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# Diving & ROV Specialists



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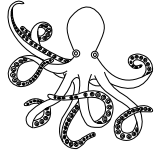
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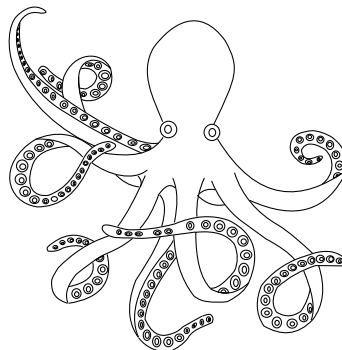
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## 1 - Origins

The transmission of knowledge and the principle of standardization have existed since humanity's beginning: Archaeology proves that primitive human groups adopted the working methods they considered the best to fabricate their tools and habitats and were organized to transmit their knowledge. That has resulted in constant technical progress, which historians and archaeologists categorize as significant progress eras, such as the stone, bronze, and iron ages. However, these periods were also characterized by a flourishing of different cultures having particular use of the available technologies that have resulted in what we commonly call civilizations. This succession and diversity of civilizations have been the motor of progress, with discoveries and technologies from a particular human group being adopted by others who then developed these concepts according to their way of life, which gave rise to other discoveries and inventions, and this continuously. Thus history proves to us that the future of humanity is in its diversity and not in a uniform civilization.

Based on what is said above, and opposite to some beliefs, we can see that the principle of standardization, which purpose is to issue technical specifications to ensure that materials, products, processes, services, systems, or persons are fit for their intended purpose, was not invented at the beginning of what is commonly called the "industrialization era" during the 19<sup>th</sup> century, but a long time ago. For example, the Xi'an tomb in China confirms that the armies of the Qin emperor (259–210 BC) were already equipped with standardized equipment far before the roman empire era (*see the image below*). During the Han dynasty (206 BC – 220 AD), officials designed standard civil service exams to choose people to work in the government based on merit rather than family status. Also, the sculptures of the Trajan emperor (53 -117 AC) column in Rome ([see here](#)) proves that the soldiers of the Roman empire had fully standardized equipment. Again in China, during the Song dynasty (960 AD - 1279 AD), silk production was organized according to strict norms controlled by the imperial government.



*Xi'an tomb in China - Qin emperor (259–210 BC)*

## 2 - About national and international standards and guidelines

Even though the example above proves that standards and transmission of these have existed since the beginning of humanity, we need to recognize that the current era has put in place structures for creating and implementing international standards to fulfill the need for increasing exchanges worldwide. As a result, a lot of devices are today built according to established requirements to offer the same service and level of safety throughout the globe. However, international standards do not entirely replace national ones, as to protect their citizens, governments also publish the standards and norms applicable in their country. Also, to protect people producing goods from abusive and unsafe working conditions, governments publish laws that indicate the minimum level of protection required. Depending on the country, these laws can be emitted in the form of acts, decrees, work regulations, codes of practice, national standards, etc. For convenience, we can call them "working laws". Some of these laws have been adopted worldwide through the various instruments of the United Nations, such as, but not limited to, the International Labour Organization (ILO).

However, adopting international laws is a long process that, in the end, requires the signature of the states applying them. Thus, a state is not engaged in implementing an international law it has not signed. For these reasons, in parallel with the laws emitted by States, companies involved in industrial or construction activities

have issued their own working practices that are based on the laws of the states and their experience. These working practices are sometimes shared through structures such as professional associations or similar organizations that defend their interests and are usually called "guidelines". These professional organizations also act as pressure groups on states to impose their point of view. For a better understanding, we need to make a distinction between standards, working laws, and guidelines:

- As said above, the purpose of standards is to issue technical specifications to ensure that materials, products, processes, services, systems, or persons are fit for their intended purpose. Standards are also called "Norms". Legal specialists say that even though their purpose is the same, their process is different: A norm can be described as a set of rules resulting from a consensus of experts, and a standard is the harmonization of technical characteristics and construction processes, not necessarily based on a consensus. However, despite this difference, the two words are often used for the same documents.

Standards and Norms are issued by states or specific organizations depending on them, usually called "national standardization bodies". For example, the Swiss Association for Standardization (SNV), British Standards Institution (BSI), American National Standards Institute (ANSI), the "Association française de normalization" (French association for normalization -AFNOR), the Thai Industrial Institute (Thailand), and many others. Organizations emitting standards & norms can group an ensemble of states. It is the case of the European Standards (EN), also called European Norms. These documents are published by one of the three following organizations: the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC), or the European Telecommunications Standards Institute (ETSI). These organizations depend on the states of the European community and the associated members. Another example of an organization that depends on states is the International Organization for Standardization, better known under the acronym ISO, which is presented as an independent, non-governmental international organization with a membership of 167 "national standards bodies". However, as the national standards bodies are appointed by their governments, we can imagine that these governments can influence ISO through their appointed standardization bodies.

- As already said, national working laws are rules whose implementation is mandatory in the country they are published. Depending on the country, they can have various forms, such as:
  - Acts: Bills that the legislature votes on.
  - Decrees: A formal and authoritative order from a government having the force of law.
  - Work regulations: Rules or directives made and maintained by the authorities.
  - Codes of practices: Ensembles of regulations that complement laws to explain how to comply with them.
  - National standards: Mandatory procedures approved by the government for the operations they are designed for.
- According to the Cambridge dictionary, "guidelines" are "information intended to advise people on how something should be done or what something should be".

Guidelines can be emitted by all types of organizations and also individual authors and are not binding. Therefore, it is not mandatory to follow a guideline that the government has not emitted or approved.

Based on the fact that only states and organizations appointed by states can emit laws and standards, professional organizations are obliged to publish their point of view through guidelines only. However, some of these organizations consider or want to impose their guidelines as standards. For this reason, depending on their policy, they convince or oblige their members to include their guidelines, which they sometimes incorrectly call "standards", in their working practices. However, as said previously, there is legally no obligation to apply such guidelines, so their implementation ultimately depends on the company. We must, however, consider that in case of an accident, the authorities of the country and the judge in charge, if the persons responsible for the undesirable event are sent to court, can ask why policies covering the activities that resulted in the accident were not implemented. Thus, even though it is not mandatory to implement an organization's guidelines, it is highly recommended to provide at least equivalent procedures adapted to the company's needs. It must be noted that guidelines from organizations are often adopted by states and, thus, become standards.

### **3 - About ethical standards, laws, and guidelines**

Based on the above, we can say that the idea of standards comes from the positive thought to improve people's living and working conditions, which can be deviated for the profit of only a few people. Thus, we can define



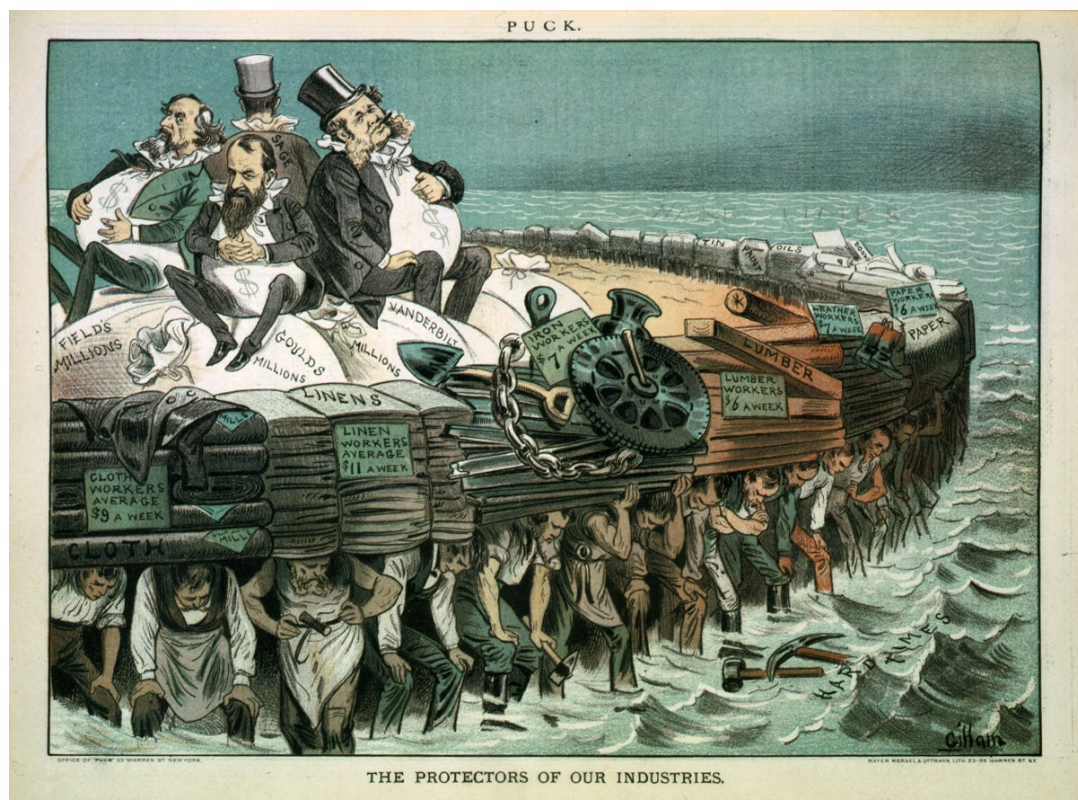
"ethical" standards, laws, and guidelines as documents describing procedures that aim to protect people without the intention of making a profit, imposing an ideology, or favouring a community to the detriment of others.

To define a community and its interests, we can refer to the description from Jeremy Bentham (1748-1832), who said: *"The community is a fictitious body composed of the individual persons who are considered as constituting as it were its members. The interest of the community then is the sum of the interests of the several members who compose it"*.

#### 4 - About the deviation of standards, laws, and guidelines

It must be noted that despite the positive intent of the people creating them, the relevance of ethical standards, laws, and guidelines to their purpose can be inappropriate. History and current working practices show us that many standards were or are unsuitable for the activities they are supposed to cover or are suitable for only a fraction of people. This can be due to an inappropriate evaluation of the problem, but also because the team has been intoxicated by various forms of external interventions. Regarding such issues, history shows us that working and commercial practices can be deliberately imposed by some unethical pressure groups on the members of their organization, governments, their contractors, and their clients to eliminate challengers, impose their ideology, be in a monopolistic position, and thus be in a situation where they can increase their profits without opposition.

These unethical groups do not hesitate to "buy" scientists, politicians, civil servants, other organizations, and the press, where they display their propaganda to reach their targets. Thus, such organizations often create what is commonly called an influence peddling or a mafia system. The guidelines they emit and also, when they obtain their publication, their standards, can be called "unethical" as they aim to be profitable for only a few people to the detriment of others. A historical example of such practices is the story of the "robber barons", a pejorative term that describes 19<sup>th</sup> century American industrialists and financiers who made fortunes by monopolizing huge industries through the formation of trusts, engaging in controversial business practices, exploiting workers (Refer to the song "[sixteen tons](#)"), practicing lobbying at large scale, and physically attacking their competitors and opponents if the methods mentioned above did not work as expected.



*Pejorative cartoon on the robber barons: To counter their bad reputation, these people invented the "self-made man myth" at the origin of the dream of many people who thought that everything was possible in the USA, and thus emigrated to finally fall into disillusion...*

The propaganda from such groups of influence is usually based on fallacious arguments that are particularly refined and usually employed very intelligently so that they can attract honest people. The list of fallacious arguments they use is without end. However, we can retain the following:

- **Circular reasoning:**  
With this method of reasoning, the proposition is supported by the premises, which is supported by the proposition, creating a circle in reasoning where no useful information is shared. In other words: X is true because of Y, and Y is true because of X.
- **Argumentation based on a dogma:**  
A dogmatism argument is based on a given belief, dogma, or doctrine. In other words, dogmatism treats something as true without question or allowance for conversation. This argumentation is commonly used with circular reasoning.
- **Personal attack:**  
A personal attack consists in refuting a logical argument by attacking the intelligence, professional qualifications, morals, and education of the person emitting it.
- **Affective influence:**  
Affective influence is based on the fact that emotions, urges, or feelings are innate and self-validating. Therefore the ability to analyze and critique is diminished. A common practice to influence people through this method is to provide them with a sad history or shocking photos and use the emotional reaction to impose procedures that are the opposite of what is needed in the industry considered and against the interest of the person approving them under the shock created by the story or the dramatic picture. Politicians frequently use this method.
- **Information Pollution:**  
Information Pollution is the contamination of information with irrelevant, redundant, unsolicited, hampering, and low-value news or documents.
- **Hasty generalization:**  
Hasty generalization is a fallacious argument by generalization that consists of drawing a broad conclusion from a small number of unrepresentative cases. Fallacious arguments by generalization are often used by self-proclaimed scientists or scientists who aim to make the ideology or practices of an unethical pressure group admitted. Of course, politicians also regularly use such arguments.
- **Argument from ignorance:**  
Argument from ignorance, also called “appeal to ignorance” consists of arguing that a proposition must be true because it has not been proven false.
- **Appeal to authority:**  
Appeal to authority is misusing an authority's opinion to support an argument by using a statement made by the mentioned authority that is out of date or reported in a biased manner.
- **Argument from authority:**  
Argument From Authority is the claim that the person or the organization taken as reference is an expert and so should be trusted. Note that the expression “X provides the best practices” is an argument from Authority, thus pure propaganda. The reason is that nothing proves that X provides the best practices because someone else may have better ideas.
- **Appeal to flattery (appeal to vanity):**  
Appeal to flattery consists of complimenting a person to obtain his approbation of the ideology, approach, guideline, or standard presented.
- **False dilemma:**  
A false dilemma is a manipulative procedure that aims to polarize the audience to promote a philosophy, approach, or guidelines by demonizing others. For example, politicians commonly use it to strong-arm the public into supporting controversial legislation or policies. This method is also widely used by organizations trying to impose guidelines. For these cases, a strategy often applied successfully involves highlighting the word "safety" so that opponents of the proposed policy are automatically classified as "unsafe people". Thus, they become enemies to eliminate without discussion.
- **Appeal to Closure:**  
Appeal to Closure means that an argument, standpoint, action, or conclusion must be accepted, no matter how questionable the point is, and will remain unsettled. In other words: X is found suspicious, and despite this, it must be accepted. This strategy is often used by persons with authority without the necessary knowledge to exercise their position. It is, of course, commonly used to impose a guideline.
- **Straw man argument:**  
A straw man argument consists in moving the discussion to a different subject rather than the topic being discussed. This strategy is commonly used by people who are uncomfortable with the issue discussed. It is often a complement of the “appeal to closure” described above.

Depending on the target, fallacious arguments are used separately or together to elaborate a suitable strategy to erase all forms of reasoning and, thus, opposition.



Among the increasingly used strategies, I need to highlight what we can call the "Infantilization strategy", which is a form of conditioning that consists of disabling a community's capacity to think by gradually downgrading it to a level equal to the reasoning of young kids. Several methods are used to obtain the desired result, for example, the multiplication of mandatory pseudo formations with exams where the questions are at the level of a kid and the employees conditioned using the fallacious reasonings described above, the organization of safety and productivity awards with teeshirts or other presents offered to the winners (It is similar to what you do to condition an animal), the implementation of a blame culture with investigations of undesirable events systemically charged against the employees involved, the use of vexation measures against people similar to those used for undisciplined kids, and many others.

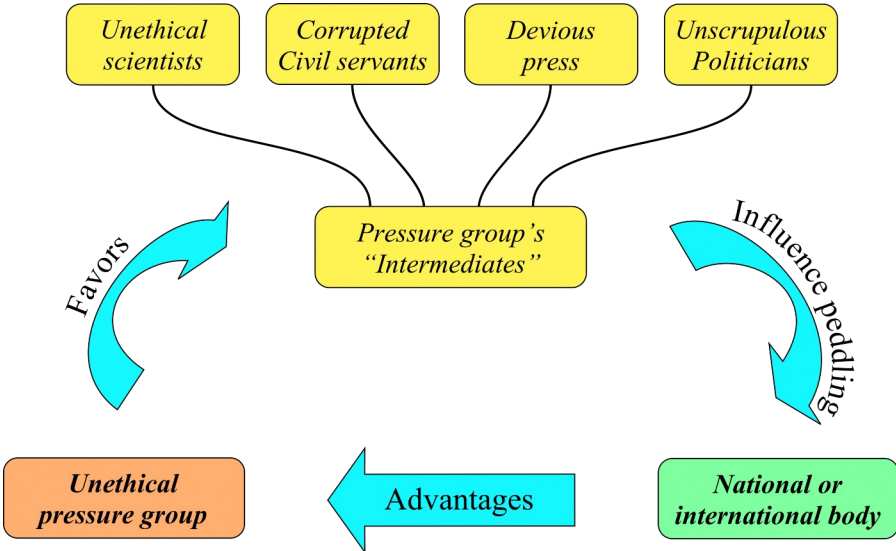
Note that even though "Infantilization" is increasingly used, it is not a new strategy: It was massively employed by the robber barons and many leaders to control people, and so was described by many 19<sup>th</sup> and 20<sup>th</sup> centuries novelists. It can be illustrated by the description of Merle Travis, the author of the previously mentioned song Sixteen tons: *"A man is made of muscle and blood, a mind that's weak and a back that's strong"*.

It is commonly said that unethical influencing groups are composed of powerful financial or industrial establishments. However, these influencing groups can also be merely the employees of organizations in a dominant position emitting guidelines or standards. The purpose, in this case, is to secure their place and organize for comfortable incomes. Another reason aside from the comfortable salaries is what we commonly call the drunkenness of power, which can be considered a symptom of megalomania, a narcissistic personality disorder that is characterized by complex symptoms, among which:

- An unstoppable need for power and glory.
- A manipulative behaviour to get to positions of power.
- A self-attribution of abilities.
- A conceited and arrogant behaviour.
- The non-acceptance of personal mistakes.
- The rejection of ideas from others or the need to self-attribute them.

Based on the above, we can consider that many of the unethical pressure groups described above show collective megalomaniac symptoms. It is, of course, not the purpose of this post to determine which degree of megalomania these people have; this is a psychoanalyze problem that requires to be evaluated by doctors. Also, we are all plus or minus narcissistic, as this is part of what the safety specialists call "self-esteem". However, we can highlight troubling facts commonly attributed to such disorders and remember that history says that some leaders affected by such conditions were the source of catastrophic events.

To maintain their dominant position, a strategy used by such unethical pressure groups is to increase their production of guidelines, even though some are unnecessary and poorly written; the aim is not to produce valuable documents but to drown people under numerous rules (Information pollution), in other words, to become unavoidable and increase their pressure on governments to push them to publish standards that are more in line with what they want. If they succeed, that may result in a system based only on paperwork and political considerations, producing standards and guidelines that may conflict with the previously established rules and not being welcomed by the people to whom they are imposed. Thus, regulations whose implementation is complex, as it may become evident to the people to whom they are imposed that their purpose is to control them instead of helping them. Consequently, people are no longer confident in laws, have trends to use undeclared inconsistent procedures, and the safety level is diminished.



To conclude with the above, inappropriate standards imposed on a community will give rise to a monoculture based on what is commonly called circular reasoning (see above), resulting in the absence of questioning regarding the appropriateness of the procedures imposed, which undoubtedly will trigger decadence because the solutions proposed do not answer to the needs of the majority of people but allow a small fraction of a population to be in upper positions enabling them to control the others for their profit. Therefore, the system will collapse due to its lack of adaptation to unplanned situations and the community's well-being.

By comparison, we can say that brilliant civilizations have disappeared because they gradually became monocultural narcissistic worlds. As already noted in the introduction of this post, history proves to us that the future of humanity is in its diversity and not in a uniform civilization.

It must be noted that many states have emitted laws to prevent the situations mentioned above (Notably antitrust laws). However, implementing such limitations is difficult or even impossible to control organizations operating internationally.

An element favouring the influence of the unethical pressure groups previously mentioned is often the states' lack of interest in the domain considered. This lack of interest can be due to a lack of resources, a lack of civil servants with proper formation, and a lack of structures to be in contact with the people involved in the activities considered. Hence, a state disconnected from reality, underestimating how strategic the activity domain can be for the country. Also note that sometimes, it may be only due to complacent behaviour. Thus, at the in the defense of these pressure groups, when countries are without proper upper ruling authority, these organizations are tempted to crush everything to increase and secure their profits, even though their methods are unethical. It has been a long time since it has been recognized that without a powerful state administration, the market quickly becomes a kind of jungle ruled by the most influential actors to the detriment of others.

In addition to the above, another reason unethical groups of interest impose their point of view is the lack of structured opposition. Thus on one side, we have people well organized, trained in all sorts of manipulations, and motivated to reach their objective. On the other side, we often find individuals and small companies proceeding separately, with some of them ready to satisfy the craziest desire of their clients. That results in these companies and individuals not being considered representative by the authorities, who will have the temptation to follow the suggestions of the unethical organizations that, despite having no legal and scientific references, often present themselves as experts by using the fallacy strategies already mentioned.

## **5 - About prohibitive prices**

Another problem with some national and international standards is their prohibitive costs and the fact that they are sold through resellers making profits from these activities. Thus, instead of being tools that protect everyone, standards become a business !

There is no problem with such practices as long the documents in question are private organizations' guidelines that are not imposed on citizens or in bidding processes.

However, this is far from being ethical when these documents are standards from organizations depending on governments, and the practices they describe are made mandatory. Considering that standards are laws and that everyone should have an equal status regarding the law, poor and rich people should have equal access to legal documents. We can call that the "principle of equality and fraternity"; without them, what some people call "democracy" becomes a vast mystification. Governments must be aware that their primary function is the protection of all their citizens. Also, not helping poor people is perhaps losing genius scientists or technicians. Some may say, *"We need to pay the people writing these standards"*. Regarding this, my answer is that I have published guidelines and manuals free of charge for over six years, some of which required more than two years of conception full-time with 16 hours/day of work. Also, most scientific documents stored in our data bank have requested similar investments to their authors and are also published free of charge, which is why you can download them without paying fees. Thus, the argument that standards must be sold at high prices because the writers must be paid is definitively fallacious because these organizations have budgets assigned by states for that.

## **6 - Organize against unethical standards, laws, and guidelines emitters**

It would be interesting to thoroughly investigate the organizations emitting official documents, and guidelines to be used in our industry. We will perhaps do it one day. However, such research requires specialists in investigation and a lot of patience, as essential information regarding how these organizations are managed is confidential. Also, that should give rise to a long study, which is not the purpose of the present document. However, based on the above, we can say that standards have positive results as well as dysfunctional consequences that can be catastrophic. For these reasons, people implementing them should be appropriately organized to select the relevant ones and eliminate and fight those they consider incorrect.

Regarding this, we can put online some suggestions that may be helpful and be the starting point for other thoughts.

### **6.1 - Be ethical**

This is a crucial element in gaining control of standards.

- Be ethical consists in not using the immoral practices described previously. This is not always easy in a world where a particular press emphasizes behaviours similar to those of the robber barons, demonizes all kinds of opposition, and some people currently in power do not hesitate to promote theories and practices directly in line with the Nazi ideology. Thus, it is easier to be unethical rather than virtuous.
- To be ethical, we also need to learn not to react at the 1st degree to events as it is too often seen on job sites, in the press, and used by politicians to condition uneducated people. That includes not thinking according to dogmas, not reacting when we are under emotion, favouring a no-blame policy, providing advice only on adequately documented events, and keeping a distance from events to analyze them with a clear mind.
- Note that playing on several safety levels according to clients' desires is unethical. A company should set a high level of safety adapted to its operations and keep on it. It is also unethical not to adopt safety rules that are proven more realistic and safe than those published in your company policy for financial reasons, or because your company is a member of another organization, or you are not its author. Note that what some people name "industry standards" are working habits not set as official standards and not to be considered as standards, as this term is often used fallaciously. Implementing incorrect procedures without warning those who have adopted them of their potential adverse consequences is also unethical.
- Being honest is not sufficient to defend and implement ethics: We need to develop our knowledge to be able to answer unethical proposals and fallacies scientifically. That includes reading scientific and engineering documents and, thus, basing our expertise on scientific facts rather than dogma. In addition, numerous events have proven that there are situations where standards and established procedures will be inefficient, and knowledge will help people to solve the problem encountered.

### **6.2 - Analyse the published documents scientifically**

Looking for appropriate procedures is crucial in supporting the working ethic. For this reason, we must acquire the capacity to analyze every published document.

Of course, analyzing publications requires being prepared to criticize them and not consider the people who wrote them as gods who never make mistakes: As it is said in the Latin language, "errare humanum est" (To error is human).

The following questions can be used:

- Who is the emitter of the document ?  
Answering such a question allows knowing whether the document is an international or a national standard or guidance, and whether its emitter defends the interests of a particular community, so its domain of application.
- Is the document based on recognized scientific or technical studies ?  
It is essential to ensure whether the document's authors worked scientifically or in another manner. Having the name of the studies in reference and their authors allows for knowing whether these are considered references by the scientific community (in this post, the word "Scientific" applies also to engineering studies). Note that to avoid giving long lists of scientists involved in a study (some studies are made by teams of 20 authors or more), it is common to mention the name of the principal author followed by "et al.", which is the abbreviation of the Latin expression "et alia", which means "and others". The supporting documents are usually indicated at the end of the guidance or standard.
- Are the document's authors indicated ?  
It is an ethical practice to indicate the names of the authors of a guideline or a standard. It is what scientists do, what NOAA and many other national and non governmental institutions taken as references do. Note that when many authors are involved, or the document is a compilation of many documents, only the main persons responsible for it may be indicated. It is, for example, the case with the US Navy manual revision 7, or ISO, that publishes the names of the persons responsible for the technical committees separately from the documents (see this address: <https://www.iso.org/technical-committees.html>).

Unfortunately, many organizations have ceased this ethical practice, considering that their name is sufficient proof of quality, which is disputable. As a result, we do not know whether the guidance has been made by competent persons, or by someone who is not. There is nothing that companies and

individuals can do in this case except to complain to the emitter and their government. Of course, I am more confident with documents where the writers engage their responsibility than those written by people hiding behind an administrative system. Note that such practices can be the beginning of toxic publications.

- Is the guideline or the standard an initial publication or a revision ?  
The revision number and the main changes made to the original document should be indicated on a page at the beginning of it. Also, I suggest keeping the previous versions in a data bank to be able to analyze the evolutions. It is the reason there is a section called “Historical diving” on this website.
- Does the document been discussed by representatives of professional organizations ?  
This point allows to see whether the document is the result of a consensus or has been imposed. The same evaluation is applicable for evaluating guidelines emitted by associations. Usually the external participants are mentioned in the presentation of documents where the names of the authors are displayed.
- Is the document logically written and comprehensible ?  
Many guidelines are not adequately written. Among the mistakes frequently encountered we can note:
  - Approximate definitions. That usually indicates that the authors do not entirely know the topic discussed or are not familiar with writing documents.
  - Exaggerate use of acronyms is often linked to the education of the writers, particularly young people who are influenced by communication through social media and merely their teachers. They are also often the fact of ex-militaries who have been educated this way. However, they are often used to downgrade the reader (meaning "I speak the language of gods") and can be assimilated into a superiority complex. Note that many documents are today covered with acronyms that are not explained, so the reader is struggling to understand what the document speaks of. In the old time, the use of abbreviations was limited to a few complex words repeatedly used, and too frequent use was considered a grammar mistake. You can see through my documents that I have kept these good practices.
  - Texts outside the topic indicated by the title are mistakes that consist in discussing a problem that is not the one indicated in the title, so not the purpose of the document. This mistake is often made by people not familiar with how to write documents or obsessed with particular issues.
  - Of course some of the fallacies described previously may be inserted in the texts and it is sometimes difficult to isolate them.
- Gap with the guideline or standard currently in force ?  
This point is already partially discussed. When a new standard or guideline is published, it is essential to check whether it provides better safety or efficiency than the procedure in force. This is the complementary process of text evaluation. This evaluation also allows evaluating whether the new document can be adopted or whether the policy currently in force is still above the safety or efficiency proposed by the new document, which is not adopted in this case.
- Is the guideline or standard easily applicable, or does it require some time to be implemented ?  
A new standard or policy may oblige to change work methods or invest in new equipment. The impacts of these changes must be analyzed to decide whether the company can implement these changes quickly or whether other options are more suitable for the company's possibilities. Note that it has become a trend from some guideline authors to impose new expensive equipment or certification processes without considering whether the companies have the resources to buy or implement them. That can sometimes be refuted, as such requirements may be in place to favour a few wealthy companies to the detriment of others or merely one or a few equipment manufacturers.
- Point of contact of the emitter ?  
In my experience, it is often impossible to get an announcer on the point of contact mentioned on the document or website. Thus, the emitter should ensure a reliable point of contact (Address, Email, phone number, etc.).
- Value for money ?  
As indicated, many guidelines and standards are sold at prohibitive prices. Providing such evaluation may incite the publisher to reconsider his commercial policy. That may also prompt small companies or individuals to select another system of sourcing than the classical one—for example, the recourse to public libraries.

### ***6.3 - Be appropriately represented to defend your point of view***

Companies and individual workers should ask whether their interests and point of view are taken into consideration by people emitting standards and guidelines. For example, some organizations are said to represent the interests of contractors. However, contrarily to their propaganda, they do not defend the interests



Of individual workers, and the guidelines they provide, even though they may result in some protective measures for their personnel, are not designed to protect all the interests of their employees. Thus professional syndicates seem to be better structured to protect the interest of individual workers when politics do not influence them. Also, the companies members of professional associations should interrogate themselves about the real support these organizations really provide. For that, we can use the following questions:

- Does the organization emits guidelines? If yes, what are their average technical level, writing process, and the organization's policy regarding their implementation by the members ?  
There are numerous professional associations or similar whose primary function is to develop the activities of their members; some publish guidelines, and others do not and base their actions on other aspects. When the organization publishes guidelines, it is essential to analyze their technical expertise level. However, being a member of an organization producing fewer guidelines or lower technical documents than another is not automatically disadvantageous. What is essential for a company is to organize technical support to ensure that its personnel is adequately skilled and become a reference in its domain of activity. This technical level can be obtained by channels other than the organization that may prefer publishing only basic guidelines, freeing its members to decide for the others. The policy for implementing the organization's guidelines can be authoritarian or soft. Note that it is often linked to the technical level of the documents, as suggested above. Note that I am naturally suspicious of people imposing things in an authoritarian manner.
- How is the organization managed ?  
Professional organizations are usually managed by committees, each in charge of an aspect of the organization's goal. A yearly general assembly is commonly organized to validate the work made by the committees and name their members and the members of the organization's management board. The members of these committees and the board can influence the policy of the organization. Also, the way the elections are organized is essential. For example, some international organizations consult their regional cells for the election of the technical committees and the management board members, while others do not. In this case, the members must go to the annual general assembly. A problem encountered with international organizations is the non-availability of members not based in proximity to the place where the general assembly is held due to long travels that can take several days. That often results in committees composed of members based nearby the organization's headquarters and employees of multinational companies. Thus, regional mid and small-size companies may not be represented, which may result in undesirable guidelines imposed on them. That can be compensated by general assemblies and committees organized cyclically in the various parts of the world where the organization operates.
- Is there a policy against conflicts of interest and avoiding an influential member taking control of the structure ?  
This point is complementary to the one above. According to the "Master class dictionary", conflicts of interest arise when people use their professional or financial relationships for personal gain. These instances can crop up in corporate settings, non-profits, public offices, and businesses. Conflicts of interest do not always consist of direct financial profits, as they can be advantages and favours that will be profitable in a long-term process. In professional associations, that can be someone whose primary activity can take advantage of decisions from committees and is in a position to push these committees for these decisions. For example, X leads a group of schools and is a member of a committee of a professional association emitting guidelines. X may influence the association to push it to emit policies that require training courses, which will be profitable for the group of schools he/she leads. Also, several historical cases show that some professional organizations have fallen under the control of one or several companies. The classical procedure these companies use is to have employees in all committees of the organization and take control of it by influencing the decisions of the other members.  
The organization's policy should consider such problems and emit restrictions to avoid them happening. It can be the evaluation of the members' activities and their limitation to only one committee.
- How are the organization's personnel engaged and managed ?  
Another essential point is the control of the personnel engaged in supporting the professional organization's activities. The reason is that it has often happened that sportive, financial and professional associations fall under the control of their employees to the detriment of their members. The process is broadly the same: People are recruited to manage the association's everyday activities, that the members have no time to do it due to their primary business activity. Then, step by step, the employees gain control of all the aspects of the association, whose members gradually lose control because they focus on their company activities and have only limited time to dedicate to the association. Finally, the policy of the association is set up by the employees who organize to

perpetuate their position. That usually results in nonprofit organizations going astray, as they become hidden commercial structures, for which the primary purpose is generating wealth to secure their employees' high salaries and desire for power (in such cases, the employees have created an unethical pressure group). Of course, the guidelines of the organization may not comply with those needed by the members and also be decreased in quality for the reasons explained in the previous points. This problem is one of the most difficult to control by people involved in other essential businesses than those of the association. A solution commonly used is to limit the duration of contracts of the employees and, thus, organize a turnover.

- Does the organization provide a range of logistical support to its members ?  
Such support often depends on the nature of the organization. A lot of organizations provide logistical support such as insurance at preferential rates, appointed lawyers, technical advising, recruitment organizations, favourable prices by selected equipment and service providers, etc.  
Such additional services are often advantageous for the members of an association. It is often encountered with agricultural cooperatives (also known as farmers' coops). For remembering, a cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. The juridical services proposed can be helpful for expressing points of view and defending the members from legal attacks.
- Is the organization fighting for its members ?  
This is a crucial question. It has often been seen associations and syndicates that were not fighting for the people they were supposed to protect. Cases of prevarications are numerous where syndicate representatives work for persons whom they should protect the members of their syndicate. We can consider such events as corruption, as the motivation for such behaviour is usually money, but that can also be political ideas. It has happened that such persons were the origin of associations operating against the interests of their members.  
Another form of organizations not defending their members is linked to an inappropriate policy imposed by some members on the other members. For example, the assumption that being fully collaborative with clients' organizations and implementing all their desires will be positive for the association may have undesirable consequences on its members, as they are unprotected from the abuses of their clients. Worse, noncollaborative members may be charged by their organization and demonized in case of conflicts. Thus, being in a situation where they get inconveniences and disagreements.
- What is the advantage of being a member of this association ?  
Commercial companies usually become members of professional associations to retrieve advantages that will allow the company to increase its business. Also, in some cases, companies become members of professional organizations because they are constrained to do so by their clients, which is illegal. Based on the elements previously discussed, people should analyze the advantages provided by an organization and whether the company should become a member. Of course, the analysis should be performed ethically and eliminate all forms of propaganda. In fact, organizations using massive propaganda should be classified as suspicious.
- Are there similar or complementary organizations ?  
Company managers should take appropriate measures to be suitably represented. That may consist of looking for equivalent organizations of the one evaluated or creating a specific structure adapted to the needs of the company and able to discuss standards and guidelines with the various national and international bodies. Of course, that requires finding other members, which may be a long process! However, if it looks like it is necessary; it can be the key to a better representation. Also, we must understand that it is not forbidden to be a member of several organizations. It is also important to be detached from any.

Individual workers should ask themselves similar questions. Note that no syndicates are internationally representative of the interests of workers in the diving and ROV industry. Some worker's associations exist in the Scandinavian countries that tried to impose their standards on the diving industry. However, according to the documents provided, their ideology regarding standards is to set unique guidelines based on NORSOK standards which they review. Sorry to say that this would result in a lack of research and the beginning of a monoculture based on only one approach, so the opposite of what I said in this post: Again, the future of humanity is in its diversity! Thus, what these organizations propose for international standards is unacceptable. Therefore, a more suitable structure has to be created. This structure could reference organizations such as "the Companions", initiated by the builders of cathedrals and castles during the late medieval period and which expanded from France to the rest of western Europe. Describing this system in detail would be lengthy and is not the purpose of this post. However, we can say that Companions' organizations have been the origin of

most standards used for building activities in these countries and are still involved in such processes. This system, which was one of the 1st organized means of defense for workers, far before syndicates, leans on high expertise acquired through a network of establishments managed by master companions, where the apprentice learns work methods from various regions, and the solidarity of its members.

#### ***6.4 - Ensure that states control or regain control of the activities considered***

I have already said that unethical pressure groups often impose their desires because of poorly organized opposition, in addition to states' lack of interest in the activities considered or the lack of power of governments. However, some states impose their point of view, laws, and standards so that even though they are consulted, all pressure groups are obliged to follow the procedures in force in the country. It is, for example, the case of Norway regarding diving activities. That doesn't mean that their rules and point of view are always the best. Some are selected in our handbooks, and others are not. However, they have the merit to be more stringent than many and remember pressure groups that the working practices in the country depend on the government in power by the will of citizens and are the same for everybody.

We can consider that this is an example that governments and their administration can control the activities in their country and that it is not inevitable that non-governmental organizations take power in place of the legal government of a nation. Thus efforts must be made to ensure that governments are sufficiently organized and helped to perform their mission as they should. That is, of course, linked to elections and nomination processes.

Also, governments should pay particular attention to protecting small and young companies, which are usually the more fragile. Regarding this point, in 2017, I made a report for a major multinational company where I concluded that they should consider the small companies working for them at the same level as those operating at the global level and eventually help them to progress; otherwise, these small structures will disappear in the profit of the strongest, which will result in an unbalanced offer of services with only a few companies arranging together to impose their standards, prices, and working conditions to their clients. Based on this fact, it appears logical to consider that something must be done and that the states remain the better judges of equitable practices for a balanced market if there is a dense network of relevant opinions on which they can lean.

Note that laws, and standards published by states should be easily applicable, consistent, and accessible to everyone working in the activity considered.

When, for some reason, it is impossible to implement what looks to be the most pertinent rule and a less safe practice is to be kept in place, that must be indicated in the document so that the reader understands why.

The problem of governments regarding standards is that it is always a paradox to decide whether a suitable standard the community is not ready for is to be published or whether its publication needs to be delayed. One of the reasons they take into account is that a too stringent norm may result in many companies stopping their activity due to a lack of resources. It is, thus, not wise to remove people from their means of life under the pretext of protecting them, as there is a risk of plunging them into miseries, which is not the objective of the standard.

In addition, to support the activities of their government, the network of opinions must be sufficiently ethical to document and indicate some illegal behaviours to the authorities.

#### **7 - To conclude this short analysis**

Although laws, standards, and guidelines have usefulness which has been shown widely and have been a driving force for progress throughout history, we can see that they can also be diverted to the profit of a few people we have named "Unethical pressure groups".

For this reason, any entrepreneur, employee, and freelancer should take action to ensure that these documents benefit the entire community, do not have the potential to create inequalities and conflicting situations, and are easily applicable. We have seen that this process is not the easiest, as it requires honesty, involvement, concertation, and also projection in the future. In addition, it requires understanding the techniques the "unethical pressure groups" hide behind, and being able to implement appropriate methods to detect and fight them, such as the systematic evaluation of the documents published, as well as the selection or creation of organizations adequate to defend the interests of every company or individual so that every opinion is taken into account and everyone feels adequately represented.

Regarding this critical point, the evaluation of the practices in force in our industry makes it clear that medium size companies, small contractors, and individual workers are poorly defended. That creates an obvious imbalance with influential groups and is inconsistent, considering that these unrepresented companies and workers paradoxically are the majority of people who contribute to developing this industry.

Therefore, something has to be done to obtain a more realistic balance, as the market rules can only work

when there is equality between the offer, the demand, and the various actors.

Hence, it is also essential that states reinforce their role and become more vigilant regarding protecting the unfavored companies and their citizens. Of course, this is against the dogma of a single culture and market directed by a central institution and the financial power of the actors. Opposite to this precept, which is profitable for only a tiny fraction of the population, states are the legal representations of the various human communities, and this diversity is fully compatible with the principle of national and international standards if these are based on consensus and aim to protect people without the intention of making profits, imposing an ideology, or favouring one community to the detriment of others. Thus, instead of having a unique organization emitting standards and guidelines, it is wiser to have several institutions capable of emitting such documents that can be compared to result in a consensus of the various communities involved, and, thus, ensure that their well-being and future are not in the hands of only a few, and that megalomaniac behaviours of some are prevented.

In addition to the above, and opposite to these people who think that everything must be standardized and legislated, it is more suitable to publish a reduced number of well-written standards and guidelines, based on ethics, common sense, expertise, and scientific research, than post a lot of less relevant documents that finally conflict each other and do not provide meaningful information, as it is, unfortunately, currently the trend with several organizations.

Of course, the publication of mandatory documents must not be the source of profitable business: From an ethical point of view, national and international standards and laws should be accessible free of charge to everyone. Thus not sold at the excessive prices currently often encountered.

