



The Alliance of Sector Councils (TASC)

» setting THE STANDARD

*Accepted Principles and
Recommended Practices
for National Occupational Standards,
Certification Programs, and
Accreditation Programs*

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ASSOCIATION

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These guidelines were developed based on existing accepted principles and recommended practices for the planning, development, implementation, and maintenance of national occupational standards, personnel certification programs, and the accreditation of educational or training courses and programs. The authors acknowledge the various source documents and organizations (see References on page 100), and thank the following TASC Working Group on Standards and Certification members for their contributions to the development of these guidelines.

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Preface

The Alliance of Sector Councils (TASC) is a coordinating body for some 40 sector councils and sector-like organizations that brings together representatives from business, labour, education, and other professional groups in a neutral forum to comprehensively and cooperatively analyze and address sector-wide human resource issues on a national scale.

For more information see www.councils.org.

The Canadian Standards Association (CSA) is an independent, not-for-profit membership association serving business, government and consumers in Canada and the global marketplace with over 3,000 published standards, codes, and supporting materials addressing 54 different technology programs. CSA's core organizational competencies include project management, research and analysis, stakeholder engagement, consensus building, standards development and implementation, and education and training.

For more information see www.csa.ca.

Based on existing accepted principles, recommended practices, and stakeholder consultation, TASC and CSA worked collaboratively to develop these guidelines to support the delivery of national occupational standards, personnel certification programs, and accreditation programs for educational or training courses and programs. These guidelines are intended to promote cooperation and coherence among sector councils, other standards-setting bodies, and groups concerned with labour market issues.

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Introduction

These voluntary guidelines were developed to provide sector councils, industry groups, professional associations, and other stakeholders concerned with human resources and labour market issues with practical guidance aligned with common business practices. The intent is to support the planning, development, implementation, and maintenance of national occupational standards, personnel certification programs, and the accreditation of educational or training courses and programs by providing common protocols to maximize efficiency, minimize cost, and optimize the benefits of a harmonized system, without constraining creativity or effectiveness. Ultimately, these guiding principles and practices are intended to inform systems that will improve the mobility of learners and skilled workers and ensure the continued competitiveness of Canada's labour market.

This document is intended to be flexible in application and provide guidance to users rather than prescriptive solutions. Recognizing that one solution is not appropriate for all users and situations, it presents accepted guiding principles that apply generally to all situations, as well as recommended practices that may suit particular needs to provide a useful starting point for those seeking to establish national occupational standards, certification programs, and/or accreditation programs.

National Occupational Standards

Occupational standards identify and group tasks associated with a particular occupation and describe the knowledge and skills that a worker must demonstrate to be considered competent in that occupation.

National occupational standards (NOS) are voluntary. They are developed with a national objective and require pan-Canadian validation and endorsement to enable the recognition of qualifications across Canada. Quality NOS developed with both a sectoral and pan-labour market objective enable the recognition of workers' knowledge and skills across the entire Canadian labour market and facilitate labour mobility across all Canadian sectors. Identifying and recognizing transferable knowledge and skills that can be applied within a variety of sectors and/or positions within a sector is especially important to individuals who are changing careers or have little work-related experience. Labour mobility within Canada allows workers to be employed in different provinces and territories, resulting in more choices and opportunities for

workers and a broader selection of candidates for employers. NOS not only facilitate labour mobility within Canada, but also provide information that is essential to recognize foreign credentials effectively and to enable foreign-trained workers to enter the Canadian workforce.

Certification Programs

Personnel certification is an industry-recognized credential granted to a candidate by a certification body upon successful demonstration of occupational competence. Competence is the ability to apply knowledge and skills as defined in a national occupational standard and/or certification scheme. Competency is the measurable skill or set of skills and level of knowledge required to perform occupation-specific tasks.

Certification programs acknowledge the accomplishments of individuals and verify that they possess the necessary knowledge and skills for the occupation. The purpose of certification is to identify individuals who meet a specified standard that defines competence in an occupation.

Personnel certification is voluntary. Certified individuals have earned credentials that they can carry with them, which allows mobility between occupational settings and labour markets.

Accreditation Programs

Education or training may be a partial or whole requirement of a national personnel certification program. The education or training requirement may be satisfied by holding a high-school diploma, college diploma or university degree, or may be met through successful completion of an accredited educational or training course or program.

Accreditation of educational or training courses and programs is normally voluntary. It is a process of quality assurance through which accredited status is granted to an educational or training course or program by the responsible accreditation body. It recognizes that a course or program meets a set of criteria established by the accreditation body. The accreditation process grants a time-limited recognition to the education/training provider's course or program after verifying that it has met the predetermined criteria. The course or program is expected to meet the criteria throughout the specified time period. The accreditation criteria may include requirements for course or program administrative management systems, development and delivery, assessment, and/or instructors.

Guideline Structure

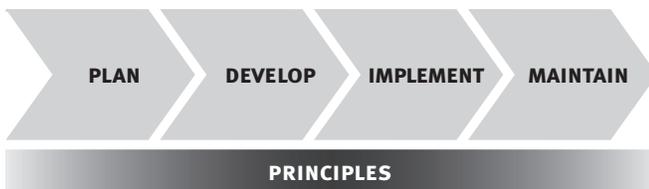
These guidelines provide the foundation for establishing national occupational standards, certification programs, and accreditation programs. The foundation begins with generally accepted principles and continues with recommended practices for each.

This document is comprised of three chapters: 1) National Occupational Standards, 2) Certification Programs, and 3) Accreditation Programs. Each chapter details the related accepted principles and recommended practices for planning, development, implementation, and maintenance. The document is structured as follows:

Chapter X

X.0 PRINCIPLES

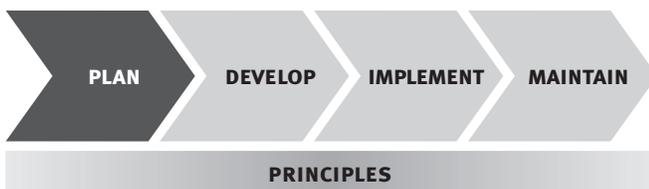
Many different methods and approaches can be used in establishing national occupational standards, certification programs, and/or accreditation programs. However, there are certain fundamental and underlying assumptions, *Principles*, upon which they should be built. These principles should be applied as guidance in handling unanticipated situations.



The *Principles* section of each chapter highlights the accepted principles that reinforce each of the following stages.

X.1 PLANNING

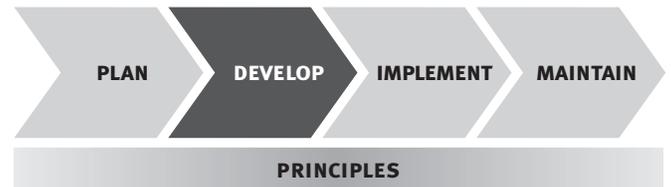
Planning is the first stage in establishing national occupational standards, certification programs, and/or accreditation programs.



The *Planning* section of each chapter highlights recommended practices for effective and efficient planning, such as defining the purpose and scope and developing a work plan.

X.2 DEVELOPMENT

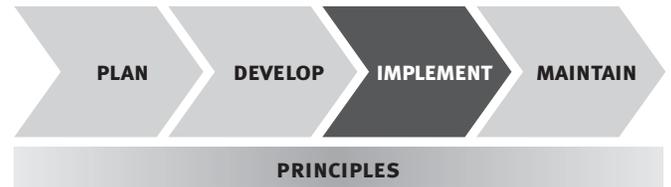
Development is the second stage in establishing national occupational standards, certification programs, and/or accreditation programs.



The *Development* section of each chapter highlights recommended practices for effective and efficient development, such as management requirements, development needs, and policies and procedures.

X.3 IMPLEMENTATION

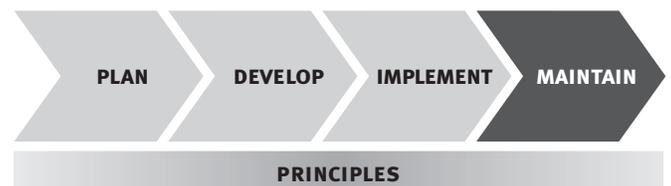
Implementation is the third stage in establishing national occupational standards, certification programs, and/or accreditation programs.



The *Implementation* section of each chapter highlights recommended practices for effective and efficient implementation, such as marketing, identifying opportunities, and establishing partnerships.

X.4 MAINTENANCE

Maintenance is the process of continually improving national occupational standards, certification programs, and/or accreditation programs.



The *Maintenance* section of each chapter highlights recommended practices for ongoing, effective and efficient maintenance, such as re-confirming validity and use, and development of maintenance policies and procedures.

1 NATIONAL OCCUPATIONAL STANDARDS

1.0 Principles for National Occupational Standards

Occupational standards identify and group the tasks associated with a particular occupation and describe the knowledge and skills that a worker must demonstrate to be considered competent in that occupation.

National occupational standards (NOS) are voluntary. They are developed with a national objective and require pan-Canadian validation and endorsement, enabling the recognition of qualifications across Canada. Quality NOS developed with both a sectoral and pan-labour market objective enable the recognition of workers' knowledge and skills across the entire Canadian labour market and facilitate labour mobility across all Canadian sectors. Identifying and recognizing transferable knowledge and skills that can be applied within a variety of sectors and/or positions within a sector is especially important to individuals who are changing careers or have little work-related experience. Labour mobility within Canada allows workers to be employed in different provinces and territories, resulting in more choices and opportunities for workers and a broader selection of candidates for employers. NOS not only facilitate labour mobility within Canada, but also provide information that is essential to recognize foreign credentials effectively and to enable foreign-trained workers to enter the Canadian workforce.

The following guiding principles apply to NOS and should be applied consistently at all stages of planning, development, implementation, and maintenance.

1. Accessible, Equitable, and Fair

ALL INDIVIDUALS SHOULD HAVE EQUAL ACCESS TO RELEVANT INFORMATION AND THE OPPORTUNITY TO PARTICIPATE EFFECTIVELY.

- NOS should be accessible to all individuals, taking into account costs, literacy levels, both official languages, and the needs of individuals with disabilities.
- NOS requirements should be inclusive and viable, taking into account gender, age, and special needs.
- Resources and/or methods should be made available to enable all stakeholders to participate meaningfully in the NOS development process.

2. Coherence and Rigour

INFORMATION SHOULD BE DEVELOPED AND PRESENTED IN A LOGICAL, RIGOROUS, AND CONSISTENT MANNER.

- NOS should be stated clearly in plain language and be meaningful, realistic, and easily understood by users.

3. Confidentiality

INFORMATION SHOULD BE ACCESSIBLE ONLY BY THOSE AUTHORIZED TO HAVE ACCESS.

- Confidentiality policies and procedures should be developed to ensure that personal information of committee members is treated as confidential, and should outline the circumstances under which this information may be disclosed or made public (e.g., name and affiliation published in NOS).

4. Consensus

A CONSENSUS PROCESS SHOULD BE USED TO MAKE DECISIONS. CONSENSUS IS DEFINED AS GENERAL AGREEMENT, CHARACTERIZED BY THE ABSENCE OF SUSTAINED OPPOSITION TO SUBSTANTIVE ISSUES BY ANY RELEVANT STAKEHOLDER AND BY A PROCESS THAT SEEKS TO TAKE INTO ACCOUNT THE VIEWS OF ALL RELEVANT STAKEHOLDERS AND TO RECONCILE ANY CONFLICTING ARGUMENTS. CONSENSUS IMPLIES MUCH MORE THAN A SIMPLE MAJORITY, BUT NOT NECESSARILY UNANIMITY.

- NOS should be developed based on stakeholder consensus.
- All stakeholder groups' positions should be treated equally, regardless of the number of individuals included in the respective stakeholder group.

5. Current, Relevant, and Valid

INFORMATION SHOULD BE CREDIBLE, APPLICABLE, AND UP TO DATE.

- To ensure the NOS is current, relevant, and valid, early and continued stakeholder engagement, particularly industry/sector involvement, is essential throughout the entire NOS development process, including planning, maintenance, and implementation.
- Information used to develop NOS must be accurate, come from clearly identified and credible sources, and reflect a range of different perspectives.



6. Harmonization

HARMONIZING WITH EXISTING RELEVANT NATIONAL AND INTERNATIONAL POLICIES, PROCEDURES, AND REQUIREMENTS HELPS TO ENSURE CONSISTENCY AND QUALITY. IT SUPPORTS GREATER LABOUR MOBILITY ACROSS PAN-CANADIAN MARKETS AND THE RECOGNITION OF FOREIGN CREDENTIALS. WHERE HARMONIZATION IS ACHIEVED, EFFORT SHOULD BE MADE TO ESTABLISH LIAISON ARRANGEMENTS WITH THE ORIGINATING ORGANIZATION IN ORDER TO KEEP IT INFORMED OF ANY CHANGES MADE.

- NOS should be harmonized (to the extent possible) with existing relevant international, regional, or national standards and policies and procedures.

7. Impartiality and Independence

DECISIONS SHOULD BE BASED ON OBJECTIVE CRITERIA, RATHER THAN BIAS, UNDUE INFLUENCE, OR PREJUDICE.

- The NOS development body and the NOS development process should be impartial and independent in relation to committee members and/or stakeholder groups.
- Decisions should be based on objective evidence and not be improperly influenced by other interests or parties.

8. Openness and Transparency

STAKEHOLDERS SHOULD HAVE THE OPPORTUNITY TO BE ENGAGED, AND THE INFORMATION PROVIDED TO STAKEHOLDERS SHOULD BE OPEN AND TRANSPARENT. AN OPEN AND TRANSPARENT PROCESS ALLOWS ALL INDIVIDUALS TO PARTICIPATE EFFECTIVELY. IN AN OPEN AND TRANSPARENT PROCESS, THE ROLES OF STAKEHOLDER GROUPS ARE CLEARLY DEFINED, THE PROCESS TO BE FOLLOWED IS CLEARLY COMMUNICATED, AND THE DETAILS OF HOW THE RESULTING INFORMATION WILL BE USED ARE SHARED WITH ALL INVOLVED. OPENNESS IS ACCESS TO OR DISCLOSURE OF INFORMATION.

- The public should be notified of the NOS development activity to promote broader stakeholder awareness and participation.
- The NOS development process should be open for anyone to provide comments; all comments should be considered and responded to, if requested.
- The NOS development process must be transparent and the degree of influence that stakeholders have on the NOS outcome should be honestly declared.

- A due diligence process should be followed to verify that stakeholders participating in the NOS development process do not have a conflict of interest in carrying out their roles and responsibilities; potential conflicts should be declared.
- The NOS development process should include a mechanism for dispute resolution, complaints, and appeals.

9. Representative

THE PROCESS SHOULD BE INCLUSIVE, NOT EXCLUSIVE. ALL INDIVIDUALS WITH A SIGNIFICANT INTEREST IN THE ISSUE SHOULD BE INVOLVED. ACCEPTANCE OF THE DIVERSE VALUES, INTERESTS, AND KNOWLEDGE OF INDIVIDUALS INVOLVED IS ESSENTIAL.

- Care should be taken in identifying and notifying stakeholders of NOS development and validation.
- NOS planning, development, implementation, and maintenance should include stakeholders who represent a broad range of perspectives.
- Stakeholder representatives should have the knowledge and capacity to participate effectively on behalf of their constituency.
- Stakeholder groups should be given the opportunity to determine their representatives through their own processes and mechanisms.

10. Sustainability

COMMITMENT AND SUFFICIENT RESOURCES ARE ESSENTIAL TO CONTINUE AND PROSPER.

- The NOS development body should have sufficient human resources, financial resources, and infrastructure to develop and maintain the NOS.

11. Voluntary

INDIVIDUALS WHO ARE AFFECTED OR INTERESTED PARTICIPATE VOLUNTARILY AND THE OUTCOME IS VOLUNTARILY APPLIED.

- Participation in NOS development and validation activities should be voluntary; participants should not be compensated for their work, but may be compensated for related expenses (e.g., travel).
- NOS should be developed based on the needs identified by industry, but are voluntary in use.

1.1 Planning of National Occupational Standards

Planning is the critical first stage in establishing national occupational standards (NOS).

1.1.1 Define Purpose and Need

1.1.1.1 IDENTIFY BUSINESS OBJECTIVES

The first step in planning the development of a national occupational standard is to identify the business objectives the standard will support. Understanding how a NOS can support different business objectives will help to guide the standard's development, confirm the importance of applying it consistently and reinforce its value as a resource within the sector. NOS can support a variety of business objectives including:

EMPLOYEE SATISFACTION:

- Helping to clearly identify career paths and providing the foundation for proper education and training that will enable employees to obtain the necessary knowledge and skills required to meet their career goals.
- Providing an established benchmark that underpins appraisal and recognition programs.
- Enhancing the credibility and professionalism of occupations.
- Providing the foundation for personnel certification programs.

ENHANCED COMPETITIVENESS:

- Increasing competitiveness and productivity and improving the quality of goods and services produced by ensuring that workers have the knowledge and skills required to be effective, efficient employees.
- Communicating and marketing the knowledge and skills of qualified employees.

CORPORATE SOCIAL RESPONSIBILITY:

- Ensuring occupational requirements are equitable and reasonable.
- Ensuring equal access to employment based on nationally validated and endorsed occupational requirements.

1.1.1.2 ASSESS NEED

Proper planning for development of NOS includes a thorough assessment of the need for the standard. Adequate evidence should exist to substantiate the need for the occupational standard in Canada. For example, the development of a NOS may be required as the foundation for the development of a training program, the accreditation of existing training programs, or the development of an evaluation instrument to determine competencies of candidates as part of a personnel certification program.

NOS should be developed as a response to industry/sector needs. Understanding these industry/sector needs assists in prioritizing NOS development activities.

To determine the need for the NOS, relevant stakeholders should be consulted. Considering stakeholder needs and involving stakeholders early in the NOS development process helps to ensure stakeholder buy-in when the NOS is published.

See Annex B – Stakeholder Engagement and Public Awareness.

1.1.2 Establish Standards Steering Committee

NOS development activities are conducted through a committee structure that supports two key roles: strategic leadership, and development (see 1.2.1, Establish Standards Development Committee).

At the strategic leadership level, a Standards Steering Committee (SSC) is established that provides broad-based direction for the standards development process and ensures consistency with industry/sector needs.

Specific responsibilities of the SSC include defining the scope of the NOS, selecting the contractor, monitoring the project budget and schedule, reviewing and approving project deliverables, and ensuring that the NOS meets the identified business objectives and needs.

The composition of the SSC should include a project manager, partners, contractor, and appropriate stakeholder representation, established with the objective of ensuring that all points of view pertinent to the NOS are represented in reasonable proportion.

See Annex B – Stakeholder Engagement and Public Awareness.

1.1.3 Define Scope

Understanding the business objectives and need for the national occupational standard will help to define the scope of the standard. The scope should be approved by the SSC.

In defining the scope of the national occupational standard, the following decisions are important to consider:

- **Type of occupation.** Occupational standards can be developed for a specific occupation or for a stream of occupations (grouping of occupations that require similar knowledge and skills). Developing standards for an occupational stream allows for flexibility in sectors where occupations change frequently and/or where skills are common to multiple occupations.
- **Type of information.** The type of information that the occupational standard will include depends on the sector, occupation, and the intended use of the standard. Some national occupational standards define entry to practice or minimum competency requirements, while others define expert levels or highly competent levels. Different types of information within the NOS can be organized to enable the identification of varying occupational proficiency levels.
- **Level of detail.** The intended use of the occupational standard will determine the level of detail it requires. Occupational standards developed to support the development of a job description might include a clearly defined job definition and contextual information about related tasks, while occupational standards developed to support a personnel certification program may involve distinct tasks, sub-tasks, and measurable competencies.

NOS can also be the foundation for broader occupational analysis. Supplementary information that is not considered necessary for inclusion in the scope of the national occupational standard can be included in supporting documents. Additional occupational information is often collected in the form of Situational Analyses, Essential Skills Profiles, and/or Occupational Language Analyses.

See Annex A – Supporting and Contextual Occupational Information.

1.1.4 Develop Work Plan

Once the purpose and the need for the NOS have been defined, a work plan should be developed. The work plan should identify the human resources, budget, and schedule required to effectively and efficiently develop, implement, and maintain the NOS.

1.1.4.1 IDENTIFY HUMAN RESOURCES

There are different human resources to consider when planning the development of a NOS. The availability and commitment of the following individuals should be considered:

1. **Staff.** The NOS development body should select a staff member to be the project manager for the NOS development project. The project manager is assigned responsibility for administering the committee membership and development activity.
2. **Partners.** At the discretion of the NOS development body, partners may be selected to work jointly on the development and/or implementation of the NOS. The decision to engage partners might be based on a variety of reasons, such as the need for funding assistance, lack of experience in NOS development, need for greater subject matter expertise, and/or brand recognition. Potential partners should be identified in the early phases of planning.
3. **Committee members.** The availability of committee members may vary depending on the sector, type of occupation, and/or timing. Special consideration should be made when working with sectors that have seasonal fluctuation in workload.
4. **Contractor.** At the discretion of the NOS development body, a contractor may be selected to assist in the development and/or implementation of the NOS. Contractors are often hired to supplement internal resources and assist in the development of NOS. To ensure the appropriate contractor is selected, a formal Request for Proposal (RFP) process should be followed.

See Annex C – Selecting a Contractor.

1.1.4.2 DEVELOP BUDGET AND SCHEDULE

NOS development schedules and timelines vary based on a number of factors. Some factors to consider include:

- Availability of SSC and SDC (Standards Development Committee) members (particularly industry members)
- Funding timelines
- Industry/sector needs
- Experience in developing NOS
- Scope of work
- Complexity of chosen NOS development methodology



Expenses and revenue related to NOS development and implementation should be considered when developing the budget. Some factors to consider include:

- Human resources (e.g., project manager, contractor)
- Meeting and travel costs
- Costs for editing, translation/adaptation, and publication
- Availability of existing materials (e.g., how much research time is required, cost to obtain materials)
- Benefits of developing a new NOS versus developing a new edition of an existing NOS
- Costs for marketing the NOS
- Cost recovery through sales or implementation

1.1.4.3 DEVELOP COMMUNICATIONS PLAN

A well-designed and executed communications plan facilitates acceptance from key stakeholders of the NOS in the early planning and development stages. The communications plan should provide guidance to all individuals involved in the NOS development (e.g., NOS development body staff, committee members) on what information they should communicate about the NOS development, what information is confidential (e.g., personal information of committee members), what messages they should communicate, and to whom these messages should be communicated.

Early development and implementation of a communications plan helps to ensure openness and transparency of the NOS development process, coordinates a cohesive message about NOS development activities, and provides an opportunity to identify, engage, and build buy-in from key stakeholders early in the process. Early stakeholder buy-in is critical to achieve successful implementation.

1.2 Development of National Occupational Standards

The NOS development process should include the following steps:

1. Establish Standards Development Committee
2. Issue Public Notice of Intent
3. Conduct National Occupational Analysis
4. Develop Content
5. Conduct Stakeholder Review and Validation
6. Approve the National Occupational Standard
7. Publish the National Occupational Standard

The process results in viable, comprehensive, coherent, measurable, competency-based occupational standards that are developed by a representative group of stakeholders using a consensus process, and are validated nationally by industry/sector and other relevant stakeholders.

1.2.1 Establish Standards Development Committee

NOS development activities are conducted through a committee structure that supports two key roles: strategic leadership (See 1.1.2, Establish Standards Steering Committee), and development.

At the development level, a Standards Development Committee (SDC) is established that provides the subject matter expertise required to develop the standard.

Specific responsibilities of the SDC include development and maintenance of the NOS.

The composition of the SDC should include a Chair, Vice-Chair, and appropriate stakeholder representation, with the objective of ensuring that all points of view pertinent to the NOS are represented in reasonable proportion.

See Annex B – Stakeholder Engagement and Public Awareness.

1.2.2 Issue Public Notice of Intent

The NOS development body for a given occupation should be well known within the subject area in Canada.

Before initiating the NOS development process, effort should be made to ensure that all interested stakeholders are informed and to confirm that no other organization in Canada has developed or is developing the same work. To ensure due diligence, a public notice of intent to proceed with the development of the NOS is issued.

Public notice can also strengthen the NOS development process by expanding stakeholder engagement early in the process. Through the public notice process, unidentified stakeholders have the opportunity to request participation, provide their comments and knowledge and offer to monitor the progress of the NOS.

The notice of intent should be issued for an appropriate length of time before the NOS development process is initiated, and appropriate methods should be used.

See Annex B – Stakeholder Engagement and Public Awareness.

1.2.3 Conduct National Occupational Analysis

A National Occupational Analysis (NOA) is the formal process of gathering and analyzing information about an occupation through research (e.g., literature reviews, jurisdictional scans) and stakeholder engagement (e.g., interviews, focus group sessions, meetings, surveys).

Based on the determined scope of the NOS, information such as general areas of activity, tasks and sub-tasks, and required knowledge and skills associated with the occupation is gathered. Additional data outside of the scope of the NOS may also be gathered during the NOA process (e.g., past and future trends, demographic profile of job incumbents, occupational environment and working conditions) and can be included in supporting documentation such as a Situational Analysis.

See Annex A – Supporting and Contextual Occupational Information.

See Annex D – National Occupational Analysis Methods.

1.2.4 Develop Content

Based on the information gathered during NOA process, a Draft National Occupational Standard (DNOS) is developed. The DNOS should be developed by the SDC and/or contractor through successive, iterative stages and by using a consensus process agreed to by the SDC and project manager.

The information is organized in an SSC-approved structure and format based on the NOS scope.

See Annex E – Example Of National Occupational Standard Structure.

The project schedule should be adhered to and the SSC notified of any changes. Appropriate records should be prepared and maintained throughout the content development process (e.g., meeting minutes, drafts).

Once the DNOS is agreed to by the SDC, it is submitted to the SSC for approval to distribute for stakeholder review and validation.

1.2.5 Conduct Stakeholder Review and Validation

The DNOS should be reviewed and validated by a broad group of representative stakeholders, and should be offered for stakeholder review and validation for an appropriate duration and using appropriate methods to enable stakeholders to participate meaningfully in the NOS development process.

See Annex B – Stakeholder Engagement and Public Awareness.

See Annex F – Stakeholder Review and Validation.

1.2.6 Approve the National Occupational Standard

Comments received on the DNOS during the stakeholder review and validation process should be collated and provided to the SDC for consideration and for response, if requested.

The DNOS should be revised based on comments received, and the Final Draft National Occupational Standard (FDNOS) should be prepared for approval by the SDC and the SSC as a National Occupational Standard (NOS).

- The SDC reviews the FDNOS to validate that the content is accurate, complete, relevant, and coherent.
- The SSC reviews the FDNOS to validate that appropriate procedures were followed and that it meets the identified purpose and needs for which it was developed.

See Annex G – Committee Approval Methods.

1.2.7 Publish the National Occupational Standard

The approved NOS should be edited, translated/adapted, and published in both official languages of Canada — French and English.

To prepare the NOS for publication, it should be edited and reviewed to ensure consistency and completeness and to eliminate redundancies, with the aim of making the NOS functional and user-friendly. The editor may consult with the SDC, SSC, contractor, and/or project manager to ensure that no substantive changes are made during editing. Editing, translating/adapting, and word processing should be completed in a professional manner. Professional services may be used.

To facilitate stakeholder engagement and continual improvement, and to ensure the NOS remains current, relevant, and valid, the contact information for the project manager (where applicable) or another relevant contact should be included in the published NOS. A membership list of contributors, including each member's name, affiliation, and province/territory, should also be included in the published NOS to add legitimacy and to support buy-in and implementation of the NOS.

NOS should be publicly available and accessible to all. Some considerations include availability in multiple languages, price, and alternative formats (e.g., hard copies, electronic, large print).

A public notification of the published NOS should be issued using appropriate methods.

See Annex B – Stakeholder Engagement and Public Awareness.

See Annex K – Second Official Language Translation and Adaptation.

1.3 Implementation of National Occupational Standards

Once the NOS is developed, the value of its implementation should be promoted.

1.3.1 Market the National Occupational Standard

An efficient and effective NOS marketing strategy is critical to assist in the uptake of the voluntary standard within industry by employers, employees, and educators.

When planning marketing activities, consider the following:

1. **Timing.** Although the main marketing activities may be planned to occur after publication of the NOS, promotion of the NOS throughout the entire development process, including the planning stage, is important. Broad stakeholder engagement throughout the entire development process not only increases the validity of the NOS and ensures stakeholder needs are met, but also assists in uptake and buy-in of the standards once they are published.
2. **Pricing.** The price for NOS should be based on factors such as type of sector, target audience, purpose, need, demand, and ability to recover development and maintenance costs. To increase the use and accessibility of NOS to all interested parties, NOS should be priced fairly and affordably, or be made available free of charge.
3. **Target audiences.** It is important to identify key stakeholders and marketing opportunities throughout the entire development process, including the planning stage. Identifying target audiences early will help to determine appropriate marketing activities. Potential target audiences include educators (e.g., colleges, universities), employers, employees, HR professionals, associations, apprenticeship programs, sector councils, and governments. Marketing messages should directly relate to the target audience and demonstrate specifically how the NOS can be a useful resource for them. A multi-pronged marketing approach that incorporates a variety of marketing activities is an effective way to reach a variety of audiences.

4. **Cost-effectiveness.** Different types of marketing materials and opportunities exist, such as brochures, websites, and presentations. However, engaging in a variety of marketing activities can be costly; it is essential to choose the most effective activities. One of the most effective and inexpensive marketing opportunities is to link the marketing of the NOS with existing infrastructures and contexts (e.g., education or training systems, government programs, HR policies).

Supporting and contextual occupational information gathered during the NOS development process might provide additional information about the occupation and target audiences that will be useful in developing quality marketing materials.

See Annex A – Supporting and Contextual Occupational Information.

See Annex B – Stakeholder Engagement and Public Awareness.

1.3.2 Apply the National Occupational Standard

National occupational standards are widely used within many Canadian sectors in numerous ways. Once the NOS is published, it may be used to:

- Strengthen human resource strategies, policies, and programs, and improve human resource planning.
- Identify and clearly communicate human resources needs.
- Define criteria for recruiting, developing, and maintaining a skilled workforce.
- Increase competitiveness and productivity by ensuring that employees meet required occupational requirements.
- Increase occupational credibility, recognition, and professionalism.
- Describe and understand occupational requirements.
- Strengthen human resource strategies, inform policies and programs, and provide for better human resource planning.
- Develop instructional programs and assessment guidelines that are consistent with professional and business needs.
- Design personnel certification and accreditation programs.

1.4 Maintenance of National Occupational Standards

It is the responsibility of the NOS development body and the respective SDC to maintain the NOS. Maintenance processes should include systematic review and maintenance of the NOS, publication of amendments, and interpretation of the NOS, in whole or in part.

NOS maintenance policies and procedures should be developed and adhered to. All related tools, programs, and materials should be reviewed and maintained at the same time as, and in accordance with, the review and maintenance of the NOS.

1.4.1 Systematic Review and Maintenance

A systematic review and maintenance process ensures that the NOS is reviewed regularly to confirm that its content remains current, relevant, and valid. It also prevents the continual and unnecessary updating of the NOS and related tools and programs, which can cause confusion in the industry and deter use of the NOS. Updating a NOS can be costly and time-consuming for the NOS development body, the SDC, and for industry. A systematic review and maintenance process promotes industry confidence both in implementing the NOS and in developing tools and programs based on the current edition.

The length of time between systematic reviews and maintenance of a NOS should be based on the purpose and need for the NOS, the NOS scope, and the nature of the occupation for which it is developed. NOS for occupations where worker knowledge and skill requirements change frequently (e.g., due to new technologies, methods, or tools to perform work) may be reviewed and maintained more frequently (e.g., every two years); on the other hand, NOS for occupations where past trends and anticipated future trends indicate that worker knowledge and skill requirements do not change frequently may not need to be reviewed as often (e.g., every five years).

At the time of systematic review and maintenance, a full NOA and stakeholder review and validation should be performed to determine if the NOS is still current, relevant, and valid.

At that time, the SDC will determine if the NOS should be:

1. **Reaffirmed.** The NOS will be considered for reaffirmation if it remains technically current, relevant, and valid without change.
2. **Updated.** Development of a new edition of the NOS will be considered if it remains valid and relevant but requires updating to make it current with new occupational tasks and competencies.
3. **Withdrawn.** The NOS will be considered for withdrawal if it is no longer used or if there is inadequate funding or stakeholder support to maintain it.

If the need for a new edition of the NOS is identified, the new edition should be developed using the regular NOS development process.

1.4.2 Amendments and Errata

Amendments alter, add to, and/or subtract from the technical content in an existing NOS. The need for an amendment may be identified by any interested party.

Amendments to a NOS should be developed using the regular NOS development process.

Amendments should only be published in cases of emergency (i.e., where a requirement in the NOS inadvertently causes a worker health and safety issue), where a conflict with another national standard is identified, or where legislation is pending or promulgated to create a conflict.

The number of separate amendments and maximum content that a single amendment is permitted to modify in a current NOS should be limited. If this limit is exceeded, the publication of a new edition of the NOS should be considered.

Errata may be issued to correct non-technical errors after a NOS has been published. Examples include typographical errors, misprints, misspellings, and omissions of approved content. In consideration of the cost involved in publishing, errata should only be published where the errors may cause confusion or misuse of the NOS. Errata should not require SDC approval.

1.4.3 Interpretations

Occasionally, questions about the NOS or parts of the NOS and its meaning arise after the NOS is published. A process to respond to these questions should be in place that includes a SDC-validated interpretation. An interpretation is a written clarification of the meaning of the NOS or part of the NOS, as determined by the SDC in response to a written request for an interpretation.

1.4.4 Public Notice of Maintenance

A public notification of maintenance action should be issued using appropriate methods.

See Annex B – Stakeholder Engagement and Public Awareness.

2

CERTIFICATION PROGRAMS

2.0 Principles for Certification Programs

Personnel certification is an industry-recognized credential granted to a candidate by a certification body upon successful demonstration of occupational competence. Competence is the ability to apply knowledge and skills as defined in a national occupational standard and/or certification scheme. Competency is the measurable skill or set of skills and level of knowledge required to perform occupation-specific tasks.

Certification programs acknowledge the accomplishments of individuals and verify that these individuals possess the necessary knowledge and skills for the occupation. The purpose of certification is to identify individuals who meet a specified standard that defines competence in an occupation.

Personnel certification is voluntary. Certified individuals earn credentials that they can transfer to different occupational settings and labour markets.

The following guiding principles apply to personnel certification programs and should be consistently applied at all stages of planning, development, implementation, and maintenance.

1. Accessible, Equitable, and Fair

ALL INDIVIDUALS SHOULD HAVE EQUAL ACCESS TO RELEVANT INFORMATION AND THE OPPORTUNITY TO PARTICIPATE EFFECTIVELY.

- All applicants and candidates should be treated equally and fairly.
- All candidates should have equal access to certification services and related preparatory materials and assessment instructions.
- Assessment accommodations and/or alternative formats should be available for individuals with special needs.
- Certification programs should be accessible to all individuals, taking into account costs, literacy levels, both official languages, and the needs of individuals with disabilities.
- Certification requirements should be inclusive and viable, taking into account gender, age, and special needs.
- Resources and/or methods that increase accessibility should be considered (e.g., offering innovative online products such as electronic certification services).

- Certification bodies should take into account current legislation concerning access to fair assessment and equal opportunities.
- Relevant staff (e.g., customer services, certification assessors) should receive training on accommodation of special needs.
- Certification decisions should be based on fair procedures and objective requirements.
- Certification programs should adhere to human rights and labour laws.
- All candidates should have information prior to assessment in order to plan and prepare adequately.
- The assessment environment and procedures should be conducive to good performance.

2. Coherence and Rigour

INFORMATION SHOULD BE DEVELOPED AND PRESENTED IN A LOGICAL, RIGOROUS, AND CONSISTENT MANNER.

- Certification requirements should be stated clearly in plain language and be meaningful, realistic, and easily understood by applicants.
- Certification requirements should be measurable in a practical way and be legally defensible.
- The same certification process should be used to assess all candidates.
- A process for certifying individuals in all provinces/territories across Canada should be established.
- Certification should be recognized in all provinces/territories across Canada.

3. Confidentiality

INFORMATION SHOULD BE ACCESSIBLE ONLY BY THOSE AUTHORIZED TO HAVE ACCESS.

- Confidentiality policies and procedures should be developed to ensure that personal information, application status, and assessment results are treated as confidential, and should outline the circumstances under which this information may be disclosed or made public.
- Certification operations should be conducted in a separate business unit from other services, helping to ensure the privacy of applicants, confidentiality of

examinations, and to prevent potential conflict with other service offerings.

4. Consensus

A CONSENSUS PROCESS SHOULD BE USED TO MAKE DECISIONS. CONSENSUS IS DEFINED AS GENERAL AGREEMENT, CHARACTERIZED BY THE ABSENCE OF SUSTAINED OPPOSITION TO SUBSTANTIVE ISSUES BY ANY RELEVANT STAKEHOLDER AND BY A PROCESS THAT SEEKS TO TAKE INTO ACCOUNT THE VIEWS OF ALL RELEVANT STAKEHOLDERS AND TO RECONCILE ANY CONFLICTING ARGUMENTS. CONSENSUS IMPLIES MUCH MORE THAN A SIMPLE MAJORITY, BUT NOT NECESSARILY UNANIMITY.

- Certification programs should be developed based on stakeholder consensus.
- All stakeholder groups' positions should be treated equally, regardless of the number of individuals included in the respective stakeholder group.

5. Current, Relevant, and Valid

INFORMATION SHOULD BE CREDIBLE, APPLICABLE, AND UP TO DATE.

- To ensure the certification program is current, relevant, and valid, early and continued stakeholder engagement, particularly industry/sector involvement, is essential throughout the entire certification program development process, including planning, maintenance, and implementation.
- Certification program requirements included in the certification scheme should be based on a relevant national occupational standard and developed using information from credible sources.
- Key certification program staff and contractors should possess the adequate knowledge and skill to conduct certification program activities.

6. Harmonization

HARMONIZING WITH EXISTING RELEVANT NATIONAL AND INTERNATIONAL POLICIES, PROCEDURES, AND REQUIREMENTS HELPS TO ENSURE CONSISTENCY AND QUALITY. IT SUPPORTS GREATER LABOUR MOBILITY ACROSS PAN-CANADIAN MARKETS AND THE RECOGNITION OF FOREIGN CREDENTIALS. WHERE HARMONIZATION IS ACHIEVED, EFFORT SHOULD BE MADE TO ESTABLISH LIAISON ARRANGEMENTS WITH THE ORIGINATING ORGANIZATION IN ORDER TO KEEP IT INFORMED OF ANY CHANGES MADE.

- To assist in the recognition of foreign credentials, certification programs should be harmonized (to the extent possible) with existing relevant international, regional, or national programs.

- Adopting internationally accepted policies and procedures may help to ensure the consistency and quality of certification programs.

7. Impartiality and Independence

DECISIONS SHOULD BE BASED ON OBJECTIVE CRITERIA, RATHER THAN BIAS, UNDUE INFLUENCE, OR PREJUDICE.

- Impartiality and being impartial is necessary if a certification body is to deliver the perception of certification that inspires confidence.
- Impartiality and independence of the certification body should be established at all levels, including structure of the organization, policies and procedures, assessment, decisions, complaints and appeals on certification.
- The certification body should be impartial and independent in relation to its applicants, candidates, and certified individuals, including their employers and their customers.
- Decisions should be based on objective evidence of conformity (or nonconformity) obtained by the certification body and not be improperly influenced by other interests or parties.
- If the certification body offers educational or training courses or programs or aids others in the development of educational or training courses or programs, it should clearly demonstrate how educational/training and certification activities are independent.

8. Openness and Transparency

STAKEHOLDERS SHOULD HAVE THE OPPORTUNITY TO BE ENGAGED, AND THE INFORMATION PROVIDED TO STAKEHOLDERS SHOULD BE OPEN AND TRANSPARENT. AN OPEN AND TRANSPARENT PROCESS ALLOWS ALL INDIVIDUALS TO PARTICIPATE EFFECTIVELY. IN AN OPEN AND TRANSPARENT PROCESS, THE ROLES OF STAKEHOLDER GROUPS ARE CLEARLY DEFINED, THE PROCESS TO BE FOLLOWED IS CLEARLY COMMUNICATED, AND THE DETAILS OF HOW THE RESULTING INFORMATION WILL BE USED ARE SHARED WITH ALL INVOLVED. OPENNESS IS ACCESS TO OR DISCLOSURE OF INFORMATION.

- Certification bodies should provide public access or disclosure of appropriate and timely information about the certification requirements and process and about the certification status of an individual.
- Policies and procedures should be publicly available and should include guidelines by which applicants may question eligibility determination assessment instrument results and certification status.

- The certification program should publish a description of the assessment instruments used to make certification decisions as well as the research methods used to ensure that the assessment instruments are valid.
- Procedures related to assessment instruments should address development and validation, eligibility requirements, and administration (e.g., delivery frequency and location, fees, reporting of results).
- A well-defined and transparent complaints and appeals procedure should be developed, and all complaints and appeals should be investigated in a timely manner.

9. Representative

THE PROCESS SHOULD BE INCLUSIVE, NOT EXCLUSIVE. ALL INDIVIDUALS WITH A SIGNIFICANT INTEREST IN THE ISSUE SHOULD BE INVOLVED. ACCEPTANCE OF THE DIVERSE VALUES, INTERESTS, AND KNOWLEDGE OF INDIVIDUALS INVOLVED IS ESSENTIAL.

- Care should be taken in identifying and notifying stakeholders of certification program development.
- Certification program planning, development, implementation, and maintenance should include stakeholders that represent a broad range of perspectives.

10. Sustainability

COMMITMENT AND SUFFICIENT RESOURCES ARE ESSENTIAL TO CONTINUE AND PROSPER.

- The certification body should have sufficient human resources, financial resources, and infrastructure to conduct effective certification and recertification activities.

11. Voluntary

INDIVIDUALS WHO ARE AFFECTED OR INTERESTED PARTICIPATE VOLUNTARILY AND THE OUTCOME IS VOLUNTARILY APPLIED.

- Personnel certification programs are voluntary.
- An individual should not require certification to be employed in an occupation.

2.1 Planning of Certification Programs

Planning is the critical first stage in establishing personnel certification programs. A comprehensive plan provides direction for the program and helps to determine whether or not it will be sustainable.

2.1.1 Define Purpose and Need

2.1.1.1 IDENTIFY BUSINESS OBJECTIVES

The first step in planning the development of a personnel certification program is to identify what business objectives the program can support and its potential effects within the industry/sector. This understanding will help to guide the program's development, confirm its value within industry, and mitigate any potential concerns. Since industry support (e.g., employer, workers) is critical to the success of a certification program, demonstrating the added value of certification is a key part of the planning process. For example, personnel certification programs support objectives in the following key areas:

Employee satisfaction:

- Fostering employee recognition. Employers and employees recognize that certified workers perform at a higher level, on average, than non-certified workers. Certification aimed at individuals who are already working in an occupation assumes that formal training has taken place and the employee is seeking to gain recognition for proficiency based on years of specialized experience.
- Raising the profile of the occupation and enhancing the credibility and professionalism of the occupation.
- Increasing mobility of workers and learners.
- Potentially raising salaries, which in turn increases the demand from employees to become certified.

Enhanced competitiveness:

- Increasing competitiveness and productivity and improving the quality of goods and services produced by hiring workers that have proven their competence as a result of a given occupation.
- Increasing profits and employee efficiency.
- Communicating and marketing the knowledge and skills of certified employees.
- Improving Canada's reputation as an exporter, since the goods and services produced by nationally certified employees may exceed the standards of international competitors.

Human resources:

- Playing a role in resolving a national human resource problem by fostering recognition of foreign credentials and prior learning.
- Facilitating progress toward meeting national targets for education and training, and raising skill levels within the population.

- Increasing employer confidence. By employing certified workers, employers can be assured that their staff meets accepted standards for the occupation.

Although the goal of certification can be very useful in meeting business objectives within industry, it could have potential perceived and real negative effects on industry if planning is not done carefully. Identifying potential issues and addressing them before establishing or initiating the certification program will increase the chances of the program's success. Potential issues that should be considered include:

- Cost and time required by workers.
- Tension arising between certified and non-certified workers.
- Gains that may be long-term and not easily measurable in monetary terms.
- Employers' concerns about the potential of certification programs to inflate salaries.
- A change in the conditions for one occupation that may have an impact on the other, where two occupations work closely together.
- Sensitivities related to recognition of seniority and grandfathering.

2.1.1.2 ASSESS NEED

Proper planning to establish a certification program includes a thorough assessment of the need for the program. There should be adequate evidence to substantiate the need for the certification program in Canada. Identifying government, industry, and/or market requirements will assist in determining the need for a certification program.

Certification programs should be developed as a response to a specific government requirement, industry need, and/or market demand. The need for a certification program is driven by many factors, including the size and characteristics of the workforce, predicted growth in the field, and skill gaps and shortages. In some cases, the number of people in the occupation may be small in number but the need may be great and the impact significant. Understanding the different stakeholder drivers for certification will help to determine the scope of the certification program; for example, understanding employer needs and which aspects of certification would assure employers that employees are competent in their occupation.

Another factor to consider in determining the need for a certification program is the availability of existing or competing programs. Conducting a competitor analysis includes

identifying other services available in Canada and the program's potential competitors.

Once the need for the program has been determined, the demand for the program should be confirmed. Many factors influence the practicality of implementing an effective and financially viable certification program. To be financially viable, the certification program must have a sufficient, ongoing, and renewable customer base. Factors to consider are the size of the customer base and buy-in from industry, which directly influences projections for candidate applications and potential revenue generation from certification. Workers are the most likely customers, except where the employer requests certification and is willing to pay the fees for its employees. When reviewing the customer base, considerations include the composition of the workers (e.g., average age of workers), the average salary in relation to the cost of participating in the certification process, the current number of workers in the field, and the estimated short- and long-term future demand for workers. Determining future trends may require the identification of key stakeholders that employ/engage these workers and what their needs are.

To determine the need and demand for a certification program, relevant stakeholders should be consulted.

See Annex B – Stakeholder Engagement and Public Awareness.

2.1.2 ESTABLISH CERTIFICATION BOARD

At the governance level, a Certification Board should be established that provides governance for the certification program and ensures it is consistent with industry needs.

Specific responsibilities of the Certification Board involve establishing policies and procedures regarding the certification program, including activities related to eligibility, the development, administration, and evaluation of assessments, and reviewing complaints and appeals.

The composition of the Certification Board should include a Chair, Vice-Chair, program manager, contractor, and appropriate stakeholder representation, aimed at ensuring that all points of view pertinent to the certification program are represented in reasonable proportion. The certification body should establish policies and procedures for the selection of individuals who serve on the board. To ensure a balance of program input, the certification body may implement a rotating system of Certification Board representation over a set period of time.

See Annex B – Stakeholder Engagement and Public Awareness.

2.1.3 Define Scope

Understanding the purpose and need for the personnel certification program will help to define the scope of the program. The scope should be approved by the Certification Board.

In defining the scope of the certification program, the following decisions are important to consider:

- **Industry needs.** The population being certified should be identified to allow justification for the appropriateness of the certification activity and to ensure that the scope of the certification program meets the population's needs and demands. For certification programs, the potential customers are employees and workers. Understanding why employers and workers are interested in certification will help to identify the general form the certification should take. A challenge in establishing certification requirements is to meet industry's needs without lowering the quality of the national occupational standard upon which it is based. This situation can be resolved by creating different levels of certification that provide for recognition of various levels of proficiency. It is important to rely on industry to identify what is important to include in the scope of the program.
- **Intended use.** Personnel certification programs are usually designed to recognize competence in an occupation. In some cases, the goal of the program may be to recognize excellence. Although many program developers begin by thinking in terms of recognizing excellence, this is not an appropriate goal for a certification program. Such an approach will greatly limit the number of candidates who attempt the assessment process.

2.1.4 Develop Work Plan

Once the scope of the certification program has been defined, a work plan can be developed. The work plan should identify the human resources, budget, and schedule required to effectively and efficiently develop, implement, and maintain the program.

2.1.4.1 IDENTIFY HUMAN RESOURCES

There are different human resources to consider when establishing a certification program. The availability and commitment of the following individuals should be considered:

1. **Staff.** The certification body must have sufficient staff (or contractors) with the adequate knowledge and

skills to establish the certification program and conduct certification program activities (e.g., processing of applications, administering the assessment instrument, storing of records). The certification body should select a program manager for the certification program. The program manager should be responsible for providing oversight and management of the program at all stages of planning, development, implementation, and maintenance. A core team of administrative staff should be available to provide program support (e.g., applicant inquiries). It may be necessary to retain additional staff during stages that are more resource intensive (e.g., development, assessment administration).

2. **Partners.** At the discretion of the certification body, partners may be selected to work jointly on the establishment of the certification program. The decision to engage partners might be based on a variety of reasons, such as the need for funding assistance, lack of experience in establishing certification programs, need for greater subject matter expertise, and/or brand recognition. Potential partners should be identified in the early phases of planning. Partners should agree to adhere to all program policies and procedures.
3. **Committee members.** The availability of members may vary depending on the sector, type of occupation, and/or timing. Special consideration should be made when working with sectors that have seasonal fluctuation in workload.
4. **Contractor.** Development of a certification program requires a variety of experts, including those experienced in assessment and management systems. It may not be feasible for the certification body to maintain the necessary in-house staff or the required infrastructure for producing, administering, and evaluating assessment instruments. At the discretion of the certification body, a contractor may be selected to assist in the establishment and/or administration of the certification program. Contractors should agree to adhere to all program policies and procedures. To ensure the appropriate contractor is selected, a formal Request for Proposal (RFP) process should be followed.

See Annex C – Selecting a Contractor.

2.1.4.2 DEVELOP BUDGET AND SCHEDULE

A certification program development budget and schedule should be developed to guide the development process.



Estimating the expenses and revenue related to the establishment of a certification program will help to assess the general feasibility of establishing the program, and should be considered when developing the budget. These estimates are informed by the findings from the needs assessment.

The expenses of a certification program are associated with the development and maintenance of the certification scheme, related assessment instruments, and the ongoing management of the program.

- **Program development costs.** Development costs are the one-time expenses associated with development of the program management system and certification scheme and assessment instruments (e.g., Certification Scheme Committee meetings, stakeholder engagement, translation/adaptation). Outside funding partners or other interested parties may be sought to offset initial development costs.
- **Program maintenance costs.** Maintenance costs are recurring expenses that are primarily associated with program management (e.g., developing policies and procedures, responding to queries, marketing, responding to appeals, maintaining a registry of certified individuals, performing re-certification), assessment administration (e.g., coordinating the administration of assessments, printing and distributing materials, paying invigilators, evaluating assessments, providing feedback to candidates, issuing certificates), and maintenance of the certification scheme and assessment instruments to ensure that they remain current, relevant, and valid (e.g., CSC meetings, stakeholder engagement). Maintenance costs are often offset by program revenues.

Certification program revenues are generated through certification fees. Some factors to consider with respect to anticipated revenue include:

- **Financial purpose of the certification program.** Certification programs may be based on a subsidization model (e.g., from government or industry), cost-recovery model (i.e., certification fees sustain the program), or a revenue-generating model (i.e., certification fees are more than required to sustain the program).
- **Certification fee.** There are many factors to consider when determining a fair certification fee. For example, fees should be aligned with market demand or the ability for the market to absorb the costs (e.g., through increased fees for services from certified workers). The market must see a value in the certification in order

for market demand to increase. Even though there may be a well-established need, workers may not have a compelling reason to seek certification if they do not perceive a return on their investment in becoming certified. Other factors to consider include the target worker's average annual salary or unique worker motivations, such as credibility, recognition, intrinsic reasons, or to gain access to jobs with employers that require credentials. Where there is a lack of training, professional development, or "credential" culture in the occupation (i.e., an apparent demand), the fee will likely be lower. The fees charged to candidates will have a strong impact on the success of the program. Whereas high fees may reduce the number of candidates, low fees may raise doubts about the value of the program and reduce the number of candidates.

- **Short- and long-term candidate projection.** Typically, the largest number of candidate applications is received in the first year of the certification program and fluctuates in the following years as program awareness increases. Eventually, after most experienced workers have either become certified or have decided not to become certified, the program focuses on workers new to the field and program revenues become more regular. In the short-term, the certification program should be prepared for revenue fluctuation. This requires proper planning and budgeting to ensure the high revenues attained in the first year can sustain the program over the lower revenue-generating years. The long-term sustainability of the certification program is greatly influenced by the anticipated future demand for the occupation, predicted growth in the field, and evidence of the value certification has provided to workers and employers since its inception.

The certification program development and implementation schedule is an important factor to consider when planning the budget. Setting a target date for the initial administration of the certification assessment will help to determine when program revenues can be expected. Based on the target administration date, all key activities that must occur before that date should be identified and scheduled accordingly.

All materials associated with the certification program should be available in both official languages — English and French. Sufficient time and budget should be allocated for editing, translation/adaptation, and publication of all materials.

See Annex K – Second Official Language Translation and Adaptation.

2.1.4.3 DEVELOP COMMUNICATIONS PLAN

A well-designed and executed communications plan facilitates acceptance from key stakeholders of the personnel certification program in the early planning and development stages. The communications plan should provide guidance to all individuals involved in the certification program development (e.g., certification body staff, committee members) on what information they should communicate about the certification program development, what information is confidential (e.g., personal information of committee members), what messages they should communicate, and to whom these messages should be communicated.

Early development and implementation of a communications plan helps to ensure openness and transparency of the certification program development process, coordinates a cohesive message about certification program development activities, and provides an opportunity to identify, engage, and build buy-in from key stakeholders early in the process. Early stakeholder buy-in is critical to achieve successful implementation.

2.2 Development of Certification Programs

The development of a personnel certification program should include the following steps:

1. Establish Certification Program Administrative Management System
2. Establish Certification Scheme Committee
3. Develop Certification Scheme
4. Select Assessment Method
5. Develop Assessment Instruments
6. Develop Certification Process

2.2.1 Establish Certification Program Administrative Management System

2.2.1.1 ORGANIZATIONAL STRUCTURE

The certification body should ensure that an appropriate governance structure and policies and procedures are developed to protect the impartiality of the certification process.

A certification body may provide a range of services and activities beyond the provision of personnel certification. If the certification body provides other services or performs other activities, it should analyze and document its relationship to determine possibilities for any conflicts of interest. For example, provided that appropriate governance policies and separation of responsibility are in place, one organization may provide both certification and accreditation.

The structure of the certification body should allow for the participation of all relevant stakeholders. To ensure representative stakeholder engagement, certification program activities can be conducted through a committee structure that supports two key roles: governance, and scheme development. A Certification Board (see 2.1.2, Establish Certification Board) and Certification Scheme Committee (see 2.2.2, Establish Certification Scheme Committee) should be established, and assist in developing, implementing, and maintaining the certification program.

2.2.1.2 RESOURCES

The certification body should have sufficient financial resources to sustain operation of the certification program and to cover associated liabilities.

The certification body should have adequate resources that possess the appropriate knowledge and skills to conduct the activities of the certification program. Staff and/or contractors should be competent to:

- Review applications
- Authorize, select, and train assessors
- Prepare, administer, monitor, grade, and evaluate assessments
- Handle appeals and complaints
- Make certification decisions
- Implement and maintain a management system

Certification assessors play a critical role in the certification process and should be provided with the appropriate information, guidance, and training needed to meet their responsibilities. Certification assessors should have appropriate qualifications and occupational expertise as well as a consistent understanding and application of related certification schemes, national occupational standards, and best practices in assessment (e.g., professionalism, ethics, communication skills, assessment procedures).

A certification body may choose to contract work related to certification activities (e.g., administration, assessment instrument development, assessment administration/delivery) to a contractor. However, the certification body should take full responsibility for contracted work and ensure that the contractor is competent and complies with all applicable policies and procedures developed by the certification body.

2.2.1.3 POLICIES AND PROCEDURES

The certification body should develop policies and procedures that govern the certification process. Policies and procedures should be developed for:

- Granting certification (e.g., eligibility criteria, assessment process)

- Maintaining, renewing, suspending, or withdrawing certification
- Developing and maintaining certification schemes and assessment instruments
- Resolving appeals and complaints
- Maintaining the certification program
- Using contractors
- Making reasonable accommodation for candidates with special needs
- Ensuring impartiality
- Preserving confidentiality

All policies and procedures should be fair and equitable among all candidates and should not impede or inhibit access by applicants and candidates.

All employees, committee members, partners, and contractors should comply with all applicable policies and procedures developed by the certification body.

2.2.1.4 RECORDS

The certification body should maintain a record of all current and previously certified individuals.

As a means to confirm the status of a certified individual, the certification body should maintain the following minimum information and respond to enquires about the status of certified individuals from any member of the public without restriction or discrimination:

- Title of the certification to which the individual is certified
- Name and certification number of the certified individual
- Effective date of certification and date of expiry

Records should be retrievable, stored in a secure manner for a reasonable time period, managed and disposed of in a way that ensures confidentiality of the information, and uniquely identifiable.

2.2.1.5 CONFIDENTIALITY

The certification body should keep confidential all information obtained in the course of its activities. This commitment to confidentiality includes all employees, committee members, partners, and contractors.

2.2.1.6 SECURITY

The certification body should determine the measures necessary to ensure security throughout the entire certification process, including the administration of assessment instruments. It is critical for the certification body to protect

the integrity of assessment instruments. All assessment instruments should be maintained in a secure environment and kept confidential, with secure arrangements made for the transport and handling of assessment materials. It is essential that assessment instruments not be seen by any unauthorized individuals prior to their administration. A breach of security would make the assessment instrument invalid.

2.2.2 Establish Certification Scheme Committee

At the development level, a Certification Scheme Committee (CSC) should be established that has the subject matter expertise required to develop the certification criteria.

Specific responsibilities of the CSC include development and maintenance of the certification scheme.

The composition of the CSC should include a Chair, Vice-Chair, and appropriate stakeholder representation, to ensure that all points of view pertinent to the certification program are represented in reasonable proportion.

See Annex B – Stakeholder Engagement and Public Awareness.

2.2.3 Develop Certification Scheme

The CSC develops a certification scheme — the public document that includes the specific certification requirements that an applicant must meet to become certified. The scheme outlines the required:

1. Prerequisites (e.g., education/training, experience) that an applicant must possess (if any) to become an eligible candidate for the certification process.
2. Competencies that a candidate must successfully demonstrate in an assessment situation to become certified.

This combination of education/training, experience, and assessment typically forms the eligibility requirements for certification.

When available, the competencies outlined in the scheme should be informed by the related national occupation standard. National occupational standards may be written at a level of specificity that is not ideal for the purpose of assessment, and the competencies within the NOS may require alteration to develop the assessment instrument. A rating scale (e.g., frequency, importance) can be applied to the NOS requirements to identify and select critical tasks and associated knowledge and/or skills. This may be completed by the CSC or through a survey of representative stakeholders.



Analysis of ratings information will help to determine how and to what degree the tasks and associated knowledge and/or skills relate to the purpose of the certification program. Based on the required competencies identified in the certification scheme and the analysis of ratings, an assessment blueprint that identifies how the competencies will be used to assess competence is developed. Although all competencies are deemed necessary, some may be considered more critical than others. Psychometric analysis of the ratings allows for a justifiable, reliable, and valid weighting of tasks and associated knowledge and/or skills to be included in the assessment instrument.

The scheme provides guidance to individuals who are interested in becoming certified and to education/training providers engaged in developing and enhancing related educational or training courses or programs. It also provides the basis for the development of an assessment that will demonstrate if an individual meets the requirements of the scheme.

The certification body should develop and adhere to policies and procedures for the development and maintenance of certification schemes that include the review and validation of the scheme by the Certification Scheme Committee.

2.2.4 SELECT ASSESSMENT METHOD

The choice of assessment methods and instruments is the next stage of the certification program development process.

The certification body has the flexibility to choose the methods and instruments it will use to assess the competence of candidates. Appropriate policies and procedures for the initial development and continued maintenance of the selected methods and instruments should be developed and adhered to.

When selecting an assessment instrument, the following factors should be considered:

- **Nature of competencies.** The nature of the competencies (e.g., predominance of knowledge or skills to be assessed) will help to determine an appropriate assessment method or instrument. Each assessment instrument has particular strengths and weaknesses for assessing knowledge and skills.
- **Acceptance by candidates.** The characteristics of the target audience and the occupation for certification should be considered when selecting an appropriate assessment method and instrument. This will help ensure candidate satisfaction. For example, candidates

who use computers regularly within their occupation may welcome the convenience of a computer-based assessment, while other candidates whose occupations do not require the use of computers may prefer a pencil-and-paper test.

- **Cost.** The development and administration of different assessment methods range widely in cost and will have a direct impact on program development and maintenance expenses. To help ensure cost recovery, the cost of administering the assessment instrument should be considered when establishing the certification fees.
- **Amount and quality of information.** Assessment instruments vary in the amount and quality of information they provide about the candidate's level of competence. The validity and reliability of the instrument should be considered.

See Annex H – Assessment Methods.

2.2.5 Develop Assessment Instruments

The certification body should develop and employ assessment instruments that are derived from the certification scheme and that are consistent with generally accepted psychometric principles.

2.2.5.1 DEVELOPMENT

Qualifications of subject matter experts, assessment development professionals, content reviewers, and others involved in assessment development should be appropriate to the content area tested and assessment procedures used and documented.

Based on the scheme requirements and assessment blueprint, a bank of assessment items are written, reviewed for fairness and content, edited, and translated/adapted. The size of the item pool must be sufficient to provide adequate item exposure control to safeguard the security and integrity of the item bank and assessment instruments. The items may be prepared by the CSC or by other subject matter experts. It is essential to provide training to item writers, item reviewers, and others who produce assessment content.

An initial version of the assessment is assembled and reviewed to ensure it conforms to the assessment blueprint and to ensure it is fair, valid, and reliable.

The development process may include pilot testing of new items with a group of representative stakeholders, with revision based on statistical analysis of results, where appropriate.



When certification programs use more than one mode of administration (e.g., paper/pencil, computer-based testing), it is important to demonstrate that different modes assess equivalent competencies and that candidates are not disadvantaged by taking a mode of an assessment instrument that varies in difficulty from another mode.

Documentation for assessments should include a detailed description of the delivery format for each portion of the assessment and the type of response required of candidates.

National certification programs require assessment instruments in both official languages. When assessment instruments (or individual items) are translated/adapted, certification bodies should ensure the adequacy of the translation/adaptation and demonstrate that information attained from translated/adapted and source versions of the assessment instruments produce comparable assessment scores and inferences.

See Annex K – Second Official Language Translation and Adaptation.

2.2.5.2 CRITERION SETTING

Regardless of the method chosen to assess competence, a criterion-setting exercise is necessary. This criterion is the aggregate candidate response necessary to be considered competent and therefore to “pass” the assessment. The criterion may take the form of a single score, such as a pass grade in a work simulation, or a score profile, which is a set of minimum scores for each major competency category. Some competencies or competency categories may be considered more or less important, and may be given greater or lesser weight in the scoring scheme. There may be interest in creating score categories that specify proficiency levels and identify competencies that have not yet been met, are met adequately, or are exceeded. This process produces a means of differentiating acceptable from unacceptable levels of competence and establishing a pass score.

The criterion-setting exercise should be completed by the CSC and the engagement of representative stakeholders. Each item should be reviewed and a decision made on how likely it is that the minimally competent candidate would respond correctly. By adding up all these ratings across the assessment instrument, a pass grade is derived that defines the point between insufficient and sufficient competence.

The criterion should be established using information from the assessment blueprint to ensure that the relationship between assessment performance and relevant criteria is based on the certification scheme requirements.

2.2.5.3 PSYCHOMETRIC VALIDATION

The certification body should develop policies and procedures for confirming the statistical properties of the assessment instrument, which outline the stages at which the psychometric validation should occur and the methods that should be used.

See Annex I – Psychometric Properties of Assessment.

2.2.5.4 MAINTENANCE

The certification body should define the controls for rotation of assessment items used in assessment instruments to maintain their objectivity and confidentiality.

An ongoing process must exist to ensure that linkage between the assessment instruments and the certification scheme and national occupation standards is maintained, as assessment components are revised and replaced over time.

Appropriate policies and procedures (such as collecting and maintaining statistical data) should be defined to reaffirm, at least annually, the fairness, validity, reliability, and general performance of each examination and all identified deficiencies corrected.

2.2.6 Develop Certification Process

The certification body should document and make available information related to the certification process. This information may include:

- Competence requirements for certified individuals
- Prerequisites, where applicable
- Application requirements
- The type and nature of the assessment and assessment process
- Conditions for granting, maintaining, and renewing certification
- Conditions for suspending or withdrawing certification

2.2.6.1 APPLICATION

An application process should be developed that requires the submission of an application by an applicant before a predetermined deadline, and a review of the application by the certification body.

The application should be signed by the applicant seeking certification, and include the following:

- General applicant information (e.g., name, address, date of birth).

- The title of the desired certification.
- A statement that the applicant agrees to abide by requirements pertaining to the use and maintenance of the designation.
- Confirmation and evidence of the applicant's possession of the required prerequisites specified by the scheme.

The certification body should review the application to confirm that it can accommodate any special needs of applicants (e.g., language, disabilities) and that the applicant has the required prerequisites specified by the scheme.

2.2.6.2 ASSESSMENT ADMINISTRATION

The administration of an assessment requires organization and preparation. All administrative tasks must be identified and planned to carry out the assessment (e.g., printing, shipment of assessment materials under secure conditions, reservation of assessment sites).

The certification body should develop and adhere to a standardized procedure for the administration of assessments. Using an approved assessment method or instrument, the certification body administers the assessment of candidate competency based on the requirements of the certification scheme.

In administering assessments, factors to consider include:

- **Preparing the candidate.** To plan and prepare adequately, all candidates should have information prior to assessment that includes assessment preparation strategies, assessment content outline, assessment format, time limits, scoring, pass/fail criterion, and supply and equipment requirements.
- **Resources.** Certification assessors and/or invigilators must be recruited and trained. They should be thoroughly trained in proper administration of the assessment instruments in an effort to minimize the influence of administration procedures on assessment scores.
- **Site.** The assessment administration site and procedures should be conducive to good performance. Points to consider include the physical site (e.g., adequate lighting, comfortable seating, environment free from distraction), personnel, security, assessment materials and equipment, and administration. All assessment administration sites should offer similar conditions. If a pencil-and-paper formal examination is to be used, sites with a sufficient number of desks should be established. If a computer-based test is to be used, sites should be set up with the appropriate equipment. If

a performance test is to be used, adequate space and supplies should be arranged. These sites are required in a sufficient number of cities to accommodate prospective candidates.

- **Accommodation.** The certification body should ensure that it is able to provide assessment of individuals with special needs unless the applicant's disability would prohibit certification under the certification scheme. Reasonable accommodations (e.g., assistance with reading, extended time for examination, large-print examination questions) should be made and the availability of accommodations should be publicized to applicants.
- **Scheduling.** Scheduling is a related issue, since the number and locations of candidates are usually not known prior to the application deadline. It may be necessary, at least in the first year of the program, to establish a minimum of one site in each province or region and have candidates apply to be tested at the appropriate site. These sites should be in regions where the industry/sector is concentrated, or where relevant educational or training courses or programs are conducted. It may be possible to use space provided by stakeholders to administer the examination. It is best to allow at least two months between the application deadline and the examination date so that these arrangements can be finalized.

2.2.6.3 ASSESSMENT EXCEPTIONS AND ACCOMMODATIONS

Certification may take into account work previously performed by another body. In these cases, all relevant reports and records to demonstrate that the candidate meets the requirements established by the certification body should be provided by the candidate.

The certification body should develop and adhere to policies and procedures that address the following:

- **Grandfathering.** The practice whereby employees who have worked for a substantial number of years in an area of specialization are granted certification without meeting all of the assessment requirements.
- **Prior Learning Assessment and Recognition (PLAR).** PLAR is a systematic process for identifying, assessing, organizing, describing, and documenting an individual's knowledge and skills developed through formal education and training and informally on the job, through independent reading and study, in courses taken, in volunteer work, and through numerous other significant life experiences.

- **Assessment and recognition of foreign credentials.**

The certification body should determine whether similarities between foreign and domestic credentials are sufficient for recognition. Holders of foreign qualifications should have adequate access, upon request, to an assessment of their foreign qualifications. Assessment criteria for the evaluation of foreign credentials have been elaborated with the objectives of increasing consistency and of treating similar cases in a reasonably equivalent manner across Canada. It is nevertheless recognized that a margin of flexibility in making decisions is essential.

See Annex J – Prior Learning and Foreign Credentials.

2.2.6.4 DECISIONS ON CERTIFICATION

Following the administration of the assessment, the assessments are scored and candidates are informed of their performance. The certification body is responsible for certification decisions.

Certification is granted to candidates who pass the assessment. The certification body should provide a certificate to all certified individuals and may add the certified individuals' names to a public registry.

These certificates should contain the following information:

- The name of the certified individual
- A unique certification number
- The name of the certification body
- A reference to the relevant documents on which the certification is based
- The effective date of certification and date of expiry

Candidates who do not pass the assessment are informed and should be provided with guidance from the certification body for reapplication.

Certification should not be granted until all requirements for certification are fulfilled and verified by the certification body.

2.2.6.5 SURVEILLANCE

Surveillance and revocation of certification are optional components of certification programs. The decision to include surveillance as part of the program should be made at the development stage by the Certification Board. The decision is based on the objectives of the program and feasibility, since this function can be very labour-intensive and costly.

Surveillance is the periodic monitoring, between periods of certification, of a certified individual's performance to ensure continued compliance with the certification scheme.

In accordance with the certification scheme, surveillance by the certification body may include:

- Assessment (e.g., on-site assessment, examination, structured interviews)
- Information from regulatory authorities
- Professional development with an assessment component
- Complaints and information from interested parties
- Legal actions taken in regard to the certified individual
- Confirmation of continuing satisfactory work and work experience record
- Checks on physical capability

Certification bodies should have procedures that specify the circumstances and conditions in which certificates will be withdrawn if competence is not confirmed during surveillance. The methods and frequency established for surveillance should be determined by the CSC and the Certification Board.

2.2.6.6 RECERTIFICATION

The certification body should develop procedures and requirements for periodic recertification of certified individuals in accordance with the certification scheme. In determining the frequency for recertification, the certification body may consider the maturity of the industry/sector, the changing body of knowledge, stakeholder feedback and expert opinions, and regulatory requirements.

Recertification requirements should measure or enhance the continued competence of certified individuals. Recertification requirements can be developed during the initial design of the program, since they are closely related to the initial certification requirements. Recertification requirements are often less strict than the initial certification requirements. For example, recertification may require evidence of continued employment in the certified occupation, evidence of continued education/training hours, and/or administration of an assessment instrument designed specifically for recertification.

The methods and frequency established for recertification should be determined by the CSC and the Certification Board.

2.2.6.7 RESOLUTION OF APPEALS AND COMPLAINTS

All appeals and complaints should be reviewed by the Certification Board and be resolved in a constructive, timely, and fair manner. The certification body should develop policies and procedures for the resolution of appeals and complaints received from applicants, candidates, certified individuals and their employers, and other parties about the certification process and criteria.

2.3 Implementation of Certification Programs

2.3.1 Promote the Certification Program

An efficient and effective certification program promotional strategy is critical to assist in the uptake of voluntary certification within industry. The needs assessment will provide guidance for the development and delivery of promotional materials, including delivery channels.

When planning promotional activities, consider the following:

1. **Timing.** Promotion of the certification program throughout the entire development process, including the planning stage, is important. Broad stakeholder engagement throughout the entire development process not only increases the validity of the certification program and ensures industry needs are met, but it also assists in uptake and buy-in of the program once it is available.
2. **Pricing.** The price for the certification program should be based on such factors as type of industry/sector, target audience, purpose, need, demand, and ability to recover development and maintenance costs. To increase the uptake and accessibility of the program to all interested parties, it should be priced fairly and affordably.
3. **Target customers.** It is important to identify the target customer base and marketing opportunities throughout the entire development process, including the planning stage. The target customers for certification programs are primarily workers and employers. Marketing messages should directly relate to the target customer base and emphasize the value of voluntary certification to them. It is critical to identify what motivates the target customers and develop an effective promotional strategy that appeals to those driving factors. A multi-pronged marketing approach that incorporates a variety of marketing activities is an effective way to reach a variety of customers.
4. **Cost-effectiveness.** Different types of marketing materials and opportunities exist, such as brochures, websites, and presentations. However, engaging in a variety of marketing activities can be costly; it is essential to choose the most effective activities. One of the most effective

and inexpensive marketing opportunities is to link the marketing of the certification program with existing infrastructures and contexts that target specialized audiences most likely to seek certification (e.g., sector councils, industry associations, trade and professional journals, education systems, apprenticeship programs, government programs, unions).

5. **Branding and positioning.** Appropriate information must be communicated to all affected groups, not just applicants for certification. It is important to generate interest and enthusiasm among all affected groups (e.g., those requiring the services of the certified individual) to increase demand for certified workers.
6. **Recognition agreements.** Recognition agreements provide a very important value proposition for customers of personnel certification programs. Attaining formal recognition of the program from key stakeholders (e.g., industry associations) may be a valuable tool in attracting customers and may also enable cross-border equivalency assurances. Pursuing mutual recognition agreements may also facilitate the recognition of prior learning and foreign credentials.

2.3.2 Identify Education and Training Opportunities

The certification scheme is outlined in a public document. It can provide guidance to any education/training provider in the development and enhancement of related educational and training courses and programs. Education or training may be a prerequisite for certification or may be voluntarily pursued by candidates to prepare themselves for the certification process or to enhance their knowledge and skills for an occupation.

If successful completion of the educational or training course or program is a partial or whole requirement of a personnel certification program, advertising and any literature related to the training course or program should clearly describe the extent to which the certificate of “Successful Completion” satisfies the education/training requirement associated with the personnel certification program.

A certification body may also provide education and training, provided appropriate governance policies and separation of responsibility are in place.



2.4 Maintenance of Certification Programs

It is the responsibility of the certification body, the Certification Board, and the CSC that contributed to the establishment of the personnel certification program to maintain the certification program. Regular maintenance is important to confirm the validity and continued use of the certification program and to ensure that it continues to align with the needs and demands of stakeholders.

Maintenance should include systematic review and maintenance of the certification program, amendments to all related materials (e.g., assessment instruments, promotional materials), and public notification of maintenance.

2.4.1 Systematic Review and Maintenance

Certification program maintenance policies and procedures are needed for periodic review and evaluation of the certification process, certification scheme, and assessment methods and instruments.

Program evaluation may include:

- Evaluating assessment methods and instruments to ensure that they continue to be fair, valid, and reliable.
- Tracking certified individuals to confirm that their level of performance meets occupational and industry/sector expectations.
- Auditing the certification program to ensure it meets sustainable financial goals and to identify areas where efficiencies can be built.

2.4.2 Public Notice of Maintenance

A public notification of certification program maintenance action should be issued using appropriate methods.

See Annex B – Stakeholder Engagement and Public Awareness.

3 ACCREDITATION PROGRAMS

3.0 Principles for Accreditation Programs

Education or training may be a partial or whole requirement of a national personnel certification program. The education or training requirement may be satisfied by holding a high-school diploma, college diploma, or university degree, or may be met through successful completion of an accredited educational or training course or program.

Accreditation of educational or training courses or programs is normally voluntary. It is a process of quality assurance through which accredited status is granted to an educational or training course or program by the responsible accreditation body. It recognizes that a course or program meets a set of criteria established by the accreditation body. The accreditation process grants a time-limited recognition to the education/training provider's course or program after verifying that it has met the predetermined criteria. The course or program is expected to meet the criteria throughout the specified time period. The accreditation criteria may include requirements for course or program administrative management systems, development and delivery, assessment, and/or instructors.

The following guiding principles apply to accreditation programs and should be consistently applied at all stages of planning, development, implementation, and maintenance.

1. Accessible, Equitable, and Fair

ALL INDIVIDUALS SHOULD HAVE EQUAL ACCESS TO RELEVANT INFORMATION AND THE OPPORTUNITY TO PARTICIPATE EFFECTIVELY.

- All applicants should be treated equitably and fairly.
- All applicants should have equal access to accreditation services and related preparatory materials and assessment instructions.
- Accreditation decisions should be based on fair procedures and objective requirements.

2. Coherence and Rigour

INFORMATION SHOULD BE DEVELOPED AND PRESENTED IN A LOGICAL, RIGOROUS, AND CONSISTENT MANNER.

- Accreditation requirements should be stated clearly in plain language and be meaningful, realistic, and easily understood by applicants.

- Accreditation requirements should be measurable in a practical way and be legally defensible.
- The same accreditation process should be used to assess all applicants.
- A process for accrediting applicants in all provinces/territories across Canada should be established.
- Accreditation should be recognized in all provinces/territories across Canada.

3. Confidentiality

INFORMATION SHOULD BE ACCESSIBLE ONLY BY THOSE AUTHORIZED TO HAVE ACCESS.

- Confidentiality policies and procedures should be developed to ensure that application status and assessment results are treated as confidential, and should outline the circumstances under which this information may be disclosed or made public.

4. Consensus

A CONSENSUS PROCESS SHOULD BE USED TO MAKE DECISIONS. CONSENSUS IS DEFINED AS GENERAL AGREEMENT, CHARACTERIZED BY THE ABSENCE OF SUSTAINED OPPOSITION TO SUBSTANTIVE ISSUES BY ANY RELEVANT STAKEHOLDER AND BY A PROCESS THAT SEEKS TO TAKE INTO ACCOUNT THE VIEWS OF ALL RELEVANT STAKEHOLDERS AND TO RECONCILE ANY CONFLICTING ARGUMENTS. CONSENSUS IMPLIES MUCH MORE THAN A SIMPLE MAJORITY, BUT NOT NECESSARILY UNANIMITY.

- Accreditation program decisions should be made based on stakeholder consensus.
- All stakeholder groups' positions should be treated equally, regardless of the number of individuals included in the respective stakeholder group.

5. Current, Relevant, and Valid

INFORMATION SHOULD BE CREDIBLE, APPLICABLE, AND UP TO DATE.

- To ensure that the accreditation program is current, relevant, and valid, early and continued stakeholder engagement, particularly industry/sector involvement, is essential throughout the entire accreditation program development process, including planning, maintenance, and implementation.

- Accreditation program requirements should be based on a relevant certification scheme and/or national occupational standard and developed using information from credible sources.
- Key accreditation program staff and contractors should possess the adequate knowledge and skill to conduct accreditation program activities.

6. Harmonization

HARMONIZING WITH EXISTING RELEVANT NATIONAL AND INTERNATIONAL POLICIES, PROCEDURES, AND REQUIREMENTS HELPS TO ENSURE CONSISTENCY AND QUALITY. IT SUPPORTS GREATER LABOUR MOBILITY ACROSS PAN-CANADIAN MARKETS AND THE RECOGNITION OF FOREIGN CREDENTIALS. WHERE HARMONIZATION IS ACHIEVED, EFFORT SHOULD BE MADE TO ESTABLISH LIAISON ARRANGEMENTS WITH THE ORIGINATING ORGANIZATION IN ORDER TO KEEP IT INFORMED OF ANY CHANGES MADE.

- Accreditation programs should be harmonized (to the extent possible) with existing relevant international, regional, or national programs.
- Adopting internationally accepted policies and procedures may help to ensure the consistency and quality of accreditation programs.

7. Impartiality and Independence

DECISIONS SHOULD BE BASED ON OBJECTIVE CRITERIA, RATHER THAN BIAS, UNDUE INFLUENCE, OR PREJUDICE.

- Impartiality and the perception of being impartial is necessary if an accreditation body is to deliver accreditation that inspires confidence.
- Impartiality and independence of the accreditation body should be established at all levels, including the structure of the organization, policies and procedures, assessment, decisions, complaints and appeals on accreditation.
- The accreditation body should be impartial and independent in relation to its applicants (i.e., education or training providers), including the applicants' customers (i.e., individuals taking the courses or programs).
- Decisions should be based on objective evidence of conformity (or nonconformity) obtained by the accreditation body and not be improperly influenced by other interests or parties.

8. Openness and Transparency

STAKEHOLDERS SHOULD HAVE THE OPPORTUNITY TO BE ENGAGED, AND THE INFORMATION PROVIDED TO STAKEHOLDERS SHOULD BE OPEN AND TRANSPARENT. AN OPEN

AND TRANSPARENT PROCESS ALLOWS ALL INDIVIDUALS TO PARTICIPATE EFFECTIVELY. IN AN OPEN AND TRANSPARENT PROCESS, THE ROLES OF STAKEHOLDER GROUPS ARE CLEARLY DEFINED, THE PROCESS TO BE FOLLOWED IS CLEARLY COMMUNICATED, AND THE DETAILS OF HOW THE RESULTING INFORMATION WILL BE USED ARE SHARED WITH ALL INVOLVED. OPENNESS IS ACCESS TO OR DISCLOSURE OF INFORMATION.

- Accreditation bodies should provide public access or disclosure of appropriate and timely information about the accreditation criteria and process and about the accreditation status of courses or programs.
- Policies and procedures should be publicly available and should include guidelines by which applicants may question eligibility determination, assessment results, and accreditation status.
- A well-defined and transparent complaints and appeals procedure should be developed and all complaints and appeals should be investigated in a timely manner.

9. Representative

THE PROCESS SHOULD BE INCLUSIVE, NOT EXCLUSIVE. ALL INDIVIDUALS WITH A SIGNIFICANT INTEREST IN THE ISSUE SHOULD BE INVOLVED. ACCEPTANCE OF THE DIVERSE VALUES, INTERESTS, AND KNOWLEDGE OF INDIVIDUALS INVOLVED IS ESSENTIAL.

- Care should be taken in identifying and notifying stakeholders of accreditation program development.
- Accreditation program planning, development, implementation, and maintenance should include stakeholders who represent a broad range of perspectives.

10. Sustainability

COMMITMENT AND SUFFICIENT RESOURCES ARE ESSENTIAL TO CONTINUE AND PROSPER.

- The accreditation body should have sufficient human resources, financial resources, and the appropriate infrastructure to conduct effective accreditation and reaccreditation activities.

11. Voluntary

INDIVIDUALS WHO ARE AFFECTED OR INTERESTED PARTICIPATE VOLUNTARILY AND THE OUTCOME IS VOLUNTARILY APPLIED.

- Participation in accreditation programs is voluntary.
- A specific accredited course or program should not be required as part of a personnel certification program.

3.1 Planning of Accreditation Programs

Planning is the critical first stage in establishing a program for the accreditation of educational or training courses and programs.

3.1.1 Define Purpose and Need

The first step in establishing an accreditation program is to identify the need for the program and the business objectives that the program will support.

The need for accreditation of educational or training courses or programs may be related to the requirements of the personnel certification program. An accreditation program may also be developed to foster the continuous quality improvement and quality assurance of educational or training programs or courses where certification programs do not exist. Accreditation may be required if the educational or training course or program is a partial or whole requirement of a personnel certification program.

Differences in the quality of education and training workers receive can result in variations in occupational proficiency. The accreditation of courses and programs aims to ensure that all accredited courses and programs are equivalent in quality and that they fulfill the requirements outlined by the certification program.

3.1.2 Establish Accreditation Board

At the governance level, an Accreditation Board should be established that provides governance for the accreditation program.

Specific responsibilities of the Accreditation Board involve establishing policies and procedures regarding the accreditation program, including activities related to eligibility, the development, administration, and evaluation of assessments, and reviewing complaints and appeals.

The composition of the Accreditation Board should include a Chair, Vice-Chair, program manager, contractors, and appropriate stakeholder representation, established with the objective of ensuring that all points of view pertinent to the accreditation program are represented in reasonable proportion. The accreditation body should establish policies and procedures for the selection of individuals who serve on the board. To ensure a balance of program input, the accreditation body may implement a rotating system of Accreditation Board representation over a set period of time.

See Annex B – Stakeholder Engagement and Public Awareness.

3.1.3 Define Scope

The scope of the accreditation program is to accredit the educational or training courses or programs required by workers to meet certification requirements.

3.1.4 Develop Work Plan

A work plan should be developed to identify the human resources, budget, and schedule required to effectively and efficiently establish and maintain the accreditation program.

3.1.4.1 IDENTIFY HUMAN RESOURCES

There are different human resources to consider when establishing an accreditation program. The availability and commitment of the following individuals should be considered:

1. **Staff.** The accreditation body must have sufficient staff (or contractors) with the adequate knowledge and skills to establish the accreditation program and conduct accreditation program activities. The accreditation body should select a program manager for the accreditation program. The program manager should be responsible for providing oversight and management of the program at all stages of planning, development, implementation, and maintenance. A core team of administrative staff should be available to provide program support (e.g., applicant inquiries).
2. **Partners.** At the discretion of the accreditation body, partners may be selected to work jointly on the establishment of the accreditation program. The decision to engage partners might be based on a variety of reasons, such as the need for funding assistance, lack of experience in establishing accreditation programs, need for greater subject matter expertise, and/or brand recognition. Potential partners should be identified in the early phases of planning. Partners should agree to adhere to all program policies and procedures.
3. **Committee members.** The availability of members may vary depending on the type of occupation and/or timing. Special consideration should be made when working with sectors that have seasonal fluctuation in workload.
4. **Contractor.** Development of an accreditation program requires a variety of experts, including those experienced in assessment and management systems. It may not be feasible for the accreditation body to maintain the necessary in-house staff or the required infrastructure to conduct accreditation activities. At the discretion of the accreditation body, a contractor may be selected to



assist in the establishment and/or administration of the accreditation program. Contractors should agree to adhere to all program policies and procedures. To ensure the appropriate contractor is selected, a formal Request for Proposal (RFP) process should be followed.

See Annex C – Selecting a Contractor.

3.1.4.2 DEVELOP BUDGET AND SCHEDULE

An accreditation program development budget and schedule should be developed to guide the development process.

Estimating the expenses and revenue related to the establishment of an accreditation program will help to assess the general feasibility of establishing the program, and should be considered when developing the budget.

Accreditation program costs are mainly associated with program development and program maintenance.

- **Program development costs.** Development costs are the one-time expenses associated with development of the program management system and assessment criteria (e.g., meetings, stakeholder engagement, translation/adaptation). Outside funding from partners or other interested parties may be sought to offset initial development costs.
- **Program maintenance costs.** Maintenance costs are recurring expenses that are primarily associated with program management (e.g., developing policies and procedures, responding to queries, marketing, responding to appeals, maintaining a registry of accredited courses and programs), the process of conducting assessments, and maintenance of the accreditation criteria and methods. Maintenance costs are often offset by program revenues.

Accreditation program revenues are normally generated through accreditation fees. Accreditation programs may be based on a subsidization model (e.g., from government or industry), cost-recovery model (i.e., accreditation fees sustain the program), or a revenue-generating model (i.e., accreditation fees are more than required to sustain the program).

The accreditation program development and implementation schedule is an important factor to consider when planning the budget. Setting a target date for initial assessments will help to determine when program revenues can be expected. Based on the target assessment date, all key activities that must

occur before that date should be identified and scheduled accordingly. The accreditation program development schedule may be largely influenced by a related certification program's schedule and the need for candidates to complete accredited educational or training courses or programs as a prerequisite for participating in the certification process.

All materials associated with the accreditation program should be available in both official languages — English and French. Sufficient time and budget should be allocated for editing, translation/adaptation, and publication of all materials.

See Annex K – Second Official Language Translation and Adaptation.

3.1.4.3 DEVELOP COMMUNICATIONS PLAN

A well-designed and executed communications plan facilitates acceptance from key stakeholders of the accreditation program in the early planning and development stages. The communications plan should provide guidance to all individuals involved in the accreditation program development (e.g., accreditation body staff, committee members) on what information they should communicate about the accreditation program development, what information is confidential (e.g., personal information of committee members), what messages they should communicate, and to whom these messages should be communicated.

Early development and implementation of a communications plan helps to ensure openness and transparency of the accreditation program development process, coordinates a cohesive message about accreditation program development activities, and provides an opportunity to identify, engage, and build buy-in from key stakeholders early in the process. Early stakeholder buy-in is critical to achieve successful implementation.

3.2 Development of Accreditation Programs

The development of an accreditation program should include the following steps:

1. Establish Accreditation Program Administrative Management System
2. Establish Accreditation Council
3. Develop Accreditation Criteria
4. Select Assessment Model
5. Develop Accreditation Process

3.2.1 Establish Accreditation Program Administrative Management System

3.2.1.1 ORGANIZATIONAL STRUCTURE

The accreditation body should ensure that an appropriate governance structure and policies and procedures are developed to protect the impartiality of the accreditation process.

The structure of the accreditation body should contain provisions for the participation of all relevant stakeholders. To ensure representative stakeholder engagement, an Accreditation Board (see 3.1.2, Establish Accreditation Board) should be established to assist in the development, implementation, and maintenance of the accreditation program.

An accreditation body may also be a certification body or provide education or training. If the accreditation body provides other services or performs other activities, it should analyze and document its relationship to determine possibilities for any conflicts of interest. For example, provided that appropriate governance policies and separation of responsibility are in place, one organization may provide both accreditation and certification.

3.2.1.2 RESOURCES

The accreditation body should have sufficient financial resources to sustain operation of the accreditation program and to cover associated liabilities.

The accreditation body should have adequate human resources in terms of knowledge and skills to conduct the activities of the accreditation program. Appropriate staff, contractors, and/or volunteers (e.g., peer reviewers) should be competent to:

- Review applications
- Authorize, select, and train assessors
- Conduct assessments
- Handle appeals and complaints
- Make assessment decisions
- Implement and maintain a management system

Accreditation assessors play a critical role in the accreditation process and should be provided with the appropriate information, guidance, and training that they need to meet their responsibilities. Accreditation assessors should have appropriate qualifications and occupational expertise as well as a consistent understanding and application of related national occupational standards and best practices in assessment (e.g., professionalism, ethics, communication skills, assessment procedures).

An accreditation body may choose to contract work related to accreditation activities (e.g., administration, assessment) to a contractor. However, the accreditation body should take full responsibility for contracted work and ensure that the contractor is competent and complies with all applicable policies and procedures developed by the accreditation body.

3.2.1.3 POLICIES AND PROCEDURES

The accreditation body should develop policies and procedures that govern the accreditation process. Policies and procedures should be developed for:

- Granting accreditation (e.g., eligibility criteria, assessment process)
- Maintaining, renewing, suspending, or withdrawing accreditation
- Developing and maintaining accreditation criteria and assessment methods
- Resolving appeals and complaints
- Maintaining the accreditation program
- Using contractors
- Ensuring impartiality
- Preserving confidentiality

All policies and procedures should be fair and equitable among all applicants and should not impede or inhibit access by applicants.

All employees, committee members, partners, and contractors should comply with all applicable policies and procedures developed by the accreditation body.

3.2.1.4 RECORDS

The accreditation body should maintain a record of all current and previously accredited educational and training courses and programs.

Records should be retrievable, stored in a secure manner for a reasonable time period, managed and disposed of in a way that ensures confidentiality of the information, and uniquely identifiable.

3.2.1.5 CONFIDENTIALITY

The accreditation body should keep confidential all information obtained in the process of its activities. These commitments include all employees, committee members, partners, and contractors.

3.2.2 Establish Accreditation Council

An Accreditation Council should be established that has the expertise required to make accreditation decisions.



Specific responsibilities of the Accreditation Council involve reviewing the final reports submitted by assessors (detailing the results of their review of the course/program and stating whether the course/program meets accreditation criteria, including recommendations and opportunities for improvement) and making accreditation decisions.

The composition of the Accreditation Council should include a Chair, Vice-Chair, and appropriate stakeholder representation, to ensure that all points of view pertinent to the accreditation program are represented in reasonable proportion.

See Annex B – Stakeholder Engagement and Public Awareness.

3.2.3 Develop Accreditation Criteria

The Accreditation Board should develop accreditation criteria for accrediting educational and training courses and programs. The criteria may include:

1. Administrative Management System Criteria
2. Development and Delivery Criteria
3. Assessment Criteria
4. Instructor Criteria

3.2.3.1 ADMINISTRATIVE MANAGEMENT SYSTEM CRITERIA

The following may be considered when developing educational or training course or program accreditation criteria related to the administrative management system of the education/training provider:

1. **Administrative policies and procedures.** The education/training provider should develop and maintain policies and procedures for the effective administration of the course or program, including:
 - Course/program design, development, evaluation, and presentation.
 - Verification of learner prerequisite knowledge or experience.
 - Instructor selection, verification of competence, continuing education/training, and regular performance evaluation.
 - Learner records.
 - Learner assessment instruments and pass/fail criteria.
 - Operation and administration of assessments and applicable re-assessment, including security and confidentiality.
 - Issue and withdrawal of certificates of “Successful Completion”.

- Storage and disposal of records.
- Methods for considering learners’ evaluations of the course/program and of instructors.
- Complaints and appeals.

2. **Records.** Records should be retrievable, stored in a secure manner for a reasonable period of time, managed and disposed of in a manner that ensures confidentiality, and uniquely identifiable. All records should be made available to the accreditation body. The records for each course/program presentation should include:

- Venue, dates, related advertisements and promotional literature.
- Names of instructor(s).
- Revision number of the course/program materials and assessment instruments used.
- Names of all learners who attended the course/program.
- Graded assessments and results.
- Unique identification number of each certificate of “Successful Completion” and the name of the learner to whom it was issued.

3. **Certificates.** A certificate of “Successful Completion” should be provided to each learner who has met the education/training provider’s criteria for passing the course or program. If successful completion of the accredited educational or training course or program is a partial or whole requirement of a personnel certification program, advertising of the training course and any literature related to the program should clearly describe the extent to which the certificate of “Successful Completion” satisfies the education or training requirement associated with the personnel certification program. The certificate should:

- State that the course or program is accredited by the accreditation body.
- Include a unique identification number.
- Show the name of the education/training provider.
- Include the course or program title, unique identifier, and dates of presentation of the course or program.
- Show the name of the learner.
- State that the learner named has successfully completed the course or program.

4. **Complaints and appeals.** The education/training provider should establish policies and procedures for managing complaints and appeals against its decisions. The policies and procedures should include the potential for involvement of the accreditation body in unresolved complaints or appeals. All appeals and complaints should be resolved in a constructive, timely, and fair manner.
5. **Confidentiality.** The education/training provider should keep confidential all information obtained in the process of its activities. These commitments include all employees, partners, board members, and subcontractors.
6. **Revisions.** The accrediting body should have policies and procedures regarding approval of significant revisions intended to be made by the education/training provider to an accredited course or program.

3.2.3.2 DEVELOPMENT AND DELIVERY CRITERIA

The following may be considered when developing educational or training course or program accreditation criteria related to the development and delivery of the course or program:

1. **Analysis.** In developing a course or program to be accredited, the education/training provider should consider related national occupational standards, situational analyses, occupational language analyses, Essential Skills profiles, certification schemes, assessment blueprints, and/or other relevant materials.
2. **Intended learning outcomes.** For each identified task and associated knowledge and/or skill required in the national occupational standard, a corresponding intended learning outcome should be addressed in the course. Each intended learning outcome should include the conditions in which the task is typically performed, including a description of the task, when the task is performed, the tools/equipment/materials required to perform the task, reference information/documentation, and the expected, measurable outcome required for an individual to be considered competent in performing the task.
3. **Content.** The course or program content should be developed to provide sufficient information to support and reinforce all intended learning outcomes.

4. **Design.** The course or program should include both knowledge-based sessions (to facilitate understanding of concepts) and skill-based sessions (application of knowledge and skills in practical activities). Each learner should be subjected to realistic practices and conditions associated with the intended learning outcomes. Topics should be presented in a logical sequence allowing for the development of knowledge and skills throughout the different stages of learning. The course or program should be adaptable to meet individual learning needs (e.g., age, ability, culture) and regional needs.
5. **Learner-centred approach.** The course or program design and delivery should support a learner-centred approach that encourages the active participation of each learner, supports and facilitates self-directed learning, allows for integration of personal experiences, ensures knowledge and skills are acquired at a pace appropriate to individual learners, and emphasizes the importance of lifelong learning.
6. **Adult-learner approach.** The course or program design and delivery should consider principles of adult learning such as unique motivators, a focus on personal goals, building on previous life experiences, promoting positive self-esteem, and treating learners as active participants.
7. **Prerequisites.** The prerequisites (e.g., related programs/courses, experience, interview) that learners must possess prior to participating in the course or program should be clearly communicated. The education/training provider should adhere to policies and procedures for verifying possession of learner prerequisites.
8. **Validation.** The course should be validated by a representative group of stakeholders.
9. **Revisions.** The education/training provider should maintain a defined control and amendment process for the purpose of tracking course or program revisions. The course or program should be designed to allow for easy updating, removal, and insertion of content as needed.
10. **Delivery.** The course or program may be delivered using a variety of different methods in combination or solely (e.g., instructor-led in a conventional classroom setting, independent study, e-learning). The course or program should develop and adhere to policies on

maximum instructional hours per day. The course or program length should allow sufficient time for a learner with reasonable abilities to achieve the intended learning outcomes.

- 11. Feedback.** A policy and procedure should be developed that allows learners to anonymously evaluate the course or program and the instructor. Feedback may be used by the training/education provider for continual improvement and/or to monitor customer satisfaction.

3.2.3.3 ASSESSMENT CRITERIA

The following may be considered when developing educational or training course or program accreditation criteria related to the assessment of learners:

- 1. Preparing the learner.** Each learner should be informed of the format of the assessment, the grading procedures, and the criteria for passing prior to enrolling in the course or program.
- 2. Assessment of intended learning outcomes.** Each learner should be assessed for achievement of each of the course or program’s intended learning outcomes. The assessment of the learner’s achievement of a given intended learning outcome should be under the same conditions and should call for the same performance as prescribed for that intended learning outcome. Where conditions cannot be replicated, a suitable assessment alternative should be employed. Evaluation of a learner’s achievement of intended learning outcomes may take place at any appropriate point in the course or program.
- 3. Assessment methods.** Assessment methods appropriate to the intended learning outcome should be used (e.g., written examinations, written assignments,

demonstration of skills). All assessment instruments should be developed and maintained in a secure manner to ensure their integrity is maintained.

- 4. Final grade.** A final grade for each learner should be issued and recorded.
- 5. Reassessment.** A learner who does not pass an assessment should be permitted at least one reassessment.

3.2.3.4 INSTRUCTOR CRITERIA

The following may be considered when developing educational or training course or program accreditation criteria related to the instructors of the course or program:

- 1. Number of instructors.** An appropriate number of instructors should be assigned for each presentation of a course or program.
- 2. Management skills.** Instructors should demonstrate effective management of the course or program, including attention to time schedule, content, requirements of any related materials (e.g., NOS), instructor conduct, and other course or program requirements.
- 3. Competence.** Instructors should demonstrate competence in the principles and practices of the tasks, knowledge, and skills associated with the course or program’s intended learning outcomes and the ability to facilitate the learning and development of the knowledge and skills associated with the course or program’s intended learning outcomes. Instructor experience, qualifications, and/or professional development requirements may be considered.

3.2.4 Select Assessment Model

Various types of assessment models (not mutually exclusive) exist, including the following:

ASSESSMENT MODEL	
ASSESSMENT MODEL	DESCRIPTION
First-party Assessment	Internal assessment is conducted by the education/training provider and is the basis for “self-declaration”.
Second-party Assessment	Assessment is conducted by individuals with a vested interest (e.g., learner, experienced workers, certification body, other relevant stakeholders).
Third-party Assessment	Assessment is conducted by an independent accreditation body. The accreditation body may or may not be formally recognized by a national or provincial body to have the authority to assess the education or training course or program.
Complaint-driven	A reactive assessment process in which public awareness is critical.
Surveillance and Registry System	Periodic surveillance assessment is conducted to renew accreditation. Accredited organizations are approved and added to a publicly available central registry.



The Accreditation Board should determine which assessment model or combination of models best meets the objectives of the program, considering resources, budget, and schedule, and develop a standardized accreditation process.

3.2.5 Develop Accreditation Process

The accreditation body should document and make available information related to the accreditation process. This information may include:

- Course or program requirements for accreditation
- Application requirements
- Type and nature of the assessment and assessment process
- Conditions for granting, maintaining, and renewing accreditation
- Conditions for suspending or withdrawing accreditation

3.2.5.1 APPLICATION

An application process should be developed that requires the submission of an application by the education/training provider applicant by a predetermined deadline and a review of the application by the accreditation body.

The application should be signed by the education/training provider applicant seeking accreditation for an educational or training course or program, and include the following:

- General information about the education/training provider (e.g., name, address, date of establishment).
- The title of the course or program for which the education/training provider applicant is seeking accreditation.
- The title of the related personnel certification program (if any).
- A statement that the education/training provider applicant agrees to abide by requirements pertaining to the use and maintenance of the accreditation.

3.2.5.2 CONDUCT ASSESSMENT

The accreditation body should develop and adhere to policies and procedures for the assessments of educational or training courses or programs based on the selected assessment model.

The following assessment process should be considered:

1. **Self-assessment.** First, the education/training provider seeking accreditation conducts an internal self-assessment to determine whether its course or program meets the criteria of the accreditation body. Based on

self-assessment results, the education/training provider makes any necessary changes and submits evidence of self-assessment to the accreditation body.

2. **Assessor review.** Second, assessors from the accreditation body undertake an assessment of the course or program through an on-site assessment, in which the reviewers meet with key informants (e.g., learners, graduates, senior administration) and review records. Assessors submit a written report to the accreditation body that details the results of their review of the course/program and that states whether the course/program meets accreditation criteria. The report should also include recommendations and opportunities for improvement. The education/training provider receives the draft report for review and is provided with the opportunity to comment. These comments are considered and a final report is issued to the accreditation body for a decision.
3. **Accreditation decision.** The Accreditation Council reviews the final report and makes the accreditation decision. The applicant education/training provider is notified of the decision.

3.2.5.3 DECISIONS ON ACCREDITATION

Accreditation is granted to educational or training courses or programs that meet the assessment criteria. The accreditation body may add the accredited education/training provider's name to a public registry. The accredited education/training provider should be entitled to use the name/mark of the accreditation body in communications and promotions related to the course or program.

Where courses or programs do not meet the accreditation criteria, the accreditation body informs the education/training provider and gives guidance on reapplication. Recommendations from the assessors' report will help the education/training provider to prepare for reapplication for accreditation.

3.2.5.4 SURVEILLANCE

Surveillance is the periodic monitoring during the period for which the program has been awarded accreditation status to ensure that the program continues to be compliant with the accreditation criteria. Withdrawal of accreditation may be one of the outcomes of the surveillance process.

Surveillance of accreditation is an optional component of accreditation programs. The decision to include surveillance as part of the program should be made at the development stage by the Accreditation Board. The decision may be based



on the objectives of the program and/or the feasibility of conducting surveillance activities, since this can be very labour-intensive and costly.

Accreditation bodies should have policies and procedures that specify the circumstances and conditions under which accreditation will be withdrawn if accreditation criteria are not met during surveillance. The methods and frequency established for surveillance should be determined by the Accreditation Board.

3.2.5.5 REACCREDITATION

The accreditation body should develop policies and procedures for periodic reaccreditation of accredited courses or programs in accordance with the accreditation criteria.

Reaccreditation criteria should be developed during the initial design of the program, since they are closely related to the initial accreditation criteria. Reaccreditation procedures may be less rigorous than the initial accreditation procedures. For example, if the accreditation criteria have not been revised and a course or program has not been revised, reaccreditation may simply require evidence of continued self-assessment and continual improvement.

The methods and frequency established for reaccreditation should be determined by the Accreditation Board.

3.2.5.6 RESOLUTION OF APPEALS AND COMPLAINTS

All appeals and complaints should be reviewed by the Accreditation Board and be resolved in a constructive, timely, and fair manner. The accreditation body should develop policies and procedures for the resolution of appeals and complaints received concerning the accreditation criteria, process, and/or decisions.

3.3 Implementation of Accreditation Programs

3.3.1 Promote the Accreditation Program

Advertising of an accredited educational or training course or program and any related literature should clearly state that it has been accredited by the accreditation body.

Education or training may be a prerequisite for certification, or may be voluntarily pursued by candidates to prepare themselves for the certification process or to enhance their knowledge and skills for an occupation. If successful completion of an accredited course or program is a partial or whole

requirement of a personnel certification program, advertising for the course or program and any related literature should clearly describe the extent to which the certificate of “Successful Completion” satisfies the requirement associated with the personnel certification scheme. If education or training is not a requirement of a certification program, accreditation of the course or program may be advertised as verification that it prepares learners for the certification process and occupation, and/or to reinforce support or endorsement (e.g., by industry, by an association) of the course or program.

The accreditation body should develop, maintain, and advertise a public registry where all accredited educational and training courses and programs are listed.

3.4 Maintenance of Accreditation Programs

It is the responsibility of the accreditation body and the Accreditation Board to maintain the accreditation program. Regular maintenance is important to ensure that it continues to align with the needs and desires of stakeholders.

Maintenance should include systematic review and maintenance of the program, amendments to all related materials, and public notification of maintenance.

3.4.1 Systematic Review and Maintenance

Accreditation program maintenance policies and procedures are needed for periodic review and evaluation of the accreditation process, accreditation criteria, and assessment methods.

Program evaluation may include

- Evaluating assessment methods to ensure continued equality, validity, and reliability.
- Tracking of learners to confirm that their level of performance meets occupational and industry/sector expectations.
- Auditing of the accreditation program to ensure that it meets sustainable financial goals and to identify areas where efficiencies can be built.

3.4.2 Public Notice of Maintenance

A public notification of program maintenance action should be issued using appropriate methods.

See Annex B – Stakeholder Engagement and Public Awareness

APPENDIX A: SUPPORTING AND CONTEXTUAL OCCUPATIONAL INFORMATION

What are Essential Skills?

Essential Skills provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. The nine Essential Skills are:

1. Reading Text
2. Document Use
3. Numeracy
4. Writing
5. Oral Communication
6. Working with Others
7. Continual Learning
8. Thinking Skills
9. Computer Use

Essential Skills Profiles describe how each skill is used by workers in a particular occupation.

It is good practice to integrate Essential Skills into NOS to give workers, employers, educators, and other stakeholders a complete picture of the requirements of an occupation, and to highlight skills that are transferable to other occupations. Essential Skills can be integrated into NOS by publishing an Essential Skills Profile as part of the respective NOS, or by integrating Essential Skills into the skills profiled in the NOS. Where NOS include information on technical competencies, Essential Skills Profiles provide information on the enabling skills needed to achieve those technical competencies.

For more information see:

http://srv108.services.gc.ca/english/general/home_e.shtml

www.itsessential.ca

What are Canadian Language Benchmarks and Occupational Language Analyses?

The Canadian Language Benchmarks (CLB) is the national standard for describing, measuring, and recognizing the second language proficiency of adult immigrants and prospective immigrants for living and working in Canada. The Centre for Canadian Language Benchmarks (CCLB) promotes and supports the recognition and use of the CLB as a practical, fair, and reliable national standard of second language proficiency in educational, training, community, and workplace settings.

Occupational Language Analyses (OLA) are companion documents to both Essential Skills Profiles and NOS. An OLA defines the Canadian Language Benchmarks levels required to perform tasks related to specific jobs as defined in Essential Skills Profiles and in NOS.

For more information see www.language.ca.

What are Situational Analyses?

Situational Analyses define the overall context of an occupation and provide valuable information about the occupation. Situational Analyses are not required components of an NOS, but help to assess the need and define the scope of the NOS. Information for a Situational Analysis could be collected and/or used during NOS planning, development, implementation, and maintenance stages as required.

Situational Analysis information might include the following:

- Demographic profile of job incumbents
- Commonly used job roles and titles
- Education, training, and experience
- Occupational environment and working conditions
- Tools and equipment
- Compensation levels and benefits
- Relationships to higher and lower occupations
- Supply and demand
- Past and future trends
- Number of people employed in the occupation
- Incentives for certification
- Commonly used terminology in the field

APPENDIX B: STAKEHOLDER ENGAGEMENT AND PUBLIC AWARENESS

When engaging stakeholders or the general public in any process, the following principles apply:

Accessible, Equitable, and Fair – All individuals should have equal access to relevant information and the opportunity to participate effectively.

Confidentiality – Information should be accessible only by those authorized to have access.

Consensus – A consensus process should be used to make decisions. Consensus is defined as general agreement, characterized by the absence of sustained opposition to substantive issues by any relevant stakeholder and by a process that seeks to take into account the views of all relevant stakeholders and to reconcile any conflicting arguments. Consensus implies much more than a simple majority, but not necessarily unanimity.

Impartiality and Independence – Decisions should be based on objective criteria, rather than bias, undue influence, or prejudice.

Openness and Transparency – Stakeholders should have the opportunity to be engaged, and the information provided to stakeholders should be open and transparent. An open and transparent process allows all individuals to participate effectively. In an open and transparent process, the roles of stakeholder groups are clearly defined, the process to be followed is clearly communicated, and the details of how the resulting information will be used are shared with all involved. Openness is access to or disclosure of information.

Representative – The process should be inclusive, not exclusive. All individuals with a significant interest in the issue should be involved. Acceptance of the diverse values, interests, and knowledge of individuals involved is essential.

Voluntary – Individuals who are affected or interested participate voluntarily and the outcome is voluntarily applied.

Considerations for proper stakeholder representation include representation from:

- A variety of work settings (e.g., rural and urban, large and small)
- Various geographic regions
- Provincial/territorial and national sector associations
- Government/regulatory authorities
- Workers who have different education or training routes to the occupation
- New and experienced workers
- Certified and non-certified workers
- Both sexes
- Ethnic diversity
- Immediate supervisors
- Employers
- Educators and trainers
- Consumers
- French- and English-speaking workers

Considerations for stakeholder engagement include:

- Defining roles and responsibilities of stakeholder groups clearly.
- Ensuring stakeholder support and commitment to the process.
- Ensuring due diligence to verify that stakeholders have no conflict of interest in carrying out their roles and responsibilities.
- Ensuring equal access and effective participation by concerned interests (e.g., to ensure equal opportunity, resources should be identified for stakeholder groups requiring support to participate).
- Engaging diverse stakeholders (e.g., age, sex, social class, ethnic group, geographical location).
- Engaging stakeholders from marginalized or seldom-heard groups (e.g., people living in poverty or disadvantaged neighbourhoods, people with disabilities, older people, people in remote rural areas, commuters).
- Identifying appropriate and relevant public notification methods (e.g., newsletters, e-mails, conferences, and websites of relevant stakeholder groups such as governments, sector councils, industry and professional associations, and apprenticeship and education programs).

APPENDIX C: SELECTING A CONTRACTOR

The following steps should be taken in selecting a qualified contractor:

1. **Develop the RFP.** Evaluation guidelines should be developed and agreed to by the SSC. The RFP will be informed by the identified business objectives and industry needs and the defined scope of the NOS. The RFP should include background information on the purpose and need for the NOS and should clearly state the required scope of work (e.g., tasks, deliverables), experience and qualifications, budget, schedule, and terms and conditions. The RFP administrator's contact information should be included so that bidders may submit questions.
2. **Develop the evaluation guidelines.** Based on the RFP, evaluation guidelines should be developed and agreed to by the SSC. Proposal evaluation and contractor selection should be based on one or a combination of the following criteria: quality of the proposal, proposed methodology, schedule, cost of services, cost within budget allocated, and/or contractor experience and qualifications.
3. **Broadcast the RFP to interested parties.** Broadcasting the RFP can be done by sending an e-mail to a list of qualified contractors, posting it on a public tendering website (e.g., MERX) and/or other relevant forums (e.g., association websites, industry newsletters), or by requesting a single contractor to prepare a proposal.
4. **Review and evaluate proposal submissions.** Using the evaluation guidelines, the project committee reviews each submission.
5. **Select a contractor.** The SSC should select a contractor based on the proposal evaluation outcomes.
6. **Notify and hire successful contractor.** The successful contractor is notified, the terms and conditions are negotiated, and the contract is prepared. Unsuccessful bidders should be notified that a contractor has been selected.

APPENDIX D: NATIONAL OCCUPATIONAL ANALYSIS METHODS

The methods used to conduct a national occupational analysis can vary. Below is an example of how a NOA may be conducted. The individual methods could also be applied on their own or combined in a way that is most feasible, considering budget and schedule.

1. Research

Identifying and reviewing publicly available, relevant materials can be a very useful first step in conducting a thorough occupational analysis.

Research may include:

- A jurisdiction scan (e.g., regional, national, and international) to identify existing standards, Essential Skills Profiles, Occupational Language Analysis, or other relevant information and materials.
- Formal or informal interviews with subject matter experts.

2. Develop Draft Occupational Profile

A draft occupational profile can be developed by the contractor, SSC, SDC, or another subject matter expert to guide the development of the NOS. An occupational profile is an overview of the occupation for which the NOS is being developed. The draft occupational profile would include a draft occupational definition and the scope of the NOS identified during planning.

3. Conduct Occupational Profiling Meeting

A facilitated Occupational Profiling Meeting can be conducted that includes the SDC members and/or other relevant stakeholders. The purpose of the meeting is to brainstorm and identify the general areas of activity, tasks and sub-tasks, and required knowledge and skills associated with the occupation. Common methods used to conduct the Occupational Profiling Meeting include the DACUM, AMOD, and/or SCID.

WHAT IS DACUM (DEVELOPING A CURRICULUM)?

The DACUM philosophy states that expert workers can describe and define their jobs more accurately than anyone else. Those workers whose occupation is the object of the analysis and who perform well in that position are the real experts of that type of job. Although first-rate supervisors and managers may know much about the work developed, they usually lack the necessary level of expertise to conduct a good analysis.

An effective way to define a job is to describe precisely the tasks that expert workers perform. To be performed correctly, all tasks require certain knowledge, skills, tools, and worker behaviors.

DACUM is a quick method of carrying out occupational analysis at a low cost. It uses teams made up of workers who have experience in the occupation to be analyzed.

The general DACUM steps include:

1. The facilitator initiates the meeting by explaining the purpose of and need for the NOS being developed, the potential uses of the NOS, and the NOS development process that will be followed.
2. Through facilitation, SDC members brainstorm to identify key responsibilities of the occupation, develop an initial definition of the occupation, and identify all knowledge and skills needed to be competent in the occupation.
3. Through facilitation, SDC members sort the information so that it can be incorporated into a comprehensible profile of the occupation by developing major categories and sorting the responsibilities, knowledge, and skills under these major categories. The major categories indicate the general skill areas within the occupation.
4. In small groups lead by a facilitator, SDC members further analyze the major categories and provide detail for the information. This information becomes very specific, and later forms the content of the NOS.
5. The SDC reconvenes in the large group to review what will become the core content of the draft NOS, and the facilitator seeks clarification on terms or ambiguities.
6. The SDC identifies other sources of information or experts that may need to be consulted to assist with specialized or incomplete content areas.
7. The initial definition of the occupation is reviewed and revised as necessary.

WHAT IS AMOD (A MODEL)?

AMOD is a variant of DACUM and is characterized by creating a strong relationship between the competencies and subcompetencies defined in the DACUM map, the learning process, and the assessment of learning.

WHAT IS SCID (SYSTEMATIC CURRICULUM AND INSTRUCTIONAL DEVELOPMENT)?

SCID is a thorough task analysis method developed with the aim of facilitating the identification and performance of training actions that are highly relevant to workers' needs. It may be done as a deeper complement to DACUM or to other productive processes based on other methodologies (experts' opinions or interviews with workers, for instance) that may go about ordering the tasks that make up a job position.

4. National Occupational Analysis Survey

A survey can be prepared based on the tasks and competencies identified. Stakeholders are asked to rank the content in the NOS by rating the skills on pre-determined dimensions. A combination of the following dimensions may be included:

1. Cognitive Taxonomy — a focus on the skills associated with how the knowledge is acquired.
2. Complexity — a measure of how difficult a task is to learn and how often it must be performed to remain proficient.
3. Risk — the risk of injury or death to the worker and harm to public health, the environment, or others if the task is not performed correctly.
4. Difficulty — level of effort, challenge, and complication associated with the performance of the task.
5. Frequency — how often the task is performed.
6. Importance — significance and consequence of the task relative to the overall job.

The survey should also collect information on the situational factors that affect the job to assist in preparing the situational analysis.

APPENDIX E: EXAMPLE OF NATIONAL OCCUPATIONAL STANDARD STRUCTURE

To facilitate understanding of the nature of the occupation, the work performed is divided into the following categories:

SOURCE	Level 1	Level 2	Level 3	Level 4	Additional/Supporting/ Contextual Occupational Information
Canadian Tourism Human Resource Council	<p>MAJOR CATEGORY (Competency) Identifies a general activity within the occupation.</p>	<p>SKILL Identifies a general skill within the general activity.</p>	<p>SUB-SKILL Identifies a specific activity within the general skill. Sub-skills are defined as either knowledge or performance standards.</p>	<p>KNOWLEDGE STANDARDS Contain information with which the individual needs to be familiar.</p> <p>PERFORMANCE STANDARDS Indicate that the information not only needs to be known but also performed in order for an individual to be considered competent in the occupation.</p>	<p>WHY IS IT IMPORTANT? Explains why the skill is important.</p> <p>DETAILS OF THE STANDARD Outlines how the skill can be achieved.</p> <p>CLASSIFICATION OF SKILLS: Frequency – how often the skill (or cluster of skills) is performed. Importance – significance and consequence of the skill (or cluster of skills) relative to the overall job. Cognitive Taxonomy – focus on the skills associated with how the knowledge is acquired. Difficulty – level of effort, challenge, and complication associated with the performance of the skill (or cluster of skills).</p> <p>CONTEXTUAL INFORMATION: Essential Skills Profiles Language Benchmarks Situational Analyses General Knowledge and Skills</p>
DACUM (Developing A Curriculum)	Duties	Tasks			<p>Worker Behaviours</p> <p>Tools, Equipment, Supplies, and Materials</p> <p>Future Trends and Concerns</p>

continued on next page

SOURCE	Level 1	Level 2	Level 3	Level 4	Additional/Supporting/ Contextual Occupational Information
<p>ECO Canada</p>	<p>FUNCTION Comprised of a group of related clusters. Functions are used to link the clusters into an occupational role.</p>	<p>CLUSTER Comprised of a grouping of related competencies. Clusters are used only as a means to organize competencies in groups of cohesive collections of one or more tasks.</p>	<p>COMPETENCY A measurable outcome of the combination of requisite knowledge and skills possessed by an individual. Knowledge and skills are the inputs that enable the competencies.</p>		<p>DCCF Rating Used to rate importance of each cluster:</p> <p>Danger – if the cluster is not performed correctly, injury or death may occur.</p> <p>Criticality – if the cluster is not performed correctly, harm to public health or environment might occur.</p> <p>Complexity – a measure of how difficult a cluster is to learn and how often it must be performed to remain proficient.</p> <p>Frequency – how often the cluster is performed.</p>
<p>Red Seal</p>	<p>BLOCK The largest division within the analysis and reflects a distinct operation relevant to the occupation.</p>	<p>TASK The distinct activity that, combined with others, makes up the logical and necessary steps the worker is required to perform to complete a specific assignment within a Block.</p>	<p>SUB-TASK The smallest division into which it is practical to sub-divide any work activity and, combined with others, fully describes all duties constituting a Task.</p>	<p>SUPPORTING KNOWLEDGE AND ABILITIES The elements of skill and knowledge that an individual must acquire to adequately perform the Sub-task.</p>	<p>TRENDS Any shifts or changes in technology that affect the block are identified under this heading.</p> <p>CONTEXT Statements written to clarify the meaning of tasks.</p> <p>RELATED COMPONENTS All components related to a specific task being undertaken are identified under this heading.</p> <p>TOOLS AND EQUIPMENT All tools and equipment necessary to complete a task are identified under this heading.</p>

APPENDIX F: STAKEHOLDER REVIEW AND VALIDATION

When establishing a valuable stakeholder review and validation opportunities, the following should be considered:

- Providing enough time for stakeholders to contribute meaningfully (e.g., a minimum of 90 days public notification).
- Selecting the right stakeholders to strengthen the process.
- Selecting an appropriate and feasible method (e.g., focus group sessions, meetings, surveys, reviews and written comment periods).

APPENDIX G: COMMITTEE APPROVAL METHODS

The following provides an example of a committee approval method:

1. A notice shall be issued at least three weeks prior to the meeting advising the committee members that a vote is to be taken. A copy of the draft for approval shall be included with the notice.
2. All voting committee members have the obligation to vote. One of the following voting options may be used:
 - a. Affirmative – when the technical content of the draft is acceptable as presented.
 - b. Affirmative with comment – when the technical content of the draft is basically acceptable, no substantive changes are required, and editorial changes or clarifications are proposed.
 - c. Negative with reason – when the technical content of the draft is deemed unacceptable, in error, or incomplete. Negative votes shall be supported with reasons. Whenever possible, the negative voter should include suggestions for alternatives that would enable the voter to reverse the negative vote.
3. To meet the numerical criteria required for approval, affirmative votes shall constitute 75% of all votes cast.
4. All comments should be considered.
5. All negative votes should be considered and the negative voters should be notified of the action taken in reference to their negative votes. The committee may rule as follows:
 - a. The negative vote is persuasive and should be accepted. In this case, the change to the draft shall be approved by the committee.
 - b. The negative vote is persuasive but should be considered for future study. In this case, with the concurrence of the voter, the vote shall be reclassified as affirmative.
 - c. Draft should be put on hold for further study.
 - d. Negative vote is not persuasive. The reasons for this committee decision should be documented.

APPENDIX H: ASSESSMENT METHODS

This annex includes examples of methods that can be used to assess individuals' competencies and describes the usefulness and limitations of each for evaluating knowledge and skills.

1. **Portfolio Assessment.** The portfolio assessment technique is widely used in educational settings, and appears well suited to assessing some aspects of occupational proficiency. A portfolio is an organized collection of materials which records and verifies an individual's learning achievements and relates them to the requirements of an education or training program, a work standard, or a professional qualification. The candidate prepares a personal portfolio that should contain certain elements such as education and career goals, work history, documented informal learning experiences, formal education history, evidence of continuing education, and evidence of continuing professional practice. The required evidence may include academic transcripts, letters of reference, written essays, and completed questionnaires. The onus is on the candidates to provide evidence that clearly demonstrates they possess the specified competencies, and this information must be verifiable. The process provides a structured opportunity to review and evaluate past experiences and the learning that has resulted. Once completed, the portfolio provides up-to-date information and evidence of learning.
2. **Feedback.** Direct feedback from past employers, personal references, peers, or clients can be an indicator of knowledge and skills, but it is important to note that sometimes these individuals may intentionally exclude information.
3. **Interview.** Interviews can be useful for eliciting information about knowledge and skills. Direct evidence of demonstration of competence can be achieved by conducting a structured interview against specified competence criteria. In a structured interview, a pre-established set of questions or scenarios is presented to the candidate in a face-to-face meeting with one or more interviewers. All candidates are exposed to the same basic interview experience. A structured interview is well suited to evaluating knowledge and communication skills and can aid in exploring potential problem areas.
4. **Observation.** Observing an individual performing a task can provide direct evidence of competence as

demonstrated through the application of knowledge and skills.

Work simulations have seen substantial use in recent years. When well designed, they can closely imitate actual work experiences, and thereby provide a direct evaluation of ability. Typically, the candidate is presented with a standardized workplace encounter, and is required to perform whatever interventions or actions are necessary. In some simulations, actors play the roles of customers, employers, or co-workers. At least one rater evaluates performance based on a pre-established set of criteria. The encounter is often followed by a set of questions designed to evaluate more fully the thought processes that went into the performed actions. Work simulations are particularly well suited to evaluating direct on-the-job performance, critical thinking, flexibility of thinking, and communication skills.

5. **Examinations (written, oral, practical).** Written testing may provide good and well-documented evidence of knowledge and skills. Oral examination may provide good evidence of knowledge (depending on the examiner's competence), with limited outcomes about skills. Practical testing may provide a balanced outcome of knowledge and skills, depending on the examination process and the examiner competence. Methods include role-playing, case studies, stress simulation or on-the-job situations. The principles of adult-learning should be carefully considered during examination development and delivery, as a formal examination process may be intimidating for adult learners who have not recently been involved in such a process.

Multiple-choice examinations are the most popular tool for assessing competence. Multiple-choice examinations are considered the most cost-effective means of assessing a large number of candidates on a multitude of competencies. Most people are familiar with the format of a multiple-choice examination. Typically, a question is posed or a statement is made to which the candidate responds. The candidate is presented with a set of three, four, or five response options and is asked to choose the option that best responds to the initial question or statement. Another variation of multiple-choice examination item presents candidates with a problem and asks them to select the most appropriate option(s) from a longer menu. Multiple-choice items



can be independent of other examination content, or can appear as a set linked by a common body of text or a graphic such as a workplace situation or engineering schematic.

The **key features assessment instrument** has gained popularity over the past few years as a suitable means of assessing professionals and others in situations where critical thinking skills and the ability to apply knowledge are key requirements. It is in many ways a pencil-and-paper version of a work simulation, using case studies or short answers to written questions. A written case study or situation development is used to simulate an actual work situation. Each case includes a detailed description of the situation, and candidates are asked to indicate how they would deal with the situation. Responses may be given in a short-answer format, or chosen from a long list of options. A standardized evaluation system gives credit for providing correct elements of the ideal response or for selecting the appropriate choices from the lists provided. Most of the information provided here concerning key features examinations applies equally to other generated-response assessments. For example, short-answer and fill-in-the-blank items can be considered analogous to key features, and are also viable assessment types. Longer essay-type assessments involve different issues. They are best suited to educational testing and are generally feasible only when there are a small number of writers.

6. **Self-assessment.** Self-assessment is an efficient means of evaluating occupational skills. The candidate answers direct questions about his or her competence. The assessment can be completed quickly and at low cost. The typical form of the assessment is a questionnaire where the candidate simply indicates his or her level of ability in each competency area on a three- to five-point rating scale. The self-assessment methodology has the benefit of covering all desired competency areas to be assessed. In preparing for self-assessment, the candidate may consider preparing a portfolio. The portfolio development process produces a valuable product, and the development process helps individuals to analyze, understand, and explain what they know and what they can do, as well as what they still need to learn.
7. **Supervisor Evaluation.** A supervisor evaluation is similar to a self-assessment, except that the ratings are performed by a supervisor or, in some cases, peers. In this evaluation, each competency is rated for each candidate. There would also likely be global ratings of performance in several key competency areas. Supervisor evaluations are well suited to assessing communication and performance-based skills.

APPENDIX I: PSYCHOMETRIC PROPERTIES OF ASSESSMENT

Consideration is given to two key psychometric properties: reliability and validity. Put simply, it is critical to ascertain that an assessment instrument produces consistent scores, and that it measures what it was intended to measure.

Testing professionals place great emphasis on reliability and validity. This emphasis is appropriate, but it can create the perception that these are the only important issues — or at least the dominant ones. Good reliability and validity are the outcome measures of a correctly executed development process.

Reliability and validity affect the quality of the inference that can be drawn from a candidate's examination score. Good reliability and validity mean that predictions can be made about the candidate with a high degree of confidence. Poor reliability and validity mean that the candidate's actual level of ability bears little resemblance to what was predicted by his or her examination score.

Reliability refers to the likelihood that a given candidate would achieve approximately the same result on a similar second examination. If reliability is low, then little meaning can be attached to an examination score, resulting in an invalid pass/fail decision. Research has shown that a well-designed multiple-choice test is likely to be more reliable than a well-designed workplace simulation. Reliable simulations can be created, but they will be more challenging and more expensive. The reliability of self-assessments is difficult to evaluate, and this can make their use harder to defend.

Validity refers to the extent to which a pass or fail decision on the examination relates to actual on-the-job performance. If candidates who successfully complete the examination are no more productive or competent than those who do not, this is evidence of low validity. The purpose of the examination is to measure workplace competence, so evidence to this link is required. Good validity information is difficult to obtain. Perceived validity, or what is known as face validity, is generally higher for workplace simulations since they relate directly the candidate's on-the-job activities. Another form of validity is content validity, which refers to how well the evaluation covers the entire domain of standards and competencies. Content validity is typically higher for multiple-choice examinations because it is possible to ask more questions than in a simulation.

APPENDIX J: PRIOR LEARNING AND FOREIGN CREDENTIALS

What is Prior Learning Assessment and Recognition (PLAR)?

PLAR is a systematic process for identifying, assessing, organizing, describing, and documenting an individual's knowledge and skills developed through formal education and training and informally on the job, through independent reading and study, in courses taken, in volunteer work, and through numerous other significant life experiences.

The idea behind PLAR is that learning takes place in different educational settings and through experience outside classrooms. Learning experiences are important, but it is essential to understand that learning does not come automatically with experience and learning differs from individual to individual.

In PLAR, learning, not experience, is considered. Credit and recognition are given when an individual demonstrates and validates learning from experiences, not for the experiences themselves. Moreover, knowledge or skills must be related to workplace standards, professional skills, and competencies as identified by professional bodies, or learning outcomes as described in the course outlines of post-secondary institutions.

The process of looking back on past experiences and reflecting on what an individual has learned can help assess his or her existing skills and abilities and set career and educational goals. The PLAR process makes it possible for educational institutions, workplaces, professional bodies and other organizations to assess an individual's knowledge and skills for the purpose of awarding credit, granting professional status, or advancing his or her career. PLAR is a process that helps adults obtain recognition for learning acquired outside of formal educational settings; it can help save time and money by filling in gaps in learning without requiring individuals to repeat their education and training.

For more information see:

www.capla.ca

www.recognitionforlearning.ca

www.cicic.ca

What is Foreign Credential Recognition?

To meet the needs of the 21st century economy, Canada requires a highly skilled workforce. Our ability to compete in the global knowledge-based economy depends on the skills of our people. Cities and communities that can attract the best talent, including highly skilled immigrants, provide opportunities for investment and contribute to keeping Canada's economy strong.

Many skilled immigrants cannot get a job in their chosen field despite the fact that they are coming to Canada with higher qualifications than ever before. It is taking much longer for them to catch up to Canadians with similar levels of education and expertise. Meanwhile, many employers are currently suffering a shortage of specific skills, and many more still are aware that demographic changes will create shortages in the future.

Foreign credential recognition is the process of verifying that the education and training obtained in another country is equal to the standards established for Canadian workers.

Assessment of credentials should be performed without any form of racial, religious, political, or sexual discrimination, and holders of foreign qualifications should have adequate access, upon request, to an assessment of their foreign qualifications.

Assessment criteria for the evaluation of foreign credentials have been elaborated with the objectives of increasing consistency and treating similar cases in a reasonably similar manner across Canada. It is nevertheless recognized that a margin of flexibility in making decisions is essential, and that decisions may vary according to the provincial/territorial system of education.

For more information see:

www.hrsdc.gc.ca

www.cicic.ca

APPENDIX K: SECOND OFFICIAL LANGUAGE TRANSLATION AND ADAPTATION

National occupational standards, certification programs, and accreditation programs, including all related materials (e.g., certification scheme, application instructions, assessment items, assessment instruments) should be made available in both of Canada's official languages. The process of translating materials includes adapting it to ensure that cultural linguistic attributes and occupation-specific or industry jargon are accurately represented. When possible, the program should be developed in both official languages in succession.

The translated materials should be validated by a representative group of stakeholders whose first language is the same as the translated materials. The stakeholders should recommend and/or approve industry-specific terms and the context in which terms/concepts are used.

Adaptation of materials is particularly important when adapting certification program assessment instruments, as the psychometric requirements must be reviewed to ensure the English and French programs are equivalent. Certification programs should be adapted, revised, and/or translated to respect the integrity of the national occupational standard and/or the certification scheme. In addition to stakeholder validation, validation of translated certification program materials may include review by a psychometrician and implementation of a pilot of the adapted assessment instrument to compare and validate statistical analyses.

GLOSSARY

accreditation

Process of quality assurance through which accredited status is granted to an educational or training course or program by the responsible accreditation body

accreditation body

Entity that grants accreditation

assessment

Process that measures fulfillment of requirements

candidate

Applicant who has fulfilled specified prerequisites, allowing his/her participation in the certification process

certification

Industry-recognized credential granted to a candidate by a certification body upon successful demonstration of occupational competence

certification body

Entity that grants certification

certification scheme

Document outlining the specific certification requirements that an applicant must meet in order to become certified

competence

Demonstrated ability to effectively apply knowledge and skills

NOS development body

Entity that develops and maintains the NOS

occupational standards

Standards that identify and group the tasks associated with a particular occupation and describe the knowledge and skills that an individual must demonstrate to be considered competent in that occupation

ACRONYMS

AMOD

A Model

CLB

Canadian Language Benchmarks

CSC

Certification Scheme Committee

DACUM

Developing a Curriculum

DNOS

Draft National Occupational Standard

FDNOS

Final Draft National Occupational Standard

NOA

National Occupational Analysis

NOS

National Occupational Standard

OLA

Occupational Language Analysis

RFP

Request for Proposal

SCID

Systematic Curriculum and Instructional Development

SDC

Standards Development Committee

SSC

Standards Steering Committee

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the accreditation of educational and training courses and programs. The authors acknowledged the following source documents and organizations used in the development of this guideline.

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