

In defence of the self-regulating profession

GEORGE R. COMRIE, P.ENG.

here is perhaps no greater threat to the future of the engineering profession than the mounting interference with our self-regulation. This threat is particularly insidious because war has not been declared-in fact, there is no clear enemy. Rather it is a case of governments pursuing their legislative agendas and self-interest groups pursing their self interests. Meanwhile, everyone seems to have forgotten that there is a self-governing profession charged with the responsibility for regulating engineering in Ontario in the public interest. In society's rush to establish rules for every conceivable activity, we seem to have lost our understanding of the concept of a self-regulating profession and how it is supposed to work.

I am not aware of anyone outside the profession suggesting our model of self-regulation should be abandoned, or even that engineering requires tighter regulation. In fact, engineering is not even on the government's or the public's radar screen as an issue for public policy. This is no doubt in part a result of the fact that engineering in Ontario is generally well done and few engineering failures come to public attention. Unfortunately, it is also a refliction of government and the public's limited awareness of who we are and what we do.

Doctors are in the same boat as engineers in terms of self-regulation, except that their services are much more in the public eye, and a perennial political issue. Yet in spite of the intense pressures on the health care delivery system, and in spite of the many other professional groups sharing the health care space, physicians and surgeons have managed to retain their favoured position as gatekeepers to health care. Everyone else works under their direction; other health care workers have relatively limited scopes of practice and are subject to oversight by medical doctors. Moreover, no one practises medicine without a licence; even if one could, most people would not dream of consulting a physician or surgeon who is not licensed.

Meanwhile in Engineering Land, the family farm is up for sale! Some engineers are having trouble finding gainful employment, since the supply of licensed professional engineers, mainly through immigration, has been growing much faster than the economy, thereby outpacing the demand for their services. Many employers-including governments-are choosing to use less skilled and less costly technical resources to perform engineering work where there is no demand-side legislation requiring a P.Eng.'s signature and seal. The lines between engineering work and other related scientific/technical work are becoming increasingly blurred as technology and technical specialties proliferate.

All of this points to an urgent need to reinforce the concept of a self-regulating engineering profession and its inherent value proposition. What is the difference between a licensed professional and any other "qualified person"? Why should one employ a licensed professional engineer instead of just someone who has completed engineering or other technical training?

The answer to these questions lies in the significance of the term "professional." A true professional has two essential attributes: *competence* and *responsibility*. It is the role of the regulatory body to assure the public that licensed practitioners are competent to practise in their chosen discipline and that they are taking responsibility for the outcomes of their work.

Competence

Many people think of competence in terms of knowledge, typically acquired by completing a prescribed course of studies. But it is much more than this. Competence is knowledge and skill at applying that knowledge. It is acquired through a formation or conditioning process in which the practitioner learns, under the supervision of a practising professional, to think and act like one. That is why it is so important for those

who teach in our engineering schools to be licensed, practising professionals.

Tests of knowledge, such as the *Ontario Building Code* knowledge tests required under Ontario's Bill 124, cannot measure or ensure competence, even at applying the building code. Many people have acquired the basic scientific and technical knowledge that underlies some aspect of engineering, but only the licensed professional has demonstrated competence to apply that knowledge and to take responsibility for his or her work.

Responsibility

The second essential pillar of true professionalism is the taking of responsibility for one's work and its consequences. The overarching goal of the licensing of professional engineers is to prevent engineering failures and associated harm to the public or to the environment before they happen, not to ensure that there is someone to blame and seek damages from after the fact. It is therefore important for society to ensure, by demand-side legislation, that engineering input is required at all critical points in any project where safety, reliability, or security may be compromised.

Professional engineers are taught and conditioned to consider carefully the potential consequences of their designs and solutions, and to mitigate against any negative ones. They are professionally bound to reveal any harmful consequences, even when it is not in their personal or economic interest to do so. The signature and seal of a professional engineer on a report or drawing signifies that he or she is taking responsibiliy for its accuracy and integrity, and for the consequences of relying upon it.

Professionals are subject to discipline by a panel of their peers for misconduct such as negligence, incompetence, or breach of trust. The threat of such discipline, which may include suspension or revocation of their licence to practise, provides strong incentive for them to maintain high standards of practice.

continued on page 23

President's message *continued from page 3*Value Proposition

I believe the self-regulating profession provides exceptional value to our society. Members of the profession are those best qualified to set standards of admission and practice, and to maintain their currency with advances in knowledge and technique. They volunteer their valuable time, talents, and energies to the profession to ensure it is properly regulated in the public interest.

Were our governments to regulate the professions directly, as is done in some jurisdictions, I believe the cost to the public and the professional would undoubtedly be greater, and the public would be less well protected.

We need to cultivate a renewed respect and appreciation for our Canadian model of professional self-regulation that is the envy of much of the rest of the world. It's a good deal for everyone. Let's get the message out!

JULY/AUGUST 2004 ENGINEERING DIMENSIONS