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Order of the Engineers

Ethical and Deontology Code

Introductory note

The current Ethical and Deontology Code integrates the stipulated on the statute of the Order of Engineers, approved on the decree-law no. 119/92, of the 30th of June, in conformity with the law no. 2/2013, of the 10th of January, that states the legal regime of creation, organization and functioning of the public professional associations, namely its TITLE II- Professional deontology (articles 135th and 144th)

In addition, beyond the restricted scope of the current Code, it is presented a "Brief Guide" that methodizes the orientation principles of it.

This document was approved by unanimity on the National Board of Directors meeting that held place on the 22nd of November of 2016.

Part I

Ethical and Deontological Code

I- Preamble

Engineering, a profession of public trust

- It is the goal of Engineering to preserve and improve the life conditions of the humankind. For that purpose, the Engineer appeals to scientific and technological knowledge of high complexity and specialization that, due to its nature, is not accessible to the generality of the parts interested on its professional activity, this is those who are or may be affected- positively or negatively- by the results of the performed engineering acts.
  It is also known that the unconsidered or improper use of the technologies, as well as the deficient quality of the processes, products or services conceived and produced by Engineers, may have tragic consequences, usually difficult to anticipate, and compromise the fundamental rights of the people and the environment.
  That is the nature of the public trust that embeds the Engineering practice.

- The engineering practice, as a profession of public trust, implies that the scientific and technical appraisal must be accompanied with the commitment to ethical principles and deontological duties inherent to the free and responsible practice of the profession.
  That is the importance of distinguishing, in that practice, a professional deontology capable of setting the duties and responsibilities required by the evolution of the professional environment, conciliating it with the long-lasting values implied with the nature of the humankind.
  Principles, values and practices that reveal an ethical foundation of engineering, capable of digging into and elevate the requirement standards of everyone that bind to a worthy practise of the profession, that the Order of Engineering, is always established as a defender and guarantee.

II- Ethics on Engineering

1 Responsibility

1.1 During the practice of their profession, the engineers are responsible for the acts they perform and the results that outcome from them, needing to guide their performance to the highest requirement standards, in accordance with their respective competences, specialities, specializations and qualifications.

1.2 Engineers must interiorize and assume strong principles of economic, social and environmental sustainability, with a perfect notion of the finite nature of the resources we are provided with and their defence and protection.

1.3 Engineers must take into account the implications resulting from their performance for the engineering community and the institutions of the society, as well as for the employers, collaborators, customers and technology users, promoting the treatment of people with fairness and respect and ensuring the observance of confidentiality duties, when appliable.

1.4 Engineers must know the laws and regulations relevant to the countries they are performing the profession and respect them, since they do not contradict the universal ethical principles, committing to apply, with a critical spirit, their professional competences, aiming their improvement.

1.5 Engineers must use prudence for, both the technical solutions and the technical improvement and innovation, taking responsibility for the quality, reliability and security of the technical processes conceived or executed, promoting the creation of the economic and social value on a sustainable basis.

1.6 The responsibility of the engineers applies, not only to the technical documentation but to the information for the customers, users and other parts interested, included, namely:

- The proper usage of the proposed solutions and possible hazards due to a misuse;
- The technical features of the products and processes in question;
- The misuse and intention of those products and processes;
- The suggestion of alternative approaches;
- The possibility of unexpected developments.

2. Orientation

2.1 Engineers are aware of the implications of integrating technical systems on the social, economic and environmental context, reason why, on the development of new technologies, they are worried with criteria and values such as:

- the sustainability of the technical systems based on them, during its whole life period;
- the adequation to its use and security;
- the contribution to health and well-being for citizens;
- the personal development on the direction of the common benefit.

The fundamental orientation on creating new technological solutions might be to keep open, for both current and upcoming generations, the possibility of a free and responsible action.

2.2 The sense of duty imposes on engineers the consideration of values of personal freedom and improvement of social, economic and environmental values as prerequisites for the well-being for all the citizens on a modern society.

2.3 Being aware that the last instance of their responsibility is their own conscience, engineers must avoid situations that may expose them to an external pressure and immediate, abusive and arbitrary constraints, to be specific, the ones related to bribery, corruption and other unlawful practices.

2.4 Engineers guide their professional responsibility on the same ethical fundaments than other members of the society. Therefore, engineers must not create products with an unethical purpose or participate in the creation of solutions likely to contribute to uncontrollable hazards or provoke significant damage.

2.5 In the case of a conflict of values, engineers must prioritize:

- human values on the dynamics of nature;
- human rights on implementation and technology exploration;
- The common benefit over private or corporate interests;
- security and protection over functionality and rentability of their technical solutions.

Engineers must adopt these orientations thoughtfully, promoting an open dialogue with the objective of finding an acceptable balance between the values in conflict.

Engineers must, therefore, prevent and try to resolve potential conflicts of interests on the processes they intervene, trying to avoid the occurrence of situations of dilemma with the decisions to take.

2.6 Engineers commit to participate in formation and educational activities in schools, universities, companies and professional institutions with the objective of promoting and building the technological education and encouraging and going deeper into the ethical reflection about technology.

2.7 Engineers must contribute to the continuous development and adaptation of the fundaments of ethics on engineering and participate in debates related to these topics.

3 Implementation

3.1 Engineers commit to keep updated and develop their attitudes and professional competences continuously, rejecting to practice professional performances for which they do not have a competence or are not legally enabled.

3.2 In the case of a conflict of interests, it is expected to analyze and consider the controversial sights through interdisciplinary and intercultural debates. In this manner, engineers acquire and reinforce their capacity to have an active role on these evaluations.

3.3 Engineers have a conscience of the importance of ethics on engineering, on the different institutional frames of the laws and regulations about the use of technology, the working conditions and environment. Adding that the diversity of frames potentiates the controversy about open questions related to engineering sciences and ethic. Engineers are, for that reason, challenged to use their professional judgement to fundament those questions.

In respect to the observance of legislation/ regulations, engineers, on their activity, must consider the following sequence of priorities: national laws have priority over professional regulation that, at the same time, have priority over individual contracts.

3.4 Every time engineers are involved in professional conflicts implying ethical nature matters that cannot be resolved with their employers, customers or colleagues, they can refer to the Order of Engineers that will provide adequate advice.

When these conflicts carry dilemma situations where there could be a significant hazard for health or safety of people and goods or environment, engineers must totally refuse their collaboration and, as a last resource, for consciousness imperative, warn competent authorities or public the existence of this hazards.

III- DEONTOLOGY OF THE PRACTICE OF THE ENGINEERING PROFESSION

It is within the context of the ethical responsibilities and the orientation principles of the engineer professional practice that, on the Order of the Engineers Statutes (OES), are found the deontological duties as listed here:

Duties from the engineer to the community (art. No. 141 of the OES)

1 It is a fundamental duty of the engineer to have a good preparation as to develop with competence their functions to contribute to the process of engineering and its better application for the service of humankind.

2 The engineer must defend the environment and natural resources.

3 The engineer must guarantee the safety of the executing staff, users and public in general.

4 The engineer must decline the fraudulent usage, or against the common benefit, of its work.

5 The engineer must look for the best technical solutions, considering first the economy and quality of the product or the works to project, direct or organize.

6 The engineer must fight against and denounce practices of social discrimination and child employment, assuming an attitude of social responsibility.

Duties from the engineer to the employer and customer (art. No. 142 of the OES)

1 The engineer must contribute to the achievement of the economic-social goals of the companies they integrate in, promoting the development of productivity, the improvement of the quality of products and the working conditions with a fair treatment to people.

2 The engineer must provide their services with diligence and punctuality so it may not cause any prejudice to the customer or third parties, never abandoning without a reason the works relying on them or their position.
3 The engineer must not divulgate or use professional secrets or information, specially the scientific, to technics obtained confidentially during the practice of their function, except for, if in conscience, considers the common benefit to be in hazard.
4 The engineer must be paid for the services that has effectively provided considering the fair value of it.
5 The engineer must refuse their collaboration on works which payment is subordinated to the confirmation of a predetermined conclusion, even though this circumstance may affect the remuneration setting.
6 The engineer must refuse compensations from more than one interested party on their job when there could be a conflict of interests or there is not consent form both parties.

Duties from the engineer to the profession practice (art. No. 143 of the OES)

1 The engineer, on its professional associative activity, must fight for the prestige of their profession and impose the value of their collaboration and an impeccable conduct, using always good faith, loyalty and exemption, both when acting individually or collectively.

2 The engineer must oppose to any disloyal competence.

3 The engineer must use the highest sobriety on the professional announcements that makes or authorizes.

4 The engineer must not accept works or execute functions beyond their competence or that demand more time that they count on.

5 The engineer must only sign opinions, projects or other professional works of which they are author or collaborator.

6 The engineer must only issue their professional opinions with objectivity and exemption.

7 The engineer must, on the practice of public functions, the company or on the works or services they develop their activity on, act with the best correction, in a way to avoid discrimination or disregard.

8 The engineer must refuse their collaboration on works on which they might have to stand for two different functions or that imply ambiguous situations.

Reciprocal duties between engineers (art. No. 144 of the OES)

1 The engineer must evaluate with objectivity the work of their colleagues, contributing to their appreciation and professional promotion.

2 The engineer must only claim the copyright when the relative originality and importance of their contribution justifies it, executing that right with respect for the intellectual property of somebody else and with the limitations imposed by the common benefit.

3 The engineer must collaborate as much as possible with colleagues when asked for.

4 The engineer must not prejudice the professional reputation or activities of colleagues, or let their work be underestimated, having the duty of highly appreciate them with protection of the class dignity.

5 The engineer must refuse to substitute other engineer, only doing it when the reasons for that substitution are right and giving the colleague the necessary satisfaction.

Part II

Ethical and Deontology on the practice of engineering

Brief guide

1 Engineers are responsible for the professional acts they perform.

2 Engineers commit to use, update and develop continuously their aptitudes and competences.

3 Engineers commit to implement and develop sustainable technological systems adequate for achieving the final goals.

4 Engineers are conscious of the effects of introducing technological systems on the social, economic and environmental context and the impact on the lives of the upcoming generation, focusing their action on the protection of the common benefit.

5 Engineers must avoid situations that may expose them to external pressure and immediate, abusive and arbitrary constraints.

6 Engineers respect laws and regulations relative to the use of technology, work conditions and environment.

7 Engineers, on the presence of a conflict of values and visions, must participate actively in an open, interdisciplinary and intercultural debate.

8 Engineers commit to foment a critical reflection about technology and its ethical dimension, not only within the Order of Engineers, but also in schools, universities, companies and other institutions they may participate in.

9 Engineers must contribute to the definition and the development of relevant laws and regulations, without renouncing to its ethical dimension and with the conscience that, specially at that level, it is present the need to choose between what should be of a higher value and what could be sacrificed.

10 Engineers could address to the Order of Engineers in the case of conflict or doubts regarding the application of ethical principles and deontological duties.