
Moving forward on building inspection and maintenance

Submission to the Department of Building and Housing
16 March 2007

Background to IPENZ

The Institution of Professional Engineers New Zealand (IPENZ) is the lead national professional body representing the engineering profession in New Zealand. It has approximately 10,000 Members who include a cross-section of the engineering community from Students to senior Fellows in management or governance positions in important design or construction organisations. IPENZ is non-aligned and seeks to contribute to the community in matters of national interest giving a learned view on important issues, independent of any commercial interest.

In making these comments IPENZ has drawn particularly on the knowledge of its Members, or members of kindred bodies, who supervise, work with or work alongside Independently Qualified Persons (IQPs), or are otherwise aware of the issues.

Executive Summary

IPENZ supports a relatively light-handed regulatory system for those involved in building inspection and maintenance. It is important that the system recognises that integration of sub-systems in complete building management systems is as likely an area of risk as failure of a single specified system or component within such a system. Taking this into account, we consider that a system closer to Option 3 rather than Option 2 is likely to prove much more efficient and effective in practice. There are a number of practical reasons favouring a national system for competence assessment and registration. In our view, using the “supervise or do” approach that is widely applied across the Building Act will minimise the number of people who will need to be assessed and registered. The requirements can be defined by using guidelines to interpret a general engineering competence standard, thereby minimising duplication of existing competence assessment and registration systems for engineers.

We do not seek to speak to this submission but are happy to discuss any of the points we have raised.

Submission

IPENZ is of the view that whilst the building warrant of fitness regime of the 1991 Act did not work fully as intended, there is little evidence that failures have created major risks to public health or safety. Therefore, provided failures continue to be infrequent and the consequences of those failures low, we would support a relatively low-cost regulatory system.

In general, the Building Act requires that specified building work be done or supervised only by suitably qualified people. We consider that a consistent application of this principle to inspecting specified systems is important to aid both understanding of and compliance by those who inspect the buildings.

It is important that the regime selected takes account of ongoing changes in the nature of specified systems. Building management systems are becoming increasingly integrated (eg security access, fire, lifts) and it is important that the integrated system is checked as the individual specified systems are checked. A person who checks the integration is likely to be more highly skilled than a person checking components.

The discussion paper states that the Department of Building and Housing (DBH) preference is Option 2. We do not support this option, but would prefer a system closer to Option 3, ie a national competence assessment and registration system on which Building Consent Authorities (BCAs) can rely, rather than nationally-supported local registration and assessment systems. The reasons for this are as follows:

- The national consistency of a competence standard to obtain the necessary certification of competence is vital. Where assessments are to be performed they should be consistent in method and predictability of result. If each BCA conducted its own assessment, it would be very difficult to achieve consistency in assessment, resulting in a greater variation in outcomes, which would be unacceptable.
- The costs should not be greater for persons conducting work under more than one BCA jurisdiction. Option 2 requires each Territorial Authority (TA), or TA cluster, to approve IQPs, thus forcing IQPs to seek multiple approvals, with the inevitable result of higher compliance costs.
- Third party registration (rather than registration by BCAs) allows complaints of poor quality work to be dealt with independently of the question of access to work within the jurisdiction of a particular BCA. We note that BCAs find it difficult to be the “gate keeper” and would prefer to refer complaints or notices of poorly-performed work to an independent competent body for that body to pursue. (For an example, see our response to question 5 below.)
- Creating a national list, but still asking building consent authorities to take full liability if they choose someone from the list, will not work. BCAs will end up doing

further local assessment to be sure, which will defeat the purpose of the system. If there is to be a national list, then by using it BCAs should manage their liability (provided there is no evidence that they failed to report bad work back to the national registration authority).

However, we do not support licensing of all persons who perform maintenance inspections. In our view the costs would outweigh the benefits. Rather, we would support a system whereby the licensed person is *either supervising or doing* the work (supervising implies responsibility and the power to intervene). This is the same construct as used for Licensed Building Practitioners (LBPs), and this consistency will help people understand the system.

In developing a national scheme for assessment and registration of IQPs, it must be recognised that they generally fall within the engineering occupational group, although many have little formal education. Restricting licensing/registration to those persons who are supervisors will probably result in only the better qualified people needing to be assessed. However, we still consider it possible that persons who would need to hold a supervisory licence might range from those without even a Level 4 trades certificate (using National Qualifications Framework [NQF] terminology) to those who are Chartered Professional Engineers (who generally hold Level 8 qualifications).

We consider it is vital to maximise the use of existing registers, and that whatever approach is taken it should recognise the continuum illustrated below:

NQF Level	Exemplifying qualification (to be followed by on-job and other development)	Current competence engineering quality mark	Possible mapping to IQP competence
8	4-year BE degree	CPEng	Unlikely to directly do or supervise IQP work personally.
7	3-year BEngTech degree	ETPract	Might manage a specialist building maintenance organisation. May or may not personally supervise.
6	National Diploma in Engineering or NZCE	CertETn	Likely to supervise group of IQPs and ensure integration of groups of specified systems.
5	Advanced Trade Certificate		Likely to diagnose faults and maintain group of specified systems.
4	Trade Certificate		Likely to maintain group of specified systems.
3	Sub-trade, but with industry experience.		Likely to test single specified system.

The ETPract (Engineering Technology Practitioner) and CertETn (Certified Engineering Technician) registers will be launched by IPENZ as current competence, internationally-benchmarked registers in July 2007. The Registered Engineering Associate does not require ongoing competence assessment, but roughly corresponds to CertETn.

In our view, the design of a supervisory licence system for IQPs should fit consistently with this continuum and minimise any further assessment. In line with international best practice, we consider that there can be a single competence standard at each level of competence and, as is the case with other engineering registers, this can be interpreted in each field of practice by the development of guidelines for assessors. For example, a person who works in fire protection systems would demonstrate competence against the general standard, but interpreted in the context of fire protection. Those who are on engineering registers are used to being asked to self-certify their particular competence to perform specific tasks. Those working at a supervisory level on specified systems will be capable of such self-certification. Thus the "licence" would be obtained by being registered on any engineering register for which the competence standard is above what is regarded as the minimum acceptable to supervise or do the necessary work.

IPENZ already has considerable experience in assessing engineering competence for those not holding formal qualifications, and we would assist any new registration authority to set up an appropriate assessment process.

We assist BCAs by providing information that confirms the practice area of each Chartered Professional Engineer (CPEng). This approach could be applied to assist BCAs recognise those engineering registrants with relevant practice areas.

We recommend that assessors in a particular occupational group be drawn from senior people in that group. Thus we consider that industry would be likely to support the broad brush system we are recommending.

We also offer the following comments on some of your specific questions:

Building warrant of fitness regime

2. Other areas with potential for significant further improvement

IPENZ recognises that building owners are not necessarily well-informed of the building warrant of fitness requirements, and may make improper returns on their Form 12s. This may be especially true of not-for-profit organisations and more so if they are asset rich but cash poor. By having a supervisory approach the owner can then deal with only one person who will organise the individual inspections and make sure the detail is right. This should improve compliance.

3. Action points for the proposed work programme

In respect of compliance schedule accuracy, IPENZ believes that it is reasonable to require a specified system designer to provide a document which forms the basis for a compliance schedule applicable to the project.

In the event of a change of use of the building, the original specified systems may be inappropriate and the compliance schedule will then need to be amended. It must be made clear that the designer of the new specified systems must then produce a document which will form the basis for a new compliance schedule.

Licensing

4. Workforce structures and occupational groupings within the IQP sector

We consider that the system we have outlined in this submission can operate efficiently and effectively in practice, and that there is goodwill and co-operation to support this.

We note that there are organised occupational groups whose expertise spans a group of specified systems. For example, IPENZ has a close association with a number of technical groups that represent people in particular industries. The form of the association varies, but IPENZ Members will usually belong to one or more of these kindred bodies. IRHACE, the Institution of Refrigeration, Heating, and Air Conditioning Engineers is one such kindred body whose members may be IQPs who deal with escape route pressurisation systems and smoke control systems. FPA, the Fire Protection Association, is a kindred body whose members may be IQPs who deal with sprinklers, alarms, riser mains and other specified systems.

5. Competence and accountability

An IPENZ Member employed at a senior level in a large BCA reported that when his BCA decided that an IQP was not performing satisfactorily, the TA attempted to remove the IQP from the BCA's register. The BCA was then threatened with legal action because there is no legislative provision for removing acceptance once it is given. In effect, the BCA was cutting the IQP off from his source of livelihood, and as there is no legislative provision for doing so, removing him from the IQP register is *ultra vires*. We have recommended above that the proposed central regulatory authority has the power to investigate complaints against IQPs, and if the complaints are upheld, to remove the IQPs from the register. This is a much more satisfactory way of dealing with non-performance. Further, the poor performer is prevented from working for all BCAs, not just one.

6. Comment on the proposed changes to the Building Act 2004

IPENZ believes that persons registered on general engineering registers, who are required to work only within their areas of competence, are suitably qualified to hold supervisory licence classes, and no further assessment of them should be required.

IPENZ strongly supports establishing competence-based registers at lower levels of competence so that all relevant levels of competence for supervisors are covered.

7. Impacts of the proposed changes

The DBH's preferred option leaves the costs and liabilities of the IQP scheme with the BCAs who currently administer the scheme. IPENZ recommends that the costs and

liabilities of registering and regulating the registration scheme be transferred to registered persons through their registration fees.

9. Other comments

IPENZ notes that the structure of a building is not a specified system. Consequently, if an inspector noticed a hole in the floor of an old building, or saw a roof tile or piece of decorative concrete fall, the building warrant of fitness system cannot be used to force remedial action. It may be worthwhile to add a mandatory reporting system for other building defects discovered as a by-product of the warrant of fitness inspections.

As stated above, IPENZ notes that as buildings become more complex, there is a need for the specified systems to work together, and in the event of a failure to fail in a safe manner. A supervisory licence holder should be capable of checking that the control system does force the different specified systems to work in the proper sequence and that each specified system “fails safe”.

Conclusion

The best outcomes will be achieved by a relatively light-handed regulatory system that recognises that integration of sub-systems in complete building management systems is as likely an area of risk as failure of a single specified system or component within such a system. A system closer to Option 3 rather than Option 2 is likely to prove much more efficient and effective in practice. Using the “supervise or do” approach that is widely applied across the Building Act will minimise the number of people who will need to be assessed and registered. The requirements can be defined by using guidelines to interpret a general engineering competence standard, thereby minimising duplication of existing competence assessment and registration systems for engineers.