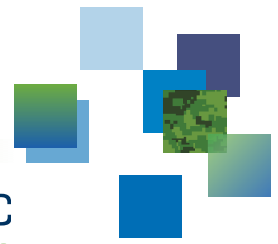DRDC | RDDC
technology**science**technologie

Outcomes and feedback from the managers' workshop on improving demographic representation at DRDC

Report by the ADM(S&T) working group on employee diversity

Sacha D. Nandlall
DRDC – Ottawa Research Centre

Gisele Amow
DRDC – Atlantic Research Centre

Patrick Brousseau
DRDC – Valcartier Research Centre

Renee Chow
DRDC – Toronto Research Centre

Christopher L. Corry
DRDC – Suffield Research Centre

Lynne Genik
DRDC – Centre for Operational Research and Analysis

Donna I. Pickering
DRDC – Toronto Research Centre

Donna L. Wood
DRDC – Centre for Operational Research and Analysis

Canada

IMPORTANT INFORMATIVE STATEMENTS

This document was reviewed for Controlled Goods by DRDC using the Schedule to the *Defence Production Act.*

Disclaimer: Her Majesty the Queen in right of Canada, as represented by the Minister of National Defence ("Canada"), makes no representations or warranties, express or implied, of any kind whatsoever, and assumes no liability for the accuracy, reliability, completeness, currency or usefulness of any information, product, process or material included in this document. Nothing in this document should be interpreted as an endorsement for the specific use of any tool, technique or process examined in it. Any reliance on, or use of, any information, product, process or material included in this document is at the sole risk of the person so using it or relying on it. Canada does not assume any liability in respect of any damages or losses arising out of or in connection with the use of, or reliance on, any information, product, process or material included in this document.

Endorsement statement: This publication has been published by the Editorial Office of Defence Research and Development Canada, an agency of the Department of National Defence of Canada. Inquiries can be sent to: Publications.DRDC-RDDC@drdc-rddc.gc.ca.

Abstract

The ADM(S&T) workforce is currently underrepresented in the employment equity groups, such as women and visible minorities. To help address this issue, the ADM(S&T) created an agency working group whose task was to generate actionable recommendations for the agency as well as present these recommendations at the 2017 managers' workshop.

The recommendations generated by the group were published as a reference document in 2017 and were categorized under five themes: measuring and communicating progress, recruitment, the hiring process, advancement, and engagement. This report summarizes feedback obtained from the managers' workshop regarding the implementation of the main recommendations generated by the group. Each recommendation is also analyzed in terms of its costs and potential benefits to the agency.

Significance for defence and security

This report analyzes a number of actionable recommendations that ADM(S&T) may implement to improve the representation of women, visible minorities, and other employment equity groups within the agency. These recommendations may help ensure that the potential gains from having a diverse workforce are maximized, and that the composition of the agency reflects the diversity of the Canadian population.

Résumé

Certains groupes d'équité en matière d'emploi, tels les femmes et les minorités visibles, sont présentement sous-représentés dans la main d'oeuvre de l'agence SMA(S&T). Afin d'adresser ce problème, le SMA(S&T) a créé un groupe de travail avec le mandat de développer des recommandations spécifiques pour redresser cette sous-représentation et de présenter ces recommandations à la réunion des gestionnaires de 2017.

Les recommandations développées par le groupe de travail ont été publiés dans un document de référence en 2017 et ont été classées sous cinq thèmes clés : la façon que le progrès est mesuré et communiqué, le recrutement, le processus d'embauche, l'avancement, ainsi que l'engagement. Ce rapport résume les commentaires reçus au cours de la réunion des gestionnaires en ce qui concerne l'implémentation des recommandations clés développés par le groupe. Chaque recommandation est également analysée en termes de ses coûts et ses bénéfices potentiels pour l'agence.

Importance pour la défense et la sécurité

Ce rapport analyse des recommandations actionnables que le SMA(S&T) peut mettre en oeuvre afin d'améliorer la représentation des femmes, des minorités visibles, et d'autres groupes d'équité en matière d'emploi au sein de l'agence. Ces recommandations peuvent contribuer à maximiser les avantages potentiels d'une main d'oeuvre diversifiée et à faire en sorte que la composition de l'organisme reflète la diversité de la population canadienne.

Table of contents

List of acronyms

ADM(HR-Civ)	Assistant Deputy Minister (Human Resources - Civilian)
ADM(S&T)	Assistant Deputy Minister (Science & Technology)
CSPS	Canada School of Public Service
DGMPRA	Director General Military Personnel Research and Analysis
DLN	Defence Learning Network
DND	Department of National Defence
DRDC	Defence Research and Development Canada
DS	Defence Scientist
EE	Employment Equity
FTE	Full Time Equivalent
GoC	Government of Canada
HRMC	Human Resources Management Committee
HR	Human Resources
IT	Information Technology
L1	Level 1 Management
L2	Level 2 Management
NCR	National Capital Region
OGD	Other Government Department
S&T	Science & Technology
TD	Temporary Duty
TM	Talent Management
PR	Public Relations
Visdoc	Visual Documentation
VTC	Video Teleconferencing

Acknowledgements

1   Introduction

Several Employment Equity (EE) groups are currently underrepresented in the ADM(S&T) workforce [1, 2], including women in technical staff and in management, visible minorities in all categories (including scientific and professional roles), and persons with disabilities in technical staff.

To help address this issue, an agency working group was convened by ADM(S&T) in early 2017 prior to the managers' workshop held later that year. The group was given the mandate of evaluating the current demographic representation of EE groups within the agency, making recommendations for accelerating the pace of change towards a balanced representation of these groups in agency S&T roles, and presenting these findings at the 2017 managers' workshop.

The recommendations generated by the working group were published in a reference document [3] and were categorized under five key themes: measuring and communicating progress, recruitment, the hiring process, advancement, and engagement.

The group's session at the 2017 managers' workshop was presented and facilitated by group members Christopher Corry and Renee Chow. Prior to the session, a subset of recommendations under each of the five themes were selected for discussion. At the session, participants were first asked to self-assess their knowledge of key EE statistics by answering a questionnaire prepared by the group; this questionnaire is presented in Annex A, with answers given in Annex B. Following this self-assessment, the participants were divided into five groups and were asked to discuss recommendations under each of the themes.

This report presents analysis and outcomes from the managers' workshop on improving demographic representation at DRDC. The recommendations that were discussed are grouped into the five themes mentioned previously: measuring and communicating progress (Section 2), recruitment (Section 3), the hiring process (Section 4), advancement (Section 5), and engagement (Section 6). For each recommendation, the text of the initiative as presented to workshop participants is first quoted from the group's previously published reference document [3]. Next, written feedback from the workshop participants regarding the initiative is provided. Finally, comments on the feedback as well as a cost-benefit assessment for each recommendation are listed.

2   Measuring and communicating progress

Achieving a balanced representation of women and other Employment Equity (EE) groups in S&T roles within DRDC will require an agency-wide, multi-year effort. During this time, measuring and communicating progress towards EE objectives is critical to success.

2.1 Employee self-identification

This recommended initiative proposes undertaking a specific effort for DRDC employees to self-identify. This can be done easily by employees in Peoplesoft and will ensure that the numbers in the annual report are as accurate as possible. It is important for employees to know that self-identification is confidential and that it will not impede their career progression.

Feedback from the workshop

No feedback was sought for this recommendation during the workshop.

Cost-benefit assessment

Since only those who choose to participate will spend time, the cost of this measure is low in terms of operations and management, and medium in terms of human resources. Hence, from a cost-benefit perspective, this recommendation should be implemented.

2.2 Dissemination of the Employment Equity report to management

This recommended initiative proposes circulating the annual DRDC Employment Equity report to management and discuss the results.

Feedback from the workshop

No feedback was sought for this recommendation during the workshop.

Cost-benefit assessment

Since the report has already been completed, the cost is for approximately one hundred managers to spend an hour discussing the results. The benefit derived from these one hundred person-hours is significantly increased awareness and direction, which is advantageous to the organization.

2.3 Training for group and team leaders

This recommended initiative proposes targeting group and team leaders for training sessions on gender bias, the status of EE in DRDC, and obligations to accommodate employees with disabilities. Group and team leaders are the level most involved in hiring technical staff.

Feedback from the workshop

No feedback was sought for this recommendation during the workshop.

Cost-benefit assessment

Since there are hundreds of group leaders and each would have to spend a few hours of their time, this recommendation would require more time and effort. Resources would also be required to set up and deliver the training in question, as well as investigate what types of training would be most effective (gender bias, racial bias, duty to accommodate, etc.). However, the benefits are potentially significant, given that EE issues do appear at this level of management.

Given that this recommendation is not as advantageous as the aforementioned ones from a cost-benefit perspective, this recommendation could also be pursued over a longer period of time.

2.4   Systematic data collection from hiring competitions

This recommended initiative proposes systematically collecting the data from competitions on who applies (from EE groups), and which candidates are hired. This is useful for analysis to understand how successful current processes are in increasing diversity in DRDC.

Feedback from the workshop

- What stakeholders need to be engaged?
    - Human Resources (HR; to obtain access to the required data).
    - Candidates (need to communicate the rationale for the data collection).

- What barriers may exist?
    - Reluctance to self-identify.
    - Difficulty or inappropriateness of estimating the data.
    - People might lie or misrepresent themselves.

- What resources would be needed?
    - A database capable of handling Protected B data.
    - Data sanitizing capability.

- What are potential, immediate actions that would help implement this recommendation?
    - Create a plan for communicating to candidates.
    - Separate out the selection criteria to: "no," "EE category," and "prefer not to self-identify."

Cost-benefit assessment

Since applicants already self-identify, this recommendation only involves collating existing statistics, and hence cost would be relatively low. Benefits include a fairer perception of the agency hiring process, and hence the cost-benefit analysis of this recommendation is advantageous to the organization.

3 Recruitment

Current ADM(S&T) recruitment efforts are ad hoc and not designed to specifically address the underrepresentation of EE groups in the agency. As a result, the pool to draw from for new hires is insufficient to meet current and future agency needs.

3.1 Developing an outreach kit

This recommended initiative proposes developing an outreach kit for common recruitment and marketing scenarios (e.g., career fairs, community outreach events). It is important that all materials in the kit (flyers, banners, slides, videos, instructions to facilitators, etc.) follow best EE practices.

Feedback from the workshop

No feedback was sought for this recommendation during the workshop.

Cost-benefit assessment

The cost of this recommendation depends on what is achievable internally and what requires the use of external resources. Hence, further assessment is needed in terms of what can be achieved using DND resources (e.g., ADM(HR-Civ), corporate and DGSTCO resources, communications, the Visdoc team) versus external contracts. Potential benefits to the agency are high in addressing Government of Canada (GoC) and DND diversity initiatives, which are top priorities for these organizations.

3.2 Targeted outreach to EE groups

This recommended initiative proposes targeting outreach activities to EE groups, and in particular universities with higher visible minority populations. Outreach activities should engage more than just the educators and the administrators in the universities (e.g., counsellors).

Feedback from the workshop

- What stakeholders need to be engaged?

- Students;
- HR and managers;
- Employees (face of the organization);
- Statistics Canada (data on the number of university graduates); and
- Co-op program managers.

• What barriers may exist?

- Coordination with other organizations and initiatives in Public Service Canada.
- EE groups may not associate with Defence, for example for cultural reasons.
- Getting the word out to students effectively, particularly in tailoring communications and messaging (philosophical).
- Potential for marginalizing non-EE members.
- Leadership teams (perception of fairness of EE, educating managers, etc.).
- Feedback loop (being singled out if joining the organization).
- Monetary; for example, if hiring from a city that has a larger pool of EE candidates but is further away, increased travel costs may be involved.

• What resources would be needed?

- Robust capability to do video interviews.
- Synchronization with university job fairs.
- Social media and web presence, as well as marketing expertise.
- Understanding audience targeted messaging requirements, but at the same time remaining representative of our organization.

• What are potential, immediate actions that would help implement this recommendation?

- Perform an analysis of the target audience (e.g., which university programs have good EE representation?).
- Increase presence at job fairs per the above analysis.

3.3 Conduct EE-targeted staffing processes

This recommended initiative proposes conducting EE-targeted staffing processes. The current practice of including text that EE groups are encouraged to apply may be insufficient for some groups. Consider staffing processes open to EE groups only, or having hiring managers make personal contact with known members of EE groups to encourage them personally to apply to open positions.

Feedback from the workshop

- What stakeholders need to be engaged?
    - EE groups;
    - Universities;
    - Cultural associations; and
    - Hiring managers.

- What barriers may exist?
    - Potentially limited pool of candidates.
    - The effort required to identify EE groups to target.
    - Lack of mobility of EE groups to areas with low EE demographics.

- What resources would be needed?
    - Money and Temporary Duty (TD) funds for recruitment efforts (e.g., travel to indigenous areas).
    - Demographic data.

- What are potential, immediate actions that would help implement this recommendation?
    - Hire a consultant specializing in EE recruitment.
    - Highlight benefits of public service employment versus the private sector.
    - Investigate more flexible staffing options (term employment, co-ops, secondments, etc.).

4 The hiring process

Studies have shown that the hiring of candidates in EE groups is significantly impacted by implicit biases [4, 5]. If not properly addressed, this issue could prevent the agency from hiring the personnel needed to achieve a balanced representation of EE groups.

4.1 Ensure diversity in selection boards

This recommended initiative proposes that HR staffing officers ensure selection boards have sufficient diverse representation. In situations where this may be a challenge for DRDC, seek selection board members from external organizations.

Feedback from the workshop

- What stakeholders need to be engaged?
    - Boards at the Centre level, drawing from other Centres if required.
    - HR, to identify candidate members as needed.

- What barriers may exist?
    - Availability and size of the pool of candidates available at each Centre.
    - Potential stigmatization of individuals.
    - Full representation of diversity may not be possible.

- What resources would be needed?
    - Identified budgets for travel and other enabling factors.
    - Education on the value of diversity.
    - Promote the spirit of the intent to whatever extent possible.

- What are potential, immediate actions that would help implement this recommendation?
    - Promote student diversity.
    - The ADM could further fund and promote entry level candidates for diversity.

Cost-benefit assessment

It is anticipated that the cost-benefit of these recommendations will be medium in the near term to high in the longer term as diversity hiring is increased (larger pools for hiring boards, management, awareness, cultural change, etc.).

4.2   Review evaluation mechanisms for bias

This recommended initiative proposes that evaluation mechanisms should be carefully reviewed to ensure no EE group is disadvantaged. For example, the use of VTC (Video Teleconferencing) can disadvantage candidates who have English or French as their second language. Board members should also be sensitive to any cultural differences in social interactions during interviews.

Feedback from the workshop

- What stakeholders need to be engaged?
    - Experts in the field, such as DGMPRA (Director General Military Personnel Research and Analysis).
    - Hiring managers.

- Other DRDC staff involved in staffing (they need training).

- What barriers may exist?
  - Strong incentive to maintain the status quo by using well established interviewing processes that do not account for cultural differences effectively.
  - Not being able to find a diverse recruiting board.
  - Board members being unaware of their own biases.

- What resources would be needed?
  - Training;
  - Experts in the field; and
  - Ensuring accommodations are available (e.g., logistics).

- What are potential, immediate actions that would help implement this recommendation?
  - Blind screening.
  - A diverse hiring board.

4.3   Check assumptions around non-verbal communication

This recommended initiative proposes having board members check assumptions around body language and other non-verbal communication for cultural differences.

Feedback from the workshop

Feedback for this recommendation was collected on the same sheet as the previous recommendation in Section 4.2 on reviewing evaluation mechanisms for bias. The feedback in Section 4.2 also applies to this recommendation.

5   Advancement

The underrepresentation of EE groups such as women and visible minorities is present at all levels of the agency, including senior management roles. Achieving a balanced representation of EE groups throughout ADM(S&T) will therefore require examining the career advancement process within the agency and ensuring that this process provides the same opportunities to all applicants.

5.1 Review the agency talent management plan

This recommended initiative proposes incorporating EE best practices into the agency's Talent Management (TM) strategy.

- At the centre level, centre directors could review their centre's TM plans with respect to diversity.

- At an organizational level, senior management could institute a process for TM and validate this process to ensure transparency and fairness.

- Information gathered at the centre level could be used to develop a master list (across centres) of individuals with TM plans, and this information may be broken down by EE group.

- From a longer term perspective, the Human Resources Management Committee (HRMC) could take diversity into account when succession planning.

Feedback from the workshop

- What stakeholders need to be engaged?
  - Line managers;
  - Management (chain of command);
  - HR;
  - Individuals and co-workers;
  - Unions;
  - Indigenous Affairs (consultation); and
  - L1 (Level 1) and L2 (Level 2) management.

- What barriers may exist?
  - Blinding the TM process;
  - Focus on merit;
  - Human dynamics;
  - Mobility;
  - Confidence;
  - Men take advancement more seriously than women (note: see comments below);
  - Willingness to act on TM plans; and
  - Awareness of TM plans.

- What resources would be needed?
  - Effort; and

– Awareness of opportunities.

- What are potential, immediate actions that would help implement this recommendation?

    – Creating an awareness of the issues involved.

    – Offer training.

    – Compare demographics of TM plan holders to those of the Canadian population.

Analysis of feedback

One of the comments mentioned in participant feedback is that "men take advancement more seriously than women." This statement would be considered to be inaccurate based on research [3], and reflects one of the challenges women face, namely that they may not be provided with growth and stretch opportunities because managers do not think they are as interested in career advancement than men. Accordingly, this comment is revealing, and suggests that educating DRDC managers on this topic is also important.

A few actions were mentioned in the feedback as a way to start moving this initiative forward, and may be worth exploring and defining in more detail. These include: creating an awareness of issues (what issues?), training (who should receive this training?), and comparing demographics of TM plan holders to those of the Canadian population (what about setting benchmarks for what is considered a success?).

Cost-benefit assessment

Benefits to the organization in the longer term are significant (medium to high), but this is also the most involved of the three recommendations in terms of cost, personnel, and effort (medium to high). There is also the challenge that defence scientists are career-managed under a person-oriented system (i.e., ease of implementation).

5.2   Encourage EE applications

This recommended initiative proposes having management encourage members of EE groups to apply for career development opportunities, such as acting positions and committee assignments.

Feedback from the workshop

- What stakeholders need to be engaged?

    – Managers;

    – Members of EE groups; and

    – Communications (focused and intentional messaging).

- What barriers may exist?
  - Potential perception that advancement is based primarily on EE group.

- What resources would be needed?
  - Communications; and
  - Information sharing capability.

- What are potential, immediate actions that would help implement this recommendation?
  - Initiate communication efforts.
  - Create EE-specific support networks.
  - Develop a culture of inclusiveness through training and communications.

5.3   Expand the agency mentoring program

This recommended initiative proposes expanding the existing DRDC mentoring program.

- Include reverse mentoring, where an individual in a senior management role is matched with a junior employee from a diversity group, such as women and visible minorities [6]. This provides senior management with an opportunity to better understand the experiences of diversity group members.

- If requested, match a mentee from a diversity group with a mentor from a similar diversity group. This enables the mentor to address specific diversity-related issues the mentee may experience or is concerned about.

- Ensure that the DRDC mentoring program requests and tracks diversity information related to mentors, mentees, and matching based on diversity. Currently, female mentees are asked if they would like to be matched with a female mentor. This matching could be expanded to visible minority mentor-mentee matching. Short-term and long-term benefits of this matching could be assessed for mentees, and perhaps even mentors.

Feedback from the workshop

- What stakeholders need to be engaged?
  - Junior EE candidates;
  - Senior employees;
  - ADM(HR-Civ) for advice;
  - Visible minority champion; and
  - Youth (important to target for their perspective; not just EE groups).
- What barriers may exist?

- Ensuring effective transmission of information.

- Interest level and receptiveness.

- Sensitivity to providing EE information (e.g., privacy concerns, may feel that the negatives of providing the information outweigh the potential benefits).

- Engendering jealousy and creating the potential for stigma.

- Ensuring that information and lessons learned are captured well.

- What resources would be needed?

  - TD funds for managers in the National Capital Region (NCR).

  - Champions for EE:
    * Check Full Time Equivalent (FTE) hours needed.
    * Perform monitoring.
    * Capture lessons learned.

  - A matching committee.

  - Information Technology (IT) resources.

- What are potential, immediate actions that would help implement this recommendation?

  - Choose a diversity champion.

  - Modify the current mentoring process.

6 Engagement

The changes described herein with respect to achieving a balanced representation of EE groups in ADM(S&T) will require awareness and engagement on improving diversity for both managers and employees in the agency.

6.1 Interactive sessions for raising awareness

This recommended initiative proposes raising awareness through interactive sessions at each centre.

- Show the diversity presentation from managers' workshop locally or via webcast.

- Invite a few guests from inside or outside DND to share success stories from diversity initiatives and programs, locally or via VTC.

- Have diversity working group members or local management facilitate a panel discussion or a question and answer session.

Feedback from the workshop

- What stakeholders need to be engaged?
    - All agency staff.

- What barriers may exist?
    - Raising awareness effectively:
        * Must go beyond simply recognizing the challenge.
        * Need to start a discussion.
        * Simply raising awareness will not change the underlying issues.
    - Need to change the process to change the culture.
    - Making the sessions engaging and interactive.
    - Need to see changes and diversity in day-to-day jobs.
    - Willingness to self-identify.
    - Maintaining ongoing discussions.
    - Being specific about the challenges involved.
    - Lack of accountability and due diligence in the process.

- What resources would be needed?
    - External people (as witnesses).
    - Communications material.
    - Leadership support in messaging (stressing the importance is mandatory).

- What are potential, immediate actions that would help implement this recommendation?
    - Consider mandatory participation in the workshops.

Cost-benefit assessment

Cost is medium, as mandatory participation may not be popular and can require significant FTE to accomplish, especially if the goal is to have multiple sessions or ongoing dialogue. Moreover, the benefit is low, as awareness sessions on their own are insufficient to create substantial change without other reinforcing initiatives. Hence, it is recommended to not implement this recommendation across the agency at this time, but instead to consider pilot testing with sub-populations (e.g., managers and supervisors only) and with a clear objective in mind (e.g., to generate and implement and a local diversity initiative).

6.2 Diversity training to grow diversity champions

This recommended initiative proposes providing voluntary training to grow diversity champions at all levels.

- Each month, promote one free online training course from the DLN (Defence Learning Network) or CSPS (Canada School of Public Service).

- Each month, schedule centre-wide or agency-wide VTC for post-training discussion.

- Ensure manager participation in each VTC to consider employees' concerns and proposals.

Feedback from the workshop

- What stakeholders need to be engaged?
  - Managers;
  - Training providers (employees); and
  - HR (involvement in training formulation and evolution).

- What barriers may exist?
  - Obtaining buy-in with respect to the value of diversity for the organization.
  - People may not feel that the training applies to them if they have no staffing authority.

- What resources would be needed?
  - Time;
  - Courseware;
  - Discussion facilitators; and
  - Managers (to mobilize and encourage staff).

- What are potential, immediate actions that would help implement this recommendation?
  - Advertise online training.
  - Nominate a diversity training champion.

Cost-benefit assessment

The cost of this measure is low, since time is required only from a few employees, if managers will encourage and support the initiative. Time and effort from the facilitators is also needed. However, potential benefits are low as well, since employees who are most interested may not always be best positioned to effect changes. Moreover, members who are already diversity-minded may become even more enlightened and engaged, but members with little awareness or interest would likely derive little value from this initiative. Hence, this recommendation is not suggested for implementation at this time.

6.3 Create diverse teams throughout the organization

This recommended initiative proposes creating diverse teams at all levels and in all functions through Sharepoint.

- Post an agency-wide list of current or planned working groups and committees with points of contact, to raise awareness of opportunities to work in diverse environments.

- Provide a mechanism for employees to express interest in committees, where employees can self-identify in EE groups or other categories (e.g., language, region, classification).

- Encourage and enable the leads of each committee to consider diverse members when discussing current and future opportunities.

Feedback from the workshop

- What stakeholders need to be engaged?
    - ADM(HR-Civ);
    - Managers (section heads, centre directors, etc.);
    - HR; and
    - EE communities and women.

- What barriers may exist?
    - Unintended bias (are we still hiring the best candidates?).
    - Geographic realities (do we hire people only locally?).
    - Availability of EE candidates (in Quebec City, is it possible to hire that many visible minorities?).
    - Some communities of minorities may dissuade their members from joining the military (DRDC); for example, because of persecution in their country of origin.

- What resources would be needed?
    - Non-traditional Public Relations (PR) campaigns that target EE groups (visible minorities, women, etc.).
    - Networking with OGDs (Other Government Departments) to get best practices.
    - Outreach to university campuses and community centres.

- What are potential, immediate actions that would help implement this recommendation?
    - Inform staff of the current diversity targets and goals, as well as of the positive results that could occur with better EE representation.
    - Start now with the goal of bringing in some improvements (rather than all that is needed).

Cost-benefit assessment

The cost of this measure is low, since it requires designing a portal or SharePoint site for employees to submit their interest, and for managers to view interested candidates. Employees and managers will also need to be informed and engaged in using the site. Design and implementation are likely achievable with a small team of four to five people, including IT experts and pilot users. Factoring in consultations with employees and management, a three month period should suffice for implementing this recommendation.

The benefit of this measure is high. Voluntary participation empowers employees by giving them the opportunity to express interest and see available opportunities. The platform could also support talent management for employees. Moreover, direct participation of diverse members in centre-level or agency-level teams or groups increases consideration of diverse perspectives to improve the team or group outputs, in addition to increasing employee engagement and buy-in when the outputs are rolled out for implementation. The platform could also support management in uncovering and considering new, enthusiastic participants for teams or groups, especially when demand for such participants is already high. This recommendation is therefore suggested for implementation.

7 Conclusion

This report analyzes a number of actionable recommendations that ADM(S&T) may implement to improve the representation of women, visible minorities, and other employment equity groups within the agency. These recommendations may help ensure that the potential gains from having a diverse workforce are maximized, and that the composition of the agency reflects the diversity of the Canadian population.

References

[1] Charest, J. (2017), DRDC demographic data for 2016. Personal communication to P. Brousseau on 2017-03-22.

[2] 2011 census of population (online), Government of Canada, http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/index-eng.cfm (Access Date: 2017-12-11).

[3] Nandlall, S. D., Amow, G., Brousseau, P., Chow, R., Corry, C. L., Genik, L., Pickering, D. I., and Wood, D. L. (2017), Improving demographic representation at Defence Research and Development Canada: report and findings of the ADM(S&T) working group on employee diversity, Defence Research and Development Canada, Reference Document, DRDC-RDDC-2017-D145.

[4] Febbraro, A. R. and Pickering, D. I. (2015), Women in science, technology, engineering, mathematics, and management: implicit bias challenges and interventions, Defence Research and Development Canada, Scientific Report, DRDC-RDDC-2015-R187.

[5] Wheeler, C. (2003), Best practices for hiring with a focus on diversity and equity. Lethbridge, AB, Canada.

[6] Hemmadi, M. (2016), How "reverse mentoring" can help improve workplace diversity (online), Canadian Business, http://www.canadianbusiness.com/innovation/how-reverse-mentoring-can-help-improve-workplace-diversity (Access Date: 2017-12-13).

This page intentionally left blank.

Annex A Questionnaire

Please answer quickly and just give your best estimates. Your answers are for your eyes only. Answers are in Annex B.

1. Visible minorities make up ⬚% of Canada's population.

2. Rank the following cities from highest (1) to lowest (3) in percentage of visible minorities:

   ⬚ Halifax ⬚ Calgary ⬚ Ottawa

3. What is the percentage of visible minorities in Quebec City? ⬚ %

4. What is the percentage of visible minorities in Toronto? ⬚ %

5. Women make up ⬚% of university graduates.

6. Women make up ⬚% of university graduates in science, technology, engineering, mathematics, and computer science.

7. Visible minorities make up 25% of defence scientists at DRDC.
   ☐ Seems about right
   ☐ Actual number is higher
   ☐ Actual number is lower

8. Visible minorities make up 10% of technical staff at DRDC.
   ☐ Seems about right
   ☐ Actual number is higher
   ☐ Actual number is lower

9. Women make up 30% of defence scientists at DRDC.
   ☐ Seems about right
   ☐ Actual number is higher
   ☐ Actual number is lower

10. Women make up 10% of technical staff at DRDC.
    ☐ Seems about right
    ☐ Actual number is higher
    ☐ Actual number is lower

This page intentionally left blank.

Annex B Answers to the questionnaire

The following answers to the questionnaire in Annex A are based on the 2011 Canadian census (questions 1–6) and 2017 DRDC data (questions 7–10).

1. Visible minorities make up $\boxed{19}$ % of Canada's population.

2. Rank the following cities from highest (1) to lowest (3) in percentage of visible minorities:

   $\boxed{\#3\ (9\%)}$ Halifax $\boxed{\#1\ (30\%)}$ Calgary $\boxed{\#2\ (24\%)}$ Ottawa

3. What is the percentage of visible minorities in Quebec City? $\boxed{4}$ %

4. What is the percentage of visible minorities in Toronto? $\boxed{49}$ %

5. Women make up $\boxed{59}$ % of university graduates.

6. Women make up $\boxed{39}$ % of university graduates in science, technology, engineering, mathematics, and computer science.

7. Visible minorities make up 25% of defence scientists at DRDC.
   ☐ Seems about right
   ☐ Actual number is higher
   ☒ **Actual number is lower (15%)**

8. Visible minorities make up 10% of technical staff at DRDC.
   ☐ Seems about right
   ☐ Actual number is higher
   ☒ **Actual number is lower (3%)**

9. Women make up 30% of defence scientists at DRDC.
   ☒ **Seems about right (28%)**
   ☐ Actual number is higher
   ☐ Actual number is lower

10. Women make up 10% of technical staff at DRDC.
    ☐ Seems about right
    ☒ **Actual number is higher (23%, but out of 34% available)**
    ☐ Actual number is lower

DOCUMENT CONTROL DATA

*Security markings for the title, authors, abstract and keywords must be entered when the document is sensitive

1. ORIGINATOR (Name and address of the organization preparing the document. A DRDC Centre sponsoring a contractor's report, or a tasking agency, is entered in Section 8.) DRDC – Centre for Operational Research and Analysis Carling Campus, 60 Moodie Drive, building 7S.2, Kanata, ON K1A 0K2, Canada	2a. SECURITY MARKING (Overall security marking of the document, including supplemental markings if applicable.) CAN UNCLASSIFIED
	2b. CONTROLLED GOODS NON-CONTROLLED GOODS DMC A

3. TITLE (The document title and sub-title as indicated on the title page.)

Outcomes and feedback from the managers' workshop on improving demographic representation at DRDC: Report by the ADM(S&T) working group on employee diversity

4. AUTHORS (Last name, followed by initials – ranks, titles, etc. not to be used. Use semi-colon as delimiter)

Nandlall, S. D.; Amow, G.; Brousseau, P.; Chow, R.; Corry, C. L.; Genik, L.; Pickering, D. I.; Wood, D. L.

5. DATE OF PUBLICATION (Month and year of publication of document.) December 2018	6a. NO. OF PAGES (Total pages, including Annexes, excluding DCD, covering and verso pages.) 27	6b. NO. OF REFS (Total cited in document.) 6

7. DOCUMENT CATEGORY (e.g., Scientific Report, Contract Report, Scientific Letter)

Reference Document

8. SPONSORING CENTRE (The name and address of the department project or laboratory sponsoring the research and development.)

DRDC – Centre for Operational Research and Analysis
Carling Campus, 60 Moodie Drive, building 7S.2, Kanata, ON K1A 0K2, Canada

9a. PROJECT OR GRANT NO. (If appropriate, the applicable research and development project or grant number under which the document was written. Please specify whether project or grant.)	9b. CONTRACT NO. (If appropriate, the applicable contract number under which the document was written.)
10a. DRDC DOCUMENT NUMBER DRDC-RDDC-2018-D160	10b. OTHER DOCUMENT NO(s). (Any other numbers which may be assigned this document either by the originator or by the sponsor.)

11a. FUTURE DISTRIBUTION WITHIN CANADA (Approval for further dissemination of the document. Security classification must also be considered.)

Public release

11b. FUTURE DISTRIBUTION OUTSIDE CANADA (Approval for further dissemination of the document. Security classification must also be considered.)

Public release

13. ABSTRACT/RÉSUMÉ (When available in the document, the French version of the abstract must be included here.)

The ADM(S&T) workforce is currently underrepresented in the employment equity groups, such as women and visible minorities. To help address this issue, the ADM(S&T) created an agency working group whose task was to generate actionable recommendations for the agency as well as present these recommendations at the 2017 managers' workshop.

The recommendations generated by the group were published as a reference document in 2017 and were categorized under five themes: measuring and communicating progress, recruitment, the hiring process, advancement, and engagement. This report summarizes feedback obtained from the managers' workshop regarding the implementation of the main recommendations generated by the group. Each recommendation is also analyzed in terms of its costs and potential benefits to the agency.

Certains groupes d'équité en matière d'emploi, tels les femmes et les minorités visibles, sont présentement sous-représentés dans la main d'oeuvre de l'agence SMA(S&T). Afin d'adresser ce problème, le SMA(S&T) a créé un groupe de travail avec le mandat de développer des recommandations spécifiques pour redresser cette sous-représentation et de présenter ces recommandations à la réunion des gestionnaires de 2017.

Les recommandations développées par le groupe de travail ont été publiés dans un document de référence en 2017 et ont été classées sous cinq thèmes clés : la façon que le progrès est mesuré et communiqué, le recrutement, le processus d'embauche, l'avancement, ainsi que l'engagement. Ce rapport résume les commentaires reçus au cours de la réunion des gestionnaires en ce qui concerne l'implémentation des recommandations clés développés par le groupe. Chaque recommandation est également analysée en termes de ses coûts et ses bénéfices potentiels pour l'agence.