REVIEW OF ASTTBC REGISTERED TECHNICAL SPECIALISTS

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Final Report

Contents

Executive Summary

ASTTBC was founded in 1958 by technologists and technicians. It became the regulator of applied science technologists (AScTs) and technicians (CTech) in 1985 with the coming into force of the ASTT Act[1]. At that time, ASTTBC functioned as both the regulator, with a mandate to protect the public, and an association, with the mandate to advance the interests of the professions under its authority.

Registered technical specialists ("RTSs") are relatively recent additions to ASTTBC's register: starting roughly twenty years ago, when a few BC municipalities requested that ASTTBC regulate Registered Fire Protection Technicians. The demand for RTSs was repeated in May 2005, when the British Columbia Ministry of Health made changes to the Sewerage System Regulation which included Registered Onsite Wastewater Professionals, a new registered technical specialist class with ASTTBC, in the definition of an "Authorized Person" entitled to perform certain acts. There has been a proliferation of classes of RTS since that time.

A significant change has occurred since RTSs first came to be regulated by the ASTTBC: ASTTBC's inclusion in the *Professional Governance Act (PGA).* The *PGA* requires the sole purpose of regulation to be protection of the public interest. In the absence of some of the previous profession-centric reasons to regulate (for example, to restrict entry to the occupation to elevate earnings and prestige), under the *PGA* the only justification for regulation is public safety.

Considering the *PGA*, ASTTBC sought to review the professions captured within the RTS classification, to determine whether regulation in its current form met with the ASTTBC mandate. Using a risk-based assessment framework, an occupational profile for each sub-class of RTS was established and recommendations were made regarding the appropriate level of regulatory oversight.

While the mandate of the project contemplated identification of regulatory changes including alternative regulatory schemes or 'homes' for the RTSs, this was unnecessary as the RTS sub-classes fell into 3 categories:

1. **Maintain full professional regulation under ASTTBC**: For these groups, it is recommended that the 'subclass' registration hierarchy be restructured, and that each of these be identified as an additional class of registrant. These should also be considered for restricted title and protected practice.
2. **Rely on parallel regulation as CTech/AScTs**: For the sub-classes that require concurrent registration in another class of registrants, it is recommended that the designation RTS be eliminated. Introduction of clear guidelines about communicating professional areas of specialized expertise would ensure that stakeholders were aware of the nature of the

[1] https://www.bclaws.gov.bc.ca/civix/document/id/consol36/consol36/00_96015_01

CTech or AScT's practice. Double registration is redundant and does not follow the principles of right touch regulation.

3. **No regulation**: The remaining sub-classes have been identified as not requiring regulatory oversight. Each has its own implementation considerations, and sunsetting them is expected to have little impact on public safety. In the absence of regulation, consumers have recourse to ordinary market activity for selection of a worker (social media, word of mouth, etc.) and legal remedies for harm, mostly through private legal action. In many cases, employers provide some degree of quality oversight (and consumer protection) through employment requirements, and the creation of standard operating procedures.

Note that the recommendations above lead to a recommendation to eliminate the registration class of Registered Technical Specialist.

1. Scope of Review

The mandate for this review was to determine whether the work performed by those registered in technical specialist subclasses requires regulatory oversight; if so, to identify the level and type of regulatory oversight required; and whether ASTTBC or another body is the appropriate organization to provide that oversight.

The review proceeded in several steps:

- A review of regulatory and ASTTBC operational documents, including relevant legislation, regulation, professional guidelines, or policies, ASTTBC operational policies and procedures, and available information concerning the initial decision to include each discipline in the ASTTBC
- An environmental scan of BC and relevant other jurisdictions (Canadian and select international) to identify other groups which currently offer education or provide certification of a technical specialist group, as well as a range of alternative regulatory approaches used for these workers and other types of workforces, in keeping with a risk-based right touch regulatory approach
- A literature scan to identify any research that has been conducted related to risk and regulation in this sector and a search for resources related to best practices in occupational risk analysis
- Key stakeholder interviews to learn more about the risk profile of each specialty and the potential implications of any change or recommendation for change
- Development of a transparent risk assessment framework and a risk profile for each RTS
- Validation of the risk profiles with subject matter experts
- Identification of risk-based regulatory options, including identification of pros and cons of alternatives and implementation advice.

The review started in July 2021 and finished in December 2021. Our detailed final recommendations for each RTS category can be found in Section 3.

2. Review Framework

2.1 Contextual Understanding of the "Right Touch"

In 2010, the United Kingdom's Professional Standards Authority ("PSA") published the first version of "*Right-Touch Regulation,"* proposing that the level of regulation of professionals should be proportionate to the level of risk performance of their occupation poses to the public. Since its publication, the concept of right touch regulation has become prevalent in designing and understanding occupational regulation in Commonwealth Countries and beyond.

The United States tends to rely less on "right touch" terminology, but there, too, the concept of using "the least restrictive regulation which is necessary to protect consumers from undue risk" has become a guiding principle for state policymakers. The argument that there is a right to earn a living unfettered by government intervention is a common refrain in the American literature on this topic.

Too much regulation is undesirable for a host of reasons, chief among them the creation of barriers to labour market entry, reduced geographic mobility, reduced wages for unlicensed workers, reduced market competition and innovation, increased prices for goods and services and the disproportionate burden of regulation on low income and certain other demographic groups.[2]

Nevertheless, in the past several decades, increasing numbers of occupations have sought regulation or licensure, as has been demonstrated by the ASTTBC experience, starting with two subclasses in its RTS category, but growing quickly to fifteen. In the United States, up to one quarter of the workforce now needs a license to work in their occupation. In some cases, the surge in occupational regulation comes from the desire by the public to be protected from risk. In many other cases, regulation is seen by the profession as a stamp of *bona fides* which may confer benefits on those who are able to attain regulation.

In the U.S., President Biden has recently issued an executive order that will call on the Federal Trade Commission to ban unnecessary occupational licensing requirements.[3] In the UK, a consultation is underway by the PSA to identify potential reductions in regulatory oversight of health and related professions. In Canada, there appears to be a rising focus on reducing the regulatory burden, as evidence in the Recommendations to modernize the provincial health

[2] https://www.ncsl.org/Portals/1/HTML_LargeReports/occupationallicensing_final.htm
[3] https://clear.blogs.com/clear/2021/07/biden-executive-order-to-ban-unnecessary-occupational-licensing-requirements.html?utm_source=Council+on+Licensure%2C+Enforcement+%26+Regulation&utm_campaign=6e362bf381-EMAIL_CAMPAIGN_2020_07_30_12_35_COPY_02&utm_medium=email&utm_term=0_953728435d-6e362bf381-220352749

profession regulatory framework in British Columbia[4] and introduction of a new 'less is more" regulatory framework for personal support workers in Ontario.[5]

Judging by these indicators, one might think that the pendulum has begun to swing away from an "all or nothing" uniformly high level of regulatory oversight, towards a more minimalistic approach. We can see this in the Initial Decision Criteria for Designating Professions (Appendix 1)[6] published by the BC Office of the Superintendent of Professional Governance (OSPG) in May 2021: occupations seeking regulation are increasingly being required to demonstrate the public interest basis for regulation. Several American states have undertaken reviews of occupational licensing requirements with a view to recommending legislative policy to ease regulatory or licensing requirements in specific industries. Thirty-six states have adopted sunset processes for existing occupational licensing laws, meaning that the regulatory regime is subject to periodic reviews or audits which sometimes result in modifying licensing requirements and boards, or eliminating or 'sunsetting' them altogether.

2.2 The Relationship of Right Touch to Risk

In "The Balance Between Public Protection and the Right to Earn a Living"[7] Dick Carpenter and Lee McGrath identify a continuum of regulatory approaches, based on necessity for public protection. The PSA takes a similar approach, indicating that the level of regulatory oversight should increase with the level of risk to which the public is exposed if the occupation is not practised safely and effectively. The combination of these concepts, modified to reflect the Canadian regulatory experience, is illustrated below (Figure 1).

Another way to think about the continuum is to consider three regulatory approaches, from most to least restrictive – or highest to lowest risk

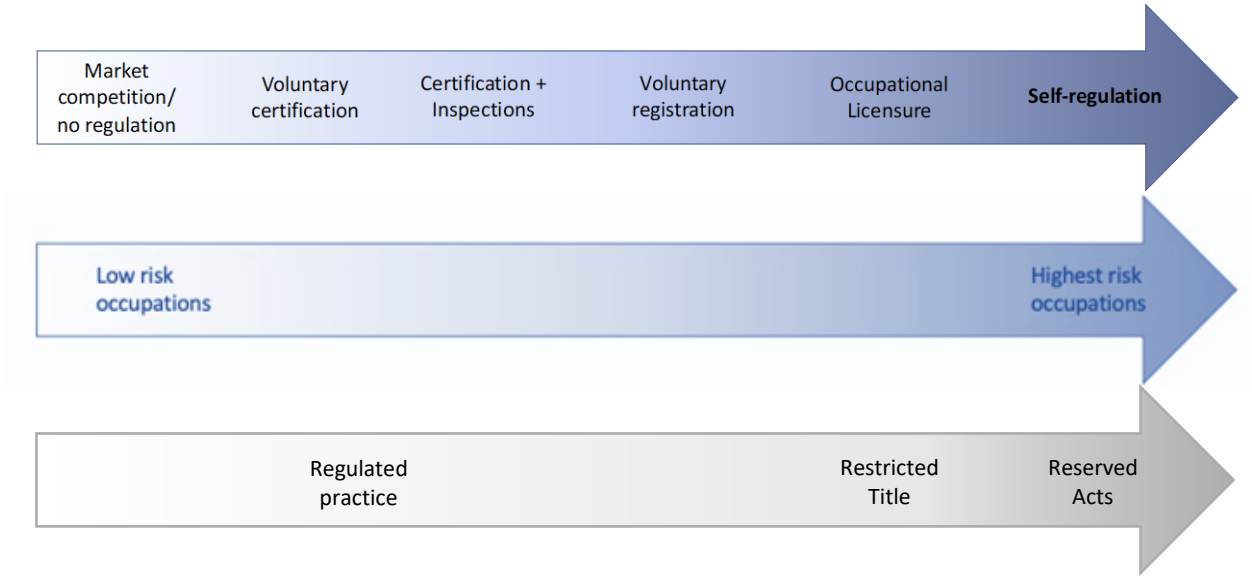
- Reserved practice: a profession for which elements of the occupation are permitted to be performed only by an authorized profession (i.e., members of the general public are prohibited from performing the activities). Reserved practice is always associated with reserved title. Practice may or may not require supervision by another professional who also has reserved practice.
- Reserved title: a profession where only members of a regulatory body are permitted to use specific titles and abbreviations. Individuals who are not members of the

[4] https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/professional-regulation/modernizing-health-profession-regulatory-framework-consultation-paper.pdf
[5] https://www.ola.org/en/legislative-business/bills/parliament-42/session-1/bill-283
[6] https://professionalgovernancebc.ca/app/uploads/sites/498/2021/05/OSPG-s.-85-application-for-designation-web-1.1-20210505.pdf
[7] "The Balance Between Public Protection and the Right to Earn a Living" Dick M. Carpenter II, Ph.D., Director of Strategic Research, Institute for Justice Professor, University of Colorado, Colorado Springs Lee McGrath, Legislative Counsel, Institute for Justice https://ij.org/wp-content/uploads/2015/03/resource_brief_070214RASTERb.pdf

regulatory body may practice the occupation but may not use the titles or lead others to believe that they are members of the regulatory body.

- Regulated practice: a profession for which a regulatory body exists and whose members must meet the standards and expectations of that body in an occupational area. Individuals who are not members of the regulatory body may also practice the occupation and use the titles.

Figure 1: Continuum of regulatory approaches and associated level of risk



2.3 Assessing RTS Risk – Stage One

As conceptualized by the PSA, each occupation will carry with it an intrinsic risk of harm to individual clients, the public and/or the environment. The first stage in determining whether regulatory oversight is required was identifying the level of intrinsic risk associated with the work performed by each of the RTS sub-classes.

Once intrinsic risk was evaluated, the second stage of the assessment was to determine what mitigating factors exist in the usual performance of the occupation which are likely to prevent harm from occurring or reduce the potential harm.

Taken together, these analyses yielded a 'residual risk' profile for an occupation.

The appropriate level of regulatory oversight, if any, was determined in relation to the residual risk profile.

The risk assessment framework is shown in Appendix 2. A comparison of the ASTTBC risk assessment framework and that proposed by the PSA is at Appendix 3.

2.4 Identifying Regulatory Mechanisms Required for Each RTS and their Appropriate Regulatory Framework – Stage Two

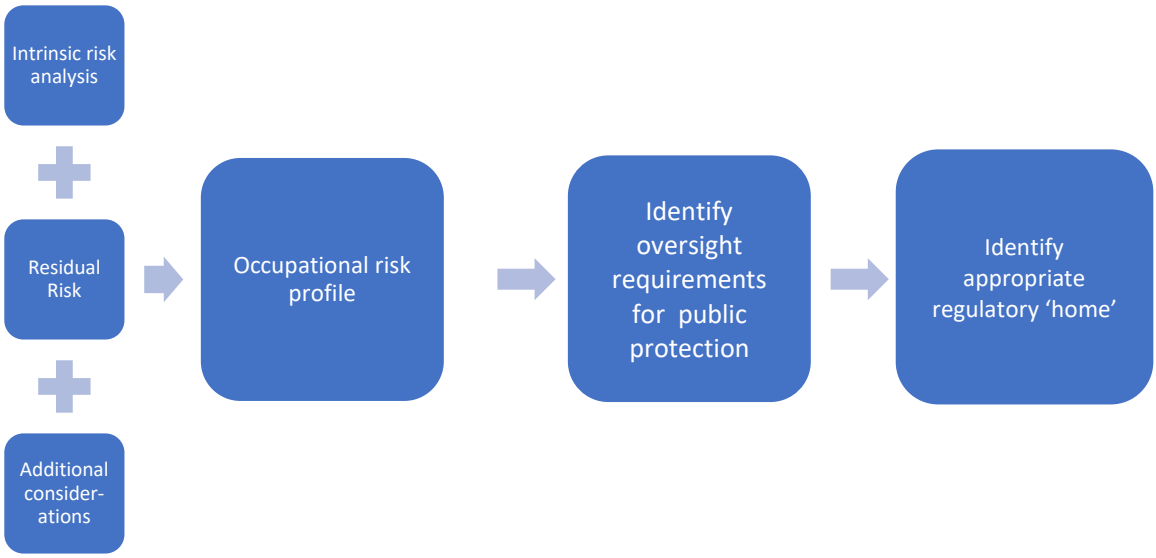
The risk continuum illustrations above provide a high-level overview of the types of regulatory approaches or frameworks associated with occupational risk. Within each regulatory approach there are a variety of regulatory mechanisms – the tools in the regulators' toolbox – that enable regulatory oversight. A list of these mechanisms, identified through literature and environmental scans, is set out at Appendix 3.

The residual risk for each RTS was identified. They were then plotted on a risk continuum like those set out above and, for each, it was possible to identify the minimum regulatory mechanisms essential to ensure public safety (using the checklist shown in Appendix 5). Where the risk is high and safety demands the use of all or most of the mechanisms available to regulators, the highest level of regulatory oversight will be called for. As risk diminishes, so will oversight.

2.5 Other Considerations – Stage Three

The assessment also considered any other relevant considerations to support recommendations about how best to regulate each group. For example, public expectation, even when based on a miscalculation of actual risk, can be an important factor in identifying regulatory requirements.

The methodology for the risk-based assessment process may be illustrated as follows:



3. Analysis & Recommendations

General Findings

Regulatory and legislative context

Through an analysis of ASTTBC's regulatory documents, and an environmental scan to identify whether and how other jurisdictions oversee the technical specialist group, it became clear that the RTS class is unique to BC. Of all the jurisdictions reviewed, no other has defined this cluster of occupations as "technical specialist," nor uses self-regulation for these types of roles. Although all Canadian provinces seem to have some form of regulation for technicians (CTech) and technologists (AScTs or Certified Engineering Technologist, CET), none of the regulatory bodies oversee technical specialists. In jurisdictions where there is a form of oversight for specific occupations, this exists as a licensing/certification model only.[8]

The *PGA*, the ASTT Regulation[9] and the ASTTBC Bylaws[10] outline the scope of practice of registrants, define registrants and list the reserved titles for these registrants.

Section 1(1) of the Regulation defines the practice of applied science technology as the provision of

(a) advice or services that are based on an engineering discipline, or
(b) advice or services that are ancillary to those described in paragraph (a).

While Schedule 2 of the *Act* contemplates reserved practice for ASTTBC registrants subject to regulation, the Regulation does not currently establish reserved practice for ASTTBC registrants.

Section 3 of the Regulation establishes reserved titles for ASTTBC registrants as follows:
…the following titles are reserved for the exclusive use of registrants:

(a) "applied science technologist";
(b) "applied science technologist trainee";
(c) "certified technician";
(d) "certified technician trainee";
(e) "registered technical specialist".

The ASTTC Bylaw establishes the subclasses and the titles for registrants.

[8] For example, in Ontario, *the Building Code Act* requires certain individuals to become a Registered Building Practitioner. This means being qualified and registered with the Ministry of Municipal Affairs and Housing and obtaining a Building Code Identification Number (BCIN).
[9] See https://www.bclaws.gov.bc.ca/civix/document/id/oic/oic_cur/0035_2021
[10] See https://asttbc.org/asttbc-bylaws/

The review and assessment of each sub-class takes this regulatory context into consideration and recommendations have been made that support public protection with right touch regulation and are more consistent with other provinces.

High-level analysis on the RTS sub-classes

Although each sub-class has unique characteristics which are described below, the following is an overview of the general themes that arose in the review:

- **Small number of registrants:** Although there are 15 sub-classes of RTS, three of these (fire protection, onsite wastewater, and construction safety) make up most members, with the remaining sub-classes each representing less than 5% of all technical specialists.
- **Duplicative registration requirements:** There are some RTS sub-classes in which registration as an AScT or CTech is required for admission (for example, building design).
- **Inconsistency with OSPG professional designation criteria:** When ASTTBC was brought under *PGA* oversight, the statutes in existence at that time were continued, meaning ASTTBC would regulate the same registrants it had been regulating under its former mandate.[11] Although the OSPG has since established criteria to determine whether a professional body should be considered for designation under the *PGA,*[12] this assessment was not done as part of the transition to the new mandate. As part of this review, each RTS sub-class was reviewed against the OSPG criteria to consider whether they would meet the threshold for professional regulation today.

These perspectives are included in the review of each RTS sub-class.

Occupational Risk and Appropriate Regulatory Oversight by Occupation

Using the process described above, each RTS sub-class was assessed to determine the intrinsic risk of the occupation along the continuum of RTSs (see

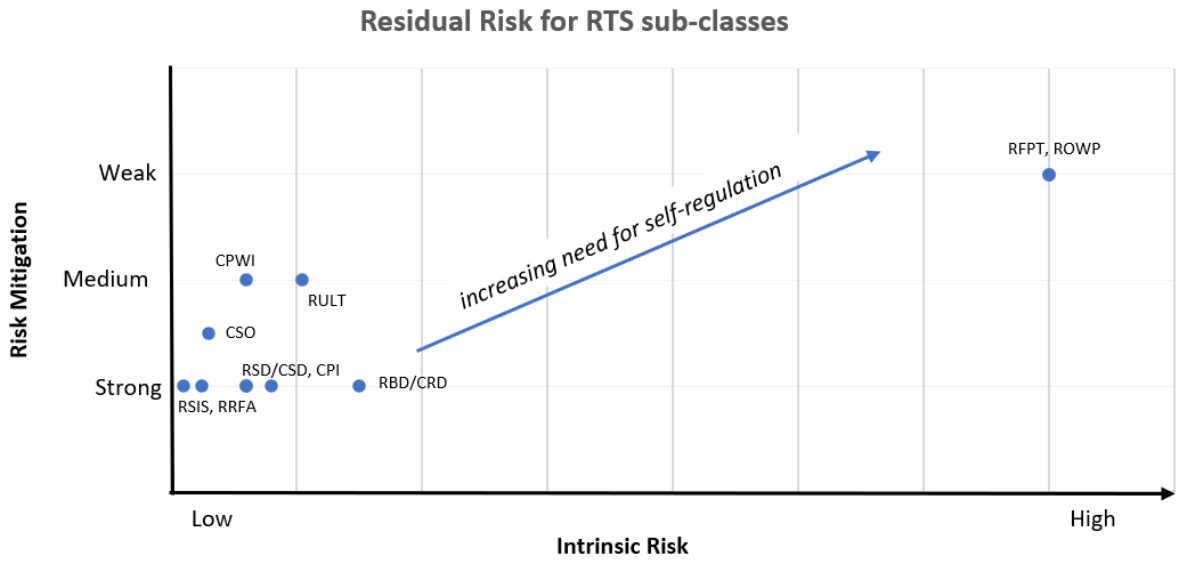
[11] https://professionalgovernancebc.ca/?page_id=2458&preview=true
[12] https://professionalgovernancebc.ca/app/uploads/sites/498/2021/05/OSPG-s.-85-application-for-designation-web-1.1-20210505.pdf

Figure 2).

Figure 2: Intrinsic Risk Continuum

The residual risk of each occupation was then assessed, by considering the risk mitigation and minimum regulatory tools needed to determine the least intrusive ("right touch") regulatory approach necessary to ensure public safety (see **Error! Reference source not found.**). A summary of the findings is provided below.

Figure 3: Residual Risk (Intrinsic risk plotted against risk mitigation)



3.1 Registered Fire Protection Technician (RFPT)

Brief Summary

Registered Fire Protection Technicians (RFPTs) offer services in fire protection and life safety. These services refer to the inspection and testing of fire protection equipment and related systems such as fire alarms, fire pumps, emergency lighting, electrical generators, water-based fire protection, portable fire extinguishers, special suppression systems, commercial kitchen duct cleaning, and smoke control systems. There are approximately 1,000 RFPTs registered with ASTTBC, making up half of the RTS class. Some jurisdictions (approximately 20 of BC's 160 municipalities) have established requirements in their fire bylaws that require RFPTs to conduct all testing of fire protection equipment and systems. For example, the City of Vancouver's fire

safety bylaw[13] has defined RFPT as a "Service agent": the only professional authorized to perform inspection and testing of fire protection equipment and related systems.

Risk assessment and other considerations

This occupation is associated with a high degree of potential risk to the public.

While they oversee, rather than work with equipment, materials or structures that can cause harm, failure to follow professional standards could result in catastrophic harm, both to individuals and the environment.

RFPTs work independently, with few workplace controls over their activities and no statutory restrictions on their activities or qualifications, except in the minority of municipalities that presently require ASTTBC registration for the position. In the absence of regulation by ASTTBC, there is no control of the risk associated with this group.

Oversight tools required to ensure public safety

RFPT	Required regulatory instruments	notes
Educational requirements	✓	To ensure appropriate training at entry to practice
Maintenance of public register	✓	To identify qualified individuals to potential employers
Continuing competency requirements	✓	*Inter alia,* to ensure currency with new technology
Mandatory liability insurance	✓	Required where not provided by employer
Public complaints	✓	To promote recognition of incompetence or negligence
Range of risk mitigation powers, including revocation	✓	To permit educational intervention or removal from the register where required
Duty to report self/colleagues	✓	To promote professionalism and enhance ability to identify those not performing to standard
Whistle-blower protection	✓	To facilitate reporting
Duty of transparency, objectivity and fairness to registrants	✓	To ensure fairness in the context of potential regulatory requirements

Given the level of risk associated with their work, and the lack of oversight or other risk mitigating factors, RFPTs require substantial regulatory oversight, as indicated in the table above.

[13] https://bylaws.vancouver.ca/consolidated/12472.pdf

If RFPTs sought regulation today, would they meet OSPG criteria?

It is expected that this occupation could be considered for regulation under the *PGA* if the OSPG were considering this today. The activities performed by the profession have the potential to pose risk to the public, environment, and property; there is no obviously superior alternative means to mitigate these risks; if all those performing the activities of the profession were required to be regulated there are enough members to have capacity to self-regulate; there is a defined route of entry to the profession, and the occupation is associated with a body of knowledge that forms the basis of practice standards.

Recommendation for future regulatory oversight:

Short term:

Retain RFPT as subclass of RTS.

Longer term:

Following appropriate consultation, revisions to Schedule 1, ASTT Regulation, and ASTTBC Bylaws to eliminate RTS as registration category and add RFPT, including addition of reserved title.

Practice should be reserved to RFPTs.

Implementation considerations:

ASTTBC Bylaw changes –
Revision of registration requirements for RFPT, including potential grandfathering recognition of those working in the area who are not presently regulated

ASTTBC to notify/work with municipalities that do not currently require RFPT registration to ensure that they are informed of change regarding title and intention to seek reserved practice

ASTTBC outreach to those performing this occupation who are not currently registered to offer and support registration

Legislative revisions including Schedule 1 and Regulation changes – longer term change to be undertaken concurrently with ongoing work.[14]

3.2 Registered Onsite Wastewater Professional (ROWP)

Brief Summary

Registered Onsite Wastewater Professionals (ROWPs) perform maintenance, inspection, design and installation of onsite wastewater systems (commonly known as septic systems). There are approximately 450 ROWPs registered with ASTTBC (representing ¼ of the RTS class). While not conferred by the *PGA*, these individuals have reserved practice, due to a regulation under the *Public Health Act*[15] which defines ROWPs as the "Authorized Person" who may provide onsite wastewater services in BC. There are four different "endorsements" for this group (planner, installer, investigator, and maintenance), limiting ROWPs to provide only the services for which they are qualified.

Risk assessment and other considerations

This occupation is associated with a high degree of potential risk to the public.

They work with equipment and materials that can pose harm, and failure to follow professional standards[16] could result in catastrophic harm, to individuals, society, and the environment.

[14] The OSPG intends to begin a process with ASTTBC to discuss the opportunities and challenges associated with, and potential approaches to, reserved practice. See:
https://professionalgovernancebc.ca/?page_id=2458&preview=true
[15] The Sewerage System Regulation (SSR) of the Public Health Act defines ROWPs as the "Authorized Person" who may provide onsite wastewater services within the scope of practice for which the ROWP is certified (Installer, Maintenance Provider or Planner).
[16] The Sewerage System Regulation (SSR) references a Sewerage System Standard Practice Manual, maintained by the BC Ministry of Health.

ROWPs work independently, with few workplace controls over their activities and no statutory restrictions on their activities or qualifications, except for those offered through the Sewerage System Regulation (SSR) of the Public Health Act.[15] ROWPs are often hired directly by members of the general public (who have no independent means by which to ensure the ROWP is appropriately qualified), and this sub-class has received more public complaints than any other.

In the absence of regulation by ASTTBC, there is no control of the risk associated with this group.

Oversight tools required to ensure public safety

ROWP	req'd	notes
Educational requirements	✓	To ensure appropriate training at entry to practice
Maintenance of public register	✓	To identify qualified individuals to potential employers
Professional Standards (competence/practice)	✓	
Standards of ethics	✓	
Continuing competency requirements	maybe	To identify qualified individuals to potential employers
Mandatory liability insurance	✓	To ensure adequate protection for those who retain their services in the event of failure to perform to standard
Public complaints	✓	To promote recognition of incompetence or negligence
Range of risk mitigation powers, including revocation	✓	To permit educational intervention or removal from the register where required
Duty to report self/colleagues	✓	To promote professionalism and enhance ability to identify those not performing to standard
Whistle-blower protection	✓	To facilitate reporting
Duty of transparency, objectivity and fairness to registrants	✓	To ensure fairness in the context of potential regulatory requirements

Given the level of risk associated with their work, and the lack of oversight or other risk mitigating factors, ROWPs require substantial regulatory oversight, as indicated in the table above.

If ROWPs sought regulation today, would they meet OSPG criteria?

It is expected that this occupation could be considered for regulation under the *PGA* if the OSPG were considering this today. The practice of the profession has potential to pose risk to the public, environment, and property that cannot be addressed more efficiently and effectively through other means. In addition, there is a defined route of entry to the profession and a body of knowledge that forms the basis of practice standards. Furthermore, the number of complaints that the ASTTBC receives about this RTS suggests that the public expects and demands regulation of this occupation.

Recommendation for future regulatory oversight

Short term:

Retain ROWP as subclass of RTS. The present system of endorsements should not be duplicated as subclasses, but registrants will be expected to practice within their own areas of knowledge, skills and judgement.

ASTTBC should establish criteria for all registrants to identify their particular areas of expertise or practice preference, such as a 'Use of Specialty Designation' guideline or bylaw. Such a guideline could build on the expectation of all professionals that they will know their own limitations and practice only in the areas in which they have the requisite knowledge, skills and judgement and set out expectations of how they can communicate their areas of expertise with potential employers or members of the public.

ASTTBC may wish to consider launching an outreach campaign to support the professionalism concept of practicing within one's own area of knowledge, skill, and judgement in order to support the transition to a self-declaration approach.

Longer term:

Following appropriate consultation, revisions to Schedule 1, ASTT Regulation, and ASTTBC Bylaws to eliminate RTS as registration category and add ROWP, including addition of reserved title.

Practice in this occupation should be reserved to ROWPs. While this is effectively the case today, through the regulations under the *Public Health Act*, it would be advisable to treat this registrant category the same way as RFPTs and obtain reserved practice through the *PGA* to ensure public protection.

Implementation considerations:
No specific short-term considerations for this group. Longer term changes, as with RFPT, legislative revisions including Schedule 1 and regulation changes.

3.3 Registered Building Designer (RBD) & Certified Residential Designer (CRD)

Brief Summary

The practice of Building Design is the art and science of designing buildings in keeping with established codes and standards and as limited by provincial statutes. A Registered Building Designer (RBD) offers building design service for houses and small buildings as permitted under Part 9 of the Building Code[17] and limiting provincial legislation. The RBD must also be registered as an AScT or CTech (building technology), and there are approximately 20 of them currently registered with ASTTBC.

A Certified Residential Designer (CRD) offers residential building design service for one- and two-family dwellings only and must also be registered as a CTech in building technology. There are currently approximately 40 CRDs registered with ASTTBC.

Neither the RBD nor the CRD have reserved practice (the BC Building Code does not place any restrictions on who is authorized to design houses or small buildings).

Risk assessment and other considerations

This occupation is associated with a moderate degree of potential risk to the public.

While they oversee, rather than work with equipment, materials or structures that can cause harm, failure to follow professional standards could result in catastrophic harm, both to individuals and the community.

RBDs and CRDs work independently, and, with the exception of Code requirements and recent changes to the Building Act[18] to set certification requirements for Building Officials,[19] there are few workplace controls over their activities and no statutory restrictions on their activities or qualifications.

[17] See https://free.bcpublications.ca/civix/content/public/bcbc2018/465649652/1014107289/?xsl=/templates/browse.xsl. Part 9 applies to Houses and Small Buildings (usually up to 3 stories, 600 square metres or less (https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/buildingactguide_sectiona1_june2015_web.pdf).

[18] Building Act Guide: https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/building-act/building-act-guide

[19] Building Officials ensure construction meets the minimum acceptable building regulations established by the Provincial Government: https://boabc.org/.

However, the individuals in this role are already required to be regulated in their capacity as AScT or CTech, and this makes the additional layer of regulation provided by the RTS class redundant.

It should also be noted that many other non-certified individuals are working in this field under no regulatory regime. Unlike in Ontario where there is a mandatory certification model set out in the Building Code Act and the title of "Designer" is set out in the Building Code, BC does not establish any minimum certification requirements for the design of small buildings.[20] Given the potential risk associated with this role, the public interest would seem to warrant regulatory oversight of all individuals working in the field.

In addition, the decisions made regarding professional regulation of Architects in BC[21] may also be a factor in the evolution of this occupation.

If RBDs and CRDs sought regulation today, would they meet OSPG criteria?

Given the very small number of registrants, these sub-classes would not likely meet the criteria for independent professional regulation. Although the work is associated with moderate levels of risk, the requirement for these groups to be registered as a CTech or AScT would likely be considered as sufficient protection for the public.

Oversight tools required to ensure public safety

All the regulatory oversight mechanisms available to ASTTBC registrants are already in place for this profession through their concurrent requirement to be registered as a CTech or AScT.

Recommendation for future regulatory oversight
There is little rationale to continue to oversee these sub-classes of RTS as separate subclasses. Practice in this occupation should be reserved to qualified CTechs or AScTs, architects and engineers.

Short term:
Eliminate RTS subclasses.

Long term:
Legislative changes to ensure reserved practice, as described above.

Implementation considerations
No considerations specific to this group beyond appropriate notification.

[20] As described in Part 9 of the Building Code.
[21] https://professionalgovernancebc.ca/2020/07/17/architectural-institute-of-british-columbia-to-transition-to-the-pga/.

3.4 Certified Property Inspector (CPI)

Brief Summary

A Certified Property Inspector (CPI) conducts inspections of commercial properties, supporting the production of property condition reports. These reports are used by both the purchaser and the lender to understand the potential costs associated with owning the property and to help negotiate purchase price. Certification as a CPI requires registration in the CTech or AScT class (Building, Civil, Electrical, Mechanical, or related discipline). There are approximately ten CPIs currently registered with ASTTBC.

Risk assessment and other considerations

This occupation is associated with a moderate degree of potential risk to the public.

While they oversee, rather than work with equipment, materials or structures that can cause harm, failure to follow professional standards could result in catastrophic harm, both to individuals and the environment.

CPIs work independently, with few workplace controls over their activities and no statutory restrictions on their activities or qualifications.

However, the individuals in this role are already required to be regulated in their capacity as AScT or CTech, and this makes the additional layer of regulation provided by the RTS class redundant.

If CPIs sought regulation today, would they meet OSPG criteria?

Given the very small number of registrants, this sub-class of RTS would not likely meet the criteria for professional regulation outlined by the OSPG. Although the nature of the work carries risk to the public and there are few mitigation factors in place to protect against this risk, the CPI is required to be registered as a CTech or AScT which would likely be considered as sufficient protection for the public.

Oversight tools required to ensure public safety

All the regulatory oversight mechanisms available to ASTTBC registrants are already in place for this profession through their concurrent requirement to be registered as a CTech or AScT.

Recommendation for future regulatory oversight

There is little rationale to continue to oversee this sub-class of RTS as a separate subclass.

Eliminate RTS subclass.

Implementation considerations

No considerations specific to this group beyond appropriate notification.

3.5 Registered Steel Detailer (RSD) & Certified Steel Detailer (CSD)

Brief Summary

The practice of steel detailing involves interpreting and translating the information of contract design drawings into shop detail drawings and building diagrams. These detail drawings give complete instructions for cutting, punching, and then assembling the various structures. The Registered Steel Detailer (RSD) must have AScT certification in Building or Civil Technology and is responsible for ensuring that all work done (both by themselves and by others under their supervision) is correct and in full conformity with all contractual, legal, and ethical standards. The Certified Steel Detailer (CSD) must have CTech certification in Building or Civil Technology. They are not responsible for checking and approving work done by others, and their work assignments are generally more limited in scope, and more specific as to what is to be done than those to the RSD. There are approximately 11 steel detailers registered with ASTTBC (9 RSD and 2 CSD).

Risk assessment and other considerations

This occupation is associated with a moderate degree of potential risk to the public.

While they oversee, rather than work with equipment, materials or structures that can cause harm, failure to follow professional standards could result in catastrophic harm, both to individuals and the environment.

However, steel detailers function under a distributed risk model, in which a professional engineer provides the design and the final approval/review of their work before building begins. Subject matter experts advise that if questions arise during a project, Engineers are consulted: the RSD does not make independent design decisions. There are statutory restrictions on their activities (through the Building Code) which provide some mitigation against risk. Most importantly, the individuals in these roles are required to be regulated in their capacity as AScT or CTech, and this makes the additional layer of regulation provided by the RTS class redundant.

If RSDs sought regulation today, would they meet OSPG criteria?

Given the very small number of registrants, this sub-class of RTS would not, independently, have the capacity to meet all of the s. 22 PGA responsibilities. In addition, the occupation does not exercise independent professional judgement. Finally, the work undertaken by RSDs is reportedly often done by other AScTs or CTechs today without RSD designation, suggesting that the body of knowledge they rely on in performance of their profession is not exclusive to RSDs.

Oversight tools required to ensure public safety

All the regulatory oversight mechanisms available to ASTTBC registrants are already in place for this profession through their concurrent requirement to be registered as a CTech or AScT.

Recommendation for future regulatory oversight

There is little rationale to continue to oversee these sub-classes of RTS as separate subclasses.

Eliminate RTS subclasses.

Implementation considerations

No considerations specific to this group beyond appropriate notification.

3.6 Registered Site Improvements Surveyor (RSIS)

Brief Summary

The practice of Site Improvements Surveys is the determination of the relative location of structures to cadastral survey monuments and Land Titles Office records and plans. These surveys are typically required by lending institutions as a condition of mortgage approval and by municipal authorities, as part of the building permit process, for the location and related ancillary works prior to construction. There are currently 19 people registered with ASTTBC in the RSIS sub-class.

Risk assessment and other considerations

This occupation is associated with a low degree of potential risk to the public.

They do not oversee or work with equipment, materials or structures that can cause harm, and in the event of negligence or failure to meet the standards expected of those in the profession, the harm would most likely be financial only and limited to a small number of individuals or entities.

The RSIS' work is subject to supervision, and independent statutory requirements under the Land Surveys Act serve to assure performance to an acceptable standard.[22] Most importantly, the individuals in this role are already required to be regulated in their capacity as AScT or CTech, and this makes the additional layer of regulation provided by the RTS class redundant.

If RSIS sought regulation today, would they meet OSPG criteria?

Given the very small number of registrants, this sub-class of RTS would not likely meet the criteria for professional regulation outlined by the OSPG. Although the nature of the work carries risk to the public, the RSIS's registration as a CTech or AScT would provide sufficient protection for the public.

Oversight tools required to ensure public safety

Since those who perform this profession are already registrants of ASTTBC, no oversight tools unique to RSISs are required.

Recommendation for future regulatory oversight

This RTS should be sunset. The public would not feel an impact from this change.

Implementation considerations

Short term:

Eliminate RTS subclass.

Long term:

Legislative changes to ensure reserved practice, as described above.

Implementation considerations

Work with the ABCLS to revise the existing MOU that identifies RSIS as qualified to perform the specific function of site improvement surveys.

[22] Note that a MOU exists between the ASTTBC and the Association of BC Land Surveyors (ABCLS) that allows RSIS to perform the specific function of site improvement surveys.

3.7 Certified Public Works Inspector (CPWI)

Brief Summary

Certified Public Works Inspectors (CPWI) work with municipal, provincial, contractors, consulting engineering firms and inspection companies. They perform a variety of services depending on their certification level, ranging from inspections/testing of water systems, roads, sidewalks, parks, and buildings to more advanced levels of responsibility including taking control of public works projects and inspection. There are approximately 100 CPWIs registered with ASTTBC (distributed across 3 certification levels).

Risk assessment and other considerations

This occupation is associated with a low degree of potential risk to the public.

They oversee, rather than work with equipment, materials or structures that can cause harm, and beyond performance codes and guidelines outlined by municipalities and ministry, there are no specific standards expected of the profession.

The CPWI may work independently and exercise oversight over multiple disciplines. CPWI's have a broad cross-functional knowledge and there is not typically an engineer on site. However, the ultimate accountability for work done is held by engineers who must approve their work.

In the absence of regulation by ASTTBC, there is adequate control over the risk associated with this group.

If CPWIs sought regulation today, would they meet OSPG criteria?

It is unlikely that this role would meet the OSPG criteria for professional regulation. The risk to the public involved in the role is mitigated by employment controls, and since inspection is often done for work that has been conducted by other regulated professionals (such as engineers), the risk associated with their role is well managed.

Oversight tools required to ensure public safety

The CPWI's role is associated with a low degree of risk and requires few regulatory oversight tools to protect the public. Although the work done by the public works inspector may require professional judgement and a strong understanding of the relevant codes/legislation and regulations, oversight for this is provided through other regulated professionals and workplace/employment controls. A public register is not as important for this role as for others, and public complaints have not been an issue.

Recommendation and for future regulatory oversight

This RTS should be sunset.

Implementation considerations

ASTTBC Bylaw changes to remove this category of registrant could be completed immediately, but implementation date could be delayed meeting the needs of those municipalities that rely on this RTS to set pay levels for employees.

Consultation with municipalities that rely on this RTS to structure pay levels to ensure that they are aware of pending changes and accommodated in terms of implementation timing.

3.8 Registered Public Works Technician (RPWT)

Brief Summary

Registered Public Works Technicians (RPWT) assist the public works department in providing day to day services that include monitoring, adjusting, repairing, and servicing water systems, roads, sidewalks, parks, and buildings. Currently there are no RPWTs registered with ASTTBC (although there are 2 in the trainee/non-practicing class).

Risk assessment and other considerations

This occupation is associated with a low degree of potential risk to the public.

Although they may work with equipment, materials or structures that can cause harm, there are no specific standards expected of the profession.

The RPWT has strong employment controls over their activities, the accountability for work done is often held by another regulated individual, and their work is subject to supervision.

In the absence of regulation by ASTTBC, there is adequate control over the risk associated with this group.

Oversight tools required to ensure public safety

Other than those already offered through workplace/employment controls, there are no regulatory tools required to maintain public safety with this role.

If RPWTs sought regulation today, would they meet OSPG criteria?

Because there are currently no registrants in this sub-class, and given the low risk associated with the role, the RPWT would not likely meet the criteria for professional regulation outlined by the OSPG.

Recommendation for future regulatory oversight

This RTS should be sunset.

Implementation considerations

No other considerations specific to this group beyond appropriate notification.

3.9 Registered Utility Locator Technician (RULT)

Brief Summary

A Registered Utility Locator Technician (RULT) verifies the location of utility mains and other services located underground to protect them from active ground disturbance such as excavators, drilling, and mining.[23] There are only 10 RULTs registered with ASTTBC.

Risk assessment and other considerations

This occupation is associated with a moderate degree of potential risk to the public.

While they oversee, rather than work with equipment, materials or structures that can cause harm, failure to follow professional standards could result in catastrophic harm, both to individuals and the environment.

However, individuals employed as RULTs work under the auspices of a company subject to controls and statutory requirements that serve to assure performance to an acceptable standard. [24] Anecdotally, approximately 1,500 people conduct the practice of underground utility locating, which far surpasses the number registered with ASTTBC. In the absence of regulation by ASTTBC, there appears to be adequate control over the risk associated with this group.

[23] There is some suggestion that those with this qualification may be retained to conduct searches for unmarked graves at former residential school sites. This activity is not reserved to RULTs, nor are they trained specifically for it. Accordingly, despite the potential risk of harm associated with unethical or poor quality performance, this activity has not been considered as part of the profile for this occupation.

[24] Worksafe BC (dictates that the company doing the digging is responsible for ensuring the locators are competent and trained) and BC One Call (the centralized communication link between the excavating community and the owner of the underground utility facilities. See https://www.bc1c.ca/)

Oversight tools required to ensure public safety

Other than those already offered through workplace/employment controls, there are no regulatory tools required to maintain public safety with this role.

If RULTs sought regulation today, would they meet OSPG criteria?

Because there is adequate control over the risk associated with this group and there are so few registrants, the RULT would not likely meet the criteria for professional regulation outlined by the OSPG.

Recommendation for future regulatory oversight

This RTS should be sunset.

Implementation considerations

Eliminate RTS subclasses.

The BC Common Ground Alliance, which currently endorses RULTs, would need to be informed.

3.10 Certified House Inspector (CHI)

In June 2021, the Superintendent of Professional Governance announced an investigation of the governance of the profession of Home Inspection. Home Inspectors are currently licensed by Consumer Protection BC[25], and they may choose to register with either the Home Inspectors Association of BC or ASTTBC.

Considering the OSPG's investigation, this report does not offer final recommendations about CHIs. The information provided below is for information only.

Brief Summary

A Certified House Inspector (CHI) conducts a visual examination and assessment of key structures, systems and components of a home or property, on behalf of a prospective home purchaser. Often used to determine the condition of a residential home or property, a home inspector's report can play a determining factor in the sale and purchase of real estate. There

[25] By law, anyone providing home inspection services must be licensed by Consumer Protection BC. Consumer Protection BC is responsible for enforcing the Business Practices and Consumer Protection Act (including the investigation of complaints about business practices) and Home Inspector Licensing Regulation (which outlines the qualifications for license)

are approximately 80 CHIs registered with ASTTBC (compared to 440 licensed to provide home inspection services by Consumer Protection BC).

Risk assessment and other considerations

This occupation is associated with a moderate degree of potential risk to the public.

While they oversee, rather than work with equipment, materials or structures that can cause harm, failure to follow professional standards could result in harm to individuals (especially related to economic and property damage).

CHIs work independently, with no supervision and few workplace controls over their activities. Clients of CHIs are often homeowners who are unable to assess the quality of services provided, adding a strong element of risk to the role.

If CHIs sought regulation today, would they meet OSPG criteria?

This matter is under consideration by the OSPG at the time of writing.

Oversight tools required to ensure public safety

The table below sets out the regulatory tools that would ensure public protection but does not consider what protections are offered by the alternative licensing and certification regimes presently operating in parallel.

CHI	Required regulatory instruments*	notes
Educational requirements	(✓)	Available without regulation. Consumer Protection BC's licensing model requires passing a competency exam and meeting training requirements
Criminal record check	(✓)	Available without regulation. Required through Consumer Protection BC
Maintenance of public register	✓	To identify qualified individuals to potential employers. Consumer protection BC has a searchable database but does not carry a public register.
Rules about performance of specific activities	(✓)	Available without regulation
Standards of ethics	✓	To protect against conflict of interest
Continuing competency requirements	✓	Home inspectors are required to renew (and re-test) with Consumer Protection BC every 3 years.
Mandatory liability insurance	(✓)	Available without regulation, through Consumer Protection BC

Public complaints	✓	To promote recognition of incompetence or negligence. Not supported through Consumer Protection BC.
Range of risk mitigation powers, including revocation	✓	To permit removal from the register where required.
Duty to report self/colleagues	✓	To promote professionalism and enhance ability to identify those not performing to standard.
Whistle-blower protection	✓	To facilitate reporting, especially related to conflict of interest
Duty of transparency, objectivity, and fairness to registrants	✓	To ensure fairness in the context of potential regulatory requirements

* brackets (✓) indicate the regulatory instrument is required, but available without professional regulation.

3.11 Registered Reserve Fund Analyst (RRFA)

Brief Summary

The Registered Reserve Fund Analyst (RRFA) prepares reserve fund plans for the purpose of Strata[26] Depreciation Reporting[27]. These reports help strata lot owners to plan and pay for the repair, maintenance and renewal of common property and assets over long time periods. To qualify as an RRFA, an individual must already be registered as a practicing CHI or CPI. There are currently fewer than 10 RRFAs registered with ASTTBC (most of them are CHIs).

Risk assessment and other considerations

This occupation is associated with a moderate degree of potential risk to the public.

They do not oversee or work with equipment, materials or structures that can cause harm, and in the event of negligence or failure to meet the standards expected of those in the profession, the harm would most likely be financial and confined to an individual or small group.

RRFAs work independently. Requirements under section 94 (1) of Strata Property Act and section 6.2(6) of the Strata Property Regulation require that a qualified person prepare the reports, and define that any person who has the knowledge and expertise to understand the individual elements of the report.

[26] Strata corporations: a legal entity with all of the powers of a natural person who has full capacity. This means that it can sue or be sued, enter into contracts and hire employees. Strata corporations are created under the Strata Property Act and not the Business Corporations Act. The strata corporation is responsible for managing and maintaining the common property and assets of the strata development for the benefit of all of its owners.
[27] In other Canadian provinces, depreciation reports are referred to as "reserve fund studies"

In the absence of regulation by ASTTBC, there is adequate control over the risk associated with this group, as demonstrated by the very small number of RRFAs compared to the number of people who perform this work.

If RRFAs sought regulation today, would they meet OSPG criteria?

Because there is adequate control over the risk associated with this group and there are so few RRFAs, the RRFA would not likely meet the criteria for professional regulation outlined by the OSPG.

Oversight tools required to ensure public safety

Those RRFAs who are currently registered as CPIs are also required to be AScTs or CTechs and thus are already registrants of ASTTBC subject to the full regulatory regime.

The name of the individual who prepares the reserve fund plan is required to form part of the record, apparently assuring a civil remedy in the event of harm caused by negligence or incompetence. Given that the majority of those performing this function are not regulated and no reports of harm or demands for additional public protection seem to have arisen, it is hard to justify the burden of self-regulation.

Recommendation for future regulatory oversight

This RTS should be sunset.

Implementation considerations

Eliminate RTS subclasses.

No considerations specific to this group beyond appropriate notification except the potential need to address the fact that in Ontario[28] and Alberta[29] specific qualifications are required to perform this work. This difference might be identified by stakeholders and addressed in communications.

[28] In Ontario, under the Condominium Act, Reserve Fund Studies must be conducted by a "reserve fund study provider," and a list of classes of professionals who are qualified to develop these studies is listed in the Condominium Act Regulation, Section 32(1). Included in this list are Members of the Ontario Association of Certified Engineering Technicians and Technologists who are registered as certified engineering technologists.
[29] In Alberta the government requires that such work be undertaken by individuals who are recognized as professionals through regulation or membership (including certified/registered engineering technologists or applied science technologists) or whose training is approved by the Director. See 21.1 of the Condominium Property Regulation.

The situation with this subclass is made somewhat more complicated by the present uncertainty around CHIs. If ASTTBC retains regulatory oversight of CHIs, the 'Use of Specialty Designation' would apply to the RRFAs who are qualified as CHIs. In addition, consultations underway regarding Strata depreciation reporting could have implications on this subclass.

3.12 Construction Safety Officer (CSO) & Registered Construction Safety Officer (RCSO)

Brief Summary

A Construction Safety Officer (CSO) takes responsibility for public safety around construction sites, including ensuring the site is in line with the Occupational Health and Safety (OHS) Regulation. To become a Registered CSO (RCSO), the individual must have completed an additional 24 months (3,600 hours) of relevant work experience. There are approximately 140 CSOs and RCSOs registered with ASTTBC[30] while approximately 3,000 reportedly perform the role without oversight.

Risk assessment and other considerations

This occupation is associated with a low degree of potential risk to the public.

Although they oversee the use of equipment, materials or structures that can cause harm, there are no specific standards expected of the profession.

The CSO and RCSO have strong employment controls over their activities, the accountability for work done is often held by another regulated individual,[31] and their work is subject to supervision.

In the absence of regulation by ASTTBC, there is adequate control over the risk associated with this group, especially given that the vast majority of those performing this occupation are not ASTTBC registrants.

If CSOs and RCSOs sought regulation today, would they meet OSPG criteria?

Given the employment controls associated with this role, and the small percentage of the workforce that are registered with ASTTBC, the OSPG would not likely consider this sub-class for professional regulation.

[30] Plus another 100 in the CSO(P) category

[31] According to Worksafe BC, the prime contractor has overall responsibility for health and safety on a worksite, and the employers of construction site staff retain responsibility for the health and safety of their own workers.

Oversight tools required to ensure public safety

The public does not rely on professional regulation for this field to ensure safety. There is no requirement in regulation or code to have a construction safety officer dedicated to a construction project, and many sites employ non-regulated people to perform this role. As a result, a public register, mandatory certification/licensure, and a public complaints process do not seem to be important for this occupation. The elements of regulation that may be worthwhile for this occupation are a code of ethics, duty to report, and whistle blower protection. The CSO must be able to rely on the ethical obligation to report safety hazards on site, even if it involves a conflict of interest with their employer.

Recommendation for future regulatory oversight

It is recommended that this sub-class be sunset.

As mentioned above, whistleblower protection is an important regulatory element that this occupation would benefit from being aware of. It is recommended that the rights of construction safety officers be made clear, so they are aware of the protection they have under the Workers Compensation Act[32] and through Worksafe BC.

Implementation considerations

Eliminate RTS subclasses.

Consider communicating with registrants to provide information about protections under the Workers Compensation Act, as described above.

Implementation considerations

No considerations specific to this group beyond appropriate notification.

4. Final Recommendations

In the short term, ASTTBC should develop guidelines or a bylaw providing direction to registrants about use of specialty designations and revise its bylaws to eliminate most subclasses of RTS, as summarized in the table below.

[32] See https://www.bclaws.gov.bc.ca/civix/content/complete/statreg/901199259/1241438022/965723187/?xsl=/templates/browse.xsl

In the long term, to optimize public protection, changes should be made to Schedule 1 of the PGA, and to the ASTT Regulation to remove the RTS registration category and create categories for RFPT and ROWP and to create reserved title for these new categories.

Consideration should be made to establish reserved practice for all remaining registrants of ASTTBC. Although the recommendations provided in this report apply regardless of the establishment of reserved practice, the full public protection benefits of professional regulation can only be achieved when the activities of ASTTBC's registrants are restricted to reserved practice.

The following is a summary of the recommendations identified for each sub-class. Note that recommendations are not repeated in detail if they have been made regarding a preceding category of registrant.

RTS	Recommendation	Implementation approach
RFPT **Total registrants in this category**: 911	**Short term:** Retain as subclass of RTS **Longer term:** Recognize as separate registration class, including addition of reserved title and practice.	Based on appropriate consultation, revisions to Schedule 1, ASTT Regulation, and ASTT bylaws to remove RTS and add RFPT as a registration category, including reserved title and practice. Revise registration requirements to ensure those who are unregistered but practice competently in this area now are able to be registered expeditiously. ASTTBC to notify/work with municipalities that do not currently require RFPT registration to ensure that they are informed of change regarding title and intention to seek reserved practice. Discussions/recommendations could be made to career colleges to build capacity for training new RFPTs as there is a reported shortage of appropriately qualified individuals. ASTTBC outreach to those performing this occupation who are not currently registered to offer and support registration and educate about impact of changes.

RTS	Recommendation	Implementation approach
ROWP **Total registrants in this category**: 391	**Short term:** Retain as subclass of RTS. The present system of endorsements should not be duplicated as subclasses, but registrants will be expected to practice within their own areas of knowledge, skills and judgment. Introduce "Use of Specialty Designation' requirements to enable registrants to identify their practice areas **Longer term:** Recognize as separate registration class, including addition of reserved title and practice.	Consultation and revisions to Schedule 1 etc. as above. Consider outreach campaign to support professionalism concept of practicing within one's own area of knowledge, skill and judgement to support transition.

RTS	Recommendation	Implementation approach
RBD & CRD CPI RSD & CSD RSIS **Total registrants in this category**: 156 (note, all are concurrently registered as AScT or CTech)	Eliminate subclasses.	Make bylaw changes to eliminate these subclasses of RTS (based on appropriate consultation). Introduce "Use of Specialty Designation" requirements as described above. Legislative revisions including Schedule 1 and Regulation changes.
RPWT RULT RRFA CSO CPWI & RCSO **Total registrants in this category**: 309	Short term – remove these subclasses from RTS category. Long term - remove RTS category.	Revise bylaws to remove these subclasses (based on appropriate consultation). Communication to all stakeholders. Note potential sensitivity in communications about RRFA, addressed above.

Appendices

Appendix 1: OSPG Guidance: Criteria for initial investigation decision regarding designation under the PGA

In order to best understand the regulatory framework for these professions in BC at this time, it is essential to consider the OSPG's guidance[33].

Prior to the creation of the OSPG, professional associations could be included in the ASTTBC regulatory oversight structure without determination of whether regulation would be in the public interest. With the change in the legislation, this would no longer be possible. Today, before considering whether regulation under the *PGA* would be appropriate, the OSPG would consider

- whether the practice of the profession results in possible/expected risks to clients and/or the public, the environment and/or property which cannot be addressed more efficiently and effectively through other means
- whether the members of the profession would have the capacity to self-regulate
- whether there is a defined route of entry to the profession and a body of knowledge that could form the basis of standards or practice
- whether the majority of the members deliver services in circumstances where they cannot be effectively supervised by others, and clients are unable to assess the quality of services provided
- Whether there is a more appropriate oversight framework for the profession elsewhere
- The degree of agreement and support amongst members of the profession to come under the *PGA*
- Whether there are identified negative impacts of establishing the profession under the *PGA* that are not outweighed by the benefits
- Whether there is government direction regarding the profession

Reflection on whether each RTS would meet these criteria if they were seeking regulation today was considered in the review of the specific occupations.

[33] https://professionalgovernancebc.ca/

Appendix 2: Risk Assessment Framework

Stage One - Intrinsic Risk

The table below sets out the method we have used to develop an intrinsic risk score for each RTS. The table was populated through qualitative data and consultation with subject matter experts. The numerical score is only to facilitate comparisons between occupations and has no independent significance.

Intrinsic Risk for occupation				
Hazard (Risk of exposure)	**Likelihood/Potential for exposure to harm[34] arising in the course of performance of occupational activities[35]**			
	n/a (0)	Low (rare) (1)	Med (possible) (3)	High (expected) (5)
Uses, directs, or approves the use of equipment that might cause harm[36]				
Uses, directs, or approves the use of materials or substances that might cause harm.				
Involved in (including evaluation of) a structure[37] or process the failure of which could cause harm				
Failure of worker to follow professional standards[38] would result in increased risk of harm				
Score (likelihood)				
Scale of harm/potential impact	**Magnitude of impact**			
	n/a (0)	Minimal (1)	Moderate (3)	Catastrophic; Irreversible; high; large (10)
Harm[39] caused to individual client[40]				
Harm caused to third parties (community or environment)				

[34] Refers to harm to third parties or the environment.
[35] To the extent possible, evidence of the likelihood should be gathered. For example, public complaints, legal actions, government intervention, independent survey evidence, insurance claims
[36] Harm may be to person or property.
[37] Existing human-built addition to natural environment
[38] Standards are a set of practices, ethics and behaviours that all members of a particular profession must adhere to. Codes, procedures or guidelines usually contain written instructions/requirements about how to do something in particular.
[39] To person or property
[40] If the harm is only to property and not to personal health the rating can never exceed medium

Vulnerability[41] of those harmed				
Score (impact)				
Intrinsic Risk Score (likelihood x impact)				

Identifying Mitigating Factors/Residual Risk – Stage Two

Having established a score for the intrinsic risk associated with performance of an occupation, the next stage is to determine whether there are safeguards in place that reduce the intrinsic risk of harm.

These factors are set out in the table below.

Risk Mitigation Factors	**Effectiveness in mitigating risk**			
	n/a	**None or v weak**	**Somewhat**	**Very good**
There is technology in place to mitigate the risks associated with the occupation				
Performance of the work is supervised or another individual is accountable for the final result				
Supervision or accountability is by a regulated professional/or they are required to be ASTTBC members				
There are workplace or employment controls over performance of the work				
There are other regulatory/statutory restrictions on the activities of the occupation[42]				
There are adequate legal remedies[43] available to those who suffer harm as the result of the activities of the profession				
There are other certifying bodies[44], consumer rating or reputation mechanisms that provide information to consumers about individuals in the occupational group				
Level of risk mitigation in the absence of ASTTBC regulation				

[41] Sector of society generally recognized as warranting a higher level of state protection. If all people equally, score should be minimal.
[42] If the other legislation under consideration requires ASTTBC registration, this score should automatically be low
[43] The harmed parties would be legally able to sue the entity/individual that caused the harm
[44] Associations with registration and certification criteria, for example

What Level of Risk is Acceptable?

Finally, two other considerations might arise in development of the overall occupational risk profile:

- The size of the occupational group (if there are relatively few individuals performing the function, the amount of harm they can cause is likely reduced meaning the burdens of regulation likely outweigh the benefits).
- The need of the public, employers or other stakeholders to have confidence in the occupation. If there is an overwhelming need by stakeholders to provide assurance to consumers or others this might outweigh many of the other considerations.

As discussed in "A Framework for Considering the Use of Occupational Licensing" the extent to which a consequence is significant is somewhat subjective. This makes it difficult to establish a risk tolerance statement that will be acceptable to all stakeholders. Building on the Framework report, perception of risk associated with RTS might be characterized as the risk profile result plus the outrage or level of concern experienced by stakeholders (including government and public).

Outrage is likely to be higher where risk is not assumed voluntarily and is unknowable to those affected; where it is industrial rather than natural; dreaded rather than not dreaded; catastrophic rather than chronic; unfair; and part of an unresponsive process. [45]

The level of risk that is acceptable to stakeholders is considered in the assessment of each RTS. It can usually be assumed that where there is no government requirement for regulation, no particular public attention to the activity and there are no restrictions on who may perform the activities associated with the RTS, the risk associated with the occupation is acceptable to stakeholders.

These considerations might be expressed as an overriding consideration. Once they have been applied, a residual risk level for each occupation can be identified. See the table below.

[45] "A Framework for Considering the Use of Occupational Licensing", p. 9

Assessment of Residual Risk – Consideration of Additional Factors				
Size of the occupation so small that risk is minimal or might be managed without regulation? Or majority of those who perform the occupation are not registered?	yes		no	
Overwhelming need of society for reassurance?				
Residual Risk	**Lowest risk**	**Some risk (oversight required)**	**Higher risk (more oversight required)**	**Highest risk**
(Intrinsic risk less +/- risk mitigation factors and other considerations)				

Other considerations (political requirements, public demand etc.)

Appendix 3: Comparing this approach to the PSA risk assessment matrix

The approach described above drew on the PSA methodology for assessing and assuring occupational risk of harm and features some modifications.

The PSA tool focussed primarily on health care and on an environment where employment controls (through the National Health Service) are the norm. It was also developed for the purpose of assessing new and unregulated occupations. See the OSPG criteria at Appendix 1. The PSA anticipated a potential to use or adapt the methodology to aid decisions on whether or not specialties should be regulated but did not make recommendations with respect to what changes or modifications might be required. The tool used for this analysis relies on each of the assessment vectors identified by the PSA, but aims to identify risk at a more specific level of detail; to cater to a non-health occupational sector; and to better fit with the BC work environment.

The table below shows how the PSA evaluation criteria have been incorporated into the ASTTBC tool.

PSA Criterion	ASTTBC criterion
Scale of Risk – size of practitioner group and user group	See "Assessment of Residual Risk" for application of this criterion
Means of Assurance	The Risk Mitigation table identifies alternative means of assurance available to manage the level and type of risk of harm – including those identified by the PSA and others
Sector Impact – assesses the impact of assurance mechanisms on the availability of services	This criterion has a lower level of applicability in this analysis: The underlying assumption of right touch regulation is that all regulation has a potentially negative impact on the cost and supply of the occupations under consideration. For the RTSs, our approach is to identify whether there is a potential to scale back the level of oversight without sacrificing safety.
Risk Perception – need for public confidence	See "Assessment of Residual Risk" for application of this criterion

PSA Criterion	ASTTBC criterion
Risk Perception – need for assurance for employers or other stakeholders	This criterion is implicit in several more detailed criteria in the ASTTBC model. In the absence of risk, there would be no need for employer reassurance. If risk is present, we look to external mitigating factors that might make inherently offer employer assurance or render it unnecessary, but we also look to whether there are other certifying bodies, consumer rating or reputation mechanisms that provide information to consumers (which would include employers) about individuals in the occupational group.
Unintended consequences	Our tool includes an "Other considerations" section to ensure that other implications/consequences of any change are included in the analysis

Appendix 4: Regulatory Oversight Frameworks: An Inventory

The following overview of (mostly) British Columbia regulatory frameworks, from least rigorous to most, follows the outline in the figures above. The divisions between the types of regulatory oversight are not as crisp as the illustration might suggest. In fact, they tend to overlap: many examples borrow features from various regulatory oversight frameworks.

No regulation/Private legal action

As Figure 1 illustrates, the most suitable regulatory framework for the lowest risk occupations is no regulation. In the absence of regulation, consumers have recourse to ordinary market activity for selection of a worker (social media, word of mouth, etc.) and legal remedies for harm, mostly through private legal action. In many cases, employers provide some degree of quality oversight (and consumer protection) through employment requirements, and the creation of standard operating procedures.

Voluntary Certification

The least rigorous form of regulatory oversight is a voluntary certification requirement. Certification generally depends on successful completion of educational requirements (or demonstration of equivalency) and does not feature further oversight of the certified individual. This means there are no standards of practice, ongoing educational requirements, and no complaints system. There is usually no mechanism for a certified person to become 'uncertified' although certification renewal, with a demonstration of continued work or additional education, is a possibility. Certification signals to potential employers or customers that the worker has attained a level of training. This may make the individual worker more attractive to employers or customers.

Trades have been managed this way in British Columbia for nearly twenty years.[46] The Industry Training Authority ("ITA") manages over 100 trades programs. It issues set program standards and issues the BC Certificate of Qualification or a National Red Seal. The Red Seal program establishes uniform educational standards for credentialling across Canada. However, until the law is changed (which is underway), there is no requirement that work be performed by registered tradespeople.

[46] See below for coming changes to the approach to trades in BC

Certification with Inspections

Depending on the constellation of legislation and regulation in which a sector works, certification of an occupation may be compulsory. Compulsory certification may afford use of title, but not always.

Where certification is compulsory, the requirement may be enforced through inspections.

One example of the least burdensome version of this type of oversight framework is British Columbia's Food Premises Regulation. The Public Health Act requires food businesses to employ staff that have obtained Food Handler Certification. (Other requirements related to physical premises also apply.) Food premises are subject to periodic inspection to ensure compliance. The individual worker is not subject to any regulatory oversight, but their workplace or employer is.

Returning to the example of trades once more, in other jurisdictions – and perhaps in BC soon – legislation exists to reserve certain areas of practise and title to certified tradespersons. Inspections are the mechanism by which this requirement is enforced.

Another example of a framework in which certification may play a public safety role is WorkSafeBC, where public protection is a sort of by-product of individual worker protection: Every worker in BC is insured against work-related injury, illness, or disease through WorkSafeBC. WorkSafeBC's mandate includes prevention of occupational injury and occupational disease, which it accomplishes through education, consultation, and enforcement. It carries out workplace inspections and investigates serious incidents such as fatalities. All employers are required to have WorkSafeBC coverage.

WorkSafeBC, which does not regulate any occupation, exercises public safety oversight through this indirect mechanism. For example, crane operators are required to have an acceptable certificate. Employers that are non-compliant with this requirement are subject to a series of potential penalties, including court orders requiring compliance. The outcome of the requirement on the workplace is properly trained workers which protects not only the workers in the workplace, but the consumers whose work and environment they affect.

Insurance

The requirement that an individual or a business carry adequate insurance is another element of public protection that may or may not be a feature of regulatory oversight.

According to Carpenter and McGrath,[47] "the (public) interest in regulating a tree trimmer is that the service provider can pay for the repair to a home or other structure in the event of damage.

[47] Carpenter, "Balance", p. 5

The trimming itself is a relatively safe profession that possesses few other threats to consumers such that extensive state-mandated training, experience, testing, and other licensure requirements are unnecessary. This means the (public) interest in protecting consumers from potential harm associated with tree trimming and other similar occupational practices can be met through bonding and insurance requirements, while allowing for basically free exercise of occupational practice."

Staying with the arborist example, the level of regulatory oversight present in BC is higher than in the United States. But this does not arise through regulation of the occupations. The ITA includes Arborist Technicians, Climbing Arborists, Field Arborists and Utility Arborists and under obligations established by Occupational Health and Safety regulations and enforced by WorkSafeBC, in addition to requiring employees to have certification, employers must ensure that workers can safely complete assigned job duties. With respect to tree falling, these would include consideration of timber, terrain, and slope.

Accordingly, even without occupational regulation, there is a mechanism for public protection through WorkSafe BC.

Voluntary Registries

Voluntary registries serve occupations without reserved practice for the occupation, but where consumers (including employers) might benefit from access to a list of certified workers. In most cases, a voluntary registry is a record of those who are voluntarily certified. For example, the ITA keeps a registry of trades in BC.

There is a framework in which the voluntary registry takes on some of the features of a more rigorous regulatory framework, while still being voluntary. In the United Kingdom, the Professional Standards Authority oversees Accredited Registers. Organisations (like associations) of unregulated professions can apply to have their voluntary register accredited against 11 published standards. An accredited registry can use the PSA quality mark to prove their organisation's "commitment to public protection and high professional standards": this signals to employers and consumers that those who are on the registry meet a set of quality criteria.

The PSA Standards for accreditation of voluntary registers[48] require maintenance of a public register, established occupational standards (competence and ethics) and educational requirements; a complaints process; a public interest focussed governance structure; a public engagement strategy and risk identification and mitigation strategies.

[48] https://www.professionalstandards.org.uk/what-we-do/accredited-registers/about-accredited-registers/our-standards

They are not as stringent at the Standards applied by the Office of the Superintendent of Professional Governance (the "OSPG') on the ASTTBC, but they are considerably more rigorous than the other regulatory frameworks so far discussed.

Compulsory Occupational License

More stringent regulatory oversight is usually present where the work performed by the occupation is reserved for those who have a license.

Consumer Protection BC operates a regulatory regime that follows this principle. Their oversight includes most of the features of the less rigorous regulatory approaches described above, with additional more stringent features.

Under s. 143 of the Business Practices and Consumer Protection Act, a person must not engage in a designated activity unless the person is licensed. For our purposes, the most relevant occupational example is home inspectors. Under the Business Practices and Consumer Protection Act, the Home Inspector Licensing Regulation sets out the requirements for obtaining a license, and for home inspection contracts[49]. The requirements for obtaining a license include several features not present in the less rigorous regulatory regimes discussed above. In addition to successful completion of educational requirements (which are features of certification programs), home inspectors must complete an additional 50 hours of training, provide a recommendation letter, prove business *bona fides*, complete a criminal record check and prove they have liability insurance.[50]

Oversight after an individual obtains their license is also at a higher level in this regulatory structure. While Consumer Protection BC conducts inspections, just as in the FoodSafe or WorkSafe regimes, Consumer Protection BC also investigates consumer complaints. They have the authority to obtain compliance and consumer restitution, as well as to levy fines. They can also sue on behalf of themselves, individuals, or groups of consumers.

They do not require continuing professional development. There is no code of conduct or standards of practice for home inspectors under Consumer Protection BC. However, there specific rules prohibiting conflict of interest and deceptive or unconscionable acts.

[50] A new law in Ohio will require a state license for home inspectors, who will also be required to have insurance, pass a criminal background check, and demonstrate competence by carrying out some initial supervised inspections. Existing home inspectors who could demonstrate competence were granted a license through a grandfathering clause. The Ohio Home Inspector Board operates under the Department of Commerce Division of Real Estate and Professional Licensing. https://sanduskyregister.com/news/329805/state-now-licensing-home-inspectors/

Paramedics in British Columbia are similarly regulated under the Emergency Health Services Act which establishes an Emergency Medical Assistants Licensing Board. The Board sets the educational requirements for licensure, investigates complaints, and conducts hearings. They have the authority to impose consequences as a result of investigations, up to and including revocation of license. There is no code of ethics or conduct. There are a few policies: Duty to Report, Emergency Childbirth and MAID. There is no continuing education requirement and there do not appear to be routine inspections. Public interaction and engagement appear to be minimal.

Hybrid

Recently passed legislation in Ontario: Advancing Oversight and Planning in Ontario's Health System Act, 2021 establishes a regulatory framework that is less rigorous than self-regulation, but contains more features than some of the other 'lower stringency' regulatory models commonly used in Canada.

At present, the new regulatory framework is intended to apply only to Personal Support Workers, although it may be expanded to include others later (it introduces an oversight body, the Health and Supportive Care Providers Oversight Authority, not unlike the OSPG).

There is no reserved practice although non-registrants are prohibited from holding themselves out as registrants.

There will be a public complaints mechanism and the Chief Executive Officer of the agency will have the authority to take action as appropriate. A Discipline Committee and an Appeals Committee may be appointed by the Board to deal with matters not resolved by the CEO.

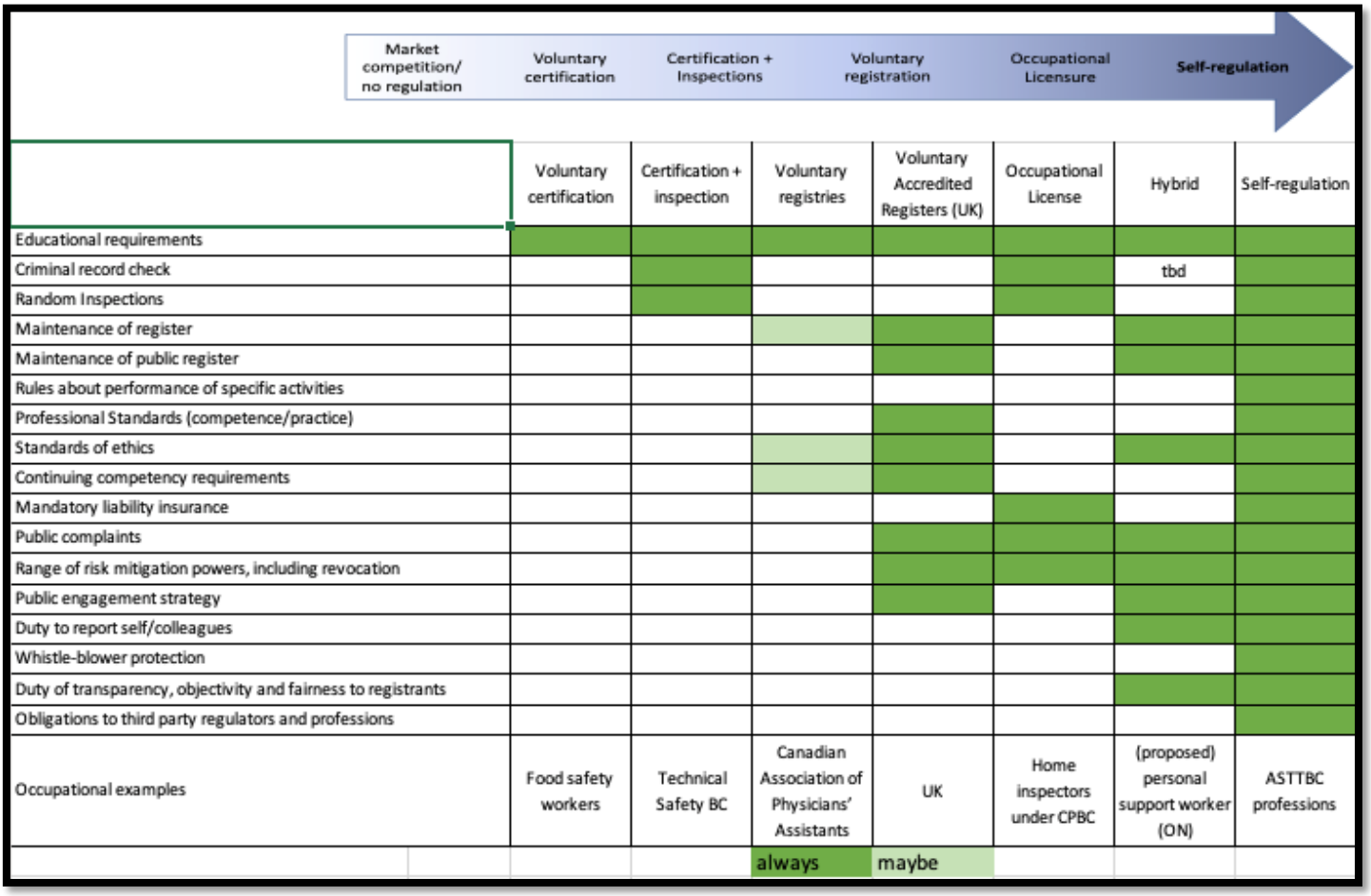
Noteworthy for their absence are Standards of Practice and continuing competence requirements.

Self-Regulation

Self-regulation is the most stringent form of occupational regulation. Some features likely to be included in a self-regulatory regime that do not appear in the others discussed above include:

- Duty to report breaches by self and others
- 'Whistle blower protection' for those who report
- Development, monitoring and enforcement of standards of practice
- Continuing competency programs
- Development, monitoring and enforcement of a code of ethics
- Duty of transparency, objectivity and fairness for registrants
- Additional obligations including collaboration with other regulators, fostering of interprofessional collaboration between registrants and those practicing other professions and to enhance the ability of registrants to adapt and respond to change.

The table below sets out the mechanisms of regulation and the regulatory frameworks in which they are likely to be found



	Voluntary certification	Certification + inspection	Voluntary registries	Voluntary Accredited Registers (UK)	Occupational License	Hybrid	Self-regulation
Educational requirements							
Criminal record check						tbd	
Random Inspections							
Maintenance of register							
Maintenance of public register							
Rules about performance of specific activities							
Professional Standards (competence/practice)							
Standards of ethics							
Continuing competency requirements							
Mandatory liability insurance							
Public complaints							
Range of risk mitigation powers, including revocation							
Public engagement strategy							
Duty to report self/colleagues							
Whistle-blower protection							
Duty of transparency, objectivity and fairness to registrants							
Obligations to third party regulators and professions							
Occupational examples	Food safety workers	Technical Safety BC	Canadian Association of Physicians' Assistants	UK	Home inspectors under CPBC	(proposed) personal support worker (ON)	ASTTBC professions
			always	maybe			

Appendix 5: Appendix – Required Regulatory Mechanisms Checklist

Occupation	req'd	avail without regulation
Educational requirements		
Criminal record check		
Random Inspections		
Maintenance of register		
Maintenance of public register		
Rules about performance of specific activities		
Professional Standards (competence/practice)		
Standards of ethics		
Continuing competency requirements		
Mandatory liability insurance		
Public complaints		
Range of risk mitigation powers, including revocation		
Public engagement strategy		
Duty to report self/colleagues		
Whistle-blower protection		
Duty of transparency, objectivity and fairness to registrants		
Obligations to third party regulators and professions		