

## ATHENA SWAN BRONZE DEPARTMENT AWARDS

Recognise that in addition to institution-wide policies, the department is working to promote gender equality and to identify and address challenges particular to the department and discipline.

## ATHENA SWAN SILVER DEPARTMENT AWARDS

In addition to the future planning required for Bronze department recognition, Silver department awards recognise that the department has taken action in response to previously identified challenges and can demonstrate the impact of the actions implemented.

Note: Not all institutions use the term 'department'. There are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' can be found in the Athena SWAN awards handbook.

## COMPLETING THE FORM

## DO NOT ATTEMPT TO COMPLETE THIS APPLICATION FORM WITHOUT READING THE ATHENA SWAN AWARDS HANDBOOK.

This form should be used for applications for Bronze and Silver department awards.
You should complete each section of the application applicable to the award level you are applying for.

Additional areas for Silver applications are highlighted throughout
the form: 5.2, 5.4, 5.5 (iv)

If you need to insert a landscape page in your application, please copy and paste the template page at the end of the document, as per the instructions on that page. Please do not insert any section breaks as to do so will disrupt the page numbers.

## WORD COUNT

The overall word limit for applications are shown in the following table.
There are no specific word limits for the employee sections and you may distribute words over each of the sections as appropriate. At the end of every section, please state how many words you have used in that section.

We have provided the following recommendations as a guide.

| Department application | Bronze | Silver |
| :--- | :---: | :---: |
| Word limit | $\mathbf{1 0 , 5 0 0}$ | $\mathbf{1 2 , 0 0 0}$ |
| Recommended word count |  |  |
| 1.Letter of endorsement | 500 | 500 |
| 2.Description of the department | 500 | 500 |
| 3. Self-assessment process | 1,000 | 1,000 |
| 4. Picture of the department | 2,000 | 2,000 |
| 5. Supporting and advancing women's careers | 6,000 | 6,500 |
| 6. Case studies | $\mathrm{n} / \mathrm{a}$ | 1,000 |
| 7. Further information | 500 | 500 |


| Name of institution | University of Sheffield |  |
| :---: | :---: | :---: |
| Department | Nuclear Advanced Manufacturing Research Centre (NAMRC) |  |
| Focus of department | STEMM |  |
| Date of application | April 2016 |  |
| Award Level | Bronze |  |
| Institution Athena SWAN award | Date: 2009 <br> Date: 2012 <br> Date: 2016 | Level: Bronze <br> Level: Bronze <br> Level: Silver |
| Contact for application Must be based in the department | Kathryn Jackson |  |
| Email | kathryn.jackson@namrc.co.uk |  |
| Telephone | 01142224783 |  |
| Departmental website | http://namrc.co.uk/ |  |

## 1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words
An accompanying letter of endorsement from the head of department should be included. If the head of department is soon to be succeeded, or has recently taken up the post, applicants should include an additional short statement from the incoming head.

Note: Please insert the endorsement letter immediately after this cover page.

Ms Sarah Dickinson<br>Senior Policy Advisor (Athena SWAN)<br>Equality Challenge Unit<br>$7^{\text {th }}$ Floor, Queens House<br>55-56 Lincoln's Inn Fields<br>London. WC2A 3LJ

$2^{\text {nd }}$ April 2016
Dear Ms Dickinson

## Re: Application for Athena SWAN Bronze Award

I am writing to you by way of introduction to our application for an Athena SWAN Bronze Award. I have spent my entire career in the Nuclear Industry, both in the UK and overseas. Before joining the University of Sheffield's Nuclear Advanced Manufacturing Research Centre (Nuclear AMRC) as Chief Executive, I led one of Europe's leading nuclear services companies. One of the most compelling observations I have made in the nuclear industry is the lack of female representation in scientific, engineering and manufacturing roles. For the last twenty years I have taken affirmative action to get female workers into disciplines and onto career paths where they will be able to influence the success of the business. One of my key actions has been to appoint suitably qualified and experienced female workers into nuclear plant scientific, engineering and manufacturing roles; a traditional bastion of male dominance. On occasions when this has been done, the effect has been profoundly successful. I have often observed the difficulties of women in nuclear plant roles and I have seen the tremendous benefits that arise from supporting female staff to overcome these difficulties and succeed in these roles.

I believe that the challenge for wider industry is to increase the feedstock of suitably qualified and experienced females and to positively drive education, recruitment and training in scientific, engineering and manufacturing disciplines. I have promoted the recognition of gender balance as an issue for the nuclear industry and I have personally promoted the Nuclear AMRC Athena SWAN application based upon the work already being done for Athena SWAN across the University of Sheffield. I initiated Athena SWAN at Nuclear AMRC and established the structure and resource to pursue a programme of improvement. I strongly supported Dame Athene Donald's visit to Nuclear AMRC and I have committed to the values of Women in

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Nuclear (WIN), as well as being an advocate of the Young Generation Network (YGN) in nuclear. I particularly wanted to draw attention to the need for a STEM "pipeline" into Nuclear AMRC, where I believe that a pro-active approach to gender balance and STEM skills development is crucial to our business. We have a challenge to ensure that nuclear manufacturing, nuclear science and engineering, and nuclear operations has excellence throughout its programmes, and we at Nuclear AMRC are trying to set an example by positively affirming, promoting and implementing knowledge and understanding of gender balance issues. As part of the University of Sheffield network, and of the wider manufacturing community, we seek to influence our business contacts locally, nationally and internationally to make the best possible business decisions in an inclusive and enlightened environment, specifically we seek to directly influence colleagues throughout the global nuclear industry. In this way we can play a part in driving an increase in the opportunity for gender minorities.

Initial feedback from our staff survey on gender balance, shows me that we have some work to do in order to achieve a better balance in our existing business and to promote a focus on STEM competences throughout our business. Through Athena SWAN, I commit to a path of continuous improvement through a comprehensive action plan, which I will personally lead and provide the necessary resource for its success.

## MW Tyman

Mike Tynan
Chief Executive Officer

Word count = 544

## 2. DESCRIPTION OF THE DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words
Please provide a brief description of the department including any relevant contextual information. Present data on the total number of academic staff, professional and support staff and students by gender.

The Nuclear Advanced Manufacturing Research Centre (NAMRC) is part of the AMRC of the University of Sheffield (TUoS) (Figure 1). Its remit is to help UK manufacturers win work in the civil nuclear industry. The centre possesses some of the largest manufacturing research facilities in the world, giving it a unique capability. Based on the Advanced Manufacturing Park in Catcliffe, Rotherham, the NAMRC is geographically separated by six miles from the university campus in a region that has a rich history of coal mining and steel production. The NAMRC is not only part of the renaissance of the UK nuclear industry, but also a regeneration of the local region. In both areas evolution in manufacturing technology is coming hand-in-hand with culture change, and diversity and equality are recognised as key parts of this.


Figure 1 - Advanced Manufacturing Park, Catcliffe, showing organisations in the University of Sheffield AMRC.

Founded in 2009 with the building opening in 2011, the NAMRC has grown rapidly from an initial staff of four to its current number of 108 plus 3 sub-contractors. Staff numbers are now close to capacity, with conversion of sub-contracted job functions into employees a priority. Growth over time is shown in Figure 2. Headcounts presented throughout this
application are from July each year. A small number of sub-contractors (five in 2015, all male) are not counted.


Figure 2 - Headcount by gender, job category and year, 2012 - 2015 .

The NAMRC is comprised of three organisational units under the executive team plus three units reporting to the AMRC (Figure 3). The largest of these is research and development (R\&D). R\&D is split into two groups: Welding and Machining.

Teaching is precluded by the NAMRC's VAT exemption, hence sections relating to students are marked as ' $n / a^{\prime}$. However the NAMRC provides early career pipeline opportunities including internships and apprenticeships, explored in 5.1.1.

Research undertaken is predominantly directed by industry on a contract basis, resulting in reports which are not in the public domain. However, the NAMRC has an imperative to publish journal papers and actively contribute to the academic community for publically funded projects. Hence many of our research staff are employed in post-doctoral positions with job functions largely aligned with conventional academic expectations for the grade.

The NAMRC is unconventional for a university department in that our project teams comprise of a mixture of researchers from academia alongside industrialists, supported by professional, financial and business development teams. Hence the culture of the NAMRC can be considered as a hybrid of academia and industry, and gender disparities in both academic and vocational STEM career pipelines are relevant. The post-May 2015 Athena SWAN expanded charter offers the opportunity to explore gender disparity across all facets of the centre, which is appropriate for the NAMRC's integrated culture. Hence the NAMRC has applied for and been awarded an allowance of an additional 1000 words (Figure 4). This has been used to report data on 'professional services' alongside 'academic and research' staff throughout this application (Table 1), beyond the standard requirements for the Bronze charter mark. This data will provide a benchmark for our future submission to silver award. References to action points are indicated by highlighted initials not included in the word count throughout this document e.g. (AP 1).


Figure 3 - NAMRC Structure of Organisational Units (NAMRC staff data, January 2016).

## Kathryn Jackson

```
From: Athena Swan
Sent: 30 March 2016 12:14
To:
Cc:
Subject:
Kathryn Jackson
Athena Swan
RE: question on Athena SWAN application
Dear Kathryn,
I can confirm that you have been granted an additional 1000 words. You are therefore permitted to use these words anywhere in the submission, but it is still helpful if you can indicate where the words have been used, in the word counts at the end of each section
When you submit your application, can you please include a copy of this email.
With best wishes
James
James Lush
Equality Charters Adviser
Equality Challenge Unit
T: 02072696547
M: 07889757390
E: james.lush@ecu.ac.uk
Follow us on Twitter: @EqualityinHE \| @Athena SWAN
```

Figure 4 - Copy of e-mail granting additional word count.

Table 1 - Word counts used in this application.

| Department application | Recommended <br> word count | Words written |
| :--- | ---: | ---: |
| 1.Letter of endorsement | 500 | 544 |
| 2.Description of the department | 500 | 634 |
| 3. Self-assessment process | 1,000 | 784 |
| 4. Picture of the department | 2,000 | 1,428 |
| 5. Supporting and advancing women's careers | 6,000 | $\mathbf{7 , 6 5 0}$ |
| 6. Case studies | $\mathrm{n} / \mathrm{a}$ | - |
| 7. Further information | 500 | 431 |
| Original Word limit | $\mathbf{1 0 , 5 0 0}$ | - |
| With Additional allocation | $\mathbf{1 1 , 5 0 0}$ | $\mathbf{1 1 , 4 7 1}$ |

Interpretations of 'academic and research' and 'professional services' staff for the NAMRC were agreed by the self-assessment team (SAT), and subsequently approved by the ECU in October $2015^{1}$ (Table 2).

The SAT decided to further sub-divide 'professional services' into 'technical' and 'nontechnical' categories, as this exposes critical differences in gender disparity due to the vocational STEM pipeline which would otherwise be obscured.

Table 2 - NAMRC interpretations of 'academic and research' and 'professional services and support' staff.

| Category | Interpretation | Staff included in this category |
| :---: | :---: | :---: |
| Academic and research | Staff who review technical literature, design research studies (desk-based or experimental based), analyse the results and write up technical results for publication. | Technical leads <br> Project engineers <br> Assistant project engineers <br> NC programmers <br> Heads of research groups |
| Professional services and support | All other staff. | All staff outside the R\&D branch of the organisation, or staff in the R\&D side of the organisation whose primary roles are the following: <br> - Directors <br> - Administrators <br> - Project managers <br> - Machine operators* <br> - Technicians* <br> - Maintenance staff* |

*Categorised as 'professional services - technical'

Figure 5 shows that headcount for 'Professional services - non-technical' is gender balanced. However, both 'Academic and research' and 'Professional services - technical' are strongly male dominated. The reasons for these disparities, and a plan for how to address them, are developed throughout this application.

[^0]

Figure 5 - Headcount by job category and gender, July 2015.
Word Count: 634

## 3. THE SELF-ASSESSMENT PROCESS

## Recommended word count: Bronze: 1000 words | Silver: 1000 words

Describe the self-assessment process. This should include:
(i) a description of the self-assessment team

The SAT was formed early in August 2015, with the first SAT meeting taking place on 2 September 2015. The establishment of the team was overseen by Mike Tynan (CEO) and Dr Kathryn Jackson (Technology Researcher). Most of the team volunteered, having already expressed an interest in the process. A few individuals were encouraged to join to ensure a diverse team and balanced representation of the centre (Table 3). All of the organisational units of the NAMRC (including Heads of Groups) and the executive team are represented. Workload implications were discussed and agreed between line managers and SAT members before the start of the self-assessment process.

Table 3 - Summary of Self-Assessment Team members

| Name of SAT member | Job title (s) during process | \% |  |  |  |  | Description | Sections contributed to |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Andrew Armstrong | Project Manager | M | V |  | R\&D | F | Andrew is in a dual career marriage with a 2 year old son. Left NAMRC in February 2016 (see 4.2.3). | 5.5.1-5.5.7 |
| Ross Barrable | Strategic Relationship Manager | M |  | V | R\&D | F | Ross is South African and immigrated at age 13. He is a proponent of equality. Deputy chair of SAT. | 5.3 |
| Samantha Biddleston | Assistant Welding <br> Technician | F |  | V | R\&D | F | Sam completed an Apprenticeship in 2014. She is an active STEM ambassador and the only female technician in the NAMRC. | 7 |
| Keith Bridger | Head of Welding | M | V |  | R\&D | F | Keith is married with three adopted children: one with special educational needs; one with autism; and one with dyslexia/dyscalculia. | 4 |
| Carl Hitchens | Head of Metrology, promoted to Head of Machining | M | V |  | R\&D | F | Carl is in a dual-career marriage with two children and finishes early Wednesdays for childcare. Joined SAT in January 2015. | 4 |
| Kathryn Jackson | Technology Researcher | F | $\checkmark$ |  | R\&D | F | Kathryn progressed from a state-school to study at Cambridge, is a STEM ambassador and proponent of social mobility. Chair of SAT. | 5.1.1-5.1.4 <br> Consolidation |
| Lauren Marples | Receptionist | F |  | V | Business Support Services | F | Through wide exposure to industry (phone calls, greeting visitors), Lauren has experienced stereotypical perceptions of females in a male-dominated environment. | 2,3 |
| Vishal Patel | Assistant Project Engineer | M | V |  | R\&D | F | Vishal's involved in the Hindu community, supports elderly relatives and is a proponent of cultural diversity. Joined SAT November 2015. | Survey <br> Word count tracking |
| Paula Perks | Commercial Manager | F |  | V | Business support services | F | Paula is married with step-daughters and two young grandchildren. She values being able to work flexibly when needed for childcare. | 5.6.1-5.6.8 |
| Jay Shaw | Head of Machining, transferred to Senior Business Development Manager | M | V |  | R\&D | F | Jay is studying for a degree alongside his job, helps to look after elderly relatives and commutes 80 miles. | - |
| Dave Stoddart | Technology Leader | M | V |  | R\&D | F | Dave is in a dual-career relationship with a 2 year old daughter and 17 year old step daughter. | 5.5.1-5.5.7 |
| Dawn Towler | Projects Accountant | F |  | V | Finance | F | Dawn is a School Governor and regularly looks after her two nephews (aged 6 and 8). | HR Data |
| Mike Tynan | Chief Executive Officer | M |  | V | Executive | F | Mike is married with two children; he is devoted to bringing out the best in people. He enjoys football. | 1 |
| Annette <br> Valentine | Business Development Manager | F |  | V | Business developme nt | P | Annette has a dual-career marriage with one daughter, commutes from York and works parttime. Left NAMRC May 2016 (see 4.2.3). | 5.6.1-5.6.8 |

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The driving forces behind the NAMRC's Athena SWAN application were Kathryn and Mike. Mike requested that Kathryn keeps the Executive Board updated on progress throughout the SAT process to ensure the SAT has their ongoing support. Mike's endorsement of the process was first communicated to all staff at a presentation by Prof Dame Athene Donald DBE FRS hosted by the NAMRC in July 2015 and again in a team brief in October 2015.

Shared learning with colleagues in the wider university was achieved:

- Kathryn and Ross had meetings with Kate Watson (Faculty of Engineering Athena SWAN and Women in Engineering Project Manager) approximately every two months to provide guidance.
- Kathryn and Ross attended Athena SWAN champions meetings in the Faculty of Engineering and a workshop for representatives from across the university.
- Kathryn represents the AMRC on Sheffield University Women's Network (women@TUOS) steering group.
- Dr Rachael Rothman (Department of Chemical and Biological Engineering) gave a presentation to the SAT in April 2016 on her department's successful Silver Award application.

NAMRC staff (SAT members and others) attended events during the application process that are relevant to the ethos of Athena SWAN (Table 4). The attendees would then provide an evaluation of the event to the SAT.

The SAT met monthly between October 2015 and April 2016, following a scheduled plan (Figure 6). Relevant information from the Faculty of Engineering or other university groups was relayed. Decisions on the method of staff consultation, data analysis and presentation methods were made and findings were discussed collectively. All meetings were prepared and chaired by Kathryn. All SAT members were encouraged to contribute to the discussion. Documentation was stored on a secure network drive with restricted access so the team could access anything at any time.

A sub-group of the SAT (Kathryn, Ross, Dawn and Lauren) met on a more regular basis at the start of the self-assessment process with the aim of identifying data that would be used by other members of the SAT.

The majority of the staff consultation was conducted through an online survey. Further information is given in section 7. Survey results have not been disaggregated by job category for the following reasons:

- Headcounts indicate that some staff have miscategorised themselves (AP 88).
- Disaggregation would enable the identification of individuals.
- Aggregation of survey results complements the integrated culture of the NAMRC.

Other information was obtained through one-to-one interviews with specific individuals or small group discussions.

SAT members did not attend all meetings due to workload or caring responsibilities (Table 5), and in some cases Kathryn gave individual follow-up briefings.

Table 4 - List of Events Attended by Staff at NAMRC

| Event | Date | Location | Attendees | Gender |
| :---: | :---: | :---: | :---: | :---: |
| Attendance for Women in Nuclear UK (WiN UK) stakeholder networking event | Tuesday 13th October 2015 | Manchester | Kathryn Jackson Julia Critten Iwona Zweirzak | $\begin{aligned} & \text { F } \\ & \text { F } \\ & \text { F } \end{aligned}$ |
| Volunteers for STEM teacher networking programme | Launch on Tuesday 20th October 2015 | Sheffield | Sam Biddleston Iwona Zweirzak Richard Hitchens Andrew Armstrong Kathryn Jackson | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~F} \\ & \mathrm{M} \\ & \mathrm{M} \\ & \mathrm{~F} \end{aligned}$ |
| Attendance for women at TUOS annual lecture | Wednesday 21st October 2015 | Sheffield | Kathryn Jackson <br> Ross Barrable <br> Jay Shaw <br> Dawn Towler | $\begin{aligned} & \mathrm{F} \\ & \mathrm{M} \\ & \mathrm{M} \\ & \mathrm{~F} \end{aligned}$ |
| He4She 'equality allies' training | Wednesday 4th November 2015 | Sheffield | Mike Tynan | M |
| IOM3 Women in Materials | Friday 6th November 2015 | Sheffield | Kathryn Jackson | F |
| He4She 'equality allies' training | Monday 25th January 2016 | Sheffield | Kathryn Jackson Miguel Garcia | $\begin{aligned} & \hline \mathrm{F} \\ & \mathrm{M} \end{aligned}$ |
| Attendance for WiN annual conference | Tuesday 2nd February 2016 | London | Kathryn Jackson Annette Valentine | $\begin{aligned} & \hline F \\ & F \end{aligned}$ |
| Unconscious bias workshop | Monday 15th February 2016 | Sheffield | Lauren Marples Vishal Patel | $\begin{aligned} & \mathrm{F} \\ & \mathrm{M} \end{aligned}$ |
| Strategies for Professional Resilience for Professional Services staff | Tuesday 16th February 2016 | Sheffield | Dawn Towler | F |
| International Women's Day | Wednesday 9th March 2016 | Sheffield Hallam | Kathryn Jackson Sam Biddleston |  |
| Women in Nuclear Global meeting | Wednesday $16^{\text {th }}$ March | London | Kathryn Jackson | F |
| Inspiring Primary Engineers | Thursday ${ }^{\text {th }}$ May 2016 | Sheffield | Sam Biddleston | F |
| Imposter Syndrome: Strategies to manage and build your confidence, with Rachel Tobbell (planned) | Thursday 19th May 2016 | Sheffield | Julia Critten | F |
| Women in Engineering primary school activity day (planned) | Sunday $19{ }^{\text {th }}$ June 2016 | Sheffield | Rahul Mandal <br> Mark D’Souza Mathew <br> Dawn Towler (TBC) | $\begin{aligned} & \mathrm{M} \\ & \mathrm{M} \\ & \mathrm{~F} \end{aligned}$ |



Figure 6 - Gantt chart for NAMRC SAT process.

Table 5 - Attendance of SAT meetings.

|  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kathryn Jackson | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Ross Barrable | Yes | Yes | Yes | No | Yes | Yes | No | Yes | Yes | No | Yes |
| Jay Shaw | Yes | Yes | No | No | No | No | Yes | No | No | No | No |
| Dave Stoddart | Yes |  | No | Yes | Yes | Yes | No | No | No | No | No |
| Andrew Armstrong | Yes | Yes | No | No | No | No | No | No | No | N/A | N/A |
| Keith Bridger | Yes | No | No | No | No | Yes | Yes | No | No | No | No |
| Samantha Biddleston | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Paula Perks | Yes | Yes | No | Part | Yes | No | No | Yes | Yes | No | Yes |
| Mike Tynan | No | No | No | No | No | No | No | No | No | No | No |
| Lauren Marples | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Dawn Towler | Yes | Yes | Yes | No | Yes | Yes | Yes | No | No | Yes | Yes |
| Annette Valentine | Yes | No | No | No | Yes | Yes | No | Yes | Yes | No | No |
| Vishal Patel | N/A | N/A | N/A | No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Carl Hitchens | N/A | N/A | N/A | N/A | N/A | N/A | No | No | No | Yes | Part |

The SAT will continue to meet on a monthly basis (AP 1) after submitting the application in April 2016 in order to ensure that progress is maintained against the Action Plan. The SAT membership will be reviewed and refreshed as required (AP 2) to ensure that it remains representative of the diverse NAMRC demographic and employees are not overloaded. Leadership will continue to be represented on the SAT (AP 3) and the SAT will report to the Executive Board (AP 4).

Progress against the action points will be reported in the meetings and recorded on a spreadsheet (AP 5). The action plan has already been agreed with all named individuals and the Executive Board. Future workload allocation for individuals on the action plan will be agreed with management (AP 6).

The NAMRC will continue to co-operate with and be represented on women@TUOS (AP 7). Staff will be allowed time to attend relevant events, and information will be circulated (AP 8).

The NAMRC will organise and host three events per year (AP 9). In 2016 this will include:

- The findings of the self-assessment process will be communicated to all NAMRC staff in a presentation by Kathryn on $10^{\text {th }}$ June 2016.
- A presentation at the NAMRC by Prof Dame Sue Ion on $1^{\text {st }}$ July 2016.
- Presentations by mid-career female researchers later in 2016.

Regular updates will be given in team briefs (AP 10). Key information will be displayed in the NAMRC and communicated to all staff by e-mail (AP 11). Relevant information will be publicised externally (AP 12). Information suitable for internal staff will be made accessible electronically (AP 13).

The NAMRC intends to work towards a silver award by 2020 (AP 14).
Word count: 634

## 4. A PICTURE OF THE DEPARTMENT

## Recommended word count: Bronze: 2000 words | Silver: 2000 words

### 4.1. Student data

If courses in the categories below do not exist, please enter $\mathrm{n} / \mathrm{a}$.
(i)Numbers of men and women on access or foundation courses
n/a
(ii) Numbers of undergraduate students by gender

Full- and part-time by programme. Provide data on course applications, offers, and acceptance rates, and degree attainment by gender.
n/a
(iii) Numbers of men and women on postgraduate taught degrees

Full- and part-time. Provide data on course application, offers and acceptance rates and degree completion rates by gender.
n/a
(iv) Numbers of men and women on postgraduate research degrees

Full- and part-time. Provide data on course application, offers, acceptance and degree completion rates by gender.
n/a
(v) Progression pipeline between undergraduate and postgraduate student levels Identify and comment on any issues in the pipeline between undergraduate and postgraduate degrees.
n/a

### 4.2. Academic and research staff data

(i)Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only

Look at the career pipeline and comment on and explain any differences between men and women. Identify any gender issues in the pipeline at particular grades/job type/academic contract type.

Additional word count has been used to present data for all staff categories in this section.
Career pipeline

Career pipelines for the machining and welding research groups have been provided by the Heads of Groups and are slightly different (Figure 7 and Figure 8). Note that the machining group pipeline offers routes for transfer between 'academic and research' and both 'professional services' categories, whereas the pipelines are distinct in welding. Links between grade and qualification/experience will be clarified for welding (AP 15). The pipelines will be communicated to staff (AP 16).


Figure 7 - Career pipeline, Machining Group.


Figure 8 - Career pipeline, Welding Group.

## Job category

Figure 9 shows a gender disparity in overall headcount, with a female to male ratio of approximately $1: 4$ remaining constant over time. This is due to disparity in two job categories:

- 'academic and research', currently 89\% male (Figure 10)
- The disparity is attributable to the academic STEM pipeline because employees generally require a degree in mechanical engineering.
- The ratio is comparable to national figures:
- $10.6 \%$ of applicants to mechanical engineering in the UK are female ${ }^{2}$.
- This ratio has remained approximately constant over time as staff numbers have increased.
- 'professional services technical', currently 97\% male (Figure 12)
- The disparity is attributable to the vocational STEM pipeline because employees are usually recruited from industry.
- This ratio is slightly more disparate than national figures:
- In 2015 6\% of registered engineers and technicians (i.e. CEng, IEng, EngTech) are women ${ }^{3}$

[^1]- In 2013/14, women accounted for only $3.8 \%$ of engineering apprenticeship starts ${ }^{4}$.
- The ratio has become slightly more disparate over time due to no recruitment of females into this category since 2012.

Actions for addressing the above disparities at intake to the pipeline are explored under recruitment (5.1.1) and outreach (5.6.8).

[^2]

| Year | Number <br> male | Number <br> female | Total |
| :---: | :---: | :---: | :---: |
| 2012 | 28 | 7 | 35 |
| 2013 | 46 | 11 | 57 |
| 2014 | 57 | 15 | 72 |
| 2015 | 74 | 20 | 94 |

Figure 9 - Headcount by gender, all staff, 2012-2015.


Figure 10-Headcount by gender, academic and research, 2012-2015.


Figure 11 - Headcount by gender, professional services non-technical staff, 2012-2015.


Figure 12 - Headcount by gender, professional services technical staff, 2012-2015.

## Leadership

Data for leadership indicates a disparity: numbers of female and male line managers are 3 and 17 respectively ( $14 \%$ female) (Figure 3, page 10). This is more disparate than the overall headcount ratio ( $21 \%$ female), and lower than the national average of $34.8 \%$ female managers ${ }^{5}$. It is noted that businesses that include women at executive level vastly outperform companies with an all-male executive ${ }^{6}$. Actions are suggested in promotion (5.1.3) and support for career progression (5.3.3).

## Salary grade

Figure 13 shows that $30 \%$ of females disagree or strongly disagree that men and women are paid an equal amount for doing the same work, in comparison to only $2 \%$ of males. The SAT recognises that line managers may not be aware of the salaries of their direct reports. The wording of the question will be disambiguated (AP 17).This disparity will be raised with the executive board and strategies developed (AP 18).


Figure 13 -Survey results, question 3.

The range and value of salary increases with grade number, therefore any disparity in salary value will be greater than indicated by grade numbers (Figure 14). Figure 15 shows a gender disparity in average salaries not considering job roles (an 'unadjusted gender pay

[^3]gap'). This gap appears to be closing from 2012 to 2015, with the distribution of men's salaries remaining largely unchanged but female salaries moving from a mode of grade 1 (2012-2014) to a more uniform distribution throughout the spectrum (2015). It is also noted that the distribution of female salaries is more polarised than the males': a high number of women's salaries are towards the top and bottom ends of the spectrum, with relatively few in the middle; whilst the opposite is true for the men. The 'gap' in the midrange for women is largely attributable to their absence in 'professional services technical'.


| Grade | Salary value |
| :---: | :---: |
| $\mathrm{NMW}^{7}$ | $£ 12,227.52$ |
| 1 | $£ 14,323-£ 14,953$ |
| 2 | $£ 14,953-£ 16,017$ |
| 3 | $£ 16,017-£ 18,734$ |
| 4 | $£ 18,212-£ 22,249$ |
| 5 | $£ 20,989-£ 26,537$ |
| 6 | $£ 25,023-£ 31,656$ |
| 7 | $£ 29,847-£ 41,255$ |
| 8 | $£ 38,896-£ 52,219$ |
| 9 | $£ 49,230-£ 64,188$ |
| Professorial $^{8}$ | $£ 57,047-£ 112,436$ |

Figure 14 - TUoS salary grade values from 1 August $2015^{9}$.

Disaggregation of grades according to job category gives further insight as follows:

- Figure 16 does not indicate a disparity in salary grade due to gender for 'academic and research' staff. The high and low ends of the salary spectrum are missing for females, attributable to low numbers, but modal values are similar.
- Figure 18 (professional services - non-technical) has only one female so it's not possible to determine trends. However, the Head of Group reports that pay for the job role of this employee is comparable to males.
- Figure 17 indicates a significantly lower salary range for females in 'professional services - non-technical'. Whilst there is no evidence that salaries are not allocated fairly on the basis of job function (key and typical responsibilities for each grade are standardised through TUoS's grade profiles ${ }^{10}$ ), the majority of women in this job category are in relatively low value roles (cleaners, administrators, etc.) whilst senior high-value roles (managers, directors, executives) are predominantly male. Reasons and actions to address this are explored in recruitment (5.1.1), promotion (5.1.3) and career development (5.3).

[^4]a) All staff: female

b) All staff: male


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Female | Female | Female | Female |
| NMW | 0 | 0 | 0 | 0 |
| G1 | 3 | 4 | 5 | 3 |
| G2 | 0 | 0 | 0 | 0 |
| G3 | 1 | 1 | 0 | 3 |
| G4 | 0 | 0 | 1 | 2 |
| G5 | 1 | 0 | 1 | 2 |
| G6 | 0 | 0 | 1 | 2 |
| G7 | 0 | 3 | 3 | 3 |
| G8 | 2 | 3 | 4 | 5 |
| G9 | 0 | 0 | 0 | 0 |
| Professorial | 0 | 0 | 0 | 0 |
| Grand Total | $\mathbf{7}$ | $\mathbf{1 1}$ | $\mathbf{1 5}$ | $\mathbf{2 0}$ |


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Male | Male | Male | Male |
| NMW | 0 | 0 | 0 | 3 |
| G1 | 1 | 1 | 1 | 0 |
| G2 | 0 | 0 | 0 | 0 |
| G3 | 0 | 1 | 7 | 7 |
| G4 | 0 | 0 | 0 | 2 |
| G5 | 1 | 1 | 0 | 1 |
| G6 | 5 | 14 | 18 | 21 |
| G7 | 12 | 13 | 16 | 24 |
| G8 | 6 | 11 | 10 | 11 |
| G9 | 0 | 1 | 0 | 0 |
| Professorial | 3 | 4 | 5 | 5 |
| Grand Total | 28 | 46 | 57 | 74 |

Figure 15 - Salary grade by year and gender, all staff, 2012-2015.
a) Acadmic and reseach: female


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Female | Female | Female | Female |
| NMW | 0 | 0 | 0 | 0 |
| G1 | 0 | 0 | 0 | 0 |
| G2 | 0 | 0 | 0 | 0 |
| G3 | 0 | 0 | 0 | 1 |
| G4 | 0 | 0 | 0 | 0 |
| G5 | 0 | 0 | 0 | 0 |
| G6 | 0 | 0 | 0 | 0 |
| G7 | 0 | 2 | 2 | 2 |
| G8 | 0 | 0 | 1 | 1 |
| G9 | 0 | 0 | 0 | 0 |
| Professorial | 0 | 0 | 0 | 0 |
| Grand Total | 0 | 2 | 3 | 4 |

b) Academic and research: male


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Male | Male | Male | Male |
| NMW | 0 | 0 | 0 | 0 |
| G1 | 0 | 0 | 0 | 0 |
| G2 | 0 | 0 | 0 | 0 |
| G3 | 0 | 0 | 5 | 6 |
| G4 | 0 | 0 | 0 | 0 |
| G5 | 0 | 0 | 0 | 0 |
| G6 | 3 | 5 | 6 | 7 |
| G7 | 5 | 3 | 5 | 10 |
| G8 | 3 | 7 | 7 | 7 |
| G9 | 0 | 1 | 0 | 0 |
| Professorial | 1 | 1 | 1 | 1 |
| Grand Total | 12 | 17 | 24 | 31 |

Figure 16 - Salary grade by year and gender, academic and research, 2012-2015.
a) Professional support non-technical: female


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Female | Female | Female | Female |
| NMW | 0 | 0 | 0 | 0 |
| G1 | 2 | 3 | 4 | 3 |
| G2 | 0 | 0 | 0 | 0 |
| G3 | 1 | 1 | 0 | 2 |
| G4 | 0 | 0 | 1 | 1 |
| G5 | 1 | 0 | 1 | 2 |
| G6 | 0 | 0 | 1 | 2 |
| G7 | 0 | 1 | 1 | 1 |
| G8 | 2 | 3 | 3 | 4 |
| G9 | 0 | 0 | 0 | 0 |
| Professorial | 0 | 0 | 0 | 0 |
| Grand Total | 6 | 8 | 11 | 15 |

b) Professional support non-technical: male


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Male | Male | Male | Male |
| NMW | 0 | 0 | 0 | 0 |
| G1 | 0 | 0 | 0 | 0 |
| G2 | 0 | 0 | 0 | 0 |
| G3 | 0 | 1 | 1 | 0 |
| G4 | 0 | 0 | 0 | 2 |
| G5 | 0 | 0 | 0 | 0 |
| G6 | 0 | 0 | 0 | 1 |
| G7 | 4 | 4 | 3 | 3 |
| G8 | 2 | 2 | 1 | 2 |
| G9 | 0 | 0 | 0 | 0 |
| Professorial | 2 | 3 | 4 | 4 |
| Grand Total | $\mathbf{8}$ | $\mathbf{1 0}$ | $\mathbf{9}$ | $\mathbf{1 2}$ |

Figure 17 - Salary grade by year and gender, professional services nontechnical, 2012-2015.
a) Professional support technical: female

b) Professional support technical: male


Figure 18 - Salary grade by year and gender, professional services technical.

## SILVER APPLICATIONS ONLY

Where relevant, comment on the transition of technical staff to academic roles.
$\mathrm{n} / \mathrm{a}$
(ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender

Comment on the proportions of men and women on these contracts. Comment on what is being done to ensure continuity of employment and to address any other issues, including redeployment schemes.

Historically, most employees across the AMRC have been employed on fixed-term contracts as a result of the university requirement to link all posts to a funding stream. These have varying terms ( 1,2 or 3 years) depending on the duration of the grant and the remaining time before expiration. Fixed-term contracts also apply to apprentices who, by law, are employed on 3 year contracts. Anecdotal evidence suggests that the use of fixedterm contracts results in a low sense of job security, tempered by the historical precedent that contracts have almost always been renewed at the end of their term due to the availability of other funding sources.

In Q1 2012 all existing members of AMRC staff were transferred onto open-ended contracts as a result of a merger with the National Metals Technology Centre (NAMTEC), in which under Transfer of Undertakings (Protection of Employment) (TUPE) terms of employment must be brought in line with the 'best' terms of the merging organisations. Hence the percentage of open-ended contracts in July 2012 was a historical high (Figure 19). Since then recruitment has reverted to the norm of fixed-term contracts. However, there have been exceptions to this norm in that open-ended contracts have been used to attract or retain employees for key roles in the centre.

For all staff, the proportion of staff on fixed-term contracts is gender balanced (Figure 19). The disaggregation of contract types by job function indicates that gender disparities in 'academic research' and 'professional services non-technical' contract types are linked to the rate of recruitment (compare Figure 20 and Figure 21 with Figure 2, page 9).

The Heads of Groups in R\&D have a long term desire that staff in their departments will receive permanent contracts that are decoupled from short-term funding streams, in alignment with industry norms. An internal policy is currently under consideration by senior management (AP 19).



|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Fixed-term | 1 | 3 | 7 | 11 |
| Open-ended | 6 | 8 | 8 | 9 |
| Total | $\mathbf{7}$ | $\mathbf{1 1}$ | $\mathbf{1 5}$ | $\mathbf{2 0}$ |


| Fixed-term | 2 | 5 | 19 | 34 |
| :---: | :---: | :---: | :---: | :---: |
| Open-ended | 26 | 41 | 38 | 40 |
| Total | $\mathbf{2 8}$ | $\mathbf{4 6}$ | $\mathbf{5 7}$ | $\mathbf{7 4}$ |

Figure 19 - Headcount by contract type and year: all job types.


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Fixed-term | 0 | 0 | 0 | 1 |
| Open-ended | 0 | 2 | 3 | 3 |
| Total | 0 | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Fixed-term | 0 | 0 | 8 | 13 |
| Open-ended | 12 | 17 | 16 | 18 |
| Total | $\mathbf{1 2}$ | $\mathbf{1 7}$ | $\mathbf{2 4}$ | $\mathbf{3 1}$ |

Figure 20 - Headcount by contact type and year: academic and research.



|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Fixed-term | 0 | 2 | 6 | 9 |
| Open-ended | 6 | 6 | 5 | 6 |
| Total | $\mathbf{6}$ | $\mathbf{8}$ | $\mathbf{1 1}$ | $\mathbf{1 5}$ |


|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| :---: | :---: | :---: | :---: | :---: |
| Fixed-term | 0 | 1 | 1 | 4 |
| Open-ended | 8 | 9 | 8 | 8 |
| Total | $\mathbf{8}$ | $\mathbf{1 0}$ | $\mathbf{9}$ | $\mathbf{1 2}$ |

Figure 21 - Headcount by contact type: professional services nontechnical.


Figure 22 - Headcount by contact type: professional services technical.

## (iii) Academic leavers by grade and gender and full/part-time status

Comment on the reasons academic staff leave the department, any differences by gender and the mechanisms for collecting this data.

Reasons for leaving are identified through exit interviews. These are held by line managers with individual leavers and intentionally not formalised because line managers recognise that leavers may clam up. Heads of Groups in R\&D are usually aware of reasons for leaving before the exit interview through ongoing people-management.

Data for leavers (overleaf) shows the following:

- The staff turnover rate (average 5 per year) is better than the national average of 5$10 \%{ }^{11}$ considering that most leavers are APEs returning to their studies.
- The gender ratio of leavers is comparable to the overall headcount ratio (approximately 1 female to 4 male) (Figure 23).
- The ratio of full-time to part-time leavers is also representative of the headcount ratio (Figure 24): the number of part-time staff has always been very low (discussed in 5.5.6).
- The highest proportion of leavers is from 'professional services - non-technical' (Figure 25), which is significantly higher than the headcount ratio for this category (see Figure 2, page 9).

Heads of Groups report the following common reasons for leaving:

- Academic and research:
- Majority of leavers are Assistant Project Engineers (APEs) on fixed-term contracts.
- 'Professional services - technical'
- The transition from a delivery-driven industrial production environment with short lead times to research with an emphasis on analysis has been a contributing factor for several leavers.
- 'Professional services - non-technical'
- There are three common reasons for leaving:
- Lifestyle choice - working closer to home
- Retirement
- Career progression

Notably, two members of the SAT left during the process: Andrew Armstrong and Annette Valentine. Andrew moved on for career development. Annette secured a job which is "much better for the family.....home based and travelling in my home region only".

Group heads have suggested that reasons for leaving could be succinctly recorded so that common issues can be identified and addressed (AP 21).

[^5]

Figure 23 - Leavers by gender and year.


Figure 24 - Leavers by full-time/part time status.


Figure 25 - Leavers by job category.
Word count $=1428$

## 5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

Recommended word count: Bronze: 6000 words | Silver: 6500 words

Additional word count has been used to present data on all staff categories throughout this section.
5.1. Key career transition points: academic staff
(i) Recruitment

Break down data by gender and grade for applications to academic posts including shortlisted candidates, offer and acceptance rates. Comment on how the department's recruitment processes ensure that women (and men where there is an underrepresentation in numbers) are encouraged to apply.

The NAMRC currently does not have a standard approach to positive action to attract or retain women in the recruitment process, although specific examples of good practice have been identified. These will be developed and communicated in a toolkit, will include a review of the Faculty of Engineering's 'Toolkit for Recruitment of Female Academics' for further ideas of good practice (AP 22).

Applications by job category

The numbers of applications (longlist), interviews (shortlist) and appointments for males, females and gender not declared (gender ND) are disaggregated by job category in Figure 26 and Figure 27. Pre-2014 data cannot be presented due to its storage method. This will be discussed with HR to ensure required data can be accessed in future (AP 23). Observations are summarised in Table 6, Table 7 and Table 8.

Table 6 - Observations on academic and research recruitment pipeline.

| Job category | Figure | Are applicants <br> gender balanced? | Is the gender ratio maintained through the selection <br> process? |
| :--- | :--- | :--- | :--- |
| Academic | Figure <br> 26 a | No - entirely male | Can't determine - one data point only |
| Research | Figure <br> 26 b | No - mostly male | Yes |

Table 7 - Observations on professional services - technical recruitment pipeline.

| Job category | Figure | Are applicants <br> gender balanced? | Is the gender ratio maintained through the selection <br> process? |
| :--- | :--- | :--- | :--- |
| Professional - <br> technical | Figure <br> $26 c$ | No - entirely male | Yes |

Table 8 - Observations on professional services - non-technical recruitment pipeline.

| Job category | Figure | Are applicants <br> gender balanced? | Is the gender ratio maintained through the selection <br> process? |
| :--- | :--- | :--- | :--- |
| Professional - <br> management | Figure <br> $27 a$ | No-mostly male | Yes |
| Professional - <br> clerical | Figure <br> $27 b$ | No-mostly female | No - proportion of females increases through the <br> recruitment process |
| Professional - <br> facilities | Figure <br> 27c | Yes | No - proportion of females increases through the <br> recruitment process |

The underrepresentation of female applicants for academic, research, technical and management positions can be correlated to the academic and vocational STEM pipelines. This indicates the need for positive action to attract women to apply for these positions (AP 24).

Notably, there is no reduction of females through the recruitment process for positions where a minority of women apply, but there is a reduction of males through the process where applicants are mostly female or gender balanced. The current headcount ratios for these job categories at the NAMRC are female dominated. This indicates a need for positive action in retaining men through the recruitment process for these positions (AP 25).

A suggestion for positive action is to offer informal tours of the NAMRC with a female role model for shortlisted female applicants, with the following rationales (AP 26):

- A female applicant for a Post-Doctoral Research Associate position in 2015 would only submit her application after she had visited the NAMRC.
- Two shortlisted females for APEs withdrew from the application process in March 2016 with no reasons given, indicating a need to proactively retain female applicants before the interview stage.
a)
a) Academic


|  | Male | Female | Gender <br> ND | Total |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 1 | 0 | 0 | 1 |
| Interviewed | 1 | 0 | 0 | 1 |
| Appointed | 1 | 0 | 0 | 1 |

b) Research

c) Professional - technical


|  | Male | Female | Gender <br> ND | Total |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 175 | 33 | 12 | 220 |
| Interviewed | 37 | 12 | 3 | 52 |
| Appointed | 8 | 1 | 1 | 10 |


|  | Male | Female | Gender <br> ND | Total |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 166 | 8 | 8 | 182 |
| Interviewed | 68 | 2 | 1 | 71 |
| Appointed | 29 | 1 | 0 | 30 |

Figure 26 - Recruitment pipeline by gender and job type for academic and research and professional services (technical) positions, 2014 2015.
a) Professional - management positions

b) Professional - clerical

c) Professional-facilities


|  | Male | Female | Gender <br> ND | Total |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 22 | 95 | 6 | 123 |
| Interviewed | 1 | 10 | 0 | 11 |
| Appointed | 0 | 2 | 0 | 2 |


|  | Male | Female | Gender <br> ND | Total |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 29 | 36 | 1 | 66 |
| Interviewed | 3 | 14 | 0 | 17 |
| Appointed | 0 | 5 | 0 | 5 |

Figure 27 - Recruitment pipeline by gender and job type for professional services (non-technical) positions, 2014-2015.

Applications by grade
Numbers of applications, interviews and appointments by grade (all job categories) are shown in Figure 28, Figure 29 and Figure 30. Table 9 summarises observations. Disparities in ratios of applicants and retention through recruitment will be addressed by positive action (AP 24, AP 25).

Table 9 - Observations on recruitment pipeline by grade.

| Grade | Figure | Are applicants gender <br> balanced? | Is the gender ratio maintained through <br> the selection process? |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | Figure 28a | No - mostly male | Yes |
| $\mathbf{2}$ | Figure 28b | No - mostly female | No - proportion of females increases |
| $\mathbf{3}$ | Figure 28c | No - mostly male | No - proportion of males increases |
| $\mathbf{4}$ | N/A | No applicants | No applicants |
| $\mathbf{5}$ | Figure 28d | Yes | Yes |
| $\mathbf{6}$ | Figure 29a | No - mostly male | No - proportion of males increases |
| $\mathbf{7}$ | Figure 29b | No - mostly male | Yes |
| $\mathbf{8}$ | Figure 29c | No - mostly male | No - proportion of females increases |
| $\mathbf{9}$ | Figure 29d | Entirely male | No data |
| Professorial | Figure 30 | No - mostly male | Yes |

a) Grade 1

b) Grade 2


| Grade 2 |  | $\frac{0}{\frac{0}{0}}$ |  | - |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 23 | 17 | 1 | 41 |
| Interviewed | 7 | 2 | 0 | 9 |
| Appointed | 3 | 0 | 0 | 3 |

c) Grade 3


| Grade 3 |  | $\frac{0}{\frac{0}{0}}$ |  | - |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 49 | 85 | 6 | 140 |
| Interviewed | 12 | 33 | 0 | 45 |
| Appointed | 3 | 14 | 0 | 17 |

d) Grade 5


| Grade 5 | $\stackrel{\stackrel{0}{0}}{\stackrel{\text { ¢ }}{¢}}$ | $\frac{0}{0}$ |  | ¢ |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 2 | 3 | 1 | 6 |
| Interviewed | 2 | 1 | 0 | 3 |
| Appointed | 1 | 1 | 0 | 2 |

Figure 28 - Recruitment pipeline by grade and gender - Grades 1 to 5 .
a) Grade 6


| Grade 6 |  | $\frac{0}{ \pm}$ |  | - |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 76 | 119 | 9 | 204 |
| Interviewed | 8 | 40 | 1 | 49 |
| Appointed | 0 | 10 | 0 | 10 |

b) Grade 7


| Grade 7 | $\stackrel{0}{\mathbb{O}}$ $\stackrel{\text { ¢ }}{\text { ¢ }}$ L | $\frac{0}{\frac{0}{0}}$ | $\begin{aligned} & \text { Q } \\ & \stackrel{亠}{0} \\ & \stackrel{\rightharpoonup}{0} \\ & \dot{0} \end{aligned}$ | $\stackrel{\overline{10}}{\square}$ |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 17 | 167 | 17 | 201 |
| Interviewed | 5 | 40 | 2 | 47 |
| Appointed | 0 | 9 | 1 | 10 |

c) Grade 8


| Grade 8 | $\stackrel{\text { ® }}{\stackrel{0}{\widetilde{\sigma}}}$ | $\frac{0}{0}$ |  | 픈 |
| :---: | :---: | :---: | :---: | :---: |
| Applied | 6 | 49 | 6 | 61 |
| Interviewed | 3 | 11 | 1 | 15 |
| Appointed | 2 | 2 | 0 | 4 |

d) Grade 9


Figure 29 - Recruitment pipeline by grade and gender - Grades 6 to 9.


Figure 30 - Recruitment pipeline by grade and gender - Professorial grade.

Job specification and advertising
AMRC line managers write the job description ('About the Job', ATJ). Training on ATJs is not compulsory but recommended for all line managers. An understanding of 'gender coded language' in ATJs has been identified as an opportunity to make job adverts more appealing to applicants of underrepresented genders (AP 27) ${ }^{12}$.

Jobs at the NAMRC are always advertised through TUoS jobs website, but usually by no other means. The use of job advertising through targeted media has been identified as a way of raising awareness of opportunities amongst underrepresented genders ${ }^{13}$ (AP 28).

Shortlisting and interviewing
Figure 31 shows the stages for shortlisting and selection. Interviews are carried out by a panel of at least two including the line manager for the advertised position. At least one interviewer is required to have completed TUoS interview training.


Figure 31 - Process flow for shortlisting and selecting candidates.

Participation of at least one woman on each interview panel will be implemented with the following rationales (AP 29):

- Being an interviewer gives women the opportunity to evaluate their own skills and understand the promotions process ${ }^{14}$.
- Similar has been adopted by other universities such as UCL ${ }^{15}$ and is standard practice for the Faculty of Engineering at TUoS.

Unconscious bias training, planned for all staff, should also support recruitment (AP 68).
Opportunities are apparent for improving the number of eligible female applicants to technical positions by exploring transferrable skills from alternative technical sectors (AP 30). Recent examples are:

- A female Post-Doctoral Research Associate was recruited in 2015 with an academic background in biomedical engineering to work on a photogrammetry (metrology) project. Her background experience is on small-scale heart stents, but the same principles are transferrable to large-scale nuclear components.

[^6]- A male maths undergraduate successfully completed a summer internship in 2015 (42\% of UK maths first degree graduates are female ${ }^{16}$ ).
- APEs have been employed from Aerospace and Control and Systems engineering. Although these disciplines are male-dominated, it widens the pool of applicants.


## Positive action

At least three examples of 'positive action' in shortlisting and interviewing candidates with protected characteristics (race, disability and gender) were identified through discussions with line managers. This included extending the shortlist to include candidates who showed potential but were not 'the best on paper'. Line managers also reported conscientiously avoiding bias in interviews: they chose to look beyond characteristics that could be perceived as disadvantageous but were not relevant for fulfilling the role. Offers have always been made on the basis of the candidate being the best for the job. As a result of this positive action, job offers have sometimes been made to candidates who otherwise may not have been shortlisted on the basis of their written application. The survey highlighted that most staff agree that the NAMRC takes positive action and have a good understanding of why it is required (Figure 32 and Figure 33). However, the NAMRC will clarify and communicate its policy with the aim of standardising across the centre (AP 22).
11) The NAMRC takes positive action to encourage women to apply for posts in areas where they are under-represented.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 1 | 1 |
| Disagree | 1 | 2 |
| Agree | 8 | 21 |
| Strongly Agree | 3 | 15 |
| Don't know | 4 | 33 |
| Total |  |  |

Figure 32 - Survey results, question 11.

[^7]

Figure 33 - Survey results, question 28.

Describe the induction and support provided to all new academic staff at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

The NAMRC has a comprehensive and well-defined induction procedure applicable to everyone who enters the building. Requirements for contracted staff are summarised in Table 10. The primary purpose for this is safety which is an integral part of the NAMRC culture. Completion is monitored and evidenced by the signed checklist which is returned to the internal Quality team.

Table 10 - Summary of NAMRC induction requirements for contracted employees.

| Requirement | Details |
| :--- | :--- |
| New starter induction | complete in first week, return signed checklist to <br> Quality |
| General H\&S induction | online |
| Fire (yearly renewal) | online |
| Out of hours | 3 yearly renewal |
| Display screen equipment assessment | Only if equipment is provided by the NAMRC |
| Environmental management system | Higher levels of environmental risk to be addressed as <br> appropriate |

Feedback received informally or anecdotally over the past year from new recruits on the induction process indicated it was inadequate, with staff feeling unguided or insufficiently advised in their first few weeks. As a result the induction process was improved in late 2015.

There are opportunities to improve the induction process by the inclusion of training on equality and diversity (already freely available through TUoS website) (AP 31) and signposts to policies on equality, diversity and bullying (AP 32). These will set out the NAMRC's cultural expectations from the offset.
(iii) Promotion

Provide data on staff applying for promotion and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

There are four routes for career progression at NAMRC:

- Promotion: Achieved by recruitment to a position at a higher grade, regrading or career progression.
- Special responsibility allowance (SRA): Circumstances arise when it is appropriate to reward an individual for undertaking the responsibilities of a higher graded job for a period of time.
- Direct appointment: By selection of a candidate for a specific role, e.g. named person on a funding grant.
- Accelerated increment (since 2014): This allows for quicker progression through the normal pay range of a grade.

In all cases, requests are submitted by line managers to the Promotions Panel usually after the annual appraisal, based on employees demonstrating the capabilities to perform the requirements for the new role. Line managers submit an expanded job description which is benchmarked against TUoS's grade structure by HR to ensure that the new salary is fair. Employees are developed towards promotion through the appraisal system, i.e. objectives are set each year to develop towards a higher grade. The Promotions Panel meets annually and consists of directors from across the AMRC.

For men and women, survey results relating to understanding of promotion (Figure 34 and Figure 35 ) were the least satisfactory of all the survey questions, indicating that action in this area should be high priority (AP 33). This will include how career breaks and the fullrange of work-related activities (administration, outreach, etc.) are considered.


Figure 34 - Survey results, question 7.


Figure 35 - Survey results, question 8.

Over the last three years the proportion of females promoted ( $7 \%$, Figure 38 ) is lower than the historic headcount ratio of $20 \%$ (Figure 9, page 25). This concurs with the disparity in survey results (Figure 36 and Figure 37) and indicates a need to develop a strategy for improving the proportion of women who are put forwards for promotion (AP 34), and to implement this with management support (AP 35). Mentoring (5.3.3) will also support this.

Note that females perform better than males for SRAs (Figure 41) and direct appointments (Figure 42). The number of employees put forwards for promotion is equal to the number receiving promotion, indicating a high state of readiness on application.


Figure 36 - Survey results, question 4.

5b) The NAMRC values and rewards the full range of skills and experience including pastoral work, outreach work, teaching and administration in considering promotion.


Figure 37 - Survey results, question 5b.


| Year | Female | Male |
| :--- | :---: | :---: |
| July 2013 | 0 | 3 |
| December 2013 | 0 | 0 |
| December 2014 | 1 | 6 |
| July 2015 | 0 | 3 |
| December 2015 | 0 | 2 |
| March 2016 | 0 | 0 |
| Total |  |  |

Figure 38 - NAMRC promotions: all staff by year.


| Grade | Female | Male |
| :---: | :---: | :---: |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 1 | 0 |
| 4 | 0 | 1 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 9 |
| 8 | 0 | 4 |
| 9 | 0 | 0 |
| Total | $\mathbf{1}$ | $\mathbf{1 4}$ |

Figure 39 - NAMRC promotions: 2012 - 2015, all staff by grade.


|  | Female | Male |
| :--- | :---: | :---: |
| Academic and <br> Research | 0 | 6 |
| Professional <br> Services and <br> Support - Technical | 0 | 5 |
| Professional <br> Services and <br> Support - Non <br> Technical | 1 | 3 |
| Total |  |  |

Figure 40 - NAMRC promotions: 2012-2015 by gender and job category.


| Year | Female | Male |
| :--- | :---: | :---: |
| July 2013 | 0 | 0 |
| December 2013 | 0 | 0 |
| December 2014 | 0 | 0 |
| July 2015 | 0 | 0 |
| December 2015 | 3 | 0 |
| March 2016 | 0 | 0 |
| Total |  |  |

Figure 41 - NAMRC special responsibility allowances: all staff by year.


| Year | Female | Male |
| :--- | :---: | :---: |
| July 2013 | 0 | 0 |
| December 2013 | 0 | 0 |
| December 2014 | 0 | 0 |
| July 2015 | 0 | 0 |
| December 2015 | 1 | 0 |
| March 2016 | 0 | 0 |
| Total |  | $\mathbf{1}$ |

Figure 42 - NAMRC direct appointments: all staff by year.

## (iv) Department submissions to the Research Excellence Framework (REF)

Provide data on the staff, by gender, submitted to REF versus those that were eligible. Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.

The NAMRC is not assessed under the REF because the industrially-based nature of its sponsorship often precludes academic publication. However, the NAMRC does have an imperative to generate journal and conference papers for its publically funded projects, and has recently instigated a register to monitor output. The female to male ratio of conference and journal publications with a NAMRC first author (1:14) is slightly more disparate than the headcount ratio in R\&D (approximately 1:10) (Figure 43). Data will be reported to the SAT annually (AP 36).

It is noted that authorship of NAMRC customer reports is an important mechanism of gaining recognition in support of career progression. Currently these are not counted alongside journal and conference papers. A register of customer reports will be created to monitor gender of authors, whilst respecting commercial sensitivity (AP 37).
a) Journal papers

b) Conference papers


Figure 43 - NAMRC publication count by gender.

## SILVER APPLICATIONS ONLY

5.2. Key career transition points: professional and support staff
(i) Induction

Describe the induction and support provided to all new professional and support staff, at all levels. Comment on the uptake of this and how its effectiveness is reviewed.
(ii) Promotion

Provide data on staff applying for promotion, and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.
n/a

### 5.3. Career development: academic staff

(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

Continuous development of staff through provision of training is a core-strength of the NAMRC: many employees have anecdotally reported that the quantity of training they have received at the NAMRC is the best in their careers. This largely concurs with the survey (Figure 44), but with a notable gender disparity between 'agree' and 'strongly agree' and a wide spread of opinions within each gender. Figure 36 (page 50) also shows that women are far less confident that active support to take up training opportunities is based on their individual merits irrespective of their gender. This concurs with data on attendance of training courses (Figure 45): the total proportion of female attendees (15\%) is slightly more disparate than the staff ratio (21\%). This will be addressed within the annual appraisal (AP 43) and through improving visibility of available training courses (AP 39, AP 40).


Figure 44 - Survey results, question 9


Figure 45 - NAMRC headcount of training course attendance by gender, January 2015 - April 2016.

Training needs are identified by individuals, line mangers or senior management, for groups or individuals. This is reviewed as standard as part of the annual appraisal, but either party can request training at any time. Approval will usually be granted, subject to relevance of the course and availability of funds. Feedback on training is collected on forms filled in by the individuals attending the course and monitored by the AMRC Training CoOrdinator.

However, the opportunities that are available (courses and suppliers) are not visible to staff (there is no central repository for information) and processes for organising training are not explicit, meaning that a pro-active approach is required. This could account for the variation of perceptions of the availability of career development opportunities within and between genders.

Actions to address this will be:

- Develop a policy for NAMRC support for career development (AP 38).
- Explain the procedures for requesting training in the induction (AP 39).
- Create a central repository for information on training courses where employees can register interest (AP 40).

There is a low level of awareness and a gender disparity around development opportunities offered to staff who work part-time or flexibly (Figure 46). This could be due to the low number of part-time staff (only one). Action will be taken to improve visibility of training opportunities available to staff who work part-time or flexibly (AP 41).
12) Staff who work part-time or flexibly in the NAMRC are offered the same career development opportunities as those who work full-time


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 1 | 0 |
| Disagree | 2 | 2 |
| Agree | 5 | 18 |
| Strongly Agree | 0 | 10 |
| Don't know | 9 | 42 |
| Total | $\mathbf{1 7}$ | $\mathbf{7 2}$ |

Figure 46 - Survey results, question 12.

## Appraisal/development review

Describe current appraisal/development review schemes for staff at all levels, including postdoctoral researchers and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

The annual appraisal is carried out using a standard format that this administered centrally by TUoS. The appraisal gives staff the opportunity to meet on a one-to-one basis with their line managers, reflect on progress over the previous year against their objectives for their role and set targets for the upcoming year. All line managers coordinating the appraisals are required to undertake training. NAMRC runs training sessions every year to update line managers of any changes to the appraisal process.

All staff participate in the annual appraisal with $100 \%$ completion rate every year for the last three years. The NAMRC also applies mid-year appraisals. However, anecdotal evidence suggests the need to standardise application of the half-yearly appraisal (AP 42).

Figure 47 and Figure 48 show a gender disparity in opinions of the helpfulness of the annual appraisal and career development opportunities, with a notably more negative response from females. This indicates action is needed to ensure females receive a helpful annual appraisal and that career development opportunities are considered (AP 43).


Figure 47 - Survey results, question $14 d$.

| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 0 | 2 |
| Disagree | 6 | 4 |
| Agree | 8 | 38 |
| Strongly Agree | 2 | 19 |
| Don't know | 1 | 9 |
| Total | $\mathbf{1 7}$ | $\mathbf{7 2}$ |

15) These opportunities and annual appraisals provided by the NAMRC are useful for my career development.


Figure 48 - Survey results, question 15.

| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 0 | 0 |
| Disagree | 4 | 7 |
| Agree | 9 | 36 |
| Strongly Agree | 2 | 20 |
| Don't know | $\mathbf{2}$ | 9 |
| Total | $\mathbf{1 7}$ | $\mathbf{7 2}$ |

(iii) Support given to academic staff for career progression

Comment and reflect on support given to academic staff, especially postdoctoral researchers, to assist in their career progression.

The survey investigated three areas where the NAMRC offers support to academic staff for career progression:

- Annual appraisal
- Networking opportunities
- Mentoring opportunities

Figure 49 shows strong agreement between men and women regarding which of these three areas are most useful for career progression, with the appraisal being identified as the most useful. Additionally there is strong agreement regarding how these opportunities are useful for different elements of professional development (Figure 50).


Figure 49 - Survey results, question 16.

| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Mentoring <br> opportunities (as <br> mentor or mentee) | 2 | 8 |
| Networking <br> opportunities | 6 | 28 |
| Annual appraisal | 9 | 36 |
| Total |  | $\mathbf{1 7}$ |


| 17) These opportunities are helpful for my career <br> Other development in terms of: <br> - Improving self-efficacy <br> - Improving interpersonal skills <br> - Increasing visibility at work <br> $\square$ Providing professional socialisation and networking opportunities <br> ■ Providing information and resource <br> - Improving functional/technical knowledge |  |  |
| :---: | :---: | :---: |
| 100\% | $\begin{gathered} 0 \% \\ 10 \% \end{gathered}$ | $\begin{aligned} & 0 \% \\ & 11 \% \end{aligned}$ |
|  | 13\% | 14\% |
|  | 15\% | 10\% |
| 50\% | 13\% | 13\% |
|  | 15\% | 14\% |
| 0\% | 16\% | 21\% |
|  | 18\% | 17\% |
|  | Female count Male cou |  |


| Options (multiple options <br> can be selected) | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Improving occupational <br> experience | 11 | 45 |
| Improving functional/technical <br> knowledge | 10 | 54 |
| Providing information and <br> resource | 9 | 36 |
| Providing professional <br> socialisation and networking <br> opportunities | 8 | 34 |
| Increasing visibility at work | 9 | 27 |
| Improving interpersonal skills | 8 | 35 |
| Improving self-efficacy | 6 | 28 |
| Other | 0 | 0 |
| Total | $\mathbf{6 1}$ | $\mathbf{2 5 9}$ |

Figure 50 - Survey results, question 17.

## Professional registration

As shown in Figure 7, page 22, professional registration is a requirement progression along the career pipeline for 'academic and research' and 'professional services - technical' roles. It is similarly recognised in 'professional services - non-technical' roles such as finance and project management.

For R\&D staff, the NAMRC pays for annual subscriptions to professional institutions relevant to employees' specific career requirements and allows employees to be interviewed for membership during work time.

The most relevant institution for most 'academic and research' roles is the Institution of Mechanical Engineers (IMechE). The NAMRC participates in the IMechE Monitored Professional Development Scheme (MPDS) which helps to progress employees towards Chartership. The scheme is coordinated for the AMRC by a female Chartered Engineer. However, uptake and awareness are low.

The Machining Group has independently engaged directly with the IMechE and support has been provided for several employees to achieve Fellowship, Chartered Engineer or Engineering Technician status over the last two years.

Some 'Professional services non-technical' staff are also registered with other relevant Chartership programmes such as Associate Chartered Accountants of the Institute of Chartered Accountants of England and Wales. However, in some instances membership is paid by the employees and support to apply is not provided to the same level as for R\&D staff.

Most staff (male and female) are not registered with any professional institution (Figure 51), indicating an opportunity for improvement. Encouragingly, the group with the highest proportion of registrations is female 'academic and research' staff.

The NAMRC's current good practice in support for professional registration will be standardised and communicated across the centre with the aim of improving registration, where relevant, for men and women (AP 44).


| Count | Female | Male |
| :---: | :---: | :---: |
| Fellow Member | 0 | 1 |
| Chartered Member | 2 | 9 |
| Incorporated <br> Member | 1 | 0 |
| Associate Member | 0 | 2 |
| Technician | 0 | 0 |
| Not registered | 1 | 19 |
| Total | $\mathbf{4}$ | $\mathbf{3 1}$ |




| Count | Female | Male |
| :---: | :---: | :---: |
| Fellow Member | 0 | 0 |
| Chartered Member | 0 | 1 |
| Incorporated <br> Member | 0 | 0 |
| Associate Member | 0 | 1 |
| Technician | 0 | 6 |
| Not registered | 1 | 23 |
| Total | $\mathbf{1}$ | $\mathbf{3 1}$ |


| Count | Female | Male |
| :---: | :---: | :---: |
| Fellow Member | 0 | 0 |
| Chartered Member | 1 | 1 |
| Incorporated <br> Member | 0 | 0 |
| Associate Member | 0 | 0 |
| Technician | 0 | 0 |
| Not registered | 14 | 11 |
| Total | $\mathbf{1 5}$ | $\mathbf{1 2}$ |

Figure 51 - Professional registration of staff, March 2016

## Mentoring

The NAMRC currently does not facilitate a mentoring scheme at an organisational level, which is reflected in the survey results (Figure 52 and Figure 53). The SAT recognises the benefits to all staff, especially females ${ }^{17}$, so a scheme will be facilitated (AP 45). Schemes already available through a variety of suppliers will be reviewed as a starting point.
14a) The NAMRC provides me with useful mentoring opportunities as a mentor.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 1 | 1 |
| Disagree | 2 | 11 |
| Agree | 6 | 22 |
| Strongly Agree | 2 | 7 |
| Don't know | 6 | 31 |
| Total |  |  |

Figure 52 - Survey results, question 14 a .


Figure 53 - Survey results, question 14b.

17 Sameer B. Srivastava, 2015, Network Intervention: Assessing the Effects of Formal Mentoring on Workplace Networks. Social Sciences (94) Issue 1.

## (iv) Support given to students (at any level) for academic career progression

Comment and reflect on support given to students at any level to enable them to make informed decisions about their career (including the transition to a sustainable academic career).

The NAMRC has no students. However, it offers four types of early career introductory opportunities: work experience; summer internships; apprenticeships; and Assistant Project Engineers (APEs), as described in Table 11. Work experience is discussed in outreach (5.6.8).

## Apprenticeships

The majority of the NAMRC's apprentices are male (Figure 54). Examples of improvements in early career pipeline opportunities that can be achieved through positive action are ${ }^{18}$ :

- Sellafield where $25 \%$ training are female.
- The National Nuclear Industry where $33 \%$ of the intake of apprentices are female.
- EDF energy where girls make $20 \%$ of the current intake.

Sellafield's success has been assisted by female employees visiting their children's schools over a period of many years, and hence the value of outreach is recognised (explored in 5.6.8). The NAMRC will develop strategies to improve its proportion of female apprentices (AP 46).

## Internships and APEs

The intakes for interns and APEs are mainly male (Figure 54).There is evidence that employment as interns or APEs has an impact on future career progression: one previous APE and one 'Nuclear Graduate' intern are now permanently employed at the NAMRC, and a number of other previous APEs have found permanent employment in local engineering companies.

Opportunities to improve this have been identified:

- Improved visibility of female role models at attraction events (AP 47).
- Openness to undergraduates from other technical sectors (AP 30).
- APEs are currently preferred to be Mechanical Engineering undergraduates. This subject has the lowest proportion of female applicants of all engineering sub-disciplines (circa. $8 \%$ in 2012/13 ${ }^{19}$ ).
- Offer informal tours of the NAMRC to female applicants (AP 26).

[^8]Table 11 - NAMRC early career introductory opportunities

| Opportunity |  | Duration | Age group /career stage | Paid /unpaid | Contract type | Advertised/ unadvertised | Selection process | Aim | Organisational unit | Content/responsibilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Work experience or work shadowing | $\sim 5$ | $\begin{aligned} & 1-2 \\ & \text { weeks } \end{aligned}$ | 14-18 years | Unpaid | None | Unadvertised | Basic match requirements, agreement from parents and school | Guiding and inspiring decisions about their courses of study and future career choices. | Any | Short rotations around the organisational to observe work |
| Summer internships | $\sim 2$ | 6-12 weeks | 18-22 years | Paid | Casual worker | Unadvertised | Informal interview | Inspire decisions about future career choice, improve future employability through work experience and contribute to the NAMRC on a small project. | Any | Short term project of organisational value to the NAMRC |
| Apprenticeships | $\sim 2$ | 3 years | 16 years upwards | Paid | Full-time, fixed-term | Advertised | Formal selection process | Vocational qualification | R\&D <br> (machining or welding) | Contribution to the organisation through practical shopfloor work alongside vocational qualification |
| Assistant <br> Project <br> Engineers | $\sim 6$ | 1 year | Undergraduates ( $\sim 18$ to 23 years) | Paid | Full-time, fixed-term | Advertised | Formal selection process | Contribute to the NAMRC and build experience portfolio for future employment. | R\&D (welding or machining) | Make a significant contribution to large projects of organisation value to the NAMRC. |






Figure 54 - Recent NAMRC early career introductory opportunities.
(v) Support offered to those applying for research grant applications

Comment and reflect on support given to staff who apply for funding and what support is offered to those who are unsuccessful.

The NAMRC's projects are categorised into five funding types (Table 12).

Table 12 - NAMRC research project funding categorisation.

| Fovernment | Grants |  | Industry |
| :---: | :---: | :---: | :---: | :---: | :---: |

Researchers are free to apply for grants for individual or collaborative research projects. Staff complete a draft research proposal and submit it to their line manager for peer review. Line managers provide constructive feedback before final submission.

For Horizon 2020 grants, there is an AMRC-wide support system delivered by a female researcher where staff applying for funding can receive guidance, feedback and administrative support on draft proposals before submission. A database of relevant grants is maintained and e-mails sent internally to prospective applicants. Ongoing support is provided for successful applicants on receipt of the funding. Unsuccessful applications are returned with feedback with areas of non-conformances to the specified requirements highlighted for further improvement. These can be resubmitted upon a complete revaluation.

Industry projects are brokered by Business Development and management, with technical input from 'academic and research' staff. The NAMRC consults industrial stakeholders to help direct government funded research projects, with input from 'academic and research' staff. The projects are then allocated to Project Managers who work individually or lead a
team to deliver the project. This is on the basis of management's awareness of their technical expertise and capability and availability to lead the project.

Project Managers often, but not always, also provide the technical leadership; hence the ability to Project Manage is a skill that most NAMRC 'academic and research' staff are required to develop.

The NAMRC maintains a register of projects including name of project manager, value of project, type of funding stream, etc. However, it has not been possible for us to disaggregate data on the distribution of projects between males and females due to gaps in this register and difficulties extracting the information. This will be addressed in an action point (AP 48). The current data suggests that a higher average number and average value of projects are managed by males than females, which may be due to more men in senior research positions. This issue will be presented to and addressed by senior management (AP 49).

## SILVER APPLICATIONS ONLY

5.4. Career development: professional and support staff
(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?
(vi) Appraisal/development review

Describe current appraisal/development review schemes for professional and support staff at all levels and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.
(ii) Support given to professional and support staff for career progression Comment and reflect on support given to professional and support staff to assist in their career progression.

### 5.5. Flexible working and managing career breaks

Note: Present professional and support staff and academic staff data separately
(i) Cover and support for maternity and adoption leave: before leave

Explain what support the department offers to staff before they go on maternity and adoption leave.

To date no employee at the NAMRC has been on maternity or adoption leave. However, a NAMRC policy will be proactively developed over and above TUoS policies to cover support before, during and after maternity and adoption leave (AP 50). This will include a review of the Department of Chemical and Biological Engineering's policy as an example of best practice.

One employee has had a pregnancy which miscarried at 10 weeks in 2015 and is currently pregnant (professional services, non-technical). She has volunteered information to the SAT for this application and agreed for it to be published.

In 2015 the employee attended a high number of medical appointments early in pregnancy due to medical complications and used her annual leave to cover them because she had not disclosed her pregnancy. As a result, she decided to disclose her pregnancy earlier than preferable at 5.5 weeks, at which point her annual leave used for appointments relating to the miscarried pregnancy was reimbursed by HR.

As a result of ongoing medical complications, the employee chose to disclose her current pregnancy to her line manager at 4 weeks so she could be granted work's time to attend medical appointments as early as possible, although she was not legally required to disclose until 26 weeks. Her line manager respected her confidentiality and was supportive. The employee has suggested we explore options to develop support for pregnant women with pre-existing medical conditions (AP 51).

Measures to avoid exposing pregnant women to risks that may arise from practical work will be considered in the policy, with particular consideration for avoidance of risks before women disclose their pregnancies (AP 52).
(ii) Cover and support for maternity and adoption leave: during leave

Explain what support the department offers to staff during maternity and adoption leave.

The proposed maternity or adoption leave policy will include pro-active arrangements for keeping in touch with the employee during their leave period, providing that the employee is happy to be contacted during this period (AP 53). This is the same for adoption or surrogacy leave. This will enable the employee to be informed of important news and events from the department. In addition the employee is entitled to up to 10 'keeping in touch' days whereby they attend work or training or perform a work from home. These days constitute normal working days and do not bring to an end the period of leave or affect any statutory entitlements. These entitlements are the same for staff on openended and fixed-term contracts.

During the leave period new parents may wish to visit their colleagues at the NAMRC with their baby. Organisational acknowledgement of this through a publicised policy considering safety, accessibility and timing will help to reinforce a supportive culture for new parents (AP 54).
(iii) Cover and support for maternity and adoption leave: returning to work

Explain what support the department offers to staff on return from maternity or adoption leave. Comment on any funding provided to support returning staff.

To date no NAMRC employee has been on maternity or adoption leave, one employee will be returning to work after long term sickness absence, which demonstrates good practice in managing a return to work that could be applicable to maternity and adoption leave:

- The line manager of this employee has been in regular contact with the employee to assess their condition and has planned for the employee to make a 'phased' return.
- The situation will be constantly monitored by the line manager and the employee and the work commitments will be agreed between the two on a monthly basis going forward.
- A revised risk assessment will be conducted prior to the return to work, taking into account any changes to the employee's ability to perform any of their normal tasks.

It is envisaged that similar arrangements could support an employee returning to work following a maternity or adoption break, which should be stated in the proposed policy (AP 55). In addition, the policy should consider:

- Provision for personal needs of new mothers, such as child feeding needs.
- Lists of childcare facilities:
- Near to the NAMRC there are at least three nurseries which accept vouchers from the TUoS childcare scheme and are used by existing employees. The centre is therefore ideally placed for local childcare facilities.

AMRC total staff numbers are high: there are currently about 500 staff and 400 students on site and associated childcare requirements are also expanding, therefore the AMRC are investigating site-based childcare facilities (AP 56).

TUoS operate a scheme known as Women Academic Returners' Programme (WARP). This gives additional support to researchers and academics returning from maternity or adoption leave. Due to the slightly unusual structure of the NAMRC group it is not immediately clear how many staff at the centre would be eligible for this scheme and this should be investigated (AP 57).

## (iv) Maternity return rate

Provide data and comment on the maternity return rate in the department. Data of staff whose contracts are not renewed while on maternity leave should be included in the section along with commentary.

To date no employee has been on maternity leave. However, one employee is currently pregnant (mentioned in 5.5.1). Her contract was not renewed in March 2016 as a result of expiration of the original funding source. This employee was 9 weeks pregnant at the time. The announcement caused her stress so she has suggested that we review policies for support offered at the announcement of non-renewal of contracts (AP 20).

The employee was entitled to apply for redeployment within TUoS, for which she was supported by HR and her current line manager by provision of a reference, organisation of a tour of the department for which she was applying, and allowance of work time to apply for and be interviewed for posts. She was redeployed on an open-ended contract on the same grade within 3 weeks of notice of non-renewal at the NAMRC, and this was awarded with her new employer being in the knowledge of her pregnancy at her choice. As redeployment counts as continuous service of over 26 weeks, she will be entitled to maternity pay. Note that she would not have been entitled to maternity pay on her existing contract because her due date would not have fallen within 15 weeks of the end of her contract.

## SILVER APPLICATIONS ONLY

Provide data and comment on the proportion of staff remaining in post six, 12 and 18 months after return from maternity leave.

## n/a

（v）Paternity，shared parental，adoption，and parental leave uptake
Provide data and comment on the uptake of these types of leave by gender and grade．Comment on what the department does to promote and encourage take－up of paternity leave and shared parental leave．

## Paternity

The UoS paternity leave policy states that eligible staff are entitled to two weeks fully paid paternity leave．All eligible NAMRC staff have taken this．After this initial two weeks they are entitled to the national statutory arrangements for parental leave．To date no employee has taken this（Table 13）．This is because TUoS annual leave entitlement is fairly generous and fathers have decided to use this instead where additional leave has been taken．

Table 13 －Paternity leave uptake，2012－2016

| Gender | $\left\lvert\, \begin{aligned} & 0 \\ & 0 \\ & \hline 0 \\ & 0 \\ & \hline 0 ⿺ 𠃊 ⿻ 丷 木 斤 丶 ~ \end{aligned}\right.$ | Job category |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 8 | Academic and research | Yes | No | Yes |
| Male | 8 | Academic and research | Yes | No | Yes |
| Male | 7 | Professional services－non－technical | Yes | No | Yes |
| Male | 7 | Professional services－technical | Yes | No | No |
| Male | 6 | Professional services－non－technical | Yes | No | No |
| Male | 4 | Professional services－technical | Yes | No | Yes |
| Male | 7 | Academic and research | Yes | No | No |

For paternity leave the employee informs his line manager the expected date and duration of leave but has the flexibility to change either at short or zero notice．In addition， employees have requested unexpected leave due to medical complications at short or zero notice and this has always been granted without question and with the blessing of the line manager．This will be standardised as NAMRC paternity policy（AP 58a），written in consultation with HR and existing NAMRC fathers．For planned medical appointments， fathers have used annual leave or worked flexibly．The latter will also be communicated in the policy（AP 58b）．

Shared parental，parental and adoption leave
No NAMRC employees have taken shared parental，adoption or parental leave．TUoS has policies on all of these ${ }^{20}$ ，but we recognise that there has been no precedent for anyone taking these types of leave at the NAMRC．Hence these will be signposted through the proposed NAMRC maternity，adoption and paternity policies（AP 59）．

[^9](vi) Flexible working

Provide information on the flexible working arrangements available.
AMRC general hours for full-time staff are 35 hours over five days from Monday to Friday:

- $8 \mathrm{am}-4 \mathrm{pm}$
- or $9 a m-5 p m$

Certain employees work agreed hours outside of this due to the position they are employed in, e.g. cleaners.

Flexible working
Requests for flexible working are generally supported, although there is a more positive response from males (Figure 55). Around half of requests for flexible working are agreed informally with line managers, with the other half contracted (Figure 56). The survey will be clarified to ask whether employees are happy with their working pattern (AP 60).


Figure 55 - Survey results, question 29.


Figure 56 - Survey results, question 40.

There is strong cultural acceptance towards flexible working or consistent working of nonstandard hours at the NAMRC:

- It is the organisational norm to work an extra half hour Monday to Thursday and then finish at 1.30 on Fridays. The extra half hour can be made up by starting earlier, finishing later or, most commonly, having half an hour for lunch. The early finish on Fridays is widely regarded as a major 'perk'.
- The early finish on Fridays is not mandatory and at least two employees (1 male, 1 female) work uniform hours to facilitate a 'normal' finish time on a Friday.
- It is normally accepted to work flexibly to accommodate exceptional events which may or may not be related to caring responsibilities, e.g. car repairs, home repairs.
- Start and finish times outside of 8 am to 5 pm are allowed by agreement with the employee's line manager.
- Several employees have adjusted their start and finish times in order to facilitate childcare. One example is Helen Arthur, a 'professional services non-technical' employee, who works two long days and three short days, amounting to full-time:
"Being allowed to work flexibly at the NAMRC provides an excellent foundation to work from. This approach allows me to fulfil all the requirements of my position whilst balancing my home life and caring for my children. I would highly recommend this approach for any working parent."

Helen Arthur

Further examples of good practice to support flexible working are:

- Office-based employees are provided with the technical capability to work from home (laptop and Virtual Private Network (VPN) access). This has been utilised by employees when their child has been ill.
- In general line managers expect leave requests to be submitted at least a week in advance but in the case of un-expected illness of dependents this is waived; the employee just needs to inform their line manager that they cannot attend their usual place of work.

Recent research ${ }^{21}$ that indicates that talented people are actively searching for workplaces that offer a more modern approach where quality of performance is rated more than the work pattern it took to get there. This is mutually beneficial: employees who work flexibly are more likely to work longer when needed as a mark of thanks and respect for that flexibility. Existing good practice in part-time and flexible working will be standardised and communicated in a policy (AP 61). Accessibility of web-conferencing and teleconferencing facilities will be improved (AP 62). The out-of-hours policy will be reviewed with the aim of improving support for flexible working (AP 63). Policies and insurance for hire cars will also be reviewed with regard to personal use and transportation of children (AP 64).

## Part-time working

Currently only one employee (female) works part-time: Annette Valentine (professional services - non-technical). She negotiated this at the time of applying and describes it as the most important factor in being able to accept the role. She says the AMRC team were very helpful and keen to support her request to work part-time:
"It would have been impossible for me to do the job living some distance from the office and balancing work with family responsibilities."

Annette Valentine

Also, one male employee (academic and research, grade 8) has successfully applied for a formal reduction in contracted hours to facilitate childcare.

TUoS is supportive of flexible and part-time working and a statement to this effect is made as standard in job advertisements. However, this is not discussed as an interview question: the onus is on the candidate to contact the department.

Action will be to find out if options for part-time and flexible working can be made more explicit in job adverts, or candidates asked for their preferences as standard at interview (AP 65).

[^10](vii) Transition from part-time back to full-time work after career breaks

Outline what policy and practice exists to support and enable staff who work parttime after a career break to transition back to full-time roles.

To date no employee has transitioned from part-time to full-time working arrangements. However, a policy will be developed and communicated to prepare for this eventuality (AP 66). This may recommend the need for the following by the line manager:

- Plan for phased return to work.
- Provision of mentoring (AP 45).
- Careful planning of changes to employee's roles and responsibilities.
- Liaison with other employees whose role and responsibilities may be reduced due to employee increasing their weekly working hours.
- Consideration of whether the employee will require any additional resources as a result of their additional working hours.
- Re-visit any relevant work place risk assessments for that employee.


### 5.6. Organisation and culture

(i) Culture

Demonstrate how the department actively considers gender equality and inclusivity. Provide details of how the Athena SWAN Charter principles have been, and will continue to be, embedded into the culture and workings of the department.

## Athena SWAN principles

In December 2015, most employees were aware of the Athena SWAN Charter and the NAMRC's policies towards gender quality (Figure 57 and Figure 58). The principles of the charter and the NAMRC's commitment to them have been communicated at all-staff briefings by Mike Tynan (CEO). Perceptions of change measured in December 2015 were low (Figure 59). Awareness will be improved through ongoing verbal (AP 10) and visual (AP 11) communication.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 1 | 4 |
| Disagree | 1 | 8 |
| Agree | 9 | 33 |
| Strongly Agree | 3 | 9 |
| Don't know | 3 | 18 |
| Total |  | $\mathbf{1 7}$ |

Figure 57 - Survey results, question 23.


Figure 58 - Survey results, question 26.
24) Since the Nuclear AMRC began the Athena SWAN process, there has been a change in staff attitudes, behaviour or workplace culture.


Figure 59 - Survey results, question 24.

| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 2 | 1 |
| Disagree | 4 | 17 |
| Agree | 2 | 13 |
| Strongly Agree | 0 | 0 |
| Don't know | 9 | 41 |

Total
17

Employees, including senior leadership, have attended events relevant to gender issues throughout the SAT process (Table 4, page 17). The attendance of leadership reinforces behavioural and cultural expectations. Ongoing participation will be assisted by the availability of a time-booking code and internal communication of available opportunities (AP 8).

The majority of employees agree that stereotypical images, unsupportive language and behaviour are not allowed at the NAMRC (Figure 60 and Figure 61), and that their line manager would deal effectively with any complaints about harassment, bullying or offensive behaviour (Figure 62). Encouragingly, regarding her feelings towards being the only female on the shopfloor, Sam Biddleston reports:

## "I don't really notice it."

The overall culture of the NAMRC is very inclusive and supportive, with an open and friendly atmosphere. This is aided by the modern open-plan office space, a communal dining/social area and kitchen, both accessible at all times. Common practices such as sharing leftover buffets and bringing in cakes on birthdays also help social lubrication.

A minority of employees strongly disagree with the above statements. This is already being addressed in some parts of the NAMRC by routine one-to-one informal catch-ups between line managers and employees, giving employees an opportunity to voice any concerns. An action will be to standardise this existing good practice, with emphasis on line managers' openness to listening and responding to any concerns from female staff (AP 67).


Figure 60 - Survey results, question 20.


Figure 61 - Survey results, question 19.


Figure 62 - Survey results, question 30.

The survey confirms that the majority of respondents feel that the NAMRC is a great place to work for women and men (Figure 63 and Figure 64), although there is slightly more negative sentiment from females. It is hoped that the collective result of the action points proposed in this plan will improve this.


Figure 63 - Survey results, question 34a.


Figure 64 - Survey results, question 34b.

Completion of training in gender equality and unconscious bias awareness are currently low (Figure 65 and Figure 66). Awareness of unconscious bias is recognised as an important strategy for gender equality and training will be rolled out to all staff (AP 68).


Figure 65 - Survey results, question 22a.


Figure 66 - Survey results, question 22b.

## Celebration of success

The NAMRC exercises good cultural practices in celebrating successes: all-staff e-mails are often sent out by colleagues or line managers to announce achievements, irrespective of gender, such as professional registration or projects successfully completed. This is generally reflected in the survey (Figure 67).
6) The NAMRC recognises and celebrates the work achievements of staff irrespective of gender.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 0 | 1 |
| Disagree | 2 | 4 |
| Agree | 9 | 25 |
| Strongly Agree | 4 | 37 |
| Don't know | 2 | 5 |
| Total | $\mathbf{1 7}$ | $\mathbf{7 2}$ |

Figure 67-Survey results, question 6.

## External partners

Notably, females have reported negative experiences when dealing with men from industry who do not share the cultural values of the NAMRC. This will be addressed by internal visual communication of our values (AP 11) and organising 'He4She’ Equality Allies training for all staff to show them ways to respond when they see a colleague being discriminated against (AP 69). Line managers will be receptive to listening to and responding to any incidents (AP 67).

Cultural diversity
Cultural diversity is regarded as an integral facet of the NAMRC and a competitive strength. Staff of at least 12 nationalities are currently employed, and languages other than English are routinely used in conversation (although English is the main language used for written and verbal communication). New staff from outside the UK have been assisted through their transition to the NAMRC by existing staff of the same nationality, e.g. finding accommodation, relocation of families, setting up bank accounts. This evidences that the existing culturally diverse workforce helps to support attraction and recruitment.

Regarding intersectionality, Iwona Zweirzak, a Polish national, reports the following:
"It is the first time for me to be working in a male dominated environment, however I do not feel like this has affected the way I work and I feel comfortable in my current work place."

Describe how the department monitors the consistency in application of HR policies for equality, dignity at work, bullying, harassment, grievance and disciplinary processes. Describe actions taken to address any identified differences between policy and practice. Comment on how the department ensures staff with management responsibilities are kept informed and updated on HR polices.

TUoS has defined policies available to all staff covering Equality, Harassment and Bullying, Grievance and Disciplinary, and Dignity at Work. These are easily accessible through the UoS website by all staff.

A manager from the UoS HR team is represented at the NAMRC's monthly Executive meetings to ensure the Management Team is aware of current and ongoing changes of HR policies, procedures and good practice. However they are currently no steps to:

- Monitor the application of policies and ensure consistent approach.
- Identify and address differences between policies and practices.

The survey results indicate:

- Most employees agree that the NAMRC has made it clear to its employees what its policies are in relation to gender equality (Figure 58, page 78). However there is an overall more positive response from men.
- Most employees agree that they understand the reasons for engaging in gender equality, although there is a greater polarity in the male responses (more 'strongly agrees' and more 'disagrees') (Figure 68).
- Most employees agree or strongly agree that the NAMRC keeps them informed about gender equality that affects them, although there is a more negative response from women (Figure 69).

Action will be instigated to monitor the communication and consistent application of HR policies (AP 70).


Figure 68 - Survey results, question 27.

Figure 69 - Survey results, question 33.
(iii) Representation of men and women on committees

Provide data for all department committees broken down by gender and staff type. Identify the most influential committees. Explain how potential committee members are identified and comment on any consideration given to gender equality in the selection of representatives and what the department is doing to address any gender imbalances. Comment on how the issue of 'committee overload' is addressed where there are small numbers of women or men.

There are only three NAMRC committees, which can be regarded as equally influential. Note that two of these (Programme and Research Boards) also have external members (not counted here), the majority of whom are male.

The average proportion of committee positions held by women, $13 \%$ (Figure 70), is lower than the overall headcount ratio of $21 \%$ (Figure 9, page 25). Data on grade is not presented in order to protect individual confidentiality of salary grades.
a) By gender


| Name of Influential Committee |  |  |
| :---: | :---: | :---: |
| NAMRC Executive Board | 11 | 1 |
| NAMRC Programme Board | 6 | 1 |
| NAMRC Research Board | 3 | 1 |
| Totals | 20 | 3 |

b) By job category


Figure 70 - NAMRC employee representation on internal committees

Minute taking roles (counted in the data) are as follows:

- Executive board - rotation of all members
- Programme board - female, professional services non-technical
- Research board - female, professional services non-technical

Most (61\%) committee members were asked to take up their role by a member of their network, colleague or a senior organisational representative, indicating the importance of networks and personal recommendation. A minority (23\%) undertake a committee role because it is part of their job. The survey also indicated that most employees are given the opportunity to represent the NAMRC internally or externally (Figure 71), with a slightly more positive male response than female.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly <br> Disagree | 0 | 0 |
| Disagree | 3 | 8 |
| Agree | 8 | 26 |
| Strongly Agree | 5 | 24 |
| Don't know | 1 | 14 |
| Total | 17 | 72 |

Figure 71 - Survey results, question 10.

No positive action is being taken as yet to ensuring gender equality in the selection of committee representatives, including administrative/facilitation support. This will be on the forward agenda of the Executive Board (AP 72).

The data shows that those represented on the most influential committees have a number of other committee responsibilities, indicating a risk of 'committee overload'. Currently there is no action to address this other than general discussions between managers and their teams about workload. A review of current committee membership will be proposed to the Executive Board to address this (AP 73).
(iv) Participation on influential external committees

How are staff encouraged to participate in other influential external committees and what procedures are in place to encourage women (or men if they are underrepresented) to participate in these committees?

Data on NAMRC representation on influential external committees has been requested by e-mail (Table 14). There is currently no register, and therefore no way of monitoring gender balance. One will be created (AP 71). The proportion of seats held by females on external committees (25\%) is similar to the overall headcount ratio (21\%).

Table 14 - NAMRC employee representation of on influential external committees.

| Name of Influential Committee |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| National Skills Academy for Nuclear Manufacturing Board | National |  |  | 1 | 0 | 1 | 0 |
| Centre of Nuclear Excellence: Business Enabling Task Force | National |  |  | 1 | 0 | 1 | 0 |
| RCC-M UK User Group | National |  |  | 0 | 0 | 1 | 0 |
| Nuclear Industry Council and its predecessor the Nuclear Development Forum | National |  |  | 0 | 0 | 1 | 0 |
| The Nuclear Innovation Research Advisory Board | National |  |  | 0 | 0 | 1 | 0 |
| Advance Manufacturing Institute Board | Faculty |  |  | 0 | 0 | 1 | 0 |
| New Nuclear Manufacturing (NNUMAN) advisory Board | National |  |  | 0 | 1 | 0 | 0 |
| High Value Manufacturing Catapult Forum | National |  |  | 0 | 1 | 0 | 0 |
| High Value Manufacturing Catapult Visualisation Forum | National |  |  | 0 | 1 | 0 | 0 |
| High Value Manufacturing Catapult Modelling and Simulation Forum | National |  |  | 0 | 1 | 0 | 0 |
| Women@TUoS Steering Group | TUoS |  |  | 1 | 1 | 0 | 0 |
| TUoS Research and Innovation Board | TUoS |  |  | 0 | 0 | 1 | 0 |
| Totals |  |  |  | 3 | 5 | 7 | 0 |

As mentioned previously, most respondents reported that they were asked to take up their role by personal recommendation. However, significantly more men than women hold positions on the most influential committees. This will be addressed in AP 72.

Describe any workload allocation model in place and what it includes. Comment on ways in which the model is monitored for gender bias and whether it is taken into account at appraisal/development review and in promotion criteria. Comment on the rotation of responsibilities and if staff consider the model to be transparent and fair.

There are two systems used at the NAMRC for formally considering workload allocation:

- The annual appraisal
- This requires line managers to review all aspects workload assignment on an annual basis, although anecdotal evidence suggests this is not consistently considered. There is no standard 'workload allocation model' or rotation of responsibilities due to the variety of roles.


## - Project resource allocation

- This is managed for individual projects centrally by Project Managers in the Machining Group using Microsoft Project, but the same system is not yet applied to any other organisational unit. Non-project work (such as Athena SWAN, training and outreach) is not considered in this system, so project managers are required to personally consult with individuals to check availability before assigning tasks.

The majority of employees agree that work and resource are allocated on a fair basis irrespective of gender (Figure 72 and Figure 73). However, the results suggest that men are more confident about workload allocation than women. Consistent consideration of workload in the annual appraisal will be addressed in the action plan (AP 74). Human resource management for R\&D projects through the extended use of Microsoft Project is already underway (AP 75).


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 0 | 0 |
| Disagree | 2 | 0 |
| Agree | 9 | 25 |
| Strongly Agree | 4 | 39 |
| Don't know | 2 | 8 |
| Total |  |  |

Figure 72 - Survey results, question 1.

2a) In the NAMRC, resource is allocated on a clear and fair basis irrespective of gender.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 0 | 2 |
| Disagree | 1 | 0 |
| Agree | 9 | 24 |
| Strongly Agree | 5 | 36 |
| Don't know | $\mathbf{2}$ | 10 |
| Total | $\mathbf{1 7}$ | $\mathbf{7 2}$ |

Figure 73 - Survey results, question 2a.

Managers consider promotions linked to the annual appraisal and recommend approval to the NAMRC Executive Team prior to submission to the annual Promotions Panel. This ensures the process is fair and transparent, and that there is a clear link between aspiration, objectives, workload and promotion. This is generally reflected in the survey (Figure 74).


Figure 74 - Survey results, question 2b.

## (vi) Timing of departmental meetings and social gatherings

Describe the consideration given to those with caring responsibilities and part-time staff around the timing of departmental meetings and social gatherings.

## Meetings

The only part-time employee, Annette, feels that the centre is generally supportive of her part-time status when organising meetings. However, she acknowledges it is sometimes difficult to accommodate meetings around her part-time status when customers dictate the meeting. The NAMRC does not have 'core hours'; it is the cultural norm to freely schedule meetings within the general hours of 8-4. There is a notably stronger positive response from males in this respect (Figure 75).
13) Meetings in the NAMRC are completed in core hours to enable those with caring responsibilities to attend


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 2 | 0 |
| Disagree | 2 | 6 |
| Agree | 9 | 31 |
| Strongly Agree | 3 | 26 |
| Don't know | 1 | 9 |
| Total |  |  | $\mathbf{1 7} \mathbf{7 2} \quad \mathbf{y}$

Figure 75 - Survey results, question 13.

Meeting times will usually be scheduled to accommodate late starts or early finishes due to caring responsibilities at the request of the individual employee. Other instances of consideration include:

- Early or late meetings accommodated by conference calls
- Avoidance of key meetings on a non-working day for part-time employee
- Sufficient notice of meetings to help staff plan ahead

Good practice will be strengthened and communicated in the policy on flexible working (AP 61).

## Social gatherings

Social events are frequent and inclusive. The majority are suitable for adults-only (e.g. nights out, annual Burn's night dinner), but some are family-friendly (e.g. rambles in the countryside), enabling parents to bring children. NAMRC social activities are usually instigated by individual employees and invitations sent out to all staff by e-mail. The recently-founded AMRC 'sports and social club' instigates site-wide events, although many of these are more attractive/inclusive for adults-only or males, such as 5-a-side football tournaments and trips to the races. The periods of notice before the events varies from a few hours (e.g. drinks after work) to a few weeks or months (e.g. Comedy Night), the latter allowing employees with caring responsibilities to make arrangements. This is generally reflected in the survey results (Figure 76).

Examples of activities during working hours are:

- Well-attended occasional lunches at local eateries
- Charity fund raising activities, usually with personal relevance to a staff member (e.g. quiz, cake stalls)

Events will be scheduled which are more appealing to females and/or accessible for families (AP 76).


Figure 76 - Survey results, question 21.
(vii) Visibility of role models

Describe how the institution builds gender equality into organisation of events. Comment on the gender balance of speakers and chairpersons in seminars, workshops and other relevant activities. Comment on publicity materials, including the department's website and images used.

The NAMRC uses female role models in publicity materials to portray its cultural and diversity values (Figure 79). Good practice has been exemplified since the NAMRC's inception, although this has strengthened since engagement in the Athena SWAN process. This will continue as part of the action plan (AP 77).

The majority of respondents to the survey agree that they are given opportunities to represent the NAMRC internally or externally, (Figure 71, page 87). However, the survey indicates that women feel that senior women are less visible as role models (Figure 77).


Figure 77 - Survey results, question 32.

There is currently no consideration of gender balance of speakers and chairs for seminars, etc; these are selected based on technical expertise and role and hence the majority are male (Figure 78). The gender balance of speakers at events will be improved, where possible (AP 78).


Figure 78 - Headcount of speakers at events by gender.

Women in Nucl
A question of balance

| The UK branch of the international Women in Nuclear network (WiN UK) held its first annual conference in Westminster |  |
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| The variation between nations and | Mencoung |
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| the imbalance are many and com |  |
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|  |  |
|  |  |
| As explained by Katrina Williams, director |  |



Iwill come away trom the Nuclear AMPC as a more experienced well-rounded appette tor ceramic insertsl We placement
8

Engineering
 an unsuitable job for a woman?


Figure 79 - Examples of female role models used in recent NAMRC marketing material.
(viii) Outreach activities

Provide data on the staff and students from the department involved in outreach and engagement activities by gender and grade. How is staff and student contribution to outreach and engagement activities formally recognised? Comment on the participant uptake of these activities by gender.

A small proportion of employees are involved in outreach, with approximately equal proportions of women and men (and therefore higher numbers of men than women), although a higher percentage of females are frequently involved (Figure 80). No management staff are involved in outreach.


Figure 80 - Survey results, question 5c.

The NAMRC is already conscious of the importance of female role models in outreach and therefore proactively encourages a gender-balanced representation. For instance, it currently has four Ambassadors registered with STEMNET (three female and one male). Activities include attending careers evenings, activity days and roadshows.

Over half of employees feel that the NAMRC values and rewards the full range of skills and experience including pastoral work, outreach, teaching and administration in performance appraisals, however there is a more positive sentiment from men (Figure 81 below and Figure 37, page 50). Although some line managers allow employees to spend work time on outreach activities, this is not yet accommodated by a time booking code and therefore most STEM ambassadors participate in their own time. Heads of R\&D groups have agreed that this time should be formally allocated and recognised in workload allocation (AP 79). Avoidance of 'outreach overload' for female employees will be considered.
5a) The NAMRC values and rewards the full range of skills and experience including pastoral work, outreach work, teaching and administration in performance appraisals.


| Options | Female <br> count | Male <br> count |
| :---: | :---: | :---: |
| Strongly Disagree | 1 | 0 |
| Disagree | 1 | 4 |
| Agree | 8 | 28 |
| Strongly Agree | 2 | 19 |
| Don't know | 5 | 21 |
| Total | $\mathbf{1 7}$ | $\mathbf{7 2}$ |

Figure 81 - Survey results, question 5a.

The Nuclear AMRC will co-operate with the AMRC Training Centre for outreach activities (AP 80). STEM ambassadors will also be encouraged to formally register with STEMNET and an internal register of activities will be maintained (AP 81).

The NAMRC hosts several school visits per year, typically for 14-16 year olds in groups of up to 20 . So far no stipulations of gender balance have been made, and groups have been predominantly male. The SAT will address this (AP 82) and consider hosting girls-only events, reviewing the Faculty of Engineering's 'STEM for Girls Day’ as an example (AP 83).

Work experience
Figure 54, page 64 shows that the majority of the NAMRCs work experience placements and internships were completed by males. It is also noted that all of the male placements were in technical areas, whilst around $40 \%$ of the female work experience and internship placements were in professional services. This is reflective of national statistics for work experience in manufacturing disciplines:

- In 2004, around 5\% of mechanical and engineering work experience placements were female ${ }^{22}$

Women in Science Engineering and Technology (WiSET) advised the NAMRC on setting up gender balanced work experience in 2015 and gave examples of similar schemes achieved

[^11]by other local organisations and RAF Cosford ${ }^{23}$. As a result, the NAMRC hosted work experience for one male and one female Year 12 student from a local school. As a result of this placement, a female student has gone on to do an Apprenticeship at the Training Centre:

"When I came for my work experience at the NAMRC I had already been looking at applying for an apprenticeship as I wasn't enjoying A Level study at all. I knew I wanted to pursue a career in engineering, so the work experience really gave me a chance to decide whether it was right for me."

Charlotte Grainger, February 2016

The Faculty of Engineering at TUoS has also achieved a third of females onto its work experience scheme ${ }^{24}$. These examples of best practice will be reviewed and a strategy developed at the NAMRC to improve ratios (AP 84). A time-booking code for hosts will be allocated (AP 79). Female mentors will help students to envisage themselves in the sector (AP 85). The opportunity for improved social mobility through offering more work experience placements to students who have no prior connection to the NAMRC (e.g. friends or family) is also recognised (AP 86). Guidelines will be developed for well-planned placements which offer a rotation around the facilities are an effective way to maximise exposure in a short time period (AP 87).

Word count $=7650$

[^12]
## SILVER APPLICATIONS ONLY

6. CASE STUDIES: IMPACT ON INDIVIDUALS

Recommended word count: Silver 1000 words
Two individuals working in the department should describe how the department's activities have benefitted them.

The subject of one of these case studies should be a member of the self-assessment team.
The second case study should be related to someone else in the department. More
information on case studies is available in the awards handbook.

## n/a

## 7. FURTHER INFORMATION <br> Recommended word count: Bronze: 500 words | Silver: 500 words

Please comment here on any other elements that are relevant to the application.

Survey overview
The survey was based on the UKRC HE STEM Gender Equality Culture Survey ${ }^{25}$ provided to the NAMRC by TUoS HR, with questions adapted by the SAT according to our departmental requirements. Vishal and Kathryn compiled the survey, which was issued securely to all NAMRC staff through Google Forms in November 2015, at which time the headcount was 109 employees plus 4 sub-contractors. The survey was issued to employees only. The survey was anonymous, and would only allow a single participation per employee.

Within the first week of it being released there was a $50 \%$ overall participation rate, including all but one female employee, indicating a higher engagement in the process amongst females than males (AP 89). Participation rates then diminished and staff were reminded several times to respond. A final response rate of $83 \%$ ( 89 out of 109 staff, 17 females and 72 males) was achieved.

The survey provides a benchmark against which progress can be measured throughout the Action Plan (AP 90).

A graphical overview of all the responses to questions with the same structure (strongly disagree, disagree, agree, strongly agree, agree and don't know) is given in Figure 82. When viewing the collective results, it becomes apparent that there is a small but statistically significant difference between male and female responses which isn't visible when viewing responses individually. The most significant difference is between 'agree' and 'strongly agree', indicating a higher level of satisfaction amongst males than females.

A number of opportunities for improvement of the survey were identified (AP 91). This included the need for improved clarity over self-classification of gender: options for gender were 'male', 'female' and 'trans'. A small number of 'trans' responses were received. The SAT will consider whether there are improved methods for collating and responding to data on gender classification, and therefore responding to the needs of people with alternative self-classifications of gender (AP 92).

[^13]

Figure 82 - Overview of survey results with SD/D/A/SA/DK results format

Work being undertaken with external partners
In November 2015 the NAMRC signed up to the Women in Nuclear (WiN) charter (Figure 84). The NAMRC has participated in WiN events (Table 4, page 17), and will continue to do so (AP 93).

The NAMRC has the opportunity to influence culture change in its industrial membership through marketing, examples in Figure 83, (AP 77), events (AP 9) and its membership charter (AP 94).

The NAMRC has approached the AMRC Training Centre about gender balance initiatives for under-18s, and this will be addressed further through the action plan (AP 80).

Other organisations within the AMRC group are interested in joining the Athena SWAN process and the SAT will provide guidance if required (AP 95). NAMRC events will be advertised to the AMRC Group (AP 9).

Word count $=431$


Figure 83 - NAMRC images used by external partners.


Figure 84 - "Women in Nuclear" industry charter signed by Mike Tynan on behalf of NAMRC in November 2015.
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## 8. ACTION PLAN

The action plan should present prioritised actions to address the issues identified in this application.

Please present the action plan in the form of a table. For each action define an appropriate success/outcome measure, identify the person/position(s) responsible for the action, and timescales for completion.

The plan should cover current initiatives and your aspirations for the next four years. Actions, and their measures of success, should be Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

See the awards handbook for an example template for an action plan.

We have used a colour coding to rank the action points (Table 15). This colour coding will be used to prioritise action and a benchmark against which to evaluate progress throughout the ongoing improvement process.

## Table 15 - Ranking of action points

| Colour <br> code | Ranking | Level of <br> priority | Interpretation |
| :--- | :--- | :--- | :--- |
|  | Good <br> practice | Low | Areas where good practice has already been demonstrated at the NAMRC. Action points will <br> focus on continuation, standardisation or communication of these practices. |
| Opportunity <br> for <br> improvement | Medium | These are instances where the NAMRC's existing practice is 'standard' but opportunities for <br> improvement have been identified. |  |
|  | Issue | High | These are instances where shortcomings or unsatisfactory elements in the NAMRC's current <br> practices have been identified, with a high priority for action. |

(i)Arising from Section 3

Actions arising from plans for the future of the SAT

|  | $\begin{aligned} & \circ \\ & \stackrel{\circ}{8} \\ & \stackrel{\circ}{3} \\ & \hline \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{1} \end{aligned}$ | Maintain the frequency of SAT meetings (once per month) | Regular meetings are essential to ensure that the pace of progress is maintained to meet targets within the timescales. | 1. Set up recurring invitation <br> 2. Maintain meeting attendance record | 1. May 2016 <br> 2. May 2016 May 2020 |  | Meetings held once per month |
|  | $\begin{aligned} & \text { AP } \\ & 2 \end{aligned}$ | Maintain representative and active membership of the SAT. | Diversity of the SAT and continuity with the original team will help to ensure that the needs of all facets of the organisation are considered and that culture change will have impact. | 1. Define the representative make-up of the SAT <br> 2. Review make-up of SAT to ensure balanced representation: <br> - Continuity of membership from the bronze application SAT as far as possible. <br> - Diversity (ages, gender, ethnicity) <br> - Representation of all of the organisational units (R\&D, supplier development, business support, executive) <br> - If original SAT members can no longer participate, appropriate replacements will be enrolled. | 1. By June 2016 <br> 2. June 2016, December 2016 then annually |  | Size of the SAT to be maintained at approximately 13 , with similar representation of the cross-section of the organisation throughout the process. |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{3} \end{aligned}$ | Maintain leadership representation on SAT | Leadership representation essential to endorse culture change from the top down. | Heads of groups and executive team continue to be represented | May 2016 May 2020 |  | Meeting attendance records: at least one manager per meeting |
|  | $\begin{aligned} & \mathbf{A P} \\ & 4 \end{aligned}$ | SAT to report to executive board | Leadership involvement essential | Give monthly updated to Exec Board | May 2016 May 2020 |  | Monthly updates to Exec Board. |


| $\begin{aligned} & \mathbf{A P} \\ & 5 \end{aligned}$ | Monitor progress against the action plan | Progress sustained | 1. Spreadsheet of action points available on network drive <br> 2. 'Ranking' of action points to be updated at every meeting | 1. By June 2016 <br> 2. May 2016 May 2020 |  | Up to date register of action points |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{AP} \\ & 6 \end{aligned}$ | Agree workload allocation for individuals named on action plan. | Time needs to be allowed for individuals to complete their contribution to the action plan. | Estimate work load and present to Managing Director (Andy Storer). Communicate to and discuss with line managers. | By July 2016 |  | Workload allocation and time booking code agred. |
| $\begin{aligned} & \mathbf{A P} \\ & 7 \end{aligned}$ | Continued cooperation with women@TUOS network | Women@TUOS is engaging widely with and impacting upon TUoS | 1. NAMRC to continue to be represented on women@TUOS steering group <br> 2. One women@TUOS steering group meeting to be held at NAMRC per year. <br> 3. Women@TUOS members invited to NAMRC events (see AP 9). | 1. Ongoing <br> 2. One per year from 2016 |  | NAMR continues to be represented on women@TUOS steering group. One meeting held at NAMRC per year. |
| $\begin{aligned} & \text { AP } \\ & 8 \end{aligned}$ | NAMRC staff to participate in relevant events | Room for improvement in communication of events, monitoring attendance and time booking code for relevant events. | 1. Seek Executive Board and Head of Groups approval, including: <br> - Time booking code available for equality and diversity events. <br> 2. Relevant events (e.g. Women@TUOS and Women in Nuclear) events communicated to NAMRC staff <br> - Discuss with Tim Chapman to agree best way to do this. <br> 3. Attendance of events monitored. <br> 4. Participation reviewed | 1. By <br> December <br> 2017 <br> 2. By <br> December <br> 2017 <br> 3. From January 2017 <br> 4. Annually from December 2017 |  | 'Reasonable level' of events participation, 2017 - 2020 (levels to be defined) |


| $\begin{aligned} & \text { AP } \\ & 9 \end{aligned}$ | NAMRC to host events on gender equality and diversity, open to all staff, wider university and membership. | The NAMRC held a high-profile event in 2015 which was very successful. | NAMRC to organise and host three events per year. For 2016 this will include: <br> - Presentation by Kathryn and Rachael Rothman on Athena SWAN process, June 2016 <br> - Dame Sue Ion presentation, July 2016 <br> - Mid-career ladder event Q3 2016 <br> Transport provided for UoS staff through University Transport Services (part funded by women@TUOS) <br> At least one event per year open to NAMRC's membership <br> All events open to AMRC Group. | 2016 onwards | Julia Critten (Events Co-ordinator) | NAMRC host three events per year from 2016 onwards |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AP } \\ & 10 \end{aligned}$ | Verbal internal communication | Verbal communication has high impact and necessary for topdown endorsement. | Athena SWAN update in team briefs (once per month) | Ongoing from June 2016 |  | Survey results 23, 24 and 26 achieve at least 80\% agree or strongly agree from December 2017 onwards. |
| $\begin{aligned} & \text { AP } \\ & \mathbf{1 1} \end{aligned}$ | Visual internal communication | Visual communication will help culture change. | - Charters in reception <br> - Display of key metrics <br> - Pop-up stand <br> - All-staff e-mails of key developments <br> - Use of charter mark on literature (when awarded) | From September 2016 |  | Survey results 23, 24 and 26 achieve at least $80 \%$ agree or strongly agree from December 2017 onwards. |
| $\begin{array}{\|l\|l} \text { AP } \\ 12 \end{array}$ | Publically accessible repository for relevant information | Essential for external communication of our values/policies relevant to Athena SWAN | 1. Set up repository <br> - Probably section on web page <br> 2. Maintain content | 1. By <br> December <br> 2016 <br> 2. From Jan <br> 2017 onwards |  | Well-presented and easily accessible public repository |


|  |  |  | 1. Set up repository |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathbf{A P} \\ & \mathbf{1 3} \end{aligned}$ | Internally accessible repository for relevant information | Essential for internal knowledge sharing relevant to Athena SWAN | - Probably section on intranet. Alternatives are Windchill or Google Drive. <br> - Speak to IT and AMRC Marketing Team for advice. <br> 2. Maintain content | 1. By <br> December 2016 <br> 2. From Jan 2017 onwards |  | Well-presented and easily accessible internal repository |
| $\begin{aligned} & \mathrm{AP} \\ & 14 \end{aligned}$ | Apply for future awards | Need for ongoing commitment for change to be realised | If the NAMRC's bronze application in April 2016 is unsuccessful, improve application based on feedback and reapply by April 2017. <br> If the NAMRC's bronze application in April 2016 is successful, aim to apply for the silver award by April 2020 or earlier. | Bronze by November 2017 <br> Silver by November 2020 |  | Achieve Athena SWAN bronze and silver charter marks. |

(ii) Arising from section 4.2

Actions arising from career pipeline

| (10) | $\begin{aligned} & \dot{\circ} \\ & \text { 흘 } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 15 | Clarify link between job roles and qualifications and experience for welding group. | Grades on pipeline for welding are currently not clearly linked to qualifications/experience | - Update pipeline with qualifications/experience | By December $2017$ |  | Link between grades and qualifications/experience is clarified. |
|  | AP 16 | Communicate career pipelines to staff | Career pipelines have only recently been defined and have not yet been communicated. | - Upload to intranet <br> - Communicate in meeting | By December 2017 | Carl Hitchens (Head of Machining) Keith Bridger (Head of Welding) | Pipelines for research groups are accessible to staff |

Actions arising from job grade by gender

| (10) | $\begin{aligned} & \dot{\circ} \\ & \text { ( } \\ & \text { 윤 } \\ & \hline \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 17 | Clarify wording /remove ambiguity of question 3. | There is ambiguity over the interpretation of survey question 3: it does not give the option for respondents to specify whether they perceive that men are paid less than women, or women paid less than men. | Revise wording of question 3 to remove ambiguity before survey is re-issued. | By November 2016. |  | SAT satisfied that ambiguity has been removed and issues around perception of gender pay gap are understood. |
|  | AP 18 | Investigate and resolve perception that men and women are not paid equally at NAMRC. | A high proportion of females perceive that men and women are not paid equally for equal work at the NAMRC (survey results, question 3). | 1. Present disparity to executive team and develop strategy to resolve this. This may require clarification of question 3 before the issue can be addressed. <br> 2. Review impact | 1. By December 2016 <br> 2. Annually from December 2016 |  | Survey question 3 achieves at least $80 \%$ agree or strongly agree for men and women from December 2017 onwards. |

Actions arising from fixed-term contracts

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 19 \end{aligned}$ | Develop internal policy for review of fixed term contracts after one year, including an option to transfer staff onto permanent contracts that are decoupled from shortterm funding streams considering factors such as behaviour, performance, etc. | Sense of job security and therefore morale are likely to improve if staff are transferred onto fixed term contracts, which is in alignment with industry norms. | 1. Seek Executive Board approval, including ascertaining whether this policy would be organisation-wide or just for the R\&D group. <br> 2. Write policy: <br> - Work with TUoS HR <br> 3. Present to executive board for approval. <br> 4. Communicate to all line managers and staff if and when approved: <br> - Part of policy on career development (AP 38). | 1. July 2016 <br> 2. By October 2016 <br> 3. By December 2016 <br> 4. By January 2017 |  | Policy implemented from 2017. |
|  | $\begin{aligned} & \text { AP } \\ & 20 \end{aligned}$ | Develop internal policy/guidelines to improve the support offered on non-renewal of contacts. | Improved availability of support offered on nonrenewal of contracts will help to reduce stress for employees. | Part of policy AP 19 above: <br> - Consult with HR and discuss with line managers | As per AP 19 above |  | Positive feedback from anyone who this applies to. |

Actions arising from leavers

| - | $\begin{aligned} & \dot{\circ} \\ & \text { ( } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & \mathbf{2 1} \end{aligned}$ | Create a system for succinctly and confidentially recording reasons for leaving. | Reasons for leaving are currently not recorded or shared, and therefore common themes/issues arising are difficult to identify across the centre. | 1. Discuss with Heads of Groups to develop a suitable system. <br> 2. Implement the system <br> 3. Report on and review common reasons for leaving | 1. Summer 2016 <br> 2. From December 2016 <br> 3. Annually from December 2017 |  | Understanding of common trends/specific issues from reasons for leaving. |

(iii) Arising from Section 5.1

Actions arising from longlisting, shortlisting and interviewing

|  | $\begin{aligned} & \dot{\circ} \\ & \text { 둔 } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 22 \end{aligned}$ | Develop a toolkit towards good practice in recruitment, including a policy on positive action, and communicate to all staff. | High lack of understanding of the NAMRC's policy towards positive action amongst all NAMRC staff, which is higher for men than women (survey question 11). <br> Positive action is not applied uniformly across the organisation. Confusion over the difference between 'positive action' and 'positive discrimination'. <br> Positive action has already been applied in the NAMRC and shown effect. | 1.Agreement in principle to be sought from the Executive Board. <br> 2.TUoS's Faculty of Engineering's 'Toolkit for recruitment of female academic staff will be reviewed as an example for good practice. <br> 3. Internal guidelines to be produced with guidance from HR. These are likely to include the following: <br> - Positive action should support all underrepresented groups at the NAMRC <br> - All shortlisted candidates must meet the essential criteria. <br> - Candidates who are not the 'best on paper' must be shortlisted as a result of extending the shortlist, not by replacing a candidate who is better on paper. <br> - Job offers must be made to the candidate which is overall the best for the job. <br> - Unconscious bias training for recruitment team (see AP 68). <br> 4. Guidelines communicated to all staff through internal presentation and made available on the intranet. <br> 5.Changes of opinion will be measured through rerunning the survey. | 1. By June 2016 <br> 2. By October 2016 <br> 3. By December 2016 <br> 4. By March 2017 <br> 5. By December 2017 | Kathryn Jackson (Technology Researcher) | Survey question 11 to achieve at least 80\% agree or strongly agree for men and women. |


| $\begin{aligned} & \text { AP } \\ & 23 \end{aligned}$ | Ensure that the required recruitment data can be accessed. | Pre-2014 recruitment data couldn't be accessed because it is stored locally and has limited access permissions. | Discuss with HR (main uni and AMRC) | By December $2016$ |  | Required recruitment data is accessible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AP } \\ & 24 \end{aligned}$ | Apply positive action to increase the applications of females for positions where they are currently underrepresented | Longlist data for academic and professional services (technical) positions. | Apply toolkit developed (above) to women applying for technical, research and managerial positions. | $\begin{aligned} & \text { From January } \\ & 2017 \end{aligned}$ |  | Target 20\% long lists by 2020 for females in technical, research and managerial positions. |
| $\begin{aligned} & \mathbf{A P} \\ & 25 \end{aligned}$ | Apply positive action with aim of retaining proportions of men being shortlisted and interviewed for positions where ratios are currently not maintained. | Shortlist and interview data for clerical and facilities positions. | Apply toolkit developed (above) to men applying for clerical and facilities positions. | $\begin{aligned} & \text { From January } \\ & 2017 \end{aligned}$ |  | Target consistent ratios through the recruitment process of: <br> - Men in clerical positions <br> - Men in facilities positions. |


| $\begin{aligned} & \text { AP } \\ & 26 \end{aligned}$ | Offer an informal opportunity to all female applicants to tour the NAMRC with a female role model as early as possible in the recruitment process. | Recruitment of female Postdoctoral research associate in 2015... Withdrawal of two females from application process for APEs in March 2016 with no reason given. | 1.Seek approval from heads of groups. <br> - Document as part of toolkit AP 22 above. <br> 2. List of female role models willing to host tours to be identified. <br> 3.Steps to be taken communicated to all line managers. <br> - Line managers to inform the female role models at the shortlisting stage of all female applicants. <br> 4. Female applicants to be offered tours at the shortlisting stage. <br> 5.Outcomes/effectiveness reviewed. | 1. By July 2016 <br> 2. By October <br> 2016 <br> 3. By <br> December <br> 2016 <br> 4. From <br> January 2017 <br> 5. December <br> 2017 then <br> annually |  | Target 0\% dropout rate of females who are shortlisted for technical or managerial positions. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Actions arising from job specification and advertising

| 为 | $\begin{aligned} & \dot{\circ} \\ & \text { 둔 } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{2 7} \end{aligned}$ | Job <br> specification ('About the job', ATJ) training to be updated to give consideration for 'gender coded language' and made compulsory for everyone writing ATJs. | The use of 'gender-coded language' in job descriptions can make the job more or less attractive to men or women. | 1. 'About the job' training to include gender balance content: <br> - Seek advice from the UoS HR department and other external sources on 'gender coded language'. <br> - Investigate the availability of scholarships and bursaries to female researchers and, if relevant, incorporate these into job adverts. <br> - Approval from executive board <br> 2. Content of ATJ training updated: <br> - Guidelines to be incorporated into 'About the job' training for NAMRC, with co-operation of UoS HR. <br> - Alternatively or in addition, consider writing in toolkit (AP 22) <br> 3. All line managers to complete new ATJ training <br> - Records of training to be updated by Debra Gisby <br> - Additional 'About the job' training sessions to be organised with HR, if required <br> 4. Review uptake | 1. By <br> September <br> 2016 <br> 2. By December <br> 2016 <br> 3. By June 2017 <br> 4. Twice per year, from December 2017. |  | Targets are 20\% by 2020 for recruitment of females into: <br> - Technical <br> - Research <br> - Management |



| $\begin{aligned} & \text { AP } \\ & 29 \end{aligned}$ | Improve gender balance and diversity of interview panels. | Including women on interview panels gives the interviewer the opportunity to evaluate their own skills and understand the promotions process. <br> Similar has been adopted by other universities such as UCL. | 1.Agreement in principle to be sought from Executive Board <br> 2.Discussion with SAT: <br> - Target gender ratios for interview panels to be agreed <br> - Other diversity factors such as ethnicity to be discussed. <br> 3.Develop strategy: <br> - Selected eligible females in the NAMRC to receive interview training to increase pool of available panellists <br> - Employees from groups with other diversity factors, e.g. ethnicity, also to be considered <br> - NAMRC line managers to be issued with a list of female panellists and their corresponding areas of expertise <br> - Line managers of females to adjust workload expectations when required to allow females to participate on panels <br> 4. Communication with Staff: <br> - Team brief and/or include in toolkit (AP 22) <br> 5. Review effectiveness | 1. By <br> September <br> 2016 <br> 2. By October <br> 2016 <br> 3. By January <br> 2017 <br> 4. By January <br> 2017 <br> 5. Annually from December 2017 |  | Targets are 20\% by 2020 for recruitment of females into: <br> - Technical <br> - Research <br> - Management |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


|  |  |  | 1. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AP } \\ & 30 \end{aligned}$ | Recruit more open to transferrable technical skills from other technical sectors. | Female PDRA recruited from biomedical engineering in 2015. Summer internship completed by maths student in 2015. | 2. Advertise for and recruit two 'casual worker' summer internships in 2017 for female undergraduates in technical disciplines other than mechanical engineering. <br> - Co-ordinate with Sam Biddleston on Work Experience (see AP 84). <br> - Consult with WiSET for advice on how to do this: <br> - 50/50 quota, or all-female placements specifically advertised <br> - Consult with Tim Chapman for advice on marketing <br> - E.g. develop poster/web page/targeted advertising specifically aimed at female <br> - Target TUoS and Sheffield Hallam science and engineering departments. <br> 3. Review and if successful advertise contracted positions under a similar remit and include in toolkit (AP 22). | 1.By July 2016 <br> 2. By Summer 2017 <br> 3. By December 2017 |  | Targets are 20\% by 2020 for recruitment of females into: <br> - Technical <br> - Research <br> - Management |

Actions arising from inductions

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 31 | Make equality and diversity training part of the induction. | New staff are not made aware of optional training that is already freely available through TUoS on equality and diversity (such as unconscious bias awareness) as part of their induction. This training is also not a part of that delivered in the induction for members of staff in any job role. | 1. Review what training is available and decide priorities for induction packs. <br> 2. Seek approval from quality team <br> 3. Update induction packs. | 1. By <br> September 2016 <br> 2.By <br> December <br> 2016 <br> 3. From January 2017 |  | All new staff to have completed online equality and diversity training as part of induction. |
|  | AP 32 | Reference policies for equality, diversity and bullying in induction pack. | Policies relating to equality, diversity and bullying are not currently highlighted in the induction checklist. | 1. Review what policies are available and decide priorities for induction packs. <br> 2. Seek approval from quality team <br> 3. Update induction packs. | 1. By <br> September <br> 2016 <br> 2.By <br> December <br> 2016 <br> 3. From <br> January <br> 2017 |  | All new staff are aware of equality and diversity and bullying policies as part of induction. |

Actions arising from promotions

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 33 \end{aligned}$ | Clarify understanding of promotions process across NAMRC. | Survey questions 7 and 8, 4 and 5b | 1.Approval in principle sought from executive board. <br> 2.Promotions process to be communicated to all staff (e.g. group briefings by heads of groups or invite central HR to give a presentation on 'The Deal'). This may include: <br> - How career breaks and the full range of workrelated activities (e.g. outreach, pastoral work and administration) are considered. <br> - Timing of promotion panel meetings to be publicised to all staff <br> - Promotion to be discussed as standard in NAMRC annual appraisals <br> - Promotions and changes in job roles of employees communicated to staff in group <br> 3.Improvement in understanding of promotions reviewed annually through repeat of survey | 1. By June 2016 <br> 2. From January 2017 <br> 3. From December 2017 |  | Survey questions 4, $5 b, 7$ and 8 to achieve at least 80\% agree or strongly agree for males and females. |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{3 4} \end{aligned}$ | Develop <br> guidelines on <br> positive action to <br> prepare women <br> for and <br> encourage <br> women to apply <br> for promotion. | Ratio of women to men being promoted (1:5.5) is more disparate than the overall headcount ratio (1:4). | 1. Seek approval in principle from executive board. <br> 2. Review best practice elsewhere for ensuring that women are developed for promotion and encouraging women to apply and develop a policy. <br> 3.Communicate to all staff: <br> - Announce in team brief <br> - Upload onto internal repository (AP 13) | 1. By July 2016 <br> 2. By December 2016. <br> 3. By December 2016 |  | Policy/ guidelines available to all staff |


| $\begin{aligned} & \mathbf{A P} \\ & \mathbf{3 5} \end{aligned}$ | Apply positive action for promotion. | Need for topdown approach to drive change. | 1. Apply guidelines on positive action developed in AP 34 above. <br> 2. Monitor impact (promotions data). | 1. From January 2017 <br> 2. Annually from December 2017. |  | Improve promotions gender ratio to be equivalent to headcount ratio (1:4 female to male). |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Actions arising from department publications

| \% | $\circ$ <br> 을 <br> 은 | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 36 \end{aligned}$ | Report gender split of journal and conference papers to SAT | Register of journal and conference paper already exists, but gender split is not recorded. | 1.Add a column for gender of authors for to the existing spreadsheet. <br> 2.Report gender split to the SAT once per year | 1. By December 2016 <br> 2. Annually from December 2016 |  | Gender balance of authorship of journal and conference papers, on average, is equal to gender ratio in R\&D. |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{3 7} \end{aligned}$ | Create register to count gender split of authorship of customer reports | Most NAMRC publications are for customers and therefore not in the public domain. The current register of publications only counts journal and conference papers, and therefore there is currently no way of assessing the gender balance of the authorship. | 3.Request approval from Heads of Groups in R\&D <br> - Include consideration for IP protection, e.g. only include titles, or hide titles if these are sensitive <br> 4. Create register <br> - Probably spreadsheet in the Athena SWAN folder on the network drive <br> 5. Populate register for historic customer reports and report gender split to SAT <br> - Obtain list of projects and project managers from 'master project schedule' <br> - Contact project managers individually to ask for authors and gender split <br> 6.Update for current year and report gender split to SAT | 3. By July 2016 <br> 4. By December 2016 <br> 5. By December 2016 <br> 6. Annually from December 2017 |  | Gender balance of authorship of customer reports, on average, is equal to gender ratio in R\&D. |

(iv) Arising from Section 5.3

Actions arising from training

|  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AP } \\ & 38 \end{aligned}$ | Guidelines /policy on career development | Single document/web page that lists what Nuclear AMRC employees can expect in terms of support for career development | 1. Seek executive board approval <br> 2. Develop guidelines <br> - Consult with HR/refer to existing TUoS documents <br> - List all relevant material developed from action points in this section. <br> 3. Communicate (e.g. internally and web page?) | 1. By July <br> 2016 <br> 2. By <br> December <br> 2016 <br> 3. By <br> December <br> 2016 |  | Internally (and externally?) available policy/ guidelines on career development. |
| $\begin{aligned} & \text { AP } \\ & 39 \end{aligned}$ | Ensure staff are provided with adequate basic information on training available and how to request it. | New Starter Introduction Pack does not contain any information regarding the NAMRC's training procedures. | 1. Create an internal focus group to review induction packs once a year. <br> 2. Run internal survey to review information in staff packs and involve employee suggestions. <br> 3. Induction pack to be updated accordingly. | Dec 2016 |  | At least 80\% agree or strongly agree to survey questions 4 and 9. |


| $\begin{aligned} & \text { AP } \\ & 40 \end{aligned}$ | Create an accessible portal for available training courses crossreferenced with grades/roles and an easy procedure for communicating registered interest to line managers to authorise training and provide updates on staff development needs. | Staff should have more open access to training to see what matches their career development requirements. <br> Line managers should have a constant awareness of what areas of training their staff want to participate in, in order to provide any further support. | 1. Arrange a meeting with Debra Gisby, Training Coordinator of AMRC Group, to look into uploading description of training courses on the AMRC Staff Portal. <br> 2. Create a list of training courses and a channel for staff to register their interest online. | Dec 2016 |  | At least 80\% agree or strongly agree to survey questions 4 and 9. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathbf{A P} \\ & \mathbf{4 1} \end{aligned}$ | Improve visibility of offering of career development opportunities to staff who work part time or flexibly by communication in a policy on flexible working. | Low results to survey question 12, indicating high lack of awareness or general negative response towards perception of availability of training to flexible/part time workers. | Implement as part of AP 65. | See AP 65 |  | Survey question 12 achieves at least $80 \%$ agree or strongly agree for men and women from December 2017 onwards. |

Actions arising from appraisals (SRDS)

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 42 \end{aligned}$ | SRDS to be applied halfyearly as standard | Anecdotal evidence that halfyearly appraisals are not uniformly applied. This will help to standardise and overall improve the level of appraisal support that all staff receive. | 1. Seek approval from heads of groups and executive boards <br> - Clarify the half-yearly expectations - how to make this not too onerous but cover key points <br> 2. Agree strategy for monitoring half-yearly application of appraisals <br> 3. Communicate <br> - To line managers <br> - To staff (part of AP 38) <br> 4. Monitor uptake | 1.By July 2016 <br> 2.By <br> November <br> 2016 <br> 3.By December <br> 2016 <br> 4.Annually from <br> December <br> 2017 |  | Half-yearly SRDSs applied to all staff from January 2017. |
|  | $\begin{aligned} & \mathbf{A P} \\ & 43 \end{aligned}$ | Ensure that females receive a helpful annual appraisal and that career development and training are discussed. | Proportion of females on training courses is slightly lower than headcount ratio ( $15 \%$ versus 20\%). | 1. Raise issue with Executive Board and heads of groups. <br> 2. SAT to discuss and agree ways to address this. Coordinate with TUoS HR, e.g. <br> - Equality policies must be outlined in the SRDS form for reference for both line managers and respective staff being reviewed. <br> 3. Communicate to line managers <br> 4. Review impact | 1. By July 2016 <br> 2. By October <br> 2016 <br> 3. By <br> December <br> 2016 <br> 4. Annually from <br> December <br> 2017 |  | At least 80\% agree or strongly agree to survey question 14d. <br> Overall gender ratio of training courses should be equal to headcount ratio, with gender balance across courses. |

Actions arising from support for career progression

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & 44 \end{aligned}$ | Standardise and communicate existing good practice in support for professional registration. | Professional registration of various levels is relevant to most roles in the NAMRC. However, most staff are not registered with a professional institution at any level. | 1. For IMechE, arrange a meeting with Shirley Harrison, who coordinates the scheme for AMRC Group, to establish what the requirements and sign-up/registration procedures are for participating on the scheme. <br> 2. Run an internal informational seminar for relevant Nuclear AMRC staff to explain the benefits of the scheme and the support that is provided by the Nuclear AMRC. <br> 3. Introduce a staff focus group that provides summary information on the scheme (regularly updated) and where staff can register their interest. This can be stored on an internal database where the status of each employee's application can monitored. <br> 4. Coordinate scheme on behalf of NAMRC staff with Shirley Harrison. - Communicate to staff (part of AP 38) <br> 5. Provide regular updates on any changes to the scheme. | Sept 16 <br> (coincide <br> with <br> uptake of new engineering staff) |  | Fully established and wellcoordinated programme that all relevant staff are aware of. |


| $\begin{aligned} & \text { AP } \\ & 45 \end{aligned}$ | Implement mentoring scheme | Mentoring is a powerful method of establishing peer-to-peer relationships that can effectively develop professional and personal skills that are essential for career development and growth. Particularly beneficial for females. | 1. Seek agreement in principle from Executive Board. <br> 2. Establish requirements, which may include the following: <br> - Internal review through a staff survey to explore whether there is a demand for a mentoring scheme or an alternative programme that contributes effectively to staff development. <br> - Identify the aims and objectives of having a mentoring scheme. <br> - Identify who will be eligible for mentoring. <br> - Evaluate what type of mentoring is required throughout the NAMRC. <br> - Establish whether there are suitable skills resources to meet mentoring requirements. <br> - Establish what other resources are required and deploy resources. <br> - Establish a process for matching mentors with mentees. <br> - Support for transition from part time to full time work (AP 66). <br> 3. Evaluate suppliers, including the following: <br> - IMechE Managed Professional Development <br> - WES MentorSET <br> - University of Sheffield <br> 4. Agree scheme with SAT and Executive Board <br> 5. Communicate <br> - Announce in team brief (Andy Storer) and e-mail (Tim Chapman) <br> - Information on intranet? <br> - Policy (AP 38) <br> 6. Monitor impact | 1. By July <br> 2016 <br> 2. By <br> December <br> 2016 <br> 3. By <br> December <br> 2016 <br> 4. By <br> December <br> 2016 <br> 5. By <br> December <br> 2016 <br> 6. Annually <br> from <br> December <br> 2017 | Ross Barrable (Strategic Relationship Manager) | Survey Q14a and 14b at least 80\% agree or strongly agree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Actions arising from support for students

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 46 \end{aligned}$ | Increase proportion of females recruited to apprenticeship. | Majority of apprentices are currently male (Figure 54). Examples of achievement as a result of a pro-active approach is Sellafield (33\% female apprentices) | 1. Identify suitable female role models: <br> - First preference: approach female apprentices at AMRC Training Centre and ask if they will be role models. <br> - Second preference: existing female employees in NAMRC <br> 2. Female role models to attend or lead 'attraction' activities to encourage girls to apply: <br> - Visit schools (all girls groups) <br> - Host tours of NAMRC (all girls groups) <br> 3. Female role models to offer support throughout the recruitment process to discourage girls from withdrawing from the process, e.g. site visits. <br> 4. Review progress and refine actions for next year based on findings. <br> 5. Repeat in subsequent years | 1. By September 2016 <br> 2. By December 2016 <br> 3. Until March 2017 <br> 4. Summer 2017. <br> 5. From September 2017. |  | Increase applications, short list and appointments of NAMRC apprentices to 20\% on average from 2017 to 2020. |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{4 7} \end{aligned}$ | Improve visibility of female role models at recruitment events at universities. | The employees who represent the NAMRC at university careers events have so far always been male. However, gender balanced images are used on the publicity materials used to advertise the positions (Powerpoint presentations, handouts, etc.). | - Encourage participation from both a male and a female employee at careers events, especially existing female APEs. <br> - Ensure females are visible in presentations/marketing material. | Dec 2016 |  | Increase applications, short list and appointments of APEs to 20\% on average from 2017 to 2020. |

Actions arising from applying for funding

|  | $\begin{aligned} & \dot{\circ} \\ & \text { ( } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 48 \end{aligned}$ | Improve system/cleanse data on projects (welding group). | Existing register has gaps and extraction of the relevant data is overly complex. Hence it is not possible to ascertain confident values for project allocation to males and females. | Cleanse data/fill in gaps. | By October 2016 |  | Project register which can be used to accurately monitor overall project allocation to individuals. |
|  | $\begin{aligned} & \text { AP } \\ & 49 \end{aligned}$ | Review and improve gender balance of project allocation. | Current project data suggests that average number of projects and value of projects per female is less than per male. | 1. SAT to investigate why female allocation of projects (number and value) is apparently lower than males. <br> 2. Make recommendations for actions. <br> 3. Report to heads of groups. <br> 4. Implement actions. <br> 5. Measure progress. | 1. By October 2016 <br> 2. By October 2016 <br> 3. By October 2016 <br> 4. From January 2017 <br> 5. December 2017 then annually to 2020 |  | Average number of projects and average total value of projects allocated to female and male R\&D staff are approximately equal (+/- 20\%) |

(v) Arising from Section 5.5

Actions arising from cover and support for maternity and adoption leave: before leave

| (100 |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 50 \end{aligned}$ | NAMRC maternity and adoption policy to be developed covering additional support over and above UoS policy before, during and after leave. | No NAMRC policy exists. Publication of a policy will help to reinforce our values and inform parents who already work here or are applying for jobs. | 1. Seek executive board approval in principle. <br> 2. Create working group and consult with HR to review support already available. <br> - Review Dept. of Biological and Chemical Engineering's policy as an example of best practice. <br> 3. Develop NAMRC policy. <br> 4. Put in publically accessible place and communicate to all staff. <br> 5. Review impact. | 1. By July 2016 <br> 2. By October 2016 <br> 3. By December 2016 <br> 4. By January 2017 <br> 5. Annually from December 2017 |  | Publically accessible NAMRC policy on maternity support before, during and after leave. <br> Positive feedback from all who the policy applies to. |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{5 1} \end{aligned}$ | Explore and develop guidance for support in pregnancy for employees with preexisting medical conditions. | Recommendation of employee who suffered miscarriage in 2015. | Part of policy AP 50 above: <br> - Consult with HR to establish existing relevant policy and determine if additional support/best practice could be offered at the NAMRC. | 1. By October 2016 <br> 2. By December 2016 <br> 3. By January 2017 |  | Publically accessible policy including additional support in pregnancy for staff with preexisting medical conditions. |


| $\begin{aligned} & \text { AP } \\ & 52 \end{aligned}$ | Maternity policy to specifically consider ways to make disclosure of pregnancy as early as possible more comfortable for women. | Women involved with safetycritical work should be encouraged to disclose pregnancies as early as possible so that risk assessments can be revised, but this can be uncomfortable for women and must be handled with sensitivity. | Part of AP 50 above. | Part of AP 50 above. |  | Maternity/ adoption policy specifically considers early disclosure of pregnancies. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Actions arising from cover and support for maternity and adoption leave: during leave

| - | $\begin{aligned} & \dot{\circ} \\ & \text { B } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 53 | Maternity policy to include support during leave. | To proactively plan for periods where maternity or adoption leave will be taken. This will both reduce the risk to the organisation and reassure current and prospective staff that they will be supported during maternity or adoption leave. | Part of AP 50 above | Part of AP 50 above. |  | Maternity/adoption policy specifically considers support during leave. |
|  | AP 54 | Develop NAMRC policy for visiting the workplace with babies. | Offering the opportunity for parents to safely visit the workplace for short periods with babies and publicising organisational acceptance of this will help to reinforce a supportive culture for new parents. | Part of AP 50 above | Part of AP 50 above. |  | Maternity/adoption policy specifically considers visiting the workplace with babies. |

Actions arising from cover and support for maternity and adoption leave: returning to work

|  | $\begin{aligned} & \dot{\circ} \\ & \text { B } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 55 | Proposed maternity and adoption policy to include returning to work. | Reinforcement and standardisation of support for new parents. | As per AP 50 above, but including: <br> - Phased return to work <br> - Revised risk assessments <br> - Lists of local childcare facilities <br> - Special consideration for mothers' personal needs which may be uncomfortable to discuss with male employees. | As per AP 50 above |  | NAMRC policy on maternity/adoption publicised including support on return to work. |
|  | AP 56 | Investigate the feasibility, cost and potential benefit of AMRC group providing onsite childcare | AMRC Group are investigating childcare facilities | 1. Investigate current childcare requirements across AMRC group <br> 2. Investigate cost and feasibility of providing on-site childcare <br> 3. Report back to AMRC executive <br> 4. Report to main university Executive | 1. July 2016 <br> 2.November 2016 <br> 3. March 2017 <br> 4. July 2017 |  | Feasibility and business case study compiled and approved by the exec team |
|  | AP 57 | Investigate WARP scheme and its applicability to NAMRC. See if it can be widened to include as many women as possible | To be able to offer additional support to returning employees, in order to give them increased reassurance and confidence when planning a family | 1. Investigate WARP Scheme with HR <br> 2. Establish Current applicability to NAMRC staff <br> 3. Investigate extending applicability to include as many staff as possible | $\begin{aligned} & \text { 1-May } 2016 \\ & \text { 2-Aug2016 } \\ & \text { 3-Sep } 2016 \end{aligned}$ |  | Report into WARP scheme and a full understanding of eligibility agreed with exec team and HR. |

Actions arising from paternity, shared parental, adoption and parental leave uptake

| (100 | 을 은 을 | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 58 \end{aligned}$ | Policy on paternity, shared parental and adoption leave over and above TUoS policy to be written and communicated, including the following: <br> a) Standardise policy that fathers-tobe are allowed to support pregnant partners in unplanned medical appointments without using annual leave with their line manager's permission. <br> b) Fathers able to work flexibly to cover planned medical appointments. | Applied informally in the R\&D team - need to standardise across the organisation. | 1. Seek approval in principle of executive board. <br> 2. Write policy: <br> - Seek guidance from HR and Review FoE Department of Biological and Chemical Engineering's policy as an example <br> - Consult with existing NAMRC fathers <br> 3. Communicate to staff | 1. By July 2016 <br> 2. By December 2016 <br> 3. From Jan 2017 |  | Policy that is publically accessible |
|  | $\begin{aligned} & \mathbf{A P} \\ & 59 \end{aligned}$ | Signpost TUoS policies on adoption, surrogacy, partner and shared parental leave through NAMRC policies on maternity, adoption and paternity. | No NAMRC staff have taken any 'family leave' other than paternity, so there is no precedent and these types of family leaver are outside the 'cultural norm'. | Part of AP 58 and AP 50 above. | As above |  | Policies on maternity, adoption and paternity to signpost TUoS policies on other types of family leave. |

Actions arising from flexible working

| (100 |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 60 \end{aligned}$ | Clarify survey question to ask whether employees are happy with their working pattern. | Existing survey questions do not explicitly ask whether employees are happy with their working pattern. | Update survey question. | By November $2016$ |  | New survey question(s) to ask whether employees are happy with working pattern. |
|  | $\begin{aligned} & \text { AP } \\ & 61 \end{aligned}$ | Standardise and communicate existing good practice in flexible and part time working through a policy. | Examples of good practice exist but are not standardised or explicitly communicated. | 1. Seek executive board approval. <br> 2. Develop policy, including the following: <br> - Line managers should accept requests for flexible working wherever possible. <br> - Consideration for timing/notice of meetings. <br> 3. Communicate policy. <br> 4. Monitor impact | 1. July 2016 <br> 2. By December 2016 <br> 3. From January 2017 <br> 4. Annually from December 2017. |  | At least 80\% agree or strongly agree on survey question 29. |
|  | $\begin{aligned} & \text { AP } \\ & 62 \end{aligned}$ | Improve visibility of web conferencing and teleconferencing facilities. | These are useful tools for flexible working but not all staff are aware of what's available or how to use them. | 1. Discuss with Lauren (receptionist) who administers systems. <br> 2. Communicate to staff. | 1. By October 2016 <br> 2. By December 2016 |  | Improved <br> visibility <br> /accessibility of <br> web and <br> teleconferencing <br> for all staff. |
|  | $\begin{aligned} & \text { AP } \\ & 63 \end{aligned}$ | Review out-ofhours policy | The out-of-hours policy may be a restraint for flexible working in the building and this needs to be checked and clarified. | 3. Review out-of-hours policy and identify if any improvements could be made <br> 4. Implement and communicate the changes | 3. By October 2016 <br> 4. By December 2016 |  | Improved out-ofhours policy that is more supportive of flexible working. |


| $\begin{aligned} & \text { AP } \\ & 64 \end{aligned}$ | Review hire car policy and insurance | Currently it is only possible for employees to collect hire cars from work and insurance restricts personal usage, which can be a challenge for parents with childcare responsibilities. | 1. Review hire car policy and insurance for NAMRC and make recommendations for improvements <br> 2. Improvements reviewed by executive board <br> 3. Improved policy written and communicated | 1. By August 2016 <br> 2. By October 2016 <br> 3. By December 2016 |  | Improve hire car policy more supportive of people with childcare responsibilities. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AP } \\ & 65 \end{aligned}$ | Make flexible <br> working <br> arrangements <br> explicit in job <br> advertisements, or <br> ask for preferences <br> at interview | There is a standard statement regarding flexible/part time working already included in job descriptions, but specific examples of good practices at NAMRC aren't communicated and the onus is on the candidate to proactively express their preferences at interview. | 1. Seek executive board approval <br> 2. Consult with HR to find out what is or isn't possible <br> 3. Communicate <br> - E.g. through recruitment toolkit (AP 22). | 1-May 2016 <br> 2-Sep 2016 <br> 3-Dec 2016 |  | Improved <br> external visibility of flexible/parttime working practices to applicants. |

Actions arising from transition from part-time back to full-time working after career breaks

|  | $\begin{aligned} & \dot{\circ} \\ & \text { ㄷ } \\ & \text { 윤 } \\ & \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 66 | Develop and communicate a policy for transitioning from Part to full time working arrangements | To proactively plan for transition from part time work to full time work. This will both reduce the risk to the organisation and reassure staff that their roles and responsibilities will be carefully managed during this period. | 1. Create Working Group to discuss Policy <br> - May be part of AP 61 above. <br> 2. Engage with central HR for advice and approval <br> 3. Fully Developed and approved maternity and adoption leave plan. | $\begin{aligned} & \text { 1-May } 2016 \\ & \text { 2-Aug2016 } \\ & \text { 3-Sep } 2016 \end{aligned}$ |  | Policy issued and in place. The effectiveness of the policy to be reviewed once it has been used for the first time. |

(vi) Arising from Section 5.6

Actions arising from culture

|  | $\begin{aligned} & \dot{\circ} \\ & \frac{1}{c} \\ & \text { 운 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{6 7} \end{aligned}$ | Standardisation of routine 1:1 informal catch-ups between line managers and employees, giving employees an opportunity to voice any concerns, with emphasis on the line managers listening to and responding to any incidents reported by female staff. | Small number of negative responses to survey questions 20, 19 and 30 , indicating that behavioural expectations need to be addressed. <br> Incidents of discrimination/bias against females reported with external customers, so line managers need to provide a way to support females by listening and responding. | Request from Executive Board and Directors to communicate to line managers: need for informal 1:1 meetings between line managers and employees, giving employees an opportunity to voice any concerns. | By December $2016$ |  | 0\% disagree or strongly disagree to questions 19, 20 and 30 from December 2017 onwards. |


| $\begin{aligned} & \text { AP } \\ & 68 \end{aligned}$ | Unconscious bias awareness training compulsory for all staff. | Some of the SAT have attended unconscious bias awareness training and believe it will be of benefit to all staff. Learning outcomes include: <br> - Benefits of diverse workplace <br> - How to recognise unconscious bias <br> - How to challenge it | 1. Seek approval of Executive Board and Heads of Groups <br> 2. Select and plan courses: <br> -Co-ordinate with TUoS HR or Faculty of Engineering <br> - Refreshers and repeat sessions for new staff offered on a regular basis to maintain impact <br> -Budget located (available from main Uni HR?) <br> oCheck with Training Co-Ordinator of paperwork requirements (Debra Gisby) <br> 3. Communicate to all staff <br> - Request Andy Storer to annount in team brief <br> - Request Heads of Groups send e-mails to their groups <br> 4. Deliver courses <br> - Find available times <br> - Book trainer and room <br> - Monitor attendance and feedback <br> 5. Monitor impact | 1. By July 2016 <br> 2. By October 2016 <br> 3. By December 2016 <br> 4. By June 2017 <br> 5. Annually from December 2017 | Sam Biddleston (Assistant Welding Technician) | Survey question 22b achieves at least 95\% 'yes' by December 2017, maintained to 2020. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| $\begin{aligned} & \text { AP } \\ & 69 \end{aligned}$ | He4 She equality allies training offered to all staff | There have been a couple of instances where female employees have felt that they have felt the experience of direct discrimination or unconscious bias when in meetings with external visitors. The 'He4She' training organised by women@TUOS shows men and women how to act if they see a colleague being discriminated against. | 1. Seek Executive Board approval <br> 2. Organise course: <br> - Ask Kathryn for contact details <br> - Check cost and budget <br> - Look for venues and available dates <br> - Ask Andy Storer to announce in team briefs <br> - Ask Heads of Groups to announce <br> 3. Run courses <br> - Book course leader <br> - Send out meeting requests <br> - Monitor attendance <br> 3. Monitor impact <br> - Additional survey question on how we handle external customers' behaviour | 1. By July 2016 <br> 2. By December 2016 <br> 3. By December 2017 <br> 4. Annually from December 2017 | Sam Biddleston (Assistant Welding Technician) | All male line <br> managers <br> completed <br> 'He4She' <br> training, in <br> addition to <br> many other staff <br> members. <br> New survey <br> question (on <br> our support for <br> customer <br> incidents) <br> achieves at least <br> 80\% agree or <br> strongly agree. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 戍 |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & 70 \end{aligned}$ | Monitor the consistent application of HR Policies on equality, dignity at work, bullying, harassment, grievance and disciplinary processes. | There is no evidence to suggest that HR Policies are consistently applied and monitor and monitored across the NAMRC. $26 \%$ of respondents are not clear or do not know what the policies are (survey questions 26,27 and 33). | 1. Management buy in to the inclusion, discussion and dissemination of HR Policies at and following Management Meetings <br> - Co-ordinate with Sam Campbell (HR Manager) <br> 2. Clear communications displayed setting out the NAMRC policies <br> - Co-ordinate with Tim Chapman (Communications Manager) <br> - Quarterly agenda item on Monthly Management Meeting to focus specifically on changes in HR policies and to identify and address differences between policies and practices. <br> - Leadership to reinforce expected behaviours. <br> 3. Monitor impact | 1. By July <br> 2016 <br> 2. By <br> December <br> 2016 <br> 3. Annually from December 2017 |  | At least 80\% agree or strongly agree on survey questions 26, 27 and 33 from December 2017 onwards. |

Actions arising from representation of Men and Women on Committees

|  |  | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & 71 \end{aligned}$ | Create a register of committees | No register of committee membership currently exists, therefore it's not possible to monitor gender split. | Create register and upload to network drive/intranet. | End Sept 2016 |  | Register of committee members |
|  | $\begin{aligned} & \mathbf{A P} \\ & 72 \end{aligned}$ | Monitor and improve gender balanced representation on committees, including more women on influential committees and gender balanced minute taking/ facilitation responsibilities. | The staff survey (question 10), committee survey and anecdotal information indicates that the majority of committees are represented by males | 1. Seek executive board approval <br> 2. Following the review in 5.6.3 agreement is made to rotate representation or proactively consider female representation on the most influential committees. <br> - Female representatives identified and a mentoring plan in place to encourage female representative. <br> - Male representatives of influential committees to review their representation and consider the opportunity to rotate membership and through this give and encourage women the opportunity to participate. <br> - Male representatives on committees act as Mentors to those women who will be rotating the role. <br> 3. Monitor impact | 1. By July 2016 <br> 2 By December 2016 <br> 2. Annually from December 2017 |  | 20\% of internal committee members are women by 2018 |


| AP 73 | Identify and mitigate 'committee overload' | Mitigation of 'committee overload' will help to improve workload balance for employees in addition to giving more opportunities for career progression for staff who currently do not participate. | $\bigcirc$ | Management Team to commission a review of committee representation with leader and managers to identify committee overload. Suggest mitigation, where appropriate, through: <br> - Role rotation, deputising, shadowing <br> Ensure that gender equality and committee overload in respect of committee representation is featured as a quarterly agenda item on the NAMRC Management Meeting | Management buy in to commissioning a review by End June 2016 <br> Review held July 2016 <br> Action agreed at September Management Meeting |  | Fewer employees on several committees, and higher number of staff on one committee. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Actions arising from workload allocation

|  | $\begin{aligned} & \dot{\circ} \\ & \text { " } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AP 74 | Consider workload allocation and resources as standard on SRDS | Anecdotal evidence that workload is not uniformly considered in annual appraisal. | Communicate the need with Executive Board, and ask them to communicate through Directors to Line Managers. | By December 2016 |  | 0\% disagree or strongly disagree on survey question 1 |
|  | AP 75 | Extend and standardise use of MS Project for resource allocation in R\&D projects | System is already applied in machining and being extended to welding. | Implement MS project system common resource pool and monitoring in welding | By September 2016 |  | MS project resource pool implemented in Welding. |

Actions arising from timing of social events

|  | $\circ$ $\stackrel{\circ}{c}$ $\bar{\circ}$ 을 | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { AP } \\ & 76 \end{aligned}$ | Schedule more social events which are appealing to females, familyfriendly or scheduled to enable people with caring responsibilities to attend. | There is room for improvement for scheduling more social events which are open to families or more appealing to females. | 1. Organise activities more appealing to females and/or families. Target 3 events per year. <br> 2. Monitor impact | 1. By <br> December <br> 2016 <br> 2. Annually <br> from <br> December <br> 2017 |  | At least 80\% agree or strongly agree on survey question 21. |

Actions arising from visibility of role models

|  | 은 은 은 | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \mathbf{A P} \\ & 77 \end{aligned}$ | Continue to promote gender balance in publicity material | In the context of the NAMRC's ambitions to improve gender equality, it is important to take advantage of every opportunity, through visible messaging, to demonstrate that the organisation is taking gender equality seriously (Survey question $10 \& 32$ ). | - Further develop the visibility of senior female role models through images on the website, articles and representation at internal and external events <br> - Articles on relevant gender balance initiatives at the NAMRC <br> Posters for outreach (similar to school of dentistry) | End <br> December <br> 2016 |  | Every <br> NAMRC <br> Newsletter includes at least 1 visible role model |
|  | $\begin{aligned} & \mathbf{A P} \\ & 78 \end{aligned}$ | Improve gender balance representation of chairs and speakers at events. | There is currently no practice for considering gender balance for presenters or chairs at events - it is done on the basis of technical expertise and role. | 1. Discuss with SAT and Heads of Groups to develop a strategy for this, which may include the following: <br> - Identify a contact from elsewhere (e.g. Faculty of Engineering?) who has implemented good practice in this respect. <br> - Aim for a gender balance that is realistic - to be agreed <br> - Gender balance of event representation to be considered as routine when planning every event? <br> - Support in presentation skills (e.g. TUoS) course to be offered to female researchers as part of personal development <br> 2. Monitor impact <br> - Seminar series presentations (list from Simon Cavill) <br> - Event register | 1. By <br> December <br> 2016 <br> 2. Annually from <br> December 2017 |  | Targets to be agreed by SAT. |


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|  | $\begin{aligned} & \mathbf{A P} \\ & 79 \end{aligned}$ | Formally recognise, account for and allow time spent on outreach in workload model (annual appraisal). | No formal workload allocation or time booking code for outreach employees usually do it in their own time and many are not involved. | 1. Seek approval of Executive Board and Heads of Groups for: <br> - Timebooking code <br> - Time allocation per person <br> - This should include schools events and hosting work experience/internships. <br> - Avoidance of 'outreach overload', particularly for female staff <br> 2. Communicate to all staff <br> - (Note this could be part of policy <br> - Team brief (request Andy Storer) <br> - E-mails requested from Heads of Groups <br> 3. Monitor uptake | 1. By July 2016 <br> 2. By <br> December <br> 2016 <br> 3. Annually <br> from <br> December <br> 2017 |  | 80\% agree or strongly agree for question 5 a <br> $30 \%$ of males and females answer 'yes' to question 5c |
|  | $\begin{aligned} & \text { AP } \\ & 80 \end{aligned}$ | Co-operate with AMRC Training Centre and AMRC Group. | AMRC Training Centre is a flagship for social mobility and engineering education for young people in the region. Better co-ordination with Training Centre will strengthen the utilisation of resources, improve the activities and maximise the impact of STEM interventions undertaken across the AMRC Group. | Co-ordinate with Kerry Featherstone (Head of Training Centre), Wendy Miller (Apprentice Trainer) and Debra Gisby (Training CoOrdinator). Suggest the following: <br> - Register of STEM ambassadors created and accessible on the intranet <br> - Internal mailing list of STEM ambassadors across the AMRC created <br> - Events are circulated to STEM ambassadors <br> - Maintain internal (AMRC Group) register of STEM activities | By December $2017$ |  | Improved coordination for STEM activities across AMRC Group |


| $\begin{array}{\|l} \mathrm{AP} \\ \mathbf{8 1} \end{array}$ | Ensure that <br> STEM <br> ambassadors <br> are registered <br> with STEMNET <br> and an <br> internal <br> register is <br> maintained. | Important for insurance and safeguarding reasons. Comparison of the existing register with survey results indicates that there are more people involved with outreach than are registered with STEMNET. | 1. Invite STEMNET representatives to present to all staff about becoming a STEM Ambassador. <br> - Establish who are the new contacts for our local STEMNET branch <br> - Contact Simon Cavill to book a slot in the seminar series which is also convenient for STEMNET <br> - Send invitation to all staff <br> 2. Update and maintain internal register (in co-operation with Debra Gisby) | 1. By December 2016 <br> 2.January 2017 onwards |  | All active <br> STEM <br> ambassadors <br> are registered |
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| $\begin{array}{\|l\|} \text { AP } \\ 82 \end{array}$ | Organise tours of the NAMRC that are gender balanced in numbers and more appealing to girls in content. | NAMRC tours given to schools are currently not gender balanced. | 1.Consult with Shirley Harrison to find out how existing tours are organised, and work out how we could improve gender balance, e.g.: <br> - Ask the schools to provide a gender balanced mix <br> - Proactively approach all-girls schools <br> - Ensure female role models lead the tour <br> - Include a tour of the offices in addition to the shopfloor <br> - Appropriate use of gender-coded language <br> 2. Create and maintain a register numbers of girls and boys participating on tours held, and monitor feedback | 1. By <br> December <br> 2016 <br> 2. Annually <br> from <br> December <br> 2017 |  | At least 30\% girls on each tour, and positive feedback. |
| $\begin{aligned} & \text { AP } \\ & 83 \end{aligned}$ | Look into running STEM events at the NAMRC. | The NAMRC currently doesn't run its own STEM events. | 1. Review FoE's 'STEM for girls' day for ideas. <br> 2. Discuss with Heads of Group at SAT meeting and agree the next steps. <br> 3. Run events (suggest one per year from 2017 onwards). | 1. By October <br> 2016 <br> 2. By <br> December <br> 2016 <br> 3. From <br> January 2017. |  | STEM for girls events held at the NAMRC (suggested 1 per year from 2017 to 2020). |


| $\begin{aligned} & \text { AP } \\ & 84 \end{aligned}$ | Improve gender balance in work experience and summer internships in technical areas of the organisation. | Current gender ratios are imbalanced (Figure 54). <br> Advice from WiSET: <br> similar schemes achieved by other local organisations. <br> Another success story is RAF Cosford WISE work experience programme. <br> Paperwork required for setting up work experience and internships is currently not well understood. | 1. Seek agreement in principle from the executive board and Heads of Groups <br> 2. Create centralised record for work experience students and internships and communicate <br> - Co-ordinate with Debra Gisby (Training Co-Ordinator) <br> - Supervisors to complete record for every placement <br> 3. Create policy or guidelines for work experience and internships, which may include: <br> - Clear and easy explanation of paperwork requirements, with examples and links to the templates (co-ordinate with Debra Gisby). <br> - Request from schools gender balanced mix of candidates, or set-up all-girls scheme alongside mixed scheme <br> - Consult with WiSET for advice <br> - Co-ordinate with Simon Cavill (AP 30). <br> - Build links with local all-girls' schools to encourage uptake. <br> - Challenges facing females will be taken into account in this process such as 'imposter syndrome' or feeling uncomfortable in a male-dominated environment. <br> - Feedback from/to students at the end of the placement will be made standard. <br> - Use Maltby Academy placements from July 2015 as an example of best practice. <br> 4. Communicate to all staff <br> - Mention in team brief <br> - Upload to internal repository (AP 13) <br> 5. Review impact | 1. By June 2016 <br> 2. By <br> September 2016 <br> 3. By <br> December <br> 2016 <br> 4. By January <br> 2017 <br> 5. July and December, 2017 to 2020 |  | Target 1:1 male to female ratio for work experience and summer internships in technical areas each calendar year, from 2017 onwards |
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| $\begin{array}{\|l} \text { AP } \\ \mathbf{8 5} \end{array}$ | Increase female mentors for work experience and summer internships | Female role models are important to transform preconceptions. | Policy/guidelines (AP 84) to include that female work experience and summer internship students have access to a female mentor throughout their placements. <br> - List of female mentors to be created. <br> - Line managers informed to adjust workload allocation to allow for this. | $\begin{aligned} & \text { By December } \\ & 2016 \end{aligned}$ |  | Target all work experience students spend some time with a female mentor from 2017 onwards. |
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| $\begin{aligned} & \text { AP } \\ & 86 \end{aligned}$ | Increase proportions of work experience and internships offered to candidates with no prior connection to the AMRC. | A high proportion of NAMRC work experience placements and summer internships are offered on the basis of personal recommendation to relatives and friends of current employees. This is undesirable in terms of social mobility and can perpetuate gender-biased expectations from family and friends. | 1. Work experience and internship records to be updated to include how the student was introduced to the NAMRC. <br> - Consult with Training Co-ordinator (Debra Gisby). <br> 2. Policy/guidelines (AP 84) to include guidance on how to achieve this, which may include: <br> - NAMRC to approach schools with no prior contact, offering a defined number of places <br> - STEMNET may be able to assist this Parents of under-18s to be invited to the initial meet-up where possible to reassure female candidates and reinforce image of the organisation to the candidate's family. | 1. By <br> December <br> 2016 <br> 2. By December 2016 |  | Target 1:1 for ratio of summer internships and work experience placements offered to friends and relatives of members of staff versus candidates with no prior contact each calendar year, from 2017 onwards. |


| $\begin{aligned} & \mathbf{A P} \\ & \mathbf{8 7} \end{aligned}$ | Improve the organisation and variety of content of work experience placements | Charlotte Grainger and Josh Pearce who had placements in the NAMRC in July 2015 with a wellorganised timetable gave very positive feedback. Exposure to a variety of areas of the organisation helps to widen their awareness in a short time. | Policy (AP 84) to include: <br> - Work experience placements to be well organised and planned in advanced, with appropriate content | $\begin{aligned} & \text { 1. By } \\ & \text { December } \\ & 2016 \end{aligned}$ |  | Target all work experience placements to have a varied timetable set up in advance, from 2017 onwards. |
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|  | $\begin{aligned} & \dot{\circ} \\ & \text { E } \\ & \text { 은 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
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|  | $\begin{aligned} & \text { AP } \\ & 88 \end{aligned}$ | Improve method of selfcategorisation of job category to reduce errors | Numbers of employees in each job category does not correspond with staff numbers. | Update survey question | By November $2017$ |  | Staff numbers on survey in each job category are equal to HR list. |
|  | $\begin{aligned} & \text { AP } \\ & 89 \end{aligned}$ | Improve response rate to Athena SWAN survey amongst males. | 50\% overall initial return rate, including all but one female employee | 1. CEO to announce survey re-run in team brief. <br> 2. Line managers to directly request survey completion from their staff. <br> 3. Improved engagement from culture change and awareness. | 1.November 2017 <br> 2. November 2017 <br> 3.2016-2020 |  | At least 80\% of males respond to survey on the first time of asking, from 2017 onwards. <br> Overall at least 90\% response rate (male and female). |
|  | $\begin{aligned} & \mathbf{A P} \\ & \mathbf{9 0} \end{aligned}$ | Repeat the survey once per year and use as a benchmark for progress against the action plan | The 2015 survey provides a quantitative, secure and anonymous benchmark for comparison | 1. Re-run survey. <br> 2. Plot comparative results (2015 versus 2017) | 1. November December 2017, 2018 and 2019 <br> 2. January 2018, 2019 and 2020. |  | Survey completed and compared to 2015 results at end of 2017, 2018 and 2019. |


| $\begin{aligned} & \mathbf{A P} \\ & \mathbf{9 1} \end{aligned}$ | Improve clarity of survey questions. | Applicants reported that some survey questions were not clear to understand | Read feedback from 2015 survey and revise survey question wording accordingly. | By September $2017$ |  | No negative feedback on ease of understanding of questions from 2017 onwards. |
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| $\begin{aligned} & \mathbf{A P} \\ & \mathbf{9 2} \end{aligned}$ | Improve the options for selfclassification of gender including non-male/female classifications, and decide how to collate and analyse these responses. | Need for improved clarity in gender classification. | 1. Seek 'expert' advice <br> 2. Implement in the revised survey | 1. By September 2017 <br> 2. By November 2017 |  | No ambiguity over gender classifications in survey from 2017 onwards. |

Actions arising from working with external partners

|  | $\begin{aligned} & \dot{\circ} \\ & \dot{~} \\ & \text { 을 } \end{aligned}$ | Planned action | Rationale /evidence | Key outputs and milestones | Time scale |  | Success criteria and outcome |
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|  | $\begin{aligned} & \text { AP } \\ & 93 \end{aligned}$ | Continued cooperation with Women in Nuclear UK | Women in Nuclear UK is engaging widely with and impacting upon the UK nuclear sector. | 1. WiN events advertised to NAMRC staff. <br> 2. NAMRC contributes to WiN initiatives throughout the next four years. <br> 3. Time booking code available <br> 4. Events attendance record maintained and monitored | 1. 2016-2020 <br> 2. $2016-2020$ <br> 3. 2016-2020 <br> 4. 2016-2020 |  | NAMRC representatives present in at least $50 \%$ of WiN events, 2017 2020. |
|  | $\begin{aligned} & \text { AP } \\ & 94 \end{aligned}$ | Influence awareness of culture change in our membership. | The NAMRC has 17 Tier 1 members and 24 Tier 2 members. Regular communication is maintained through events and newsletters. | 1. Include 'inclusivity and diversity' as part of our membership charter <br> 2. Membership feedback survey updated to include inclusivity and diversity <br> 3. Monitor impact | 1. By <br> December <br> 2016 <br> 2. By <br> December $2017$ <br> 3. Annually from 2017 |  | Annual feedback from members question on inclusivity and diversity to receive positive responses |
|  | $\begin{aligned} & \text { AP } \\ & 95 \end{aligned}$ | Influence and provide guidance to other AMRC organisations interested in applying for Athena SWAN. | AMRC Group has over 400 staff located on the same site. Staff from across AMRC including senior management have shown interest in the Athena SWAN process. | Offer support to other areas of AMRC applying for Athena SWAN | 2. 2016-2020 |  | Increased participation in Athena SWAN across AMRC. |

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