

Chapter 2. Codes of conduct

Having read this chapter and completed its associated questions, readers should be able to:

- Describe professional codes and corporate codes;
- Differentiate between three types of codes of conduct: aspirational, advisory, and disciplinary codes;
- Understand the role of codes of conduct with respect to the responsibility of engineers;
- Identify the strengths and weaknesses of codes of conduct;
- Evaluate the role of global codes for multinationals and for engineers.

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2.1 Introduction

Case: Bay Area Rapid Transport Project¹

In March 1972 Holger Hsortsvang, Max Blakenzee, and Robert Bruder, three engineers, working on the *Bay Area Rapid Transport Project (BART)* in California (United States) and responsible for the design and creation of an automatic guided train system, were dismissed. These engineers had been expressing their doubts about the safety of the system via internal memos since 1969 to their managers. The response was "don't make trouble". In 1971 they brought their concerns in confidence to members of the board of directors, thus bypassing their immediate superiors. That was unconventional for the BART organisation and indeed for any hierarchical organisation. The director they finally made contact with turned out to be very interested in their case and so he promised to raise it with the management. He furthermore promised to keep their names anonymous and do nothing to damage their interests. However, two days after the encounter the full story was published in the *Contra Costa Times*. At first the engineers denied having any involvement in the matter but once their involvement was confirmed they were immediately fired without cause or appeal. They subsequently took the matter to court.

In the wake of the affair one of the organisations to become involved was the Institute of Electrical and Electronic Engineers (IEEE). The IEEE decided to send what is known as an *amicus curiae* letter to the law courts. (An *amicus curiae* is an

¹ Based on Anderson et al. (1980), Anderson et al. (1983), and Unger (1994, 12-17).

"friend of the court": someone, not a party to a case, who voluntarily offers information on a point of law or some other aspect of the case to assist the court). The letter emphasised the fact that according to the IEEE's professional code, engineers are responsible for the 'safety, health and welfare of the public'. The IEEE also argued that the professional code is an implicit aspect of the employment contract. If this argument had been accepted by the judge then it would have meant that employees who act in accordance with what is stated in the professional code may not be simply dismissed.

After the three engineers had lost their job, their concerns were decisively confirmed on 2nd October 1972, three weeks after BART began carrying passengers. There was a train system accident and several passengers were wounded. Despite this, the three engineers accepted an out-of-court settlement reported to be \$25,000 per person. The presumed reason for this was that they had in the first instance lied about their involvement in the matter which had weakened their case. Apart from anything else, the dismissals were very detrimental for the careers of all three engineers.

In this case, the three engineers acted out of a sense of professional responsibility. This professional responsibility was codified in the IEEE code of conduct and was related to the safety, health and welfare of the public. Although their professional organization supported their behaviour, it could not prevent them from being dismissed. In this chapter, we discuss the role of codes of conduct in engineering. In particular, we focus on professional codes as they have been proposed by professional engineering societies and on corporate codes, as they have been formulated by companies. In section 2.2, we discuss these two types of codes, their structure and their content. In section 2.3, we discuss a number of common objections that have been levelled against codes of conduct. This includes the problem that is highlighted by the case above, i.e. acting according to the code, may nevertheless lead to dismissal. In section 2.4, we will discuss codes of conduct in an international context.

2.2 Codes of conduct

Codes of conduct are codes in which organizations lay down guidelines for responsible behaviour of their members. Such guidelines may be detailed and prescriptive, but they can also be formulated more broadly and express the values and norms that should guide behaviour and decision-making.² Codes of conduct are often intended as an addition to the requirements of the law. When codes of conduct are enforced this is usually done by the organization that formulated the code. For engineers, two types of codes of conduct are especially important: one, professional codes that are formulated by professional associations of engineers and, two, corporate codes of conduct that are formulated by companies in which engineers are employed.

Codes of conduct are formulated for a variety of reasons, like increasing moral awareness, the identification and interpretation of the moral norms and values of a profession or a company, the stimulation of ethical discussion, as a way to increase accountability to the outside world and, finally, to improve the image of a profession or company. Depending on the exact objectives of a code of conduct, a distinction can be made between three types of codes of conduct³:

² Hummels & Karssing (2007).

³ For a comparable distinction, see Frankel (1989).

- An *aspirational* code expresses the moral values of a profession or company. The objective of such a code is to express to the outside world the kind of values the profession or company is committed to.
- An *advisory* code has the objective to help individual professionals or employees to exercise moral judgments in concrete situations on basis of the more general values and norms of the profession or company.
- A *disciplinary* code has the objective to achieve that the behaviour of all professionals or employees meets certain values and norms.

Most professional codes for engineers are advisory. Usually, they have the following more specific objectives: increasing awareness of and sensitivity for moral issues in the daily exercising of the profession, helping in analyzing such moral issues and in formulating key questions or issues with respect to these moral issues, and, finally, helping in coming to a judgment on these moral issues. Corporate codes of conduct are more often disciplinary. In such cases, their objective is to achieve that all employees act according to certain guidelines. The formulation of codes of conduct is only one of the activities that professional associations and companies can undertake to stimulate responsible behaviour by their members. Other activities include the appointment of a confidant or committee which whom moral problems can be discussed or the organization of training sessions for dealing with moral dilemmas.

2.2.1 Professional codes

Professional codes are guidelines for the exercising of a profession that are formulated by a professional society. Professional codes have been formulated for a variety of professions like doctors, nurses, lawyers, priests, the police and corporate managers. Also engineers have professional codes of conduct.

What is a profession?

A profession is an occupation with specific characteristics. There is no agreement on what characteristics are exactly required to call an occupation a profession. The following characteristics are often mentioned:⁴

1. The use of specialized knowledge and skills requiring a long period of study.
2. A monopoly on the carrying out of the occupation: not everybody can call himself an engineer or do engineering work.
3. The assessment of whether the professional work is carried out in a competent way is done, and can only be done, by colleague professionals. They are the only ones who possess the knowledge and skills to apply the right standards of judgment.

Some authors have added two further characteristics:⁵

4. A profession provides society with products, services or values that are useful or worthwhile for society, and is characterized by an ideal of serving society.
5. Ethical standards, derived from or relating to the society serving ideal of the profession, regulate the daily practice of professional work.

⁴ See e.g. Layton (1971); Noble (1977), Disco (1990).

⁵ E.g. Davis (1998), Harris, Pritchard & Rabins (2005).

These authors view professional codes as an expression of the service ideal to society and the ethical standards that regulate the profession. Authors who do not include these two additional aspects in the definition of a profession are often more sceptical about the purpose of professional codes. They stress that professions may be self-serving and that codes of conduct might primarily be a means to acquire status and other privileges.

Historically, the development of professional codes for engineers began in England in 1771 with the code of the *Smeatonian Society*. More influential for the current professional codes for engineers was the formulation of a range of professional codes for different engineering professions like civil, mechanical and electrical engineering in the first decade of the twentieth century in the US. The early codes comprised rules for engineers that chiefly pertained to etiquette. The professional code regulated people's entry into the profession and the behaviour of members towards each other and in relation to employers and clients. While the early codes did not address broader social issues raised by engineering, this changed after the Second World War. The gas chambers and scientific experiments that had been carried out by the Germans on people during the Second World War gave science and technology a bad image. The atomic bomb also showed clearly that technology gave rise to certain moral issues.

Case: The atomic bomb⁶

In 1932 James Chadwick discovered the neutron, which later proved the key to nuclear fission and the discovery of the atomic bomb. The Hungarian scientist Leó Szilárd as early as October 1933 realized that "a chain reaction might be set up if an element could be found that would emit two neutrons when it swallowed one neutron."⁷ This chain reaction would result in the production of large amounts of energy that might be used to produce energy but might also be put to bad purposes. In the same year, Hitler had come to power in Germany and Szilárd had fled to London to escape Nazi prosecution. Szilárd therefore started lobbying for not publishing the results of studies on this topic, as he feared they could be misused by the German government; he was however not very successful.

In 1934 the research groups of both Enrico Fermi and Irene Joliot-Curie disintegrated heavy atoms by spraying them with neutrons. At this point these scientists did not realize that they had achieved fission. It took until 1938 before the experiments were rightly interpreted, after another experiment with bombarding uranium with neutrons by the German physicist Otto Hahn, who is usually credited with discovering nuclear fission. On 2 February 1939, Szilárd wrote a letter to Joliot-Curie: "Obviously, if more than one neutron were liberated, a sort of chain reaction would be possible. In certain circumstances this may then lead to the construction of bombs which would be extremely dangerous in general and particularly in the hands of certain governments"⁸, and "We all hope that there will be no or at least not sufficient neutron emissions and therefore nothing to worry about."⁹ At that time, Joliot-Curie was just at the point of experimental realization of the mentioned chain reaction and her group published the results to the dismay of Szilárd.

As Szilárd feared that the Germans might be able to develop an atomic bomb, he began to look for ways to persuade the US government also to do so. In August 1939, he succeeded in convincing Einstein in signing a letter to President

⁶ This box is mainly based on Jungk (1958).

⁷ Jungk (1958, 54).

⁸ Jungk (1958, 77).

⁹ Jungk (1958, 77).

Roosevelt in which they warned for the developments in Germany and urged for more American studies on the subject. The letter eventually reached Roosevelt in October 1939, and contributed to the establishment of the so-called Manhattan Project, a large research project in the US that would eventually result in the production of atomic bombs. After the war, Einstein came to regret his cooperation deeply: "If I had known that the Germans would not succeed in constructing the atom bomb, I would never have lifted a finger."¹⁰

Towards the end of the war, a number of scientists working on the Manhattan Project became concerned about the use of the atomic bomb they had developed by the US government. In July 1945, 69 scientists signed a petition drafted by Szilárd. This petition, among other contained the following passages¹¹:

We, the undersigned scientists, have been working in the field of atomic power. Until recently, we have had to fear that the United States might be attacked by atomic bombs during this war and that her only defense might lie in a counterattack by the same means. Today, with the defeat of Germany, this danger is averted and we feel impelled to say what follows:

The war has to be brought speedily to a successful conclusion and attacks by atomic bombs may very well be an effective method of warfare. We feel, however, that such attacks on Japan could not be justified, at least not unless the terms which will be imposed after the war on Japan were made public in detail and Japan were given an opportunity to surrender.

The added material strength which this lead [in the development of the atomic bomb] gives to the United States brings with it the obligation of restraint and if we were to violate this obligation our moral position would be weakened in the eyes of the world and in our own eyes. It would then be more difficult for us to live up to our responsibility of bringing the unloosed forces of destruction under control.

The signed petition never reached President Truman. On 6 August 1945, the US dropped the atomic bomb "Little Boy" on the city of Hiroshima, followed on August 9 by the dropping of the "Fat Man" nuclear bomb over Nagasaki. The bombs killed as many as 140,000 people in Hiroshima and 80,000 in Nagasaki by the end of 1945. On August, 15 1945, Japan announced its surrender to the Allied Powers.

One of the ways of restoring the social image of science and technology after the Second World War was by establishing professional codes. In 1950 the German engineers' association, the Verein Deutscher Ingenieure (VDI), drew up an oath for engineers, which was clearly inspired by the dubious role of some engineers and scientists during the Second World War. One of the things stated in the professional code was that engineers should not work for those who fail to respect human rights.¹² Also in the US, most of the professional codes were reformulated after the Second World War: the duty of the engineer to serve the public interest was especially stressed in the new codes of conduct. Organisations like the National Society of Professional Engineers (NSPE), the American Society of Civil Engineers (ASCE) and The American Society of Mechanical Engineering (ASME) formulated codes of conduct stating that engineers "should hold paramount the safety, health and welfare of the public."

In addition to national engineering societies, Europe has an overarching professional organization, the European Federation of National Engineering Associations (FEANI). FEANI was established in 1951 by a group of German and

¹⁰ Jungk (1958, 87).

¹¹ <http://www.dannen.com/decision/45-07-17.html>

¹² VDI, 'Bekentennis der Ingenieure' (1950), i.e. 'The Confession of Engineers' included in Lenk & Ropohl (1987, 280).

French engineers. At the moment, professional associations from 29 European countries are member of FEANI.¹³ FEANI has formulated a universal statement regarding the conduct of professional engineers, which can be implemented by national member's societies in their code of conduct. The FEANI code thus has a quite different status than most US codes like the NSPE code which is reflected in the content of the code, in particular the FEANI code is much more general (and vague) and contains much less details than for example the NSPE code.

Professional codes for engineers provide content to the responsibility of engineers. They express the moral norms and values of the profession. Most modern professional codes relate to three domains: 1) conducting a profession with integrity and honesty, and in a competent way; 2) obligations towards employers and clients; 3) responsibility towards the public and society.

Integrity and competent professional practice

All professional codes include the obligation to practice one's profession with integrity and honesty, and in a competent way. This is the traditional core of all professional codes. To practice one's profession in a competent way means that the practitioner must be competent and the professional practice must be conducted skilfully. This implies that the practitioner must be well enough educated, must keep up to date in his field and must take only work in his field of competence. With integrity and honesty we mean that the profession must be conducted in an honest, faithful and truthful manner. This entails, for instance, that facts may not be manipulated and agreements must be honoured. Sometimes it is also stipulated that the profession must be practiced in an independent and impartial way. Usually this is meant to imply that engineers should avoid conflicts of interests. You have a conflict of interest if you have an interest that, when pursued, conflicts with meeting your obligations to your employer or clients. This may be a personal interest, like when you have stocks in a company that produces a certain kind of measuring apparatus and you have to advise a large client about what measuring apparatus to use. It can also be an interest that derives from another professional role, for example when you advise two competing firms. Although conflicts of interest do not necessarily lead to immoral behaviour it is better to avoid them because a conflict can corrupt your professional judgement and diminishes your trustworthiness as engineer. If a conflict of interest is unavoidable it should at least be disclosed to the interest parties.

"Engineers shall perform services only in the areas of their competence." (NSPE Code of conduct)

"Engineers shall issue public statements only in an objective and truthful manner." (NSPE Code of conduct)

"Engineers shall not be influenced in their professional duties by conflicting interests." (NSPE Code of conduct)

"Engineers shall maintain their relevant competences at the necessary level and only undertake tasks for which they are competent." (FEANI)

Obligations towards clients and employers

Obligations towards clients and employers are mentioned in most professional codes. In many cases, it is stipulated that engineers should serve the interests of their clients and employers and that they must keep secret the confidential information passed on by clients or employers.

¹³ www.feani.org visited 24 August 2007.

"Engineers shall act for each employer or client as faithful agents or trustees."
(NSPE Code of conduct)

"Engineers shall not disclose, without consent, confidential information concerning the business affairs or technical processes of any present or former client or employer, or public body on which they serve." (NSPE Code of conduct)

"Engineers shall provide impartial analysis and judgement to employer or clients, avoid conflicts of interest, and observe proper duties of confidentiality." (FEANI)

Social responsibility and obligations towards the public

Virtually all professional codes in one way or another emphasize the social responsibility of engineers. Matters frequently referred to are: safety, health, the environment, sustainable development, and the welfare of the public. According to a limited number of professional codes engineers must inform the public about the aspects of the technology in which they are involved and that are relevant to the public, such as the risks and hazards involved.

"Engineers shall hold paramount the safety, health, and welfare of the public."
(NSPE Code of conduct)

"Engineers shall at all times strive to serve the public interest." (NSPE Code of conduct)

"Engineers are encouraged to adhere to the principles of sustainable development in order to protect the environment for future generations." (NSPE Code of conduct)

"Engineers shall carry out their tasks so as to prevent avoidable danger to health and safety, and prevent avoidable adverse impact on the environment." (FEANI)

2.2.2 Corporate codes

Corporate codes are voluntarily commitments made by individual companies or associations of companies setting certain values, standards and principles for the conduct of corporations. Corporate codes are usually more recent than professional codes. They have been formulated since the 1960s and 1970s, particularly in reaction to corporate scandals.¹⁴ According to a survey that was carried in 2001 and 2002, 52% of the 200 largest companies in the world have a corporate code.¹⁵ A distinction can be made between three types of corporate codes: stakeholder statutes, value statements and codes of conduct.¹⁶ Stakeholder statutes state the responsibility of a company towards its stakeholders. Value statements contain the core values of a company, and codes of conduct contain detailed rules and norms for the behaviour of individual employees. A number of corporate codes combine these three functions. Below, we will discuss the main elements of the various kinds of corporate codes: the mission, the core values, the responsibilities towards stakeholders and detailed rules and norms.

Corporate Social Responsibility

¹⁴ Ryan (1991)

¹⁵ Kaptein (2004).

¹⁶ Kaptein (2004).

The formulation of corporate codes is based on the assumption that companies have a corporate social responsibility, i.e. a responsibility towards stakeholders and to society at large. This assumption has been contested by several authors who maintain that the responsibility of a company is limited to making profit within the limits of the law. This so-called classical view on corporate responsibility can be traced back towards Adam Smith, the founder of modern economics. According to Smith, the invisible hand of the market makes everyone better off if all people, producers and consumers alike, only pursue their own interests.¹⁷ An important contemporary defender of the classical view is the economist and Noble Prize laureate Milton Friedman. According to Friedman, companies only have responsibilities towards their shareholders and not to any other stakeholders, society or the environment.¹⁸ He considers it undesirable that companies take into account other stakeholders' interests and views. He provides two arguments for this statement. First, money spent by a corporation on social responsibility is ultimately the money of the shareholders and this expenditure conflicts with their goal to maximize profits. Second, corporations are not democratically elected. When companies formulate their own ideas about what is morally allowable or desirable they are enforcing their own particular view upon others without any democratic legitimization. If any limits on corporate behaviour are desirable, they have to be formulated by the government, not by companies.

A number of objections can be raised against Friedman's view. First, although responsibilities to other stakeholders can conflict with shareholders' interests, this is not always the case. Companies are aware that corporate responsibility initiatives do not necessarily have a negative impact on their bottom line, and that they can have an extremely positive impact. In other words, the thought that "ethics is a luxury we can't afford" is replaced by "ethics pays".¹⁹ Second, laws are not always adequate or effective in preventing immoral behaviour. Not everything that is morally desirable can be laid down in the law. Laws also tend to lag behind technological development and companies might be in a better position to foretell moral issues raised by new technology than the government. Hence, they have a responsibility that extends beyond what the law requires.

Mission statement

Many corporate codes contain a mission statement that concisely formulates the strategic objectives of the company and answers the question what the organization stands for.

"At Microsoft, we work to help people and businesses throughout the world realize their full potential. This is our mission. Everything we do reflects this mission and the values that make it possible." (Microsoft mission statement)

"The mission of Merck is to provide society with superior products and services by developing innovations and solutions that improve the quality of life and satisfy customer needs, and to provide employees with meaningful work and advancement opportunities, and investors with a superior rate of return." (Mission statement of Merck, a pharmaceutical company)

Core values

Core values express the qualities that a company considers desirable and which ground business conduct and outcomes. They imply an appeal on the attitudes of employees but do not contain detailed rules of conduct. Often mentioned values

¹⁷ Smith (1776).

¹⁸ Friedman (1962).

¹⁹ Paine (2000, 329).

include teamwork, responsibility, open communication and creativity.²⁰ Also values like customer orientation, flexibility, efficiency, professionalism and loyalty are regularly mentioned.

"As a company, and as individuals, we value:

- Integrity and honesty.
- Passion for customers, for our partners, and for technology.
- Openness and respectfulness.
- Taking on big challenges and seeing them through.
- Constructive self-criticism, self-improvement, and personal excellence.
- Accountability to customers, shareholders, partners, and employees for commitments, results, and quality." (Microsoft)

Responsibility to stakeholders

Most corporate codes also express responsibilities to a variety of stakeholders like consumers, employees, investors, society and the environment. Competitors and suppliers are also sometimes mentioned as stakeholders. Typically, responsibility to the environment is more often mentioned in European than in American codes. Conversely, responsibilities to competitors are far more often mentioned in American than in European or Asian codes.

With respect to customers, the supply of qualitatively good products and services is often mentioned as a responsibility. Also sustainability, and enhancing the health and safety of consumers are important topics. With respect to employees, regularly mentioned responsibilities include encouraging personal development, respect and equal opportunity. With respect to society, the most mentioned responsibility is observing the law. Also being a good corporate citizen and contributing to society are named. Less often cited responsibilities include enhancing the quality of life, sustainability and respecting human rights.

In addition to responsibilities towards stakeholders, some corporate codes also contain *stakeholder principles* that guide the relationship between company and stakeholders. The most mentioned stakeholder principles are transparency, honesty (truth) and fairness (impartiality).²¹ In American codes, honesty is more often included than transparency, whereas in European and Asian codes the relation is reversed. Japanese companies relatively often cite trust as a stakeholder principle compared to American and European companies.

From Lockheed Martin's *Setting the standard; Code of ethics and business conduct*:

"Our commitments:

- For our *employees*: we are committed to honesty, just management, fairness, a safe and healthy environment free from the fear of retribution, and respecting the dignity due everyone.
- For our *customers*: we are committed to produce reliable products and services, delivered on time, at a fair price.
- For the *communities in which we live and work*: we are committed to observe sound environmental business practices and to act as concerned and responsible neighbors, reflecting all aspects of good citizenship.
- For our *shareholders*: we are committed to pursuing profitable growth, without taking undue risk, to exercising financial discipline in the deployment of our assets and resources, and to making accurate, timely, and clear disclosures in all public reports and communications.

²⁰ The description of the content of corporate codes of conduct here and below is based on Kaptein (2004).

²¹ Kaptein (2004).

- For our *suppliers and partners*: we are committed to fair competition and the sense of responsibility required of a good customer and teammate.”

Norms and rules

Norms and rules contain guidelines for employees how to act in specific situations. This may include subjects like the acceptance of gifts, fraud, conflicts of interest, confidentiality, theft, corruption, bribery, discrimination, respect and sexual harassment.

Some rules from Intel’s *How the Corporate Business Principles Apply to You*:

- “Employees must follow the law wherever they are around the world and in all circumstances. Do not engage in behavior that harms the reputation of Intel or yourself. If you wouldn’t want to tell your parents or your children about your action, or would be embarrassed to read about it in a newspaper, then don’t do it.
- Employees must avoid both actual and perceived conflicts of interest.
- Customers and suppliers must be dealt with fairly and at arm’s length.
- Employees must never attempt to bribe or improperly influence a government official, customer or supplier.”

Two examples from the IBM document *Ethics and Compliance*:

“Generally, it is not appropriate for an employee to accept a supplier’s invitation to attend an entertainment or sporting event at the supplier’s expense. An invitation to an entertainment or sporting event such as a golf or tennis tournament may be appropriate if it demonstrably helps to build or maintain a business relationship. Before accepting such an invitation, an employee must obtain approval from a Vice President, a Regional Sales Manager or Corporate Director of Purchasing. Sound judgment is necessary for determining when invitations to such events are appropriate.”

“Paying a freight forwarder to expedite a shipment through customs is not acceptable if the agent doesn’t follow applicable rules and regulations, and if the agent gives money or payment in kind to a government official for personal benefit. On the other hand, expediting by following rules and regulations and without bribing officials is acceptable.”

2.3 Possibilities and limitations of codes of conduct

As we have seen, codes of conduct help to express the responsibilities of engineers. They are therefore a useful point of departure for discussions about these responsibilities. Still, in the course of time, a number of objections against code of conduct have been levelled. Below, we discuss the main objections. In judging these objections, one should keep in mind that codes of conduct may have different objectives. Especially the difference between aspirational, advisory and disciplinary codes is relevant here. Objections against disciplinary codes are not always sound objections against advisory codes and vice versa. Although the objections discussed below show some of the limitations of codes of conduct, none of them is strong or convincing enough to conclude that codes of conduct as such are undesirable. Much depends on the actual formulation and implementation of the code.

2.3.1 Codes of conduct and self-interest

Codes of conduct are a form of self-regulation. Sometimes, they are primarily formulated for reasons of self-interest, for example to improve one's image to the outside world, to avoid government regulation or to silence dissident voices. An example in which the latter happened is the case of Jon Tozer (see box).

Case: John Tozer²²

In 1989 the Australian engineer John Tozer criticized the decision of the Coffs Harbour authorities to pump sewage into the sea. According to him the engineers employed by the local authority had given a misleading impression of the effects upon the environment and they had failed to properly investigate the alternatives. The engineers in question were subsequently successful in removing Tozer from the Association of Consulting Engineers Australia (ACEA). Tozer was accused of having contravened the professional code by openly criticizing the work of other (associated) engineers. Because of his disbarment Tozer, who has his own consulting engineering firm, is no longer able to fulfil any contracts for customers demanding ACEA membership.

The fact that self-interest plays a role in formulating codes of conduct is not necessarily objectionable as long as the content of the code is ethical and serious attempts are made to live by the code of conduct. One way to ensure this is to include a range of stakeholders in the formulation and implementation of the code of conduct to avoid that the code becomes one-sided.

A code of conduct serving only the interests of a company or profession may amount to window-dressing. We speak of window-dressing if a favourable impression is presented of what the company is doing but that impression does not represent how the company and its employees actually behave. In cases of window-dressing, it may, for example, well be the case that the existence of the code is unknown to members of the organization while at the meantime the code is used in communication with the outside world. The danger of window-dressing is especially present in the case of aspirational codes because they tend to be very vague and general.

Case: Google in China: a case of window-dressing?²³

"While removing search results is inconsistent with Google's mission, providing no information... is more inconsistent with our mission" (Google statement)

Google, the leading Internet search engine company in the world, entered the Chinese market in early 2000 by creating a Chinese-language version of its home page, google.com, that was located in the United States but that could handle search requests from China. In this way, the technology was not subject to Chinese censorship laws as the facilities were not within China's physical boundaries, and Google did not need a license from the Chinese government to operate its business. In 2002, the Chinese version of Google was shut down by the Chinese government for two weeks. When reinstated, it was very slow for all Chinese users and completely inaccessible for Chinese colleges and universities. By 2005, the Chinese search engine company Baidu emerged as the leading internet search company in China. To compete with Baidu, Google decided in 2006 to launch a Chinese website – www.google.cn – and agreed to censor its content enforced by means of filters known as 'The Great Firewall of China'. "Harmful" content included

²² Based on Beder (1993).

²³ Based on Martin (2008), Dann & Haddow (2008), and Congressional Testimony "Internet in China" of Schrage (2006).

material concerning democracy (e.g., freedom), religious cults (e.g., Falun Gong), or antigovernment protests (e.g., Tiananmen Square). Google received much criticism from human rights advocates because it censored information such as human rights.

A moral question is here whether Google's slogan "Don't be Evil" ("It's about providing our users unbiased access to information") and their mission statement "Google's mission is to organize the world's information and make it universally accessible and useful" have been consistently followed. By censoring information, one could argue that Google has strayed from dedication to helping every user get unrestricted access to content on the internet. Google admitted that the launching of google.cn was problematic with respect to their mission. In the words of Schrage, Google's vice president of Global Communications and Public Affairs: "[Google, Inc., faced a choice to] compromise our mission by failing to serve our users in China or compromise our mission by entering China and complying with Chinese laws that require us to censor search results. ... Self-censorship, like which we are now required to perform in China, is something that conflicts deeply with our core principles. ... This was not something we did enthusiastically or something we're proud of at all."

On March, 22 2010 after a cyber attack on Google's servers and increased demands for censoring, Google decided no longer to censor its search results. In the words of David Drummond, senior vice president of Google Corporate Development and Chief Legal Officer: "On January 12, we announced ... that Google and more than twenty other U.S. companies had been the victims of a sophisticated cyber attack originating from China, and that during our investigation into these attacks we had uncovered evidence to suggest that the Gmail accounts of dozens of human rights activists connected with China were being routinely accessed by third parties, most likely via phishing scams or malware placed on their computers. We also made clear that these attacks and the surveillance they uncovered—combined with attempts over the last year to further limit free speech on the web in China including the persistent blocking of websites such as Facebook, Twitter, YouTube, Google Docs and Blogger—had led us to conclude that we could no longer continue censoring our results on Google.cn. So earlier today we stopped censoring our search services ... on Google.cn. Users visiting Google.cn are now being redirected to Google.com.hk, where we are offering uncensored search in simplified Chinese, specifically designed for users in mainland China and delivered via our servers in Hong Kong."²⁴ On March, 30 2010, the Chinese government blocked access to Google's search engine from Mainland China.

2.3.2 Vagueness and potential contradictions

In the application of codes of conduct to concrete situations, one is frequently confronted with rather vague concepts and rules that need interpretation. Depending on the exact interpretation of such concepts and rules, codes of conduct sometimes result in contradictory recommendations about what to do in a specific situation.

One relevant notion from codes of conduct that is in need of further clarification and interpretation is 'loyalty.' The NSPE code of conduct, for example, requires that engineers "shall act for each employer or client as faithful agents or trustees."

²⁴ <http://googleblog.blogspot.com/2010/03/new-approach-to-china-update.html>
Accessed April, 11 2010

This means that engineers need to be loyal to their company.²⁵ But what does loyalty exactly amount to? Take, for example the case of the three BART engineers discussed at the beginning of this chapter. Did the engineers acted disloyal because they spoke out against their organization? The answer to this question is yes if one interprets loyalty as *uncritical loyalty*. Harris, Pritchard and Rabins define uncritical loyalty to an employer as “placing the interests of the employer, as the employer defines those interests, above any other consideration.”²⁶ Such uncritical loyalty may, however, be misguided.²⁷ First, one might disagree about what the interests of the employer are. In the BART case, it might well be argued that it was not in the interest of the BART organization to keep silent the technical problems. So conceived, the BART engineers acted loyal to the interests of the company. Second, it might be doubted whether the interests of the company should always override any other concerns, especially in cases when the public is put at danger. To deal with such objections, Harris, Pritchard and Rabins propose the notion of *critical loyalty* which they define as “giving due regard to the interest of the employer, insofar as this is possible within the constraints of the employee’s personal and professional ethics.”

Apart from vagueness, codes of conduct may be plagued by inconsistencies, both within codes and between codes. Let us look at the rules for confidentiality and disclosure of information contained in three different codes of conduct (see box).

NSPE (National Society of Professional Engineers, US):

“Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized or required by law or this Code.” (Rule of practice 1c)

“Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.” (Rule of practice 1f)

FEANI (European Federation of National Engineering Associations):

“Engineers shall ... observe proper duties of confidentiality.”

“Engineers shall be prepared to contribute to public debate on matters of technical understanding in fields in which they are competent to comment.”

IEEE (Institute for Electrical and Electronic Engineers):

“We, the members of the IEEE, [...] agree to accept responsibility when making engineering decisions consistent with the safety, health and welfare of the public, and to disclose promptly factors that might endanger the public or the environment.”

There are important differences between these three codes. The IEEE code does not contain a confidentiality requirement, while the other two do. Conversely, the FEANI code is silent about informing third parties when the code is violated or the public is put at risk, probably because the code is only intended as a common framework that can be further detailed by member societies in their own national codes. Note also that the NSPE Code identifies different parties that should be informed in the case of code violations than the IEEE code. Whereas the IEEE Code

²⁵ Harris et al. (2005, 191).

²⁶ Harris et al. (2005, 191).

²⁷ Martin & Schinzinger (1996, 193-195).

would encourage the BART engineers to speak out in public, the NSPE code tells them to inform the proper authorities. The prescription flowing from the FANI code is less clear. If one interprets "contributing to public debate" as informing the public about possible hazards, one might say that engineers have a right to speak out on basis of the second rule in the box. On this interpretation, "contributing to public debate" conflicts with the rule about confidentiality. This conflict is not resolved in the code. This conflict might be avoided by an interpretation of "contributing to public debate" that excludes making public confidential information, even if this is information about the possible malfunctioning of a technical system.

As this example reveals the degree to which codes of conduct are vague and potentially contradictory is different from code to code. This means that attempts can be made to avoid vagueness and contradictions. The NSPE has gone some way in doing so in its code. In addition, the Board of Ethical Review of the NSPE has in the past published anonymous cases in which a judgment was presented whether certain behaviour was in accordance with the code of conduct or not.²⁸

2.3.3 Can ethics be codified?

Some authors have argued that the idea of drafting a code of conduct is misperceived because ethics cannot be codified. In a sense, this objection is the mirror of the previous one. Whereas people who criticize the vagueness and potential contradictions in codes of conduct are worried that such codes do not uniformly prescribe certain behaviour, people who argue that ethics cannot be codified are often worried that codes of conduct contain strict prescriptions which conflict with what ethics is about according to them. We will consider three different arguments why ethics cannot be codified.

One argument is that ethics requires individual moral judgment, instead of blindly following a code.²⁹ In the terminology of the philosopher Immanuel Kant, following a code of conduct may be based on heteronomous motives, i.e. motives originating outside the acting person like fear for sanctions while moral behaviour requires autonomous decisions and behaviour (see further chapter 3). However, even if ethics requires autonomous decision-making, it does not follow that code of conduct are necessarily objectionable. What is objectionable is a certain uncritical ways of using codes of conduct. However, an advisory code need not conflict with the moral autonomy people retain in deciding whether to follow the code or not. Nevertheless, in the case of disciplinary codes the argument may be sound because disciplinary codes suppose that the code is strictly adhered to.³⁰

A second argument is that codes of conduct are not morally binding.³¹ As the box shows, a variety of arguments why codes of conduct are binding can be given. Even if one rejects the view that codes of conduct entail a contract, one might still argue that codes of conduct express already existing moral responsibilities and obligations. In that case, a code of conduct cannot create new moral obligations beyond what was already morally required. From this, however, it does not follow that a code is superfluous. It might still be helpful, for example, to remind people of their moral obligations and responsibilities.

Why are codes of conduct morally binding?

²⁸ The cases can be found at <http://www.niee.org/cases/index.htm> (visited 24 August 2007).

²⁹ Ladd (1991).

³⁰ There may be, however, non-moral arguments for having a disciplinary code.

³¹ Cf. Ladd (1991).

Three explanations have been offered why codes of conduct are morally binding:

- 1) One possible explanation is that codes of conduct entail an implicit contract between engineering as a profession and the rest of society.³² According to this explanation, professionals serve a moral ideal in exchange to privileges as status, a monopoly on carrying out the occupation and good salaries. In this explanation, professionals are bound by professional codes because they have implicitly signed a contract with society. This contract creates a moral obligation to follow the code of conduct of a profession.
- 2) A second explanation is offered by Michael Davis. He defines a profession as follows: "A profession is a number of individuals in the same occupation voluntarily organized to earn a living by openly serving a certain moral ideal in a morally-permissible way beyond what law, market, and morality would otherwise require."³³ One important feature of this definition is that being a profession is a voluntary choice. According to Davis, the existence of professional codes for engineers testifies that engineers indeed have made this choice. Such codes are binding because being a member of a profession implies an implicit contract with your colleague professionals. This contract creates a level playing field so that all professionals can pursue the moral ideal.
- 3) A third explanation is that the codes of conduct as such are not morally binding but that they express moral responsibilities that are grounded otherwise. Michael Pritchard, for example, has argued that engineering codes of conduct are based on common morality.³⁴

Similar arguments may be given for corporate codes. These can also be seen as (1) a contract between a company and society or (2) as a contract between employees of a company or (3) as an expression of the moral responsibilities and obligations a company and its employees have on other grounds.

A third argument against codes of conduct is that they presuppose that morality can be expressed in a set of universal moral rules. One reason why this is questionable is that engineering is too diverse, both in terms of disciplines (civil engineering, mechanical engineering, electrical engineering, aerospace engineering, etc.) and in terms of activities (research, design, testing, maintenance, etc.) for one code to apply. This objection can, however, be dealt with by having a variety of codes of conduct. A more fundamental objection is that sound moral judgment always requires taking into account the particularities of a situation.³⁵ According to this line of reasoning, it is not surprising that codes of conduct always require interpretation in particular situations.

Two points are worth noting about these three arguments. First, the arguments are merely directed against disciplinary codes. Such codes are strictly prescriptive and are enforced. Enforcement usually requires that the room for interpretation of the code is limited. Moreover, enforcement makes it desirable that the code is morally, or at least legally, binding. The arguments are less, if at all, convincing in the case of advisory and aspirational codes. Second, in as far as especially the first and third argument are sound, they imply that it is neither possible nor desirable to try to avoid all room for interpretation in the formulation of a code of conduct. This suggests that one needs to accept some degree of vagueness and some potential conflicts in codes of conduct.

³² Harris et al. (2005)

³³ Davis (1998, 417).

³⁴ Pritchard (2009).

³⁵ E.g. Dancy (1993).

2.3.4 Can codes of conduct be lived by?

Codes of conduct sometimes contain provisions that are very difficult or impossible to follow in practice. Professional codes can, for example, justify or require actions that go against the interest of the employer. The BART case, which with this chapter started, is an example. More generally, professional codes sometimes require that engineers inform the public timely and completely if the safety, health or welfare of the public is put at stake in a technological project. This duty to inform the public can conflict with the confidentiality duty that engineers also have according to the law in many countries. If engineers in such situations release information outside the company in which they are working, they are blowing the whistle (see chapter 1).

Engineers, and other employees, who blow the whistle are usually in a weak position from a legal point of view.³⁶ The situation is different from country to country, but the laws that regulate employment contracts in most countries either impose certain confidentiality duties on employees or they allow the employer to order the employee to keep silent certain specific information, or they do both. The reason for this is twofold. First, confidentiality may be required to protect the competitive position of one company versus another. Second, such laws are intended to avoid that employees disproportionately damage the company for which they are working by making public certain information. Breaching confidentiality duties may be a ground for dismissal in some countries. In other countries, like the US, employees can be dismissed at will by the company.³⁷ However, the employee can hold the company liable for the damage of dismissal on unjust grounds.

Limits to confidentiality duties

There are limits to the confidentiality duties that companies can impose upon their employees. First, in many countries freedom of speech is legally protected. Historically, freedom of speech is understood to apply to the relation between the state and an individual citizen and not to the relation between a company and an individual employee, which is basically a relation between citizens, according to the law. There is, however, a tendency in law also to apply fundamental rights like the freedom of speech to relations between organizations and individuals. This does not mean that employees have complete freedom of speech, but it might mean that confidentiality duties should be weighed against, or be proportional to the freedom of speech of an employee and the legitimate interests of an employer. Second, in some cases there are legal requirements to make public certain information, or to inform the government or the public prosecutor about certain abuses. These legal requirements may override confidentiality duties. Third, engineers might argue that they have a professional duty, based on their professional code of conduct, to make public certain information. This happened in the BART case and was supported by the professional association of electrical engineers, the IEEE, but to no avail. Fourth, employees can argue that it is in the public interest that certain information is made public. Again, the success of this strategy in court seems limited. In response, several governments have formulated special laws to protect whistleblowers (see also box). In the US there has been legislation protecting whistle blowers for twenty years. In recent times this has been adapted to give whistle blowers greater protection. Recently large financial

³⁶ Malin (1983).

³⁷ Convention 158 of the International Labour Organization states that an employee "can't be fired without any legitimate motive" and "before offering him the possibility to defend himself". The US has not ratified this convention.

rewards have been paid to whistle blowers who brought to light fraud or tax abuse. Nevertheless, also in these cases whistle blowers usually only have a limited amount of legal leverage in the first place and they almost always eventually lose their jobs.

Protection of whistle blowers

In several countries, attempts have been undertaken to protect whistle blowers legally. The main initiatives have been undertaken in the US and the UK³⁸:

In the United States, the Sarbanes-Oxley Act (SOX) came in force in 2002. This act requires companies to adopt policies for internal whistle blowing with respect to accounting and auditing. Companies can also apply such procedures to other kinds of violations covered by their code of conduct. Prior to SOX, federal whistleblower statutes only covered the public sector, or related to more specific areas like safety and the environment.

In the U.K., the Public Interest Disclosure Act of 1998 protects both internal and external whistle blowers from retaliation, but does not provisions with respect to whistle blowing policies of companies. The Combined Code on Corporate Governance of 2003, issued by the Financial Services Authority, encourages the institutionalisation of whistle blowing policies by companies. Corporations should follow this code or explain why they did not.

A code of conduct is hardly credible if living by it requires engineers to accept dismissal on a regular base. This is especially a problem for professional codes that require engineers to blow the whistle. Nevertheless, there are a number of initiatives that can be undertaken to improve the degree to which such codes can be lived by. First, the law may be changed to better protect whistle blowers. Second, companies can include a right to inform the public in certain well-circumscribed cases in their corporate code and can formulate policies so that employees can indeed live by such codes. Some companies, like the chemical concern DSM, have formulated policies or procedures for whistle blowing.³⁹ Also professional associations can undertake initiatives, like providing legal support to individual engineers in cases where adhering to the professional code creates conflict with the employer. The IEEE has done that in the past. Some professional organizations like the NSPE have also published lists of companies that live by the professional code.

2.3.5 Enforcement

Enforcement is only an objective in the case of disciplinary codes. Active enforcement of codes of conduct seems to be an exception, especially for professional codes. Below, we will elaborate on the reasons for this and discuss what possibilities for enforcement exist.

Professional codes

One obvious reason why professional codes are often not enforced is that they are often advisory and that enforcement is not an objective of advisory codes. An underlying reason for the lack of enforcement, and for the choice to formulate advisory rather than disciplinary codes, is that professional codes do not have a legal status. Moreover, the possibilities for professional associations to enforce

³⁸ Hassink et al. (2007).

³⁹ DSM Alert: Whistle Blowing Policy & Procedure for expressing concerns about expected serious misconduct at DSM, 2004.

professional codes are limited. Enforcement requires sanctions and the most severe sanction that professional societies can exercise with respect to their members is usually loss of membership. The effect of that sanction is limited because in most countries, membership of a professional association is voluntary and is not required to exercise the profession of an engineer. A notable exception is consulting engineering in the US and Australia. Consulting engineers in these countries have to be registered as engineers in order to carry out their profession if they are not employed by a company but have their own firm. Such registration is also sometimes required for specific groups of engineers in other countries. If registration is required, loss of registration and thus loss of the ability to work as a professional engineer can be the consequence of an engineer breaching his or her professional code. The earlier discussed case of John Tozer is an example. In most cases, no attempts are made by professional associations to enforce their code of conduct.

Corporate codes

Corporate codes also usually lack a legal status. Nevertheless, enforcement or at least monitoring of the code is more common than in the case of professional codes. Of the world largest companies that have a code, 52% report monitoring of compliance with the code.⁴⁰ Generally speaking, corporate codes offer more possibilities for enforcement than professional codes. The reason for this is that companies do usually influence the daily practice of individual engineers to a much larger extent than professional associations do. Companies do have more possibilities to stimulate or discourage individual behaviour of engineers than professional associations. Ultimately, they can dismiss engineers if they breach the code of conduct; a sanction that is much more severe than loss of professional membership.

Corporate codes can also be enforced externally, i.e. through an external organization assessing the company in terms of its code of conduct. This is called external auditing. An increasing number of companies are voluntarily audited by accountancy or consultancy firms with respect to, for example, safety, environment, social issues and integrity.⁴¹ An advantage of such external assessment is that it helps to avoid that the corporate code of conduct is interpreted and enforced at will. In the absence of external audits, it is conceivable that those on the work floor are punished severely for not obeying the corporate code of conduct while people at higher levels in the organizations, i.e. those persons who also interpret and enforce the code, are judged more mildly. External auditing also increases the credibility, and so the image, of a company. External auditing may also be required for the acquisition of hallmark that guarantees customers of the company that certain standards are met. External auditing or enforcement can also be carried out by branch organizations. This requires a code of conduct on the level of an entire business branch. In several countries, the chemical industry has established such codes of conduct ('responsible care'⁴²). Such branch codes have the additional advantage that companies who want to live by certain moral standards are not punished for that financially or commercially.

Even if corporate codes are not enforced, they offer better possibilities for stimulating responsible behaviour than many professional codes. One reason is that external parties can criticize a company for not living by its own code of conduct. This is of course also the case with professional associations but

⁴⁰ Kaptein (2004).

⁴¹ Hummels & Karssing (2007).

⁴² See www.responsiblecare.org Accessed 2 November 2009.

companies are often more sensitive to external criticism than professional associations.

Case: Brent Spar

According to its code of conduct, Shell is committed to contributing to sustainable development (see also appendix 4). In 1999 Shell decided to sink the oil platform Brent Spar instead of dismantling it. The British government gave Shell permission to carry out this option. However, subsequently Shell was put under great pressure by environmental organizations, in particular by Greenpeace. Greenpeace argued that dismantling was more environmentally friendly and, moreover, saw the sinking of a platform as an undesirable precedent for the discarding of oil platforms. Because Greenpeace was able to mobilize the public and consumers of Shell products, among others through an occupation of the Brent Spar, Shell eventually felt forced not to sink the Brent Spar.

2.4 Codes of conduct in an international context

2.4.1 Global codes for multinationals

The 1990s witnessed a proliferation of corporate codes of conduct and an increased emphasis on corporate social responsibility. These codes emerged in the aftermath of a period that witnessed a major shift in the economic role of the state, and in policies toward multinational corporations and foreign direct investment. In the 1970s many national governments had sought to regulate the activities of multinational companies, since these companies were widely criticized for their behaviour in developing countries. Host governments and labour organizations claimed that multinational companies failed to operate in harmony with local economic, social, and political objectives. The 1980s was a decade of deregulation, since efforts at regulation had been unsuccessful, and increased efforts were undertaken to attract foreign investment. Foreign direct investment in the global economy began to reach unprecedented levels, significantly increasing the influence of multinational companies on the prospects of developing countries. Many governments of lesser-developed nations saw foreign capital as key to economic growth and actively encouraged foreign investment. However, few such nations had the power to enforce corporate regulation. As a consequence, this allowed some multinationals to degrade the environment, abuse human rights, and provide little benefit to local or national development. The view that the best way of companies to promote social development in a developing nation is simply by increasing the overall level of economic activity through trade and investment, however, was changing. The new phrase became the "triple bottom line" (3BL or "People, Planet & Profit") of economic, social, and environmental outcomes.⁴³ It is in this context that the recent wave of voluntary codes must be understood, which go beyond simple business or labour matters, to demonstrate that they are motivated by a sense of social responsibility, particularly in light of the increased liberalization of markets.⁴⁴ These codes of conduct have been seen as pivotal in the global marketplace.⁴⁵ US companies began introducing such codes in the early 1990s, and the practice spread to Europe in the mid-1990s. They tend to focus on the impact of multinational companies in two main areas: social conditions and the environment.

⁴³ Elkington (1994).

⁴⁴ Cf. Sethi & Williams (2000), Cottril (2000).

⁴⁵ Cf. Radin (2004).

However, many voluntary codes of conduct of multinational companies were vague declarations of business principles applicable to international operations. A number of organizations have anticipated this by developing a global code of conduct that multinational companies can use as a guide to develop and/or revise their codes of conduct, especially related to investments in developing countries. Three major global codes of conduct are the Caux Round Table principles⁴⁶, the Organization of Economic Co-operation and Development guidelines for multinational companies⁴⁷, and the United Nations Global Compact⁴⁸. The United Nations Global Compact (UNGC) is the world's largest, global corporate citizenship initiative. It is concerned with exhibiting and building the social legitimacy of business and markets by offering a framework for businesses that are committed to aligning their operations and strategies with ten principles in the areas of human rights, labour, the environment, and anti-corruption (see box). The principles are derived from *The Universal Declaration of Human Rights*, *The International Labour Organization's Declaration on Fundamental Principles and Rights at Work*, *The Rio Declaration on Environment and Development*, and *The United Nations Convention Against Corruption*. Many multinationals are involved in this voluntary initiative of the UNGC. This initiative of the United Nations is meant to stimulate corporate responsibility. Although the guidelines are not directly binding on companies, adhering companies are expected to promote them and to follow procedures for resolving alleged violations.

The UNGC states that business, trade and investment are essential pillars for prosperity and peace. But in many areas, business is too often linked to serious issues – for example, exploitative practices, corruption, income equality, and barriers that discourage innovation and entrepreneurship. Following the ten principles can in many ways build trust and social capital, contributing to broad-based development and sustainable markets.

United Nations Global Compact Principles

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: make sure that they are not complicit in human rights abuses.

Labour Standards

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: the elimination of all forms of forced and compulsory labour;

Principle 5: the effective abolition of child labour; and

Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: undertake initiatives to promote greater environmental responsibility; and

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

⁴⁶ www.cauxroundtable.org/documents/Principles%20for%20Business.PFD.

⁴⁷ www.oecd.org/daf/investment/guidelines.

⁴⁸ www.unglobalcompact.org/AboutTheGC/TheTenprinciples/index.html.

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Case: Shell, Nigeria and the Ogoni: a study in unsustainable development⁴⁹

"Shell is a global group of energy and petrochemical companies. Our aim is to meet the energy needs of society, in ways that are economically, socially and environmentally viable, now and in the future."⁵⁰ The company is involved in several voluntary social and environmental initiatives, such as the United Nations Global Compact.

The Nigerian government's 4 June 2008 decision to replace the Shell Petroleum Development Company (SPDC) – Shell's Nigerian subsidiary – as operator of oil concessions in Ogoni areas offers an opportunity for ending one of the longest running conflicts between a multinational oil company and a local community in the Niger Delta. The Niger Delta was once considered the breadbasket of Nigeria because of its rich ecosystem, a place where people cultivated fertile farmlands and benefited from abundant fisheries.

The origins of the conflict between the Ogoni and SPDC date back to the company's discovery of oil in this part of the Niger Delta in 1958. Nigeria was still under British colonial rule, and the Ogoni, like all other minority ethnic groups in the Delta, had no say in the exploitation agreements. Even after independence in 1960, they were not accorded a real stake in oil production.

There were more than 100 oil wells, mostly operated by SPDC. As elsewhere in the Delta, the environmental effects of oil exploration and production in Ogoni territory were severe. Land and water pollution from spills played havoc with the ecosystem. Villagers lived with gas flares burning 24 hours a day (some for over 30 years) and air pollution that produced acid rain and respiratory problems. Above-ground pipelines cut through many villages and former farmland.

SPDC refused to accept responsibility for environmental repercussions and largely denied there was an issue. As late as 1995, for example, an SPDC document insisted that: "Allegations of environmental devastation in Ogoni, and elsewhere in our operating area, are simply not true. We do have environmental problems, but these do not add up to anything like devastation". In response to criticism of its community relations practices, SPDC insisted that most of the Ogoni demands for social benefits and infrastructural development were the responsibility of the government, not an oil company. It maintains that it has responded "promptly, fairly, and completely" to community complaints in Ogoni land but that many, such as those articulated in the Ogoni Bill of Rights, are of a political nature and thus beyond its competence.

In response the Ogoni founded in 1992 the Movement for the Survival of Ogoni People (MOSOP), led by Ken Saro-Wiwa. From the start it adopted a policy of non-violence. MOSOP demanded that SPDC take responsibility for its massive environmental devastation of their homeland and denounced the injustices that Shell has inflicted on the Ogoni and other peoples in the Niger Delta. In 1995, Ken Saro-Wiwa and 13 other MOSOP leaders were subjected to a secret tribunal that, based on unsubstantiated allegations, sentenced nine of the men to death by hanging. They were accused of incitement to murder. All nine were summarily executed without any opportunity for appeal.

⁴⁹ Based on International Crisis Group (2008) and Boele et al. (2001).

⁵⁰ www.shell.com.

Most Ogoni saw Shell as the architect of the events. The company strongly denied any complicity in the military repression of the Ogoni. However, it never proved forgery, so the impression persisted that it had a hand in the repression. The Ogoni thus resolved never to allow SPDC to resume operations on their land. Many regarded its pledge not to use armed escorts and only to resume operations with host communities' consent as mere posturing. Relations between SPDC and the Ogoni have remained tense ever since.

A major issue that has to be dealt with in the context of the exit of SPDC is environmental clean-up. No significant study has been conducted to determine reliably the precise impact of oil industry-induced environmental degradation on human livelihoods in the area, but there are indications of severe damage. The African Commission on Human and Peoples' Rights held that "the pollution and environmental degradation in Ogoni was to a level unacceptable and has made living in Ogoni land a nightmare". SPDC policy, according to the company, is to clean up environmentally-damaging incidents related to its operations regardless of cause, but only to pay compensation if the incident occurred as a result of its own operational failure. When environmental damage occurs as a result of sabotage (a common occurrence according to SPDC), the company is forbidden by Nigerian law from paying compensation. SPDC continues to pledge cooperation with the proposed United Nations Environment Programme (UNEP) environmental assessment, though it has not promised that it will pay any damages related to UNEP findings.

2.4.2 Global codes for engineers

The globalization of the world's economies has also increased the working space of engineers. Engineering products and production facilities often transcend national boundaries. Engineers travel across the world and meet other cultures by interacting with foreign engineers. Multinational companies employ engineers from different cultural backgrounds in the same corporate environment. So, engineering has become a global activity and increasingly requires a global approach and acceptable global guidance.

The engineering profession in the United States has been a world leader in promoting engineering ethics code development and associated educational activities. Due to their leadership other nations have followed the American lead and have adopted US codes. The Nation Society for Professional Engineers (NSPE), for example, reports that its code is used by the Japan Consulting Engineers Council. It is also expected that a code very similar to American ones will soon be adopted by the Japan Accreditation Board for Engineering Education (JABEE) that was established in 1999.⁵¹ However, this approach may well be counterproductive, since it neglects the cultural differences between Japan and the US. The US codes are based on the notion of professional autonomy: "empowering individuals to reason more clearly and carefully concerning moral questions, rather than to inculcate any particular beliefs".⁵² However, not all nations value autonomy to the degree as the United States. For example, Japanese society emphasizes group values in educational and socialization practices, instead of individualism as in the United States. Whereas many professionals in the United States focus on individual career development, the Japanese professionals are more devoted to the company's goals. Most Japanese people have a strong sense of loyalty, so whistle

⁵¹ Luegenbiehl (2004).

⁵² Schinzinger & Martin (2000, 14).

blowers would probably not be accepted by Japanese society. As engineering ethicist Heinz Luegenbiehl writes:

"The ideal [American] professional model requires that the engineer and the engineering profession be autonomous so as to protect the public in the face of corporate self-interest. The ideal Japanese model, on the other hand, requires the engineer to function harmoniously as an integral part of the group in a system where the corporation serves the needs of society. The potential for professional autonomy is very limited in the Japanese model. In the Western model the profession guarantees the quality of the engineer's work through its contract with the larger society. In the Japanese model the corporation serves the same function. (...) Seen in terms of engineering, it is therefore the corporation which takes responsibility for, and guarantees, the engineering's work. The engineers, for their part, are an integral part of the larger group and, knowing that their fate is tied to that of the corporation, would be aware that they would not profit from individual actions. The corporation, in turn, sees its interest tied to those of the nation. The core demand for 'safety, health, and welfare of the public,' the primary goal of an engineering ethics, can then be achieved through the corporation, since it is not expected to act based solely on the interests of its owners."⁵³

Other commentators have shown some more cultural differences between nations, and have argued that drafting a global code for engineers is not a straightforward process.⁵⁴ It requires continuing efforts to understand and appreciate cultural differences.⁵⁵ An example of such a rather successful effort from which we can learn is a recent project to devise a common code of conduct for American, Canadian, and Mexican engineers under the North American Free Trade Agreement (NAFTA). The objectives of this project were 1) to study the aspects of conduct and ethics related to engineering practice under the provisions of the NAFTA, and 2) to develop a mutually agreed upon set of ethical principles.

The main challenge of a global code for engineers is to create consistency in spite of cultural differences. As we have seen, autonomy cannot serve as an uncontested universal foundational assumption for building a global code for engineers. Heinz Luegenbiehl proposes some principles for a global code for engineers based on the nature of engineering activity and the universal use of reason in engineering (see box).⁵⁶ The universal foundational assumption is that all engineers, independent of their cultural background, must accept the premise that the use of reason is a valid decision-making instrument.

Ethical Principles for Engineers in a Global Environment⁵⁷

- The Principle of Public Safety: Engineers should endeavor, based on their expertise, to keep members of the public safe from serious negative physical consequences resulting from their development and implementation of technology.
- The Principle of Human Rights: Engineers should endeavor to ensure that fundamental rights of human beings will not be negatively impacted as a result of their work with technology.
- The Principle of Environment and Animal Preservation: Engineers should endeavor to avoid damage to the animal kingdom and the natural environment

⁵³ Luegenbiehl (2004, 71-72).

⁵⁴ Downey et al. (2007).

⁵⁵ Weil (1998).

⁵⁶ Luegenbiehl (2009).

⁵⁷ Luegenbiehl (2009).

which would result in serious negative consequences, including long-term ones, to human life.

- The Principle of Engineering Competence: Engineers should endeavor to engage only in engineering activities which they are competent to carry out.
- The Principle of Scientifically Founded Judgment: Engineers should endeavor to base their engineering decisions on scientific principles and mathematical analysis, and seek to avoid influence of extraneous factors.
- The Principle of Openness and Honesty: Engineers should endeavor to keep the public informed of their decisions which have the potential to seriously affect the public, and to be truthful and complete in their disclosures.

Charles Harris has proposed some principles for a global code that apply to engineers operating in developing countries⁵⁸, based on Richard De George's guidelines for multinational corporations in the international environment⁵⁹. De George's guidelines, however, apply to multinational companies or to their managers. They cannot be simply applied to engineers. Firstly, engineers have a lesser scope of responsibility than managers. Engineers are responsible primarily for the design, production and implementation of technology, and are therefore more narrowly focused than managers, who are responsible for the total well-being of the enterprise.⁶⁰ Secondly, engineers do not make management decisions, and have relatively little decision-making power within the corporate hierarchy.⁶¹ Nevertheless it is not very difficult to adapt some of these guidelines for the engineering practice. Engineers, Harris claims, have a responsibility

1. to refuse to engage in direct, intentional harm;
2. to refrain from participating in the design, production or implementation of technology that produces more harm than good, all things considered;
3. to participate only in technology that promotes the country's development;
4. not to participate in the violation of human rights; and
5. to respect host-country (lesser-developed country) culture in their professional work.

In combination with the Ethical Principles for Engineers in a Global Environment of Luegenbiehl (see box), these principle could function as a starting point to develop and/or revise international professional codes for engineers.

2.5 Chapter summary

Codes of conduct are codes in which organizations lay down guidelines for responsible behaviour of their members. Codes of conduct can be aspirational (mentioning the main values), advisory (assisting individuals in moral judgement) and disciplinary (enforcing rules of behaviour). Professional codes are formulated by professional associations of engineers, and corporate codes are formulated by companies in which engineers are employed. Professional codes describe the professional responsibility of engineers, and corporate code the responsibility of engineers as employees. Most professional codes relate to three domains: 1) conducting a profession with integrity and honesty, and in a competent way; 2) obligations towards employers and clients; 3) responsibility towards the public and society. Corporate codes usually contain a mission statement (the overall objectives of the company), core values, stakeholder principles and more detailed rules and norms.

⁵⁸ Harris (1998).

⁵⁹ De George (1993).

⁶⁰ Harris (1998, 324).

⁶¹ Harris (1998, 324-325).

A number of objections have been raised against codes of conduct:

1. Code of conduct sometimes amount to window-dressing
2. Codes of conduct are often vague and are potentially contradictory
3. Ethics cannot be codified
4. Codes of conduct cannot be lived by
5. Codes of conduct are not enforced.

We have seen that the second and third objection mirror each other. According to the objection that ethics cannot be codified, ethics always remains a matter of judgement. This is exactly the reason why codes of ethics cannot avoid all vagueness and potential contradictions. This is not to say that vagueness and contradictions should not be avoided when possible, but the code is maybe better considered as a set of guidelines that is helpful in judging cases than as a set of strict prescriptive rules. Objections 2 and 3, then, do not really apply to aspirational and advisory codes, although they may be a problem for disciplinary codes. The same applies to objection 5 because enforcement is only an objective for disciplinary codes and not for advisory and aspirational codes. Objection 4 is serious and may be especially a problem in cases of whistle blowing, or more generally, tensions between your responsibility as engineer and as employee. Partly it can be solved by better attenuating the responsibility of engineers as professionals with the responsibility of engineers as employees, and thus better attenuating professional codes and corporate codes. Some companies have tried to do this.

As engineering increasingly becomes and international activity, codes of conduct increasingly become global in nature. This raises difficult questions about how to deal with cultural differences and about whether the professional autonomy model on which most US professional codes are based can be exported. Nevertheless it seems possible to formulate a global professional code for engineers that contain at least some more or less commonly accepted principles.

Questions chapter 2

1. The Software Engineering Code of Ethics and Professional Practice of the Association for Computing Machinery states that "The dynamic and demanding context of software engineering requires a code that is adaptable and relevant to new situations as they occur. However, even in this generality, the Code provides support for software engineers and managers of software engineers who need to take positive action in a specific case by documenting the ethical stance of the profession. The Code provides an ethical foundation to which individuals within teams and the team as a whole can appeal. The Code helps to define those actions that are ethically improper to request of a software engineer or teams of software engineers. The Code is not simply for adjudicating the nature of questionable acts; it also has an important educational function. As this Code expresses the consensus of the profession on ethical issues, it is a means to educate both the public and aspiring professionals about the ethical obligations of all software engineers."⁶²
Is this code aspirational, advisory, or disciplinary? Explain your answer.

⁶² <http://www.acm.org/about/se-code> Accessed 2 November 2009.

2. Give an example of a situation in which you have a professional responsibility to do something *but* not a legal responsibility.
3. What is meant by "a code is nothing, coding is everything"?
4. What are the most important objectives of professional codes of conduct?
5. Why is enforcement an explicit objective for disciplinary codes? Why is enforcement often difficult to obtain for professional engineering codes of conduct?
6. What are corporate codes? Discuss three objections to and/or shortcomings of corporate codes.
7. What are the two arguments of Milton Friedman's criticism of corporate social responsibility? Give some objections against these arguments.
8. Like engineers, medical doctors and lawyers also have professional codes. Unlike engineering codes, however, these codes typically are accompanied by disciplinary law, so that doctors or lawyers who violate the code can be excluded from practicing the profession. Provide an argument *for* and an argument *against* the adoption of similar disciplinary law for engineers.
9. What is valuable about loyalty? What is problematic about loyalty? Be careful to indicate what concept of loyalty you are using in answering this question.
10. To gain protection of the UK's Public Interest Disclosure Act, those who reveal organizational malpractices have to satisfy a number of conditions that witnesses in other criminal investigations do not have to satisfy, e.g., deriving no financial gain from the case and not having been involved in the crime at any stage. Critically evaluate the merits of these conditions, Compare them also with the guidelines for whistle-blowing mentioned in chapter 1.
11. Look for a professional code of conduct in your own area:
 - a. Do you recognize the three general content areas mentioned in the text in this code?
 - b. Is the code vague at some points? Where?
 - c. Are there any potential contradictions between the provisions of the code? Does the code contain provisions to deal with these contradictions?
 - d. Are there any provisions in the code that are impossible to live by? Which ones?
 - e. Do you agree with the professional responsibility set out in the code? Are you missing anything?
12. Look for a corporate code of an engineering company. In what respects are the responsibilities of engineers that are articulated in this code different from the responsibilities articulated in professional codes (like the code of the NSPE)? Is this code conflicting at certain points with, for example, the professional code of the NSPE? If there is a conflict what code should, in your view, take precedence and why?
13. Do you agree that engineers have a responsibility for human rights as some global codes of conduct suggest? Is this responsibility restricted to not engaging in violations of human rights or do engineers also have a responsibility to enhance human rights through their engineering projects?

14. Draft a code of conduct to cover e-communications (e-mail, Web use and so on). Explain and justify your proposed code.
15. One of the principles for a global code of conduct for engineers mentioned by Luegenbiehl is the principle of scientific founded judgement. What do you think that Luegenbiehl means with extraneous factors? Would considerations of safety or human welfare count as extraneous factors that should not influence engineering decisions?
16. The US government allows employees of aircraft manufacturers like Boeing to serve as inspectors for the Federal Aviation Agency (FAA) that is responsible for regulating the aircraft industry and doing safety and quality inspections. What would be the reasons for the US government to allow this? Is this a conflict of interest? Would it be unethical for an engineer employed by Boeing also to act as inspector for the FAA?

Discussion questions

1. If you were to give ethical training to engineers, would you stress knowing the law, company rules and codes of conduct, or would you instead focus, on explaining the principles behind these rules. Are there any common principles behind these rules? Which ones?
2. Loyalty or integrity: which should be the most important to engineers?
3. What do you see as the main ethical issues arising from globalization?
4. Cases like Shell in Nigeria and Google in China that were discussed in this chapter seem to suggest that codes of conduct are a dead letter when it comes to moral decision-making in practice. Discuss whether codes of conduct are indeed just window-dressing in cases like this or whether they have any positive effect. Can you think of ways to bridge the gap between what companies like Shell and Google say in their codes and what they do in practice? Should multinational companies maybe avoid undemocratic countries like Nigeria and China to avoid though ethical decisions?
5. Choose any Fortune 500 company. Locate the company's code of ethics published on the company's web page. Evaluate the code in terms of the United Nations Global Compact Principles.