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Office of Audit and Evaluation

Audit of Talent Management – Workforce Planning and Succession Management

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Executive Summary and Conclusion

Background

This audit report presents the findings of the National Research Council Canada's (NRC) *Audit of Talent Management – Workforce Planning and Succession Management*. The audit was approved by the President following the recommendations of the Senior Executive Committee and thereafter by the Departmental Audit Committee on June 24, 2016 as part of the NRC 2016-17 to 2018-19 Risk-Based Internal Audit Plan.

Audit Objective

The objective of this audit was to provide reasonable assurance that NRC's talent management policies and practices enable effective workforce planning, including succession management, at NRC.

Raison d'être

Talent management is a widely recognized driver for organizational success. As a knowledge-based organization, effective processes and mechanisms to identify, measure, nurture, and sustain talent are vital to becoming an effective research and technology organization (RTO).



Figure 1 – Talent management elements

Workforce planning and succession management support NRC in addressing current and future human resource needs and help prepare the organization to address expected and unexpected gaps in its workforce at varying levels of the organization. Effective workforce and succession planning processes enable organizational responsiveness, to dynamic work environments and government priorities.

Strengths

Workforce planning roles, responsibilities, and accountabilities are defined and support a functioning governance structure. In general, we noted that the planning framework enables workforce and succession management activities.

NRC is in the process of inventorying and defining the key positions and roles that are critical to its success. Synergies exist that can be capitalized on, with corporate support, as individual operating groups undertake competency inventory exercises to define existing and anticipated

research and technical competencies needed to remain at the forefront of Canadian innovation.

NRC has defined a succession planning program aligned with its workforce planning framework. We noted that knowledge management activities are integrated with succession activities to varying degrees reflective of differing business processes between operating groups.

Areas for Improvement

While governance structures exist and support workforce planning management, further clarification of workforce planning authorities across portfolio and branch, division, and enterprise levels is necessary to support strategic alignment across NRC.

Information is available to support informed decision-making. We noted opportunities for improvement with respect to accessibility, integrity, and utility. A planning approach that brings together current, medium-, and longer-term workforce and competency needs is necessary to prepare NRC for tomorrow's research challenges.

Opportunities exist to strengthen talent development and career management processes aligned with NRC's approach to career progression to maintain morale and enable its workforce to build upon their meaningful contributions to the organization.

Some of the opportunities for improvement noted could be addressed with Human Resource Branch's (HRB) adoption of components of an integrated talent management solution (SuccessFactors). Further consideration of related modules, specifically supporting workforce planning and succession management, would reinforce the existing framework and increase program effectiveness.

Audit Opinion and Conclusion

In my opinion as Chief Audit and Evaluation Executive, the elements examined of NRC's current management control framework for talent management, with respect to workforce and succession planning, are adequate to enable workforce planning. NRC should further strengthen its talent management practices through ongoing improvement and risk-based considerations as set out below.

Statement of Conformance

In my professional judgment as the Chief Audit Executive, sufficient and appropriate audit procedures have been conducted and evidence gathered to support the accuracy of the audit opinion and conclusion. The opinion is based on a comparison of the conditions, as they existed at the time, against pre-established audit criteria that were agreed on with management. The opinion is applicable only to the entity examined. The engagement was conducted in conformance to the requirements of the Policy on Internal Audit, its associated directive, and the *Internal Auditing Standards for the Government of Canada and Code of Ethics*. The evidence was gathered in compliance with the procedures and practices that meet the auditing standards, as corroborated by the results of the quality assurance and improvement program. The evidence gathered was sufficient to provide senior management with proof of the opinion derived from the internal audit.

Alexandra Dagger, CIA, Chief Audit and Evaluation Executive

¹ Appendix B defines potential overall audit ratings

Acknowledgements

The audit team would like to thank those who collaborated in this effort to highlight NRC's strengths and opportunities for improvement as they relate to this audit project.

1.0 Introduction

Attracting and developing high quality and high potential personnel and managing for excellence are recognized success factors to support NRC in the achievement of its strategic and operational objectives.

The Audit of Talent Management was approved by the President following the recommendations of the Senior Executive Committee and the Departmental Audit Committee on June 24, 2016 as part of the NRC 2016-17 to 2018-2019 Risk-Based Internal Audit Plan.

2.0 Background and Context

As a departmental corporation that is also listed under Schedule V of the *Federal Administration Act* (FAA), NRC is a separate employer within the Government of Canada and is excluded from the requirements of the *Public Service Employment Act* and *Public Service Modernization Act*. Separate employer status enables flexibility in the determination of human resource related policies and guidelines to meet NRC's needs.

NRC's FY2016 client survey noted that clients come to NRC due to the recognized scientific knowledge of its researchers and trust in NRC's research methods. NRC relies on the knowledge, skills, and abilities of its workforce as the driver for success. NRC faces similar challenges to industry and government with respect to an aging workforce, maintaining relevance in innovation activities, and matching labour and expertise supply and demand. For example, as noted in Figure 2, as of September 2016, 10% of NRC's workforce was eligible for retirement without penalty. This increases to 45% of NRC's current workforce by FY2027. Employee² and employer³ driven turnover has generally trended downward as shown in Figure 3.

Figure 2 – Workforce retirement eligibility as of September 2016

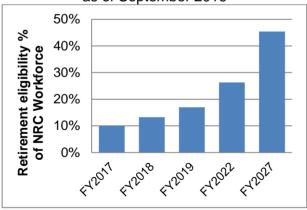
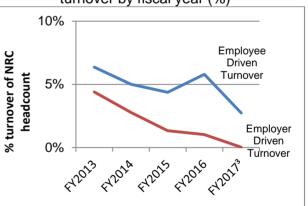


Figure 3 – Employer / Employee driven turnover by fiscal year (%)⁴



As part of the President's Mandate Letter, NRC has undertaken the NRC Dialogue initiative to review and better position NRC to support the Government of Canada's Innovation Agenda. The Initiative is expected to influence NRC's approach to hiring of under- and post-graduate students, increase opportunities for women in research, and support leadership development to develop NRC's next generation workforce.

² Employee driven turnover includes resignations, retirements, and deceased individuals

³ Employer driven turnover includes discharges, layoffs, employment revocations, rejections during probation, and early ending of terms

⁴ Data for FY2017 is presented up to September 2016

3.0 About the Audit

Objective

The objective of this audit is to provide reasonable assurance that NRC's talent management policies and practices enable effective workforce planning, including succession management, at NRC.

Scope

The audit scope concentrated on activities by Human Resources Branch (HRB) and the processes, procedures, tools, and templates provided by HRB to Portfolios, Branches, and Industrial Research Assistance Program (PBIs) for talent management. A cross-sectional approach was taken to engage both the supply (HRB) and demand side (PBIs) of workforce and succession management expertise and services. The audit examined plans, risks, and mitigation strategies defined for fiscal year 2016. Based on the planning stage risk assessment, the audit scope focused on workforce planning and succession management as described in Figure 1 and Appendix A of this report.

The audit scope excluded classification processes, budgeting, and financial forecasting practices. The audit touched upon other elements of talent management, including employment equity, diversity, and official languages, to the degree that they relate to workforce planning and succession management.

Approach and Methodology

The audit was conducted in accordance with generally accepted professional auditing standards of the Institute of Internal Auditors (the IIA) and the standards and requirements set out in the Treasury Board <u>Policy on Internal Audit</u>. The audit criteria, presented in <u>Appendix A</u>, were primarily derived from the NRC HR Manual with consideration to TBS Management Accountability Framework areas of management and Office of the Comptroller General's (OCG) Audit Criteria related to the Management Accountability Framework: A Tool for Internal Auditors (2011). Consideration was also given to related key policies, standards, and directives.

Criteria were discussed with management in advance of the audit. Audit samples were drawn from across the organization. Divisions and portfolios were selected to obtain representative audit findings to support workforce and succession planning across NRC. Our selection methodology incorporated quantitative and qualitative factors including general workforce demographics, retirement eligibility, planned staffing activities, turnover, and other professional judgement informed criteria. The audit methodologies were selected to ensure that the root cause of findings was identified and to ensure recommendations add value for NRC.

4.0 Audit Findings and Recommendations

4.1 Workforce Planning, Alignment, and Governance

Summary Finding

Overall, we found that workforce planning is supported by an adequate framework that aligns with related talent management and NRC business processes.

Roles, responsibilities, and accountabilities associated with workforce planning have been defined and communicated. In general, HR related planning processes were found to inform business planning, integrating information from the operating environment. Governance structures in place are adequate to provide the necessary oversight and challenge function to enable workforce planning activities. However, NRC would benefit from further clarification of the degree to which workforce planning activities are undertaken at varying levels of management to support alignment that furthers NRC's operational and strategic objectives.

We could not identify formalized guidance for PBIs to manage their high potential employees in a consistent fashion that maximizes benefits for NRC.

Groups across NRC are in the process of defining and cataloguing their current competencies and capabilities. Synergies exist, through centrally supported planning and resourcing, for an NRC wide catalog to benefit NRC as a whole, to maximize the value of its matrix structure, and facilitate increased cross-portfolio interaction. Information is generally available to support decision-making. Opportunities exist to increase reporting accessibility and utility to better align with NRC's HR management principle of sub-delegating authority where possible and appropriate.

Supporting Observations

4.1.1 Workforce planning roles, responsibilities, and accountabilities

As a separate employer within the Government of Canada, accountability for all personnel management related matters, including determining employment terms and conditions rest with the President of NRC. The President may delegate these authorities to personnel managers within NRC.

With respect to workforce planning, the Vice-President, HRB is responsible for:

- Developing and obtaining approval for policies, procedures and programs;
- Training, advising and assisting management in undertaking HR planning;
- Supporting activities to analyze NRC's workforce demographics and providing enterprise HR planning information; and
- Monitoring, evaluating, and reporting on progress against NRC's HR objectives.

PBIs are responsible for actual implementation of HR planning programs providing opportunities to implement unique workforce and succession practices that address local needs but may not demonstrate complete alignment with NRC-wide initiatives.

Human Resource Generalists (HRG) serve as frontline HR support staff to PBIs and provide a diverse array of HR related services including workforce planning and succession management advice and the provision of regular and ad-hoc HR reports. A corporate resource fulfills ad-hoc and specialized HR reporting requests. HR teams are assigned to PBIs while HRB centrally

manages programs such as hiring and recruitment, learning and development, and performance management.

NRC Finance Branch (FB) comptrollers are responsible for supporting PBIs in planning, forecasting, and monitoring of salary expenses. As of FY2017, only FB staff have access to NRC's corporate salary forecasting tool. Plans are in place to refine reporting capabilities and make them available to management. In the interim, comptrollers and HRGs meet regularly to reconcile staffing plans with salary forecasts to support management oversight.

The NRC Human Resources (HR) Manual outlines the roles and responsibilities associated with human resource planning and management and its contribution to high productivity and employee satisfaction. The HR Manual is organized to delegate people management authorities to the lowest levels possible recognizing the importance of direct engagement by supervisors with employees to maximize productivity and support proactive workforce management.

The HR Manual delegation of authority instrument defines the roles and responsibilities of NRC personnel managers, serving as the core document from which managers derive their talent management related authorities. A specific component of the delegation instrument is devoted to HR planning related authorities. Delegated workforce planning related authorities include performance agreement (i.e. Commitments to Excellence) reviews, approvals and performance result ratings; visiting worker related approvals; workforce adjustment decisions; official languages hiring considerations and training; job accommodation related approvals; and approvals for training, incentives, and awards.

NRC's talent management policies, processes and procedures are consolidated within the NRC HR Manual as documented on NRC's intranet. We identified additional materials that define and delineate workforce planning related roles and responsibilities in the form of job descriptions, planning templates, and guidance on management in NRC's matrix model.

4.1.2 Planning alignment between business needs and environmental context

Workforce Planning Approach

We found a defined planning framework to align planning activities across programs, portfolios, divisions. Planning and Reporting Services (PRS) provides a common set of program and portfolio planning templates. These templates involve resource definitions including workforce plans, gap analyses, hiring plans, and related talent management plans to operationalize PBI and NRC strategies. PBIs are expected to develop HR plans that are integrated at the Division level and rolled into an NRC wide plan.

Our review of FY2016 operational plans and their HR components identified inconsistent application of HR guidelines with unique PBI approaches to defining workforce needs. The operational plans examined generally quantified workforce needs supported by qualitative factors. However, we identified only two of six divisions had divisional workforce plans. HR related performance metrics were found to be reflective of local management objectives and generally aligned with corporate performance targets.

Our review of strategic and operational plans identified limited planning considerations for NRC HR policy dictated requirements with respect to official languages, employment equity, and multi-culturalism to support a diverse and representative workforce. We noted that HRB has developed a workforce toolkit that provides structure to enable consistent and organized workforce planning activities that addresses policy requirements.

We noted that the current corporate performance measurement framework encourages PBIs to prioritize activities to generate revenue, contain costs, and maximize recoverable time. Near-term oriented objectives reduce management incentive to devote resources to identifying next

generation program ideas, future competency needs, and addressing competency gaps thereby increasing the risk of workforce obsolescence.

While PBIs use common planning templates, we identified variations in workforce planning approaches reflective of differing PBI management processes. A sample of program business cases, business plans, implementation plans, and progress reports, identified unique approaches to defining and quantifying workforce assumptions. For example, we identified programs incorporating succession planning considerations and workforce gap analyses even though portfolios are tasked with managing resource availability.

We found that HRB's workforce planning toolkit does not expressly require PBIs to identify attrition estimates. While attrition is difficult to forecast, better integration of HR information, PBI planning, and supervisory activities facilitates improved forecasting of workforce changes. For example, we noted that one PBI had developed succession plans at the operating team level by using HRB provided demographical data to focus supervisor-employee conversations.

Consistently quantifying an estimated level of attrition, either through employer driven approaches such as workforce adjustments, terminations, and program and project closures, or through employee driven separation facilitates an NRC understanding of potential resource gaps. It also reinforces staffing plans, and supports NRC's corporate objective to develop an NRC wide workforce plan. Providing guidelines or estimates to PBIs also supports alignment of planning approaches and enables PBIs to build upon with their own assumptions and internal insight.

Understanding the Current Workforce and Supply

We noted varying degrees to which PBIs have defined competency proficiency with some using three level scales and others only listing competencies. We also noted that the workforce planning toolkit does not require proficiency ratings to identify developmental needs, nor does it require PBIs to assess the availability of a competency. NRC's workforce planning toolkit does provide a framework for integrated and aligned talent management by cataloguing existing competencies and identifying gaps, defining staffing needs, and documenting training needs.

We did not identify environmental scanning activities to assess general workforce supply and provide macro-level insight into Canadian and global HR trends. While individual PBIs have indepth knowledge of labour supply within their respective industrial sectors, HRB's scanning activities primarily incorporate internal workforce factors. We noted through interviews that an assessment of labour supply could increase HRB responsiveness to PBI HR needs such as increased engagement with academic institutions, new or modified training programs, and better guidance to PBIs with respect to organizational design and decisions to hire, train-up, or contract out. For example, a downturn in one industrial sector represents opportunities to attract top expertise to the organization. Alternatively, the absence of desired expertise could warrant a campus outreach initiative to influence learning program offerings.

We noted various approaches to managing cross-portfolio resource sharing challenges. In one instance, a PBI defined an approach to prioritize resource support to specific programs (hosted and other PBI programs) based on strategic alignment to better map development and hiring needs. Effectively sharing expertise and skills across NRC is a vital practice but increases the risk of siloes across PBIs that reduce the effectiveness of NRC's matrix organization. Program outlooks spanning short to medium terms (three to five years) and unique PBI-level approaches to developing new programs increase barriers to cross-portfolio pollination and collaboration.

Branding

Employer branding was noted as a significant PBI concern to effectively source top talent. As of Q2 FY2017, HRB continues to operationalize NRC's defined talent attraction strategy and concerted branding campaign. Opportunities exist for NRC to build stronger relationships with higher learning institutions and increase awareness of NRC's research activities and expertise such as having NRC researchers collaborate on the creation of or delivering free- or open-ware learning courses. This aligns with case study best practices of industry-academia relationships that developed from minor relationships into strategic collaborations and facilitated a pipeline of talent and research ideas.

Identifying Future Workforce Needs

NRC has undertaken various corporate initiatives to help shape NRC's investment strategy in emerging technologies, influence future program development, and support cross-pollination and awareness of existing program activities. Our review of FY2017 strategic and operational plans identified efforts across portfolios to define program ideation processes that will help shape skill and competency needs and workforce gap analyses.

We noted Executive-supported and resourced program ideation processes, such as NRC's Game Changing Technologies (GCT) Initiative, to support the identification of future workforce competency, knowledge, and skills requirements. Launched in FY2015, the GCT Initiative identified new opportunities and program ideas, indirectly supporting workforce planning to secure NRC's relevance in Canada's innovation landscape. A variety of factors, including corporate and PBI level performance measures encouraging revenue generation, cost constraint, and achievement of recoverable time targets, do not support an environment conducive to idea exploration when benefits are to be realized in the medium to long-term.

Knowledge and Information Technology Services (KITS) provides research and development environmental scanning services enabling PBIs to access timely and relevant industry information in support of program planning and resource definition. We also identified industry specific dashboards providing users with analyses of industry global and national trends, economic indicators, aggregate employment figures, top companies and competitors, and other factors that could influence talent related program assumptions and planning. As of November 2016, nine of 18 dashboards had been updated from the previous year.

NRC has staff that provide insight at the global level on the nature and pace of change affecting NRC's priority areas. They also offer technology sector assessments to understand the direction of technology development, key players, and impacts to existing markets that could help inform competency gap analyses.

We noted reliance by PBIs on their assigned Business Management Support (BMS) teams and frontline research staff for business environment insight to inform strategic, operational, and talent management related planning. In general, we noted informal practices in place to develop insight into environmental operating factors. These included staff engagement of industry players and collaborators at conferences; training events and related forums; stakeholder consultations; acquisition of industry research; external positions such as adjunct professorships or participation on industry related boards; and, researcher professional networks.

Workforce Management Alternatives

Our review of strategic and operational plans identified consideration for various alternative forms of workforce management to address current and future needs and both anticipated and unanticipated changes in workload. Our sample of PBIs noted the following workforce management alternatives:

- Competitive and non-competitive outsourcing to address gaps or increase organizational bandwidth:
- Increased use of post-secondary and post-graduate students for workforce renewal;
- Continued use of NRC's pre- and post-retirement programs for workforce continuity;
- Leveraging NRC's visiting worker program for bleeding edge ideas and talent; and
- Increased use of non-competitive hiring vehicles in recognition of program timeframes and the temporary nature of project based activities.

In one example, we noted organizational design changes to outsource specific functions to allow staff to be refocused to research and technical activities.

HRB has a variety of programs that enable alternative workforce management strategies. As codified in the HR Manual, provisions and guidelines exist for term and short-term staffing; exchanges, secondments, and assignments with Other Government Departments (OGD) and industry; campus recruitment and recruiting post-secondary and post-graduate talent; and sourcing foreign workers.

4.1.3 Governance structure, oversight and reporting mechanisms to support the alignment of talent management activities with NRC's Strategy

We reviewed the terms of reference for various governance bodies noting that mandates and scopes were clear and complementary in providing direction and oversight of human resource management related activities aligned with NRC's Strategy.

Alignment of governance bodies and strategic direction is facilitated through NRC leadership sitting on or chairing workforce and succession management related decision-making bodies such as the R&D VP committee and the Human Resources Promotion Committees and championing HR related initiatives such as diversity, employment equity, and official languages. Alignment is also advanced through formally approved and documented guidance such as in the form of the President's Mandate Letter and annual NRC wide operating plans.

Governance bodies demonstrated agility and responsiveness to identified needs and gaps in direction. For example:

- NRC Council formed an HR sub-committee in 2016 to consider matters related to senior leadership, executive structure, and succession management;
- SEC reviewed and approved NRC's Corporate Risk Profile incorporating talent management related risks and mitigation plans;
- SEC formally responded with an action plan for a Chief Information Officer succession plan under the Comptroller General's <u>Audit of Information Management</u>;
- SEC undertakes ongoing monitoring of NRC's Employment Equity action plans; and
- The Learning Advisory Committee was formed to support the identification of corporate learning and development needs.

Division Heads are responsible for the management and stewardship of HR resources aligned with NRC's overall strategic direction. NRC General Managers and Directors General are responsible for the management and stewardship of their staff including the identification and definition of talent needs, review of employee performance, succession planning, identification of high performance individuals, and other HR matters in accordance with established NRC HR policies.

We identified a variety of corporate and PBI level reporting activities used to inform and support governance body decision-making and to enable alignment of talent management activities including:

- Quarterly corporate performance reporting with metrics on turnover including the loss of High Potential [employees] (HIPO)s or individuals in critical roles, and time devoted to learning and development;
- Regular division level performance reporting including division level HR metrics such as completion of performance agreements with developmental goals, regrettable departures, new employees, and talent-related operational challenges;
- · Program planning reviews and approvals;
- Regular program progress reporting detailing resource challenges, resourcing changes based on revised assumptions, and talent management activities following program completion or closure;
- Annually updated, formally approved and resourced strategic and operational plans; and
- Ad-hoc human resource reporting such as a workforce overview supporting onboarding of new executives or custom reporting based on senior management parameters.

The Corporate Risk Profile (CRP) identifies, documents, and communicates the most significant risks to achieving NRC's objectives. The CRP includes senior executive commitments to address risks, serving as an anchor point in their performance reviews and supports prioritization in decision-making. The sourcing and management of technical and business expertise was identified as a corporate risk while talent management is referenced in two other corporate risks. As part of risk management action plans, NRC committed to updated staffing related performance measures and developing an NRC wide workforce plan by FY2018.

Subject to the Government of Canada's Innovation Agenda and the review of NRC's current activities (NRC Dialogue), it is vital for NRC to define a talent management governance model that provides sufficient consistency and commonality in approach to capitalize on NRC's matrix model. The governance model must balance centralization and local management to effectively leverage the depth and breadth of NRC's research and technical expertise. For example, diverse PBI approaches and practices address local management needs but preclude streamlined information consolidation and complicate efforts to manage resources crossfunctionally. Clearly defining the lead authority for workforce planning and accountability for HR information standards is a precursor to effective workforce planning. A defined lead authority is also vital to ensure HRB's technology solutions are designed to address NRC's needs.

Recommendation

 The Vice-President, Human Resources Branch should revisit, with senior management, NRC's talent management model to clarify the degree to which accountabilities and authorities for workforce planning approaches and activities are to be undertaken across NRC's levels of management and Human Resource Branch's role within that context. [Priority: High]

4.1.4 Current and future critical competencies and capabilities

PBIs manage their base of skills and competencies independently according to NRC's principle of delegated HR authority. HRB has provided a toolkit to support PBI workforce planning activities. The toolkit provides the structure necessary to develop an NRC wide workforce plan. The toolkit includes a non-mandatory section to document, at a high level, key research and or

technical competencies to address current and future business requirements. PBIs are required to define the positions that are vital to the functioning of NRC, and critical roles or individuals with key knowledge, contacts, and or history that make them vital to NRC success.

Our review of operational plans noted numerous portfolios undertaking competency inventorying exercises with the common purpose of addressing current program needs and preparing for future program requirements. The majority of scoped-in PBIs had a competency inventory identifying the key skills, knowledge, and to a limited degree, capabilities captured in spreadsheet software. Only two of five scoped-in PBIs had defined competency gaps and or future competencies necessary to meet strategic objectives.

We identified various approaches to align competencies with business needs by articulating capabilities or service offerings based on competency sets and teams. While unique approaches to competency management reflect local needs, it further complicates efforts to develop an NRC wide workforce plan and introduces barriers to cross-portfolio collaboration expected of a matrix organization.

We noted that NRC lacks a common taxonomy to classify and manage competencies due to varying business unit practices. The lack of a common definition of competency, or framework from which to identify, manage, and develop competencies, precludes an NRC wide approach to managing talent risk and complicates efforts to leverage existing NRC expertise in a crossfunctional manner. We also observed differences across PBIs in their assessment of competency proficiency, which is important to establish a baseline for comparison and managing performance expectations.

We identified numerous instances of PBIs leveraging different tools to catalogue and map existing competencies and skills including spreadsheet software and proprietary databases. In one example, one PBI had implemented a system to capture researcher information by research areas, equipment use, professional relationships, and academic qualifications among others. The system included the capability to illustrate cross-disciplinary relationships. Diverse, independent, efforts across NRC to classify and catalogue competencies and develop systems to track and manage them on an ongoing basis introduce barriers to resource sharing and collaboration. A centrally supported effort would represent better use of limited resources.

The lack of competency definition standardization prevents the ability to pull together PBI competency cataloguing efforts in a meaningful manner, challenges the development of an enterprise workforce plan, and hinders HRB plans for an R&D personnel competency profile to facilitate program resource allocation. The inability to consistently identify knowledge and skills that already exist within NRC reduces the effectiveness of a matrix organization, reducing cross-and multi-disciplinary interaction across portfolio lines.

We identified various approaches and models to manage competencies. Two example models that could be adapted to manage NRC's competency inventory include:

- A competency model continuum using the four categories of:
 - Universal competencies referring to core values, skills, and or knowledge (i.e. customer service or project management) which already exists at NRC;
 - o Leadership competencies;
 - o Functional competencies such as expertise in a domain (i.e. engineering); and
 - Technical competencies referring to specific skills or expertise within a subdomain
- A model based on the Building Information Modelling (BIM) Framework of:

- o Core competencies (i.e. individual skills and educational backgrounds);
- o Domain competencies of learned skills (i.e. managerial knowledge); and
- Execution competencies associated with knowledge and skills in the use of tools, techniques, and equipment (i.e. using design software or modelling programs).

We noted that other government departments (OGDs) and other leading research and or education institutions have publicly accessible expertise catalogues and or internal profiles and databases to facilitate the leveraging of existing expertise. While NRC also has an externally available expertise catalogue, its limited functionality along with NRC's ongoing IT systems transformation projects have made it obsolete.

Our review of PBI strategic and operational plans identified common risk themes related to expertise relevance and access to top talent. Plans and programs to address these risks include PBI level initiatives to develop program ideation processes to inform future workforce needs and an HRB-driven campus recruitment initiative supported by individual PBI outreach approaches.

HRB's workforce planning toolkit was released in FY2017 to provide greater structure for PBI workforce planning. Our review of operational plans identified numerous PBIs undertaking competency inventorying exercises independent of HRB's workforce planning program. We noted that any resulting gap analyses would address current needs only. PBIs are in the planning stages of defining program creation processes that will inform future workforce needs and gap analyses.

As of Q2 FY2017, PBIs were in varying stages of documenting their critical roles and positions, inventorying their HIPOs, and developing succession plans. HRB provided guidelines with respect to career pathing as the means to retain HIPOs and employees with specialized, difficult to recruit, technical skills. Concurrently, NRC defined a corporate objective to have developmental plans in place for all HIPOs supporting top talent retention.

Recommendation

2. The Vice-President, Human Resources Branch should champion the adoption of a common approach to classifying and cataloguing technical competencies in support of NRC's matrix organization. [Priority: High]

4.1.5 Information to support workforce planning and decision-making

Data and Information

Workforce planning decision-making is supported by NRC's Enterprise Resource Management (ERM) system and a variety of independent corporate and PBI managed applications. NRC also has tools integrated with its ERM system for salary forecasting and workforce related reporting.

NRC has defined parameters for HR data collection that supports a variety of analyses and reporting capabilities for informed decision-making. For example, the HR Manual requires PBIs to track and report on their workforce composition, specifying the mix of permanent, term, and short-term staff. HR data is also organized to facilitate reporting according to legislated requirements under the Employment Equity Regulations and aligned with the National Occupational Classification (NOC) standard. Alignment with national standards enables NRC to benchmark its workforce against aspects of the Canadian labour market including potential career mobility patterns and progression opportunities, occupational forecasting, labour supply and demand, and employment equity.

We noted concerns with respect to time reporting that serves as the basis for performance information and workforce planning related decision-making. For example, three of five scoped-

in PBIs identified challenges in reporting representativeness with respect to defined, recoverable time related performance metrics.

We observed minor data entry errors and data anomalies impacting NRC's workforce and salary related forecasting and reporting. We identified differences between planned staffing activities and forecast positions that have financial implications for planning purposes. We noted that management has recognized the importance of salary forecasting data integrity. For example, we identified efforts to purge outdated planning records to increase salary forecasting integrity. As well, we noted that management has defined periodic review processes and is exploring automated solutions to increase reporting integrity and accessibility.

NRC's retirement projections rely on an employee's Public Service Superannuation Act (PSSA) date to calculate retirement eligibility. We noted that the Public Services and Procurement Canada (PSPC) Pension Centre does not currently provide NRC with regular updates regarding changes to employee PSSA dates based on personal confidentiality. While the lack of up-to-date data does not impact employees, it precludes NRC's ability to generate representative retirement projections where an individual is eligible to buy back more than one year of service time. This risk has been identified by management and various solutions have been explored that are subject to resource constraints within HRB's slate of ongoing and planned initiatives.

Reporting

Numerous pre-defined reports are corporately available that support planning and monitoring activities including but not limited to demographical reports, workforce morale and health, employment and departure related statistics, promotion and employment equity statistics, official languages proficiency, and workforce management related performance metrics.

We noted inconsistent use of aforementioned reports. Among the factors noted for inconsistent adoption was a lack of awareness or access, especially at the junior supervisor or manager level; a lack of expertise to generate reports by local resources; a lack of report depth; or a lack of need. We also noted that access to NRC's salary forecasting tool is currently limited to Finance Branch (FB) personnel although efforts are planned to increase its accessibility.

Corporate management reporting includes talent management related metrics such as employer and employee driven turnover; recoverable time; time devoted to learning and development initiatives; and the completion of performance agreements that include the definition of professional development goals. Reflective of differing management processes and practices, we identified a variety of PBI level workforce management related performance metrics that generally align with corporately encouraged behaviours.

Systems

We identified PBIs making use of spreadsheet software to maintain inventories and databases of employee educational profiles, competencies, succession plans, and career objectives and aspirations supplementing corporately maintained information. While PBI-level management of workforce and succession related information meets local needs, it also increases the challenge of developing a complete view of NRC's workforce competencies and skills. Separate approaches increase information management risks, and impede the ability to leverage existing skills and competencies in a cross-NRC manner expected of a matrix organization.

NRC continues to rely on spreadsheets and paper-based systems to manage various talent management processes including staffing, performance management, and learning and development increasing the risk of data integrity issues and incomplete or unrepresentative decision-making information. As well, the lack of an automated method to track and measure performance and learning and development precludes the ability to achieve workforce agility

and operationalize learning, development, and succession plans. Reliance on manual data management and tracking is also labourious and contributes to stale information.

At the time of the audit, HRB was rolling out an integrated talent management system to enable NRC wide talent management practices. The system will automate performance management activities, provide a centrally managed learning and development management system, and enable tracking of employee goals and priorities based on development and succession plans. Implementing additional integrated talent management system capabilities in workforce and succession management would enable HRB to devote greater focus to activities of strategic value.

Benchmarking

We identified a variety of benchmarks that validate NRC's workforce and succession planning activities as leading practices and identify opportunities to improve program monitoring and assessment. Through OGD resources, we noted the following practices:

- Comparing vacant positions and overtime use to identify workload-workforce issues;
- Assessing retirement related departures relative to retirement eligibility within business units and for different job roles (i.e. researchers compared to corporate staff) for more detailed workforce planning;
- · Analyses of recruitment pipelines to assess internal training program effectiveness; and
- Reviewing new hire turnover and cases of rejection on probation for onboarding and recruitment strategy changes.

We found that NRC HR planning practices align with top global companies with respect to having a formal succession program; assessing and identifying jobs and roles critical to future organizational success; having defined internal successor pools; and three to five year workforce plans. We noted opportunities for NRC to align with top global company best practices through a formalized HIPO program; defining metrics to assess succession plan effectiveness; defining a process to communicate to individuals when they are no longer considered high potential; and incorporating senior executive performance measures reflecting aspects of retention, diversity, and mentorship.

Other leading practices we noted include greater involvement with educational institutions by having research staff develop learning programs and instructing classes, including providing open-ware learning courses, to help develop a talent pipeline.

We identified a variety of RTO related benchmarks and considerations that could support NRC talent management initiatives. RTOs are generally noted as preferred employers among recent graduates requiring strong branding; high turnover is expected due to market driven strategies and connections with industry; flexible staffing practices are required to facilitate exchanges with academia and industry; and the majority of RTOs maintained relationships with academia as a strategy for workforce renewal.

We noted opportunities to better leverage information from job search and employment websites to support HR program revisions and improvements. For example, anonymous reviews by current and former employees noted the need for streamlined processes, increased management support, and increased research and project opportunities as methods to improve the work environment. Harnessing feedback on NRC's talent management practices from a variety of sources increases NRC's ability to operationalize and adjust its talent management strategies to execute its workforce plans.

Recommendations

- 3. The Vice-President, Human Resources Branch should establish a framework for High Potential (HIPO) employee management that clearly establishes a path for NRC to realize its investment in staff. [Priority: Moderate]
- 4. The Vice-President, Human Resources Branch should explore opportunities to adopt automated workforce and succession planning solutions that integrate with their adoption of an integrated talent management system. [Priority: Moderate]

4.2 Integrated Succession Planning

Summary Finding

Overall, we found that NRC has the framework in place to support effective succession planning. The degree to which succession planning has been implemented varies across the organization based on a variety of factors including group maturity in business processes and activities, operational priorities, and change factors.

We noted that the framework, as defined, promotes linkages with workforce planning including managing high performing talent, high potential talent, and individuals and positions of critical importance to NRC.

Opportunities exist to strengthen the linkages of succession management with other talent management activities through technology-based solutions, adequate resourcing, and a consistent approach to manage high potential talent.

Supporting Observations

4.2.1 Succession planning processes and integration of current and future needs and development opportunities

NRC has succession planning programs in place for both executives and non-management positions. HRB has tools and templates to support PBIs in their succession planning activities that include identification of critical positions, critical roles, and of high potential employees to fill those positions integrating current, and future needs and development requirements. As of Q2 FY2017, PBIs were in various states of completing templates.

We noted succession planning activities being planned or undertaken at the PBI level. Within the five scoped-in PBIs, the majority had succession plans or were in the process of developing them. While strategic and operating plans are updated annually along with their HR components, only one PBI had defined a consistent update frequency. We did not identify any PBIs that had defined additional triggers for succession plan updates or reviews. Concurrently, the reliance on paper and spreadsheet based succession plans increases the need for manual updates and adjustments as succession plans are refreshed or implemented. Opportunities exist to increase automation and workflow of succession planning activities to enable a more agile workforce and focus on value-added activities.

We found that performance and development activities are aligned with organizational strategy through NRC's performance management program. PBIs are using the program to identify personal development commitments and training needs in support of career advancement and succession activities.

The HR Manual includes provisions for various programs supporting succession management including defined apprenticeship guidelines for skilled trades; pre- and post-retirement

employment programs enabling workforce transition; and various post-secondary and post-graduate employment and award programs.

We identified numerous corporate and PBI level initiatives, operationalized or in progress, demonstrating succession management activities including:

- Staffing plans justified with linkages to succession plans;
- A rolling succession plan based on a gap analysis bringing together HRB generated demographic data with supervisor-employee conversations regarding career objectives;
- Tracking of employee performance and career objectives with formalized supervisor driven discussions regarding career development;
- Use of NRC's staffing mechanisms to source proven talent;
- Continuous job posters in anticipation of departures and vacancies;
- A campus recruitment initiative strategically focused on select institutions; and
- Informal practices of backfilling or under-filling vacant positions as developmental opportunities, especially in light of budget constraints.

We noted that PBIs consider sourcing talent globally in recognition of the exclusivity of select research domains and expertise. One PBI in particular noted challenges in sourcing global talent due in part to changing immigration requirements. HRB has addressed this through an external expert on immigration law and increased engagement with federal partners.

PBIs have identified a variety of strategies to address anticipated competency gaps and to maintain leadership in future marketspace. Some of the strategies we identified include: targeted recruitment of industry post-retirees; focused recruitment of junior and mid-career professionals from industry; secondment of industry and OGD professionals; increased use of non-competitive hiring mechanisms; consideration for outsourcing; and using external recruitment professionals for hard-to-fill positions. Concurrently, PBIs across NRC have defined plans to increase relationships with higher learning organizations to access expertise and resources and potentially develop a talent pipeline.

NRC has active candidate lists, for both corporate and research staff, in the form of collective staffing actions and pre-qualification lists that provide a pool of pre-screened candidates for PBIs to draw on. The HRB Hiring Roadmap graphically depicts the various competitive and non-competitive mechanisms available to help hiring managers address succession risks. While NRC lacks passive candidate lists, it has mechanisms, such as the Employee Referral Program (ERP) to source passive candidates.

Refer to Recommendation 4.

4.2.2 Knowledge management integration with succession planning initiatives

In the majority of scoped-in PBIs, we found knowledge management to be an informal practice. The degree to which succession plans reflected knowledge management practices varied based on local management practices. Some practices we noted consistently being employed by PBIs include overlap periods between incumbents and their replacements; defined organizational learning needs for teams and individuals; consistent supervisor-employee meetings; formal training; and participation in cross-NRC initiatives.

Our review of PBI succession and related development plans identified local mechanisms including:

- Assessments of strategically important positions, retirement risk of incumbents, and knowledge transfer needs;
- Documented knowledge development area plans for HIPOs;
- Proprietary workflow documentation systems and process guides;
- Mentorship by management and technical leaders to share expertise and develop junior staff;
- Use of the Research Associate and student programs to bring in new expertise and ideas:
- Online seminars to share program objectives, skills needs, and accomplishments; and
- Events patterned after NRC's TechX event to share program progress and accomplishments and foster cross-functional collaboration.

Other local practices include post-project analyses; on-the-job training; rotational supervisory assignments; newsletters; town-halls; and team gatherings to disseminate information and recognize best practices and desired behaviour through NRC's internal awards programs.

NRC-wide knowledge management and transfer resources exist in the form of a formal onboarding program, self-serve training options and, to varying degrees, peer-to-peer sharing forums such as cross-NRC working groups and communities of practice. We noted that PBIs planned to leverage corporately available resources to further general knowledge management practices complemented by internal, PBI specific mechanisms.

The adoption of generic job description models, such as the Technical Officer classification, includes the definition of minimum knowledge requirements for advancement for consistency and integrity of performance assessments and clearly articulating proficiency levels.

HRB defined a Learning and Development (L&D) model that focuses on learning through experience supported by group learning and formal training. NRC supports its L&D model with cross-NRC working groups and initiatives, and acting positions and deployments. We noted concerns with PBIs' ability to operationalize NRC's L&D model due to budget constraints and corporate and PBI level performance measures focused on financial targets and recoverable time. Constrained management incentives to support learning assignments increase the risk of an obsolescent workforce unable to address future challenges.

HRB administers a variety of programs that support knowledge management and are accessible to all PBIs. NRC's pre- and post-retirement employment program retains key expertise in an alternative work arrangement that enables balance between NRC needs and the needs and plans of retiring or retired staff. NRC also has programs in place that facilitate knowledge sharing by allowing non-salaried individuals on NRC premises and to potentially work on NRC

projects including volunteer and independent visitors, secondees, and collaborator representatives. PBI workforce plans must define their use of aforementioned HRB programs.

4.2.3 Career development processes and alignment with succession planning activities

In general, we found that NRC has elements in place supporting a career development strategy aligned with succession planning processes.

NRC's performance management system requires employees to set annual performance goals that include professional development related objectives. Developmental objectives incorporate discussions regarding career aspirations, are certified by individuals before being formally approved, and are incorporated into succession plans where applicable.

NRC has defined a career advancement strategy focused on defined opportunity milestones for employees to achieve within the organization. It includes a variety of opportunities to grow, but may not take the form of a promotion, such as increased responsibilities or the ability to participate in local and cross-functional initiatives. HRB offers a variety of programs that support career development including internal learning and training opportunities, exchanges with OGDs or industry, flexible work arrangements, and leave provisions for learning purposes. Programs are also available supporting employees transitioning into retirement.

PBIs are responsible for enacting HR succession management programs but face fiscal challenges and the need to balance operational priorities. Within specific classification groups, we identified career advancement bottlenecks. For example, clustering of individuals in the midand top-levels of certain classifications highlight impending management challenges to maintaining morale and employee engagement through limited career progression opportunities in lieu of promotions and salary increases. This is especially important for classifications where pay scales are near commensurate with junior management and serve as a financial disincentive to transition into management roles.

We noted various PBI level examples to better align career ladders and succession efforts through organizational structure changes. PBIs reorganized teams and added hierarchy levels to maintain effective spans of control, bridge perceived gaps between staff and management, and provide opportunities to explore career tracks. We identified other local PBI practices to support career development including recurring assignments; formal and informal mentoring activities; local sharing forums; participation on special projects; full implementation of generic job descriptions; internally developed training curricula; and funded (external) training.

NRC has undertaken numerous initiatives to align job descriptions and classifications. Defined job classification standards, defined behavioural competencies, and generic job descriptions support consistent application of job definitions across NRC and career pathing for similar jobs and roles. Supporting a focus on supervisory excellence, NRC has defined standards for leadership experience in different roles and positions. Articulating experiential learning standards supports bridging of skills gaps and defining developmental objectives.

We identified ongoing executive support for NRC's career development related initiatives. We noted communication from senior executives encouraging participation in and soliciting feedback on plans and proposals to revise research staff promotion criteria. We also identified ongoing communication throughout the process to adopt generic job descriptions for various classifications clarifying the benefits and business need, defining the process, and identifying mechanisms to address concerns.

5.0 Conclusion

In general, we found that NRC has a planning framework in place and defined governance structures that enable workforce and succession management. Further clarification of workforce planning authorities across portfolio and branch, division, and enterprise levels is necessary to support cross-NRC strategic alignment.

NRC is in the process of identifying and defining the key positions and roles critical to its success. Opportunities exist to build upon the inventorying exercises of groups across NRC through corporate support to ensure consistency and to develop a strategic, cross-NRC perspective of existing and needed research and technical competencies. Information is available to support informed decision-making with opportunities to improve information accessibility, integrity, and utility. A more balanced planning approach that considers future workforce and competency needs is necessary to prepare NRC for tomorrow's research challenges.

The organization has a succession planning program in place aligned with its workforce planning framework. Knowledge management activities integrate with NRC's succession planning program to varying degrees reflective of differing business processes across NRC's operating groups. Opportunities exist to strengthen talent development and career management processes aligned with NRC's approach to career progression to maintain employee morale and engagement.

HRB's adoption of an integrated talent management solution (SuccessFactors) will address some of the opportunities for improvement noted. Further consideration of related modules, specifically supporting workforce planning and succession management, would reinforce the existing framework and increase program effectiveness.

Appendix A: Audit Criteria

Line of Enquiry	Audit Criteria
	1.1 Workforce planning roles, responsibilities, and accountabilities are clearly defined and communicated
	1.2 Planning aligns business needs with environmental context
1.0 Workforce Planning, Alignment, and	1.3 A governance structure with formal oversight and reporting mechanisms is in place that promotes and supports the alignment of talent management activities with NRC's Strategy
Governance	1.4 Current and future critical competencies and capabilities have been identified
	1.5 Information is available and accessible to support workforce planning and decision-making
	2.1 Formal succession planning processes exist integrating current and future needs and development opportunities
2.0 Integrated Succession Planning	2.2 Knowledge management is integrated with succession planning initiatives
	2.3 Career development processes are aligned with succession planning activities

Appendix B: Potential Overall Ratings

Management Attention Required

There are significant weaknesses in the design and/or effectiveness of the selected key management controls that require management's attention. Critical practices / processes do not meet the expectations and or key principles described in Government of Canada and NRC regulations, policies and directives. There are significant opportunities for improvement.

Needs Improvement

The design and/or effectiveness of the selected key management controls needs improvement. Some areas of practice / processes meet the expectations and or key principles described in Government of Canada and NRC regulations, policies and directives. There are several opportunities for improvement.

Adequate

The design and/or effectiveness of the selected key management controls is adequate. Most areas of practice / processes meet the expectations and or key principles described in Government of Canada and NRC regulations, policies and directives. There are a few opportunities for improvement.

Strong

The design and/or effectiveness of the selected key management controls is strong. All areas of practice / processes meet the expectations and or key principles described in Government of Canada and NRC regulations, policies and directives. No areas for improvement were identified.

Appendix C: Management Action Plan

Definition of	Definition of Priority of Recommendations		
High	Implementation is recommended within six months to reduce the risk of potential high likelihood and/or high impact events that may adversely affect the integrity of NRC's governance, risk management and control processes.		
Moderate	Implementation is recommended within one year to reduce the risk of potential events that may adversely affect the integrity of NRC's governance, risk management and control processes.		
Low	Implementation is recommended within one year to adopt best practices and/or strengthen the integrity of NRC's governance, risk management and control processes.		

	Recommendation	Corrective Management Action Plan	Expected Implementation Date and Responsible NRC Contact
1	The Vice-President, Human Resources Branch should revisit, with senior management, NRC's talent management model to clarify the degree to which accountabilities and authorities for workforce planning approaches and activities are to be undertaken across NRC's levels of management and Human Resource Branch's role within that context. [Priority: High]	A model will be proposed to the Senior Executive Committee in order to establish HR planning responsibilities at the appropriate levels of the organization	Date: 21 December 2017 Contact: VP, Human Resources Branch
2	The Vice-President, Human Resources Branch should champion the adoption of a common approach to classifying and cataloguing technical competencies in support of NRC's matrix organization. [Priority: High]	Work was done on this front in the fall of 2016. Preliminary investigation revealed that there were a wide variety of tools in place across the organization to suite a variety of needs. In addition to internal NRC requirements, there was also the need for a tool that was external facing. The creation of a catalogue with an appropriate taxonomy requires a substantial investment of resources for the initial	Date: 31 January 2018 Contact: Director, Planning, Development & Performance

	Recommendation	Corrective Management Action Plan	Expected Implementation Date and Responsible NRC Contact
		build and continued resources to maintain. To design and create an appropriate solution, HRB will: a) Lead a multi-stakeholder working group to identify the needs and potential tools (involving Knowledge, Information and Technology Services (KITS), Communications Branch (CB), Directors R&D, etc.) Note: One possible tool that could address internal access to NRC talent is SuccessFactors. Further exploration would be required to determine what information could be captured and how to make it accessible to the appropriate users. The resources required for this work are fully utilized on the current SuccessFactors deliverables that will be completed in late September.	
3.	The Vice-President, Human Resources Branch should consider establishing a framework for High Potential (HIPO) employee management that clearly establishes a path for NRC to realize its investment in staff. [Priority: Moderate]	An inventory of high potential employees was collected across NRC through the FY 2016-17 workforce planning exercise. To create a more formalized approach to HIPO management, HRB will: a) Establish a process/mechanism to regularly examine the NRC HIPO community to identify opportunities for development across NRC (PBIs or corporate) that would benefit both the individual and organization b) Formalize the designation as part of the CTE process and work with individual supervisors to ensure learning commitments support the development needs identified	Date: 30 August 2018 Contact: Director, Planning, Development & Performance
4.	The Vice-President, Human Resources Branch should explore opportunities to adopt automated workforce and succession planning solutions that integrate with their	The recent implementation of the SuccessFactors integrated talent management system will make improvements in the automation of staffing activities and will provide improved workforce data.	Date: 30 December 2018 Contact: Director, Planning, Development &

Recommendation	Corrective Management Action Plan	Expected Implementation Date and Responsible NRC Contact
adoption of an integrated talent management system. [Priority: Moderate]	There is a succession planning module of SuccessFactors that NRC could explore implementing. Our early impressions of the tool suggest that it would be beneficial to the organization; however, in addition to the financial and human resources required for the implementation itself, significant work would be required in advance to modify some of our existing tools (e.g. behavioural competencies) to align with the product. To undertake this work, HRB will work within the investment project framework to: a) Identify the appropriate planning requirements and associated technology solution. Resources - HRB HRMS team and KITS Enterprise Systems b) Propose an investment project in line with findings as appropriate	Performance