

**CONCORDIA UNIVERSITY
FACULTY OF ENGINEERING AND COMPUTER SCIENCE**

**ENGR 201
PROFESSIONAL PRACTICE AND RESPONSIBILITY**

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CHAPTER 09

CODE OF ETHICS : DUTIES AND OBLIGATIONS TOWARDS THE CLIENT

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TOPIC 1 : KNOWING ONE'S LIMITATIONS

3.01.01.¹ Before accepting a mandate, an engineer must bear in mind the extent of his proficiency and aptitudes and also the means at his disposal to carry out the mandate.

- The engineer must secure the availability of enough intellectual and material resources to bring the project to fruition.

¹ Unless otherwise noted, the *Code of Ethics of Engineers* (CQLR, c. I-9, r.6) is quoted

- This implies that the engineer has carefully documented and assessed the real nature of the problem and the needs relative to the client's objectives.
- Intellectual resources include :
 - Knowledge of the science of the concerned engineering domain(s)
 - Knowledge of the facts relevant to the specific project at hand
 - Reference libraries, data bases etc.
 - Experience
 - Knowledge or, at least, awareness of "non engineering" constraints : legal, environmental, social, economic, etc.
- Material resources include :
 - Time
 - Money
 - Personnel
 - Equipment
 - Certification

3.01.02. In cases where it is in his client's interest, the engineer shall retain the services of experts after having obtained his client's authorization, or he shall advise the latter to do so.

- While it is not forbidden to be creative and to experiment, the engineer must refrain from doing so at his client's expense unless an informed consent has been secured.
- Trying to do things beyond one's competence is very dangerous and an easy trap to fall into.

TOPIC 2 : INFORMATION

3.02.02. An engineer must avoid any misrepresentation with respect to his level of competence or the efficiency of his own services and of those generally provided by the members of his profession.

Professional Code, s. 60.2. No professional may, by whatever means, make false, misleading or incomplete representations, in particular as to his level of competence or the scope or effectiveness of his services or of those generally offered by members of his profession.

- False and misleading representations are easily avoided.

- Incomplete representations are common because of an erroneous evaluation of the client's technical proficiency or because prior knowledge is wrongly assumed.

3.02.03. An engineer must, as soon as possible, inform his client of the extent and the terms and conditions of the mandate entrusted to him by the latter and obtain his agreement in that respect.

- The preceding comment applies.
- The agreement should be in writing, in plain language if appropriate.
- In the enthusiasm of starting a new project, it is easy to sidestep such tedious but essential work.

3.02.04. An engineer must refrain from expressing or giving contradictory or incomplete opinions or advice, and from presenting or using plans, specifications and other documents which he knows to be ambiguous or which are not sufficiently explicit.

- Violating this section is too common, unfortunately.
- Incomplete opinions, advice or engineering documents are often the consequence of insufficient means (3.01.01).
- When giving opinions and advice, it is essential to state their limitations and to present contradicting evidence in order to paint an accurate picture.

3.02.05. An engineer must inform his client as early as possible of any error that might cause the latter prejudice and which cannot be easily rectified, made by him in the carrying out of his mandate.

- A tricky proposition. It may conflict with demands made by the insurance company or corporate legal counsel. However, there often is an obligation to do everything possible to mitigate losses, and the engineer's commitment to protecting the public must prevail.
- The danger does not have to be clear and present: "potential" is enough. The prejudice may be physical, financial, etc.
- Even if the client detects the error, he is presumed to lack the knowledge required to evaluate it adequately. That is why he is entitled to expect transparency from the engineer.
- If the consequences are tragic, the engineer may be accused of criminal neglect under section 219 of the *Criminal Code* for omitting to do something which is within his duty to accomplish, thus showing wanton or reckless disregard for the life and safety of others.

3.02.07. Where an engineer is responsible for the technical quality of engineering work, and his opinion is ignored, the engineer must clearly indicate to his client, in writing, the consequences which may result therefrom.

- When the engineer foresees consequences of ignoring his advice, be it regarding technical aspects, safety, liability, economics etc., notifying his client will serve to protect himself, perhaps the public as well, and to establish due diligence.
- This does not mean that the client is bound to obey the engineers advice : no authority is granted by this section.

3.03.02. In addition to opinion and counsel, the engineer must furnish his client with any explanations necessary to the understanding and appreciation of the services he is providing him.

- The extent of the explanations should be in relation with the client's ability to understand them.
- As for representations, incomplete explanations are common because of an erroneous evaluation of the client's technical proficiency or because prior knowledge is wrongly assumed.
- The extent of these explanations should remain within reasonable bounds. It does not have to be an engineering course.

3.03.03. An engineer must give an accounting to his client when so requested by the latter.

- It is in keeping with good communication.

3.05.04. As soon as he ascertains that he is in a situation of conflict of interest, the engineer must notify his client thereof and ask his authorization to continue his mandate.

- *Covered in topic 5*

3.08.03. An engineer must inform his client of the approximate cost of his services and of the terms and conditions of payment. He must refrain from demanding advance payment of his fees; he may, however, request a deposit.

- *Covered in topic 8*

3.08.04. An engineer must give his client all the necessary explanations for the understanding of his statement of fees and the terms and conditions of its payment.

- Covered in topic 8

TOPIC 3 : INTEGRITY

3.02.01. An engineer must fulfill his professional obligations with integrity.

- Integrity is a fundamental duty of every professional and is the first one in section 87 of the *Professional Code* :

87. The board of directors must make, by regulation, a code of ethics governing the general and special duties of the professional towards the public, his clients and his profession, particularly the duty to discharge his professional obligations with integrity.

- To say that it is not a well-defined notion is an understatement. It has to do with probity, honesty, both intellectual and material.
- Moral integrity is maintained when the same virtues are commanding the personal and professional life : in this sense, integrity will be said to be indivisible.
- Professional integrity is somewhat different. It calls for people to take responsibility for their actions in a way that is coherent with the principles upheld by the profession.
- Some recent judicial decisions would lead us to think that integrity, as a requirement of a Code of Ethics, does not extend to private life.

3.02.06. An engineer must take reasonable care of the property entrusted to his care by a client and he may not lend or use it for purposes other than those for which it has been entrusted to him.

- This includes intellectual property.

3.02.08. The engineer shall not resort nor lend himself to nor tolerate dishonest or doubtful practices in the performance of his professional activities.

- The fact that it is the client who encourages or commits such practices does not allow the engineer to "shut his eyes, ears and mouth".
- The act that the engineer does not have direct authority on the practices is not necessarily relevant : an engineer should not tolerate,

for example, illegal purchasing practices, construction without permit, import of nonconforming chemicals, software copyright violations ...

- Standing up against dishonest or doubtful practices may lead to whistle-blowing. It may be the only way to avoid being seen as an accomplice.

3.02.09. An engineer shall not pay or undertake to pay, directly or indirectly, any benefit, rebate or commission in order to obtain a contract or upon the carrying out of engineering work.

- There is no use in claiming that it is a matter of survival, everybody does it, etc.
- Such practices are eventually paid for by unsuspecting clients.
- It may, however, be very difficult to distinguish these practices from the legitimate use of intermediaries or consultants, especially in foreign countries.

3.02.10. An engineer must be impartial in his relations between his client and the contractors, suppliers and other persons doing business with his client.

- The difficulty is that this duty to be fair may put undue strain on the engineer because of the need to properly ascertain the "equivalent products".
- This section does not make public calls for tenders mandatory. It is a question of applicable regulations, and circumstances.

TOPIC 4 : AVAILABILITY AND DILIGENCE

3.03.01. An engineer must show reasonable availability and diligence in the practice of his profession.

- Unless agreed, the engineer should show leadership in project management.
- The worst excuse for failing in this respect : "The client did not pay me".

3.03.04. An engineer may not cease to act for the account of a client unless he has just and reasonable grounds for so doing. The following shall, in particular, constitute just and reasonable grounds:

- (a) the fact that the engineer is placed in a situation of conflict of interest or in a circumstance whereby his professional independence could be called in question;
- (b) inducement by the client to illegal, unfair or fraudulent acts;
- (c) the fact that the client ignores the engineer's advice.

3.03.05. Before ceasing to exercise his functions for the account of a client, the engineer must give advance notice of withdrawal within a reasonable time.

- In some instances, the engineer must cease and desist himself from a project.
- "Advance notice" may be very short, down to even a few hours or no delay at all, if the situation warrants it. Otherwise, the engineer may make himself liable.
- Needless to say, the notice should be given in writing.

TOPIC 5 : INDEPENDENCE AND IMPARTIALITY

3.05.01. An engineer must, in the practice of his profession, subordinate his personal interest to that of his client.

- To the extent of not being paid, if necessary.

3.05.02. Any engineer must ignore any intervention by a third party which could influence the performance of his professional duties to the detriment of his client.

Without restricting the generality of the foregoing, an engineer shall not accept, directly or indirectly, any benefit or rebate in money or otherwise from a supplier of goods or services relative to engineering work which he performs for the account of a client.

- This will include free or very inexpensive "productivity software".

3.05.03. An engineer must safeguard his professional independence at all times and avoid any situation which would put him in conflict of interest.

3.05.04. As soon as he ascertains that he is in a situation of conflict of interest, the engineer must notify his client thereof and ask his authorization to continue his mandate.

- This section is not dependent on section 3.05.02 and should not be invoked to justify a deliberate violation of section 3.5.03.

3.05.05. An engineer shall share his fees only with a colleague and to the extent where such sharing corresponds to a distribution of services and responsibilities.

- This is not meant to prohibit having employees or practicing in a corporation.

3.05.06. In carrying out a mandate, the engineer shall generally act only for one of the parties concerned, namely, his client. However, where his professional duties require that he act otherwise, the engineer must notify his client thereof. He shall accept the payment of his fees only from his client or the latter's representative.

- Self-explanatory. The usual exception is when the engineer serves as an independent mediator or expert to help resolve a dispute between two parties.

TOPIC 6 : PROFESSIONAL SECRECY

Professional Code, section 60.4. Every professional must preserve the secrecy of all confidential information that becomes known to him in the practice of his profession.

He may be released from his obligation of professional secrecy only with the authorization of his client or where so ordered or expressly authorized by law.

The professional may, in addition, communicate information that is protected by professional secrecy, in order to prevent an act of violence, including a suicide, where he has reasonable cause to believe that there is an imminent danger of death or serious bodily injury to a person or an identifiable group of persons. However, the professional may only communicate the information to a person exposed to the danger or that person's representative, and to the persons who can come to that person's aid. The professional may only communicate such information as is necessary to achieve the purposes for which the information is communicated.

- The right to professional secrecy belongs to the client, not to the professional.

3.06.01. An engineer must respect the secrecy of all confidential information obtained in the practice of his profession.

- Secrecy depends on four conditions :

1. the information is of a confidential nature
 2. the information becomes known to the engineer through communication
 3. the information is revealed to the engineer because of its confidential nature
 4. the information is communicated to the engineer by a client to enable the former to provide professional services to the latter
- The second condition is far reaching: it would mean that important facts discovered by an engineer in the course of his duties are not protected.
 - The intensity of the protection granted by the professional secret of the engineer is not as extensive as the doctor's or the lawyer's, and courts may require the secret to be demonstrated.

3.06.02. An engineer shall be released from professional secrecy only with the authorization of his client or whenever so ordered by law.

3.06.03. An engineer shall not make use of confidential information to the prejudice of a client or with a view to deriving, directly or indirectly, an advantage for himself or for another person.

- This is not obvious when "general knowledge" is concerned. If the actual confidential information is not duplicated but the engineer uses specialized knowledge he acquired through his work, he may be considered as innocent. However, he may be found liable if the tribunal decides that he could not possibly succeed in his new endeavours without some use of confidential information: this is sometimes referred to as the "springboard" theory.

3.06.04. An engineer shall not accept a mandate which entails or may entail the disclosure or use of confidential information or documents obtained from another client without the latter's consent.

- Consent is not to be presumed from the absence of a determined effort by the client to enforce confidentiality: the engineer is bound to respect confidentiality even if the client has not specifically requested it.

TOPIC 7 : RECORDS AND DOCUMENTS

The engineer must keep a register of his mandates and records thereof in accordance with sections 1.01 to 2.06 of the *Regulation respecting the keeping of records and consulting offices of engineers* (CQLR, c. I-9, r.13).

Professional Code, section 60.5. Every professional must respect the right of his client to examine documents concerning him in any record established in his respect, and to obtain a copy of such documents.

However, where authorized by law, a professional may refuse to allow access to the information contained in such a record.

Professional Code, section 60.6. Every professional must respect the right of his client to cause to be corrected any information that is inaccurate, incomplete or ambiguous with regard to the purpose for which it was collected, contained in a document concerning him in any record established in his respect.

He must also respect the right of his client to cause to be deleted any information that is outdated or not justified by the object of the record, or to prepare written comments and file them in the record.

Access to and correction of records and release of documents

3.07.01. Beyond the specific rules prescribed by law, an engineer must act, with diligence and no later than thirty (30) days following receipt thereof, on any request made by his client for the purposes of:

- 1° examining documents concerning him in any record established in this respect;
- 2° obtaining copies of documents concerning him in any record established in his respect.

3.07.02. An engineer who agrees to a request contemplated in section 3.07.01 shall give the client access to the documents in his presence or in the presence of a person authorized by him.

An engineer may, with respect to a request contemplated in subparagraph 2° of section 3.07.01, charge his client a reasonable fee not exceeding the cost of transmission, transcription or reproduction of a copy.

An engineer charging such fees shall, before they are incurred, inform his client of the approximate amount he will be asked to pay. An engineer has the right of retention concerning payment of such fees.

3.07.03. An engineer who, in applying the second paragraph of section 60.5 of the Professional Code, refuses to allow his client access to information contained in any record established in this respect, must furnish his client with the reasons for such refusal in writing.

3.07.04. Beyond the specific rules prescribed by law, an engineer must act, with diligence and no later than thirty (30) days following receipt thereof, on any request made by his client for the purposes of:

1° correcting information that is inaccurate, incomplete or ambiguous with regard to the purposes of which it was collected, in any document concerning him that is contained in any record established in his respect;

2° deleting any information that is outdated or not justified by the object of the record established in his respect;

3° placing his written comments in the record established in his respect.

3.07.05. An engineer who agrees to a request contemplated in section 3.07.04 shall give his client without charge a copy of the document or portion thereof showing the client that the information has been corrected, or, as the case may be, a certificate indicating that the written comments from the client have been placed in the record.

Upon receipt of a request in writing from the client, an engineer shall send, without charge to the client, a copy of such information or certificate to any person from whom an engineer received such information and to whom such information was given.

3.07.06. An engineer agrees to act with diligence on any request in writing made by his client for the purpose of taking back a document or item which the client had left with him.

The engineer indicates in the record established in respect of his client, as the case may be, the reasons for the client's request.

3.07.07. An engineer may require that a request contemplated in sections 3.07.01, 3.07.04 or 3.07.06 be submitted to his professional domicile during the usual hours of work.

TOPIC 8 : FEES

3.08.01. An engineer must charge and accept fair and reasonable fees.

- This section is intended to protect the clients only : the courts have made this clear in the mid 90's.

- There no longer is an enforceable engineer's fee table in Québec, and if there was any it might be contrary to federal fair trade laws. However, some associations have "indicative" fee tables.
- There are several ways to establish fees and one might be more appropriate depending on the circumstances :
 - Flat fee (for a project, for a task, etc...)
 - Hourly/daily rate
 - Percentage of the value of the work
 - "Cost Plus"
 - Any combination of the above
- Wages are not fees

3.08.02. Fees are considered fair and reasonable when they are justified by the circumstances and correspond to the services rendered. In determining his fees, the engineer must, in particular, take the following factors into account:

- (a) the time devoted to the carrying out of the mandate;
- (b) the difficulty and magnitude of the mandate;
- (c) the performance of unusual services or services requiring exceptional competence or speed;
- (d) the responsibility assumed.

- In essence, any fee that the engineer and client agree upon is reasonable if the client gives an informed consent.
- Some professionals argue that low fees make for lousy work and they would use this argument to justify minimal fees and prosecution of professionals who do not "charge enough". However, evidence supporting this theory is, at best, scant.

3.08.03. An engineer must inform his client of the approximate cost of his services and of the terms and conditions of payment. He must refrain from demanding advance payment of his fees; he may, however, request a deposit.

- This obligation persists throughout the project.
- The engineer cannot, however, hold any funds or property on behalf of a client or another person because the Board of directors of OIQ has not determined the conditions by regulation in keeping with section 89 of the *Professional Code*.²

² **89.** The members of an order may not, in the practice of their profession, hold funds or property, including advances on fees, on behalf of a client or another person, unless it is expressly authorized by the board of directors by regulation.

3.08.04. An engineer must give his client all the necessary explanations for the understanding of his statement of fees and the terms and conditions of its payment.

- Interests for late payment may be charged only if the contract provides for them.
- The engineer may not retain his work for reason of non-payment unless the contract specifically says so.

5.01.07. An engineer who, in his advertising, mentions fees or prices shall do so in a manner that can be understood by the public, which has no particular knowledge of the practice of engineering or the professional services covered by the advertising, and shall:

- 1° keep them in effect for the period mentioned in the advertising or, if no period is specified, for a period of ninety (90) days following the last publication or broadcast;
- 2° specify the nature and extent of the services included in such fees or prices;
- 3° indicate whether or not certain fees are included in such fees or prices;
- 4° indicate what additional services may be required which are not included in such fees or prices.

5.01.08. In the case of advertising offering a special price or a discount, an engineer shall specify how long such special price or discount is valid, as the case may be. This period may be less than ninety (90) days.

- Seen in lecture 07

REQUIRED READING

- *Code of Ethics of Engineers* (CQLR, c. I-9, r.6), Divisions III and V
 - <http://www.oig.qc.ca>, in the "Laws and regulations" / "Lois et règlements" or in www.canlii.org (use the search tool)

If it authorizes the members of the order to hold such funds or property, the board of directors must, subject to the Unclaimed Property Act (chapter B-5.1), determine by regulation

(1) procedures and standards for holding and disposing of such funds or property; and

(2) procedures and standards for keeping and auditing members' books and registers and, if applicable, for holding and auditing a trust account.

- *Regulation respecting the keeping of records and consulting offices of engineers* (CQLR, c. I-9, r.13)
 - <http://www.oiq.qc.ca>, in the "Laws and regulations" / "Lois et règlements" or in www.canlii.org (use the search tool)

SUGGESTED READING

- OIQ's "*Guide de pratique professionnelle*" (in French only)
 - <http://www.gpp.oiq.qc.ca/>
 - *Regulation respecting the cessation of practice of a member of the Ordre des ingénieurs du Québec* (CQLR, c. I-9, r. 5)
 - <http://www.oiq.qc.ca>, in the "Laws and regulations" / "Lois et règlements" or in www.canlii.org (use the search tool)
-