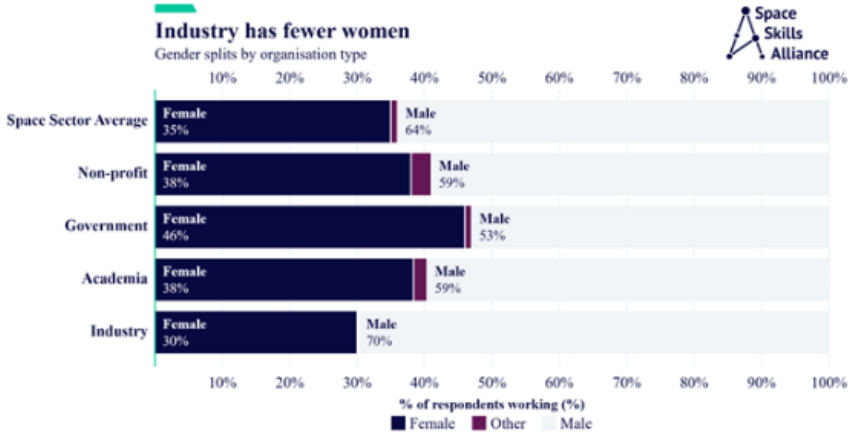
However, continued sector growth will depend on ensuring access to a skilled and diverse workforce capable of supporting future innovation.

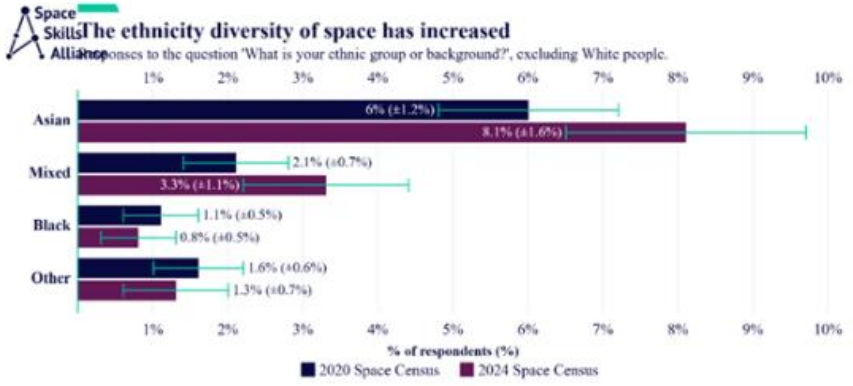
Diversity and representation in the Space workforce

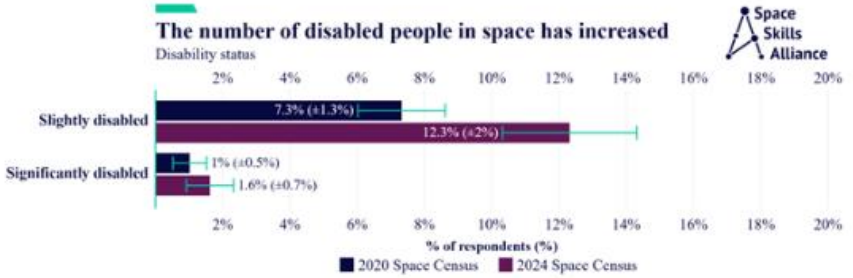
Although the space sector continues to grow, representation gaps remain across several demographic groups. According to the UK Space Census (2024), women account for

approximately 35% of the workforce. Ethnic minorities make up 13% of the workforce, and approximately 14% of employees identify as disabled.









Source: Space Skills Alliance – UK Space Census (2024)

Women are more strongly represented in academia and public sector organisations than in private space companies (30%). Representation of individuals from lower socioeconomic groups also remains limited compared with the wider UK population.

Improving diversity within the space sector is increasingly recognised as important not only for equity but also for innovation, talent development, and organisational performance.

2. Methodology

Focus Groups structure

Participants represented a range of professional roles and levels of seniority, from early-career professionals to senior leadership positions, working in organisations connected to the space sector, including academia, government bodies, and consultancy organisations. The diversity of experience and organisational backgrounds contributed to a broad range of perspectives during the discussions.

Demographic information of the participants was not formally collected. Based on observations by the facilitator and participants, participants appeared to include a vast majority of women alongside a smaller number of men. This observation is indicative rather than definitive.

Participants were divided into two focus groups:
Group A: 6 participants
Group B: 5 participants

Each focus group session lasted approximately one hour. Participants were encouraged to share their perspectives openly. To support confidentiality and encourage candid discussion, all participants signed a consent form agreeing to participate in the discussions and for their data to be collected and published as required, and they have been anonymised in this report.

The discussions followed a semi-structured format guided by a set of indicative questions that cover topics such the value of diversity in the workplace, the skills gap and its connection to EDI, experiences of inclusion or exclusion in the sector, leadership's role. The questions were used to facilitate conversation and encourage reflection, while allowing participants the flexibility to raise additional topics and share their perspectives freely.

Analytical approach

Discussion transcripts and facilitator notes were analysed using thematic analysis, a qualitative method used to identify patterns across participant contributions.

Themes were identified relating to:

- EDI practices
- Awareness of space careers
- Talent pipelines
- Workforce diversity and inclusion
- Organisational culture.

3. Key findings

Analysis of the two focus group discussions identified a set of interconnected themes shaping diversity, recruitment, and workforce development within the UK and Scottish space sector. While participants approached the discussion from different organisational perspectives - including academia, government, consultancy, and sector support organisations - there was strong convergence around a number of structural and cultural issues affecting workforce diversity and talent development.

Importantly, participants emphasised that diversity and inclusion challenges cannot be separated from broader workforce challenges such as skills shortages, talent retention, and awareness of career opportunities. Rather than being a standalone issue, diversity was widely seen as deeply interconnected with how the sector attracts, develops, and retains talent.

The following sections synthesise the insights from both focus groups and illustrate the key themes that emerged across the discussions:

Equality, Diversity and Inclusion (EDI) as a driver of innovation and sector growth

Participants consistently emphasised that equality, diversity, and inclusion (EDI) are not only ethical or social considerations but fundamental drivers of innovation, organisational performance, and long-term sector growth. This was particularly highlighted in the context of the space sector, which is technologically complex and rapidly evolving.

Diverse teams were widely recognised as better equipped to generate new ideas, challenge assumptions, and approach complex problems from multiple perspectives. Participants linked diversity directly to creativity and innovation outcomes:

"Diversity helps with innovation and creativity. Different perspectives lead to different ideas and better solutions."

There was also strong recognition that organisations failing to diversify their workforce risk limiting their access to talent:

"Why would you want to immediately exclude potentially half of your talent pool?"

Participants highlighted that diversity should be understood broadly, extending beyond gender to include socioeconomic background, neurodiversity, cultural diversity, and non-traditional career pathways. In addition, inclusive workplaces were associated with improved employee retention, stronger organisational performance, and greater resilience.

Demographic changes in the future workforce were also noted as a key driver for change. Younger generations entering the labour market are more diverse and globally connected, meaning organisations that do not reflect this diversity may struggle to attract and retain talent.

Integration of EDI into organisational practice and leadership

While participants broadly acknowledged the importance of EDI, they identified a gap between recognition and implementation. EDI initiatives were often described as inconsistently embedded within organisational practices and sometimes treated as secondary priorities.

"EDI is often seen as an add-on rather than something central to how organisations operate."

Participants emphasised that effective inclusion requires more than formal policies. It must be integrated into everyday organisational behaviour, including recruitment, management practices, and decision-making processes.

"Policies are important, but what really matters is how people behave day to day."

Leadership was identified as critical in driving this change. Participants argued that leaders must not only endorse EDI strategies but actively model inclusive behaviours and embed them into organisational culture. However, in some cases, engagement with EDI appeared to be driven more by compliance requirements, such as funding conditions, rather than strategic intent.

Reframing EDI as a driver of innovation, talent attraction, and workforce sustainability was seen as key to increasing leadership engagement.

Skills development, workforce pipeline, and the "Skills Gap"

Skills development emerged as a central theme across discussions. While the space sector frequently reports a shortage of specialised skills, participants questioned whether this represents a true lack of talent or a broader issue related to workforce access and recruitment practices.

"When people talk about a skills shortage, the first question should be: what skills are actually missing?"

Participants highlighted that the concept of a "skills gap" is often insufficiently defined and may overlook the importance of transferable or "meta-skills" such as communication, problem-solving, adaptability, and resilience.

Scottish universities were widely recognised as producing highly skilled graduates in relevant disciplines. However, participants noted challenges in the transition from education into employment, particularly for early-career professionals.

"Universities are producing talented graduates, but the transition into the space sector is not always straightforward."

Limited entry-level opportunities, unclear career pathways, and competition from other sectors were identified as contributing factors. Industries such as finance and technology often offer higher salaries and clearer progression routes, attracting individuals with transferable skills.

Participants suggested that improving inclusion practices and widening recruitment pools could significantly help address workforce challenges.

Talent retention and workforce mobility

Retention of skilled individuals was identified as a key challenge for the Scottish space sector. While Scotland attracts talented students and researchers, many leave the sector or relocate after completing their studies.

"We attract talented people to study here, but many of them leave because opportunities aren't always clear or accessible."

Participants linked this trend to limited early-career opportunities, unclear progression pathways, and competition from higher-paying sectors. This creates a leakage in the talent pipeline, reducing the long-term workforce available to the sector.

Immigration policies were highlighted as an additional structural barrier. International graduates trained in UK institutions often face time constraints when attempting to secure employment.

"By the time international students find a job, visa timelines can become a barrier."

Participants noted that smaller companies may be reluctant to sponsor visas due to cost and administrative complexity. As a result, skilled graduates may leave the UK despite being well-qualified, representing a missed opportunity for the sector.

Awareness and visibility of Space careers

A recurring theme across discussions was the limited awareness of the space sector and its career opportunities among students, educators, and the general public.

"People still think space means rockets or astronauts."

Participants emphasised that this narrow perception obscures the wide range of roles available, including careers in law, business, communications, policy, and social sciences. Lack of awareness was identified as a major barrier to attracting diverse talent:

"Young people often don't know that Scotland even has a space industry."

Participants highlighted the need for stronger outreach, improved communication of career pathways, and engagement with both students and parents to increase visibility of the sector.

Pathways into the Space sector, early and later influences

Participants stressed that career aspirations are often shaped early in life, making education a critical intervention point for improving diversity.

Several barriers within education pathways were identified:

- Low uptake of physics compared to other sciences
- Perceptions of STEM subjects as difficult or inaccessible
- Lack of visible role models
- Limited awareness of career applications.

Participants also emphasised the influence of parents, teachers, and career advisors:

"If parents or teachers question a student's choice, that can make them doubt whether they belong."

There was strong agreement on the need to introduce space-related topics earlier in the curriculum and provide educators with better resources to connect STEM subjects to real-world careers.

Participants highlighted the importance of expanding entry routes beyond traditional university pathways. Apprenticeships, vocational education, and technical training were identified as key opportunities to widen participation. These pathways were seen as particularly valuable for individuals from underrepresented backgrounds and those who prefer practical learning environments.

Suggested approaches included:

- Developing sector-specific apprenticeships
- Strengthening industry–education partnerships
- Promoting non-traditional career routes.

Access to mentoring and professional networks was identified as a key factor influencing career progression.

"Having someone in the sector that you can talk to makes a huge difference."

However, participants noted that networks in specialised industries such as space can be relatively closed, often relying on existing relationships. This can disadvantage individuals without access to established connections.

Mentoring programmes and structured networking opportunities were therefore seen as important tools for supporting inclusion, addressing imposter syndrome, and improving career access.

Workplace culture and structural barriers

Participants described a range of cultural and structural barriers affecting inclusion within the sector. These included unconscious bias, lack of representation, and informal recruitment practices.

"Sometimes it's not direct discrimination, but small comments that make people question whether they belong."

Reliance on existing networks for hiring and speaking opportunities was also identified as reinforcing homogeneity:

"It's often about who people already know."

Participants also highlighted challenges faced by mid-career professionals, particularly women returning to work, identifying this group as an underutilised talent pool.

EDI was strongly linked to wider workplace factors such as wellbeing, flexible working, and organisational culture. Participants argued that inclusion should not be treated as a standalone initiative but integrated into broader workforce strategies. Flexible working arrangements, for example, were seen as critical for supporting retention and enabling participation from individuals with diverse needs and responsibilities.

A holistic approach to workplace culture was viewed as more effective than isolated diversity initiatives.

The opportunity for the Space sector to lead

Despite the challenges identified, participants expressed optimism about the future. The relatively young and evolving nature of the space sector in Scotland was seen as a unique opportunity to embed inclusive practices from the outset.

"The space sector could become the sector people choose not only because of the technology, but because it's inclusive."

Participants suggested that positioning the sector as innovative, accessible, and inclusive could attract talent that might otherwise move into competing industries.

4. Recommendations

The focus group discussions highlighted several structural and cultural factors shaping diversity and workforce participation within the space sector. Addressing these challenges will require coordinated action across industry, academia, policy organisations, and sector networks. The following recommendations reflect the key themes identified through the data analysis:

Embed diversity and inclusion within organisational leadership

Sustained progress on diversity and inclusion requires strong leadership commitment. While many organisations have introduced policies, meaningful change depends on integrating EDI into organisational strategy, decision-making, and culture. Leaders should position diversity and inclusion as a strategic priority linked to innovation, workforce sustainability, and talent attraction, rather than a compliance requirement.

Improve diversity monitoring and evidence-based policy

Robust data is essential for tracking progress and informing policy development. Expanding the collection and analysis of workforce diversity data across the sector will support more effective, evidence-based interventions.

Promote inclusive recruitment practices

Recruitment processes significantly influence workforce diversity. Informal hiring practices and reliance on existing networks can unintentionally restrict access to opportunities.

Organisations should review recruitment procedures to ensure they are transparent, inclusive, and accessible, including:

- Broadening advertising channels
- Reviewing job descriptions for inclusivity
- Implementing structured selection processes to reduce bias.

Adopting inclusive recruitment practices will enable organisations to access a wider talent pool and strengthen innovation capacity.

Strengthen awareness and early engagement in space careers

Limited awareness of the breadth of careers within the space sector remains a significant barrier to participation. Many students, parents, and educators continue to associate space careers primarily with highly specialised scientific roles, which can discourage wider engagement.

To address this, coordinated outreach initiatives should increase visibility of the full range of roles across the space economy, including engineering, data science, law, policy, communications, business development, and environmental science. These efforts should prioritise collaboration between industry, universities, schools, and community organisations, with a particular focus on reaching underrepresented groups and communities with limited exposure to the sector.

Early engagement is critical, as career aspirations are often shaped during primary and secondary education. Providing teachers and career advisors with accessible resources, alongside activities such as school visits and real-world case studies, can help demonstrate the relevance and accessibility of space-related careers while challenging existing stereotypes.

Develop alternative pathways into the sector

Expanding non-traditional entry routes is essential for widening participation and addressing workforce shortages. Apprenticeships, vocational education, and mid-career transitions provide valuable opportunities for individuals who may not follow traditional university pathways.

Strengthening collaboration between industry and technical education providers can support the development of practical, skills-based training programmes aligned with sector needs. Multiple entry pathways will help diversify the workforce and improve access to space careers.

Expand mentoring and professional networks

Mentoring and access to professional networks play a key role in supporting career progression and retention within the space sector. Structured mentoring programmes can provide guidance, build confidence, and improve awareness of career pathways.

There is a need to develop sector-wide mentoring initiatives that connect students, early-career professionals, and individuals transitioning into the sector with experienced professionals. These programmes are particularly important for individuals from underrepresented backgrounds who may lack access to established networks.

Support international talent retention

International graduates represent a valuable source of skilled talent for the space sector, yet visa timelines and sponsorship barriers can limit their ability to remain in the UK workforce. Reviewing immigration pathways and improving support for employers, particularly smaller organisations, could help retain highly skilled individuals trained within UK institutions.

5. Next steps

The insights gathered through the focus group discussions represent an initial exploratory step toward understanding diversity and workforce participation within the Scottish Space sector. Building on these findings, several areas of future work could support the development of more inclusive workforce practices across the sector.

Future work that aligns with the New Voices in Space (NVIS) Working Group's strategy and objectives include:

Expand stakeholder engagement

Future initiatives should involve broader consultation with stakeholders across the Scottish Space ecosystem, including industry companies and organisations, research institutions, and early-career professionals. Expanding the range of perspectives captured through further focus groups, interviews, or workshops would help develop a more comprehensive understanding of workforce challenges and opportunities.

Develop sector-wide evidence and data

Improving the availability of workforce diversity data will be essential for monitoring progress and supporting evidence-based policy development. Future work could include larger-scale surveys or sector-wide data collection initiatives to better understand demographic representation, career pathways, and barriers to participation.

Such evidence could support the development of even more targeted strategies aimed at improving diversity and workforce sustainability within the country's Space sector.

Strengthen collaboration across the sector

Addressing workforce diversity challenges requires collaboration across industry, academia, government, and professional organisations. Partnerships between these stakeholders can support initiatives related to career awareness, education outreach, mentoring programmes, and workforce development.

Cross-sector collaboration may also help align diversity initiatives with broader strategies related to skills development, innovation, and economic growth.

Continue dialogue on inclusive workforce development

Finally, maintaining ongoing dialogue within the sector will be essential for sustaining momentum around diversity and inclusion. Creating opportunities for organisations and

professionals to share experiences, best practices, and lessons learned can support collective progress across the sector.

By continuing to engage stakeholders and build evidence around workforce diversity, the Scottish Space sector can position itself to develop a more inclusive, resilient, and innovative workforce capable of supporting long-term growth.

6. Limitations of the findings and impact statement

The insights presented in this report are based on qualitative data gathered through a small number of focus group discussions and should therefore be interpreted as exploratory rather than statistically representative of the wider space sector. The relatively limited sample size means that the findings reflect the perspectives and experiences of those involved rather than providing a comprehensive view of the sector as a whole.

However, the discussions generated rich qualitative insights and highlighted recurring themes that align with broader research on workforce diversity and inclusion in STEM industries. As such, the findings provide a valuable starting point for further research, stakeholder engagement, and the development of initiatives aimed at improving inclusive recruitment and participation within the space sector.

The relatively young and rapidly evolving nature of the space sector presents an opportunity to embed inclusive workforce practices at an early stage of industry development. By addressing diversity and inclusion proactively, the sector may be able to position itself as an attractive and accessible career destination for a wider range of individuals.

Continued collaboration and engagement will be essential for ensuring that the growth of the UK and Scottish space sectors is supported by a workforce that reflects the diversity of society and is equipped to drive future innovation.

7. Acknowledgements

The working group wishes to formally acknowledge the support of the UK Space Agency for funding this initiative and for its ongoing commitment to advancing diversity and inclusion within the Scottish space sector.

The working group additionally extends its appreciation to all the focus group participants for their valuable contributions to the research. Their insights and perspectives have been central to the development of this report.

The group also recognises the significant contribution of Dr Athina Frantzana, who served as Chair of NVIS from June 2024 to April 2026. Her leadership was instrumental in establishing the strategic direction of the group and in overseeing the design and delivery of this initiative. The working group further acknowledges her role in conducting the data analysis and in developing and presenting the findings.

Finally, the group acknowledges the support provided by Space Scotland's leadership and staff throughout the duration of this initiative.

References

Space Skills Alliance (2024), *UK Space Census*.

UK Space Agency (2023), *Size and Health of the UK Space Industry Report*.

Scottish Government (2023), *Scotland's Space Sector Strategy*.

Østergaard, C. R., Timmermans, B., & Kristinsson, K. (2011), *Does a different view create something new? The effect of employee diversity on innovation*. Research Policy, 40(3), 500–509.