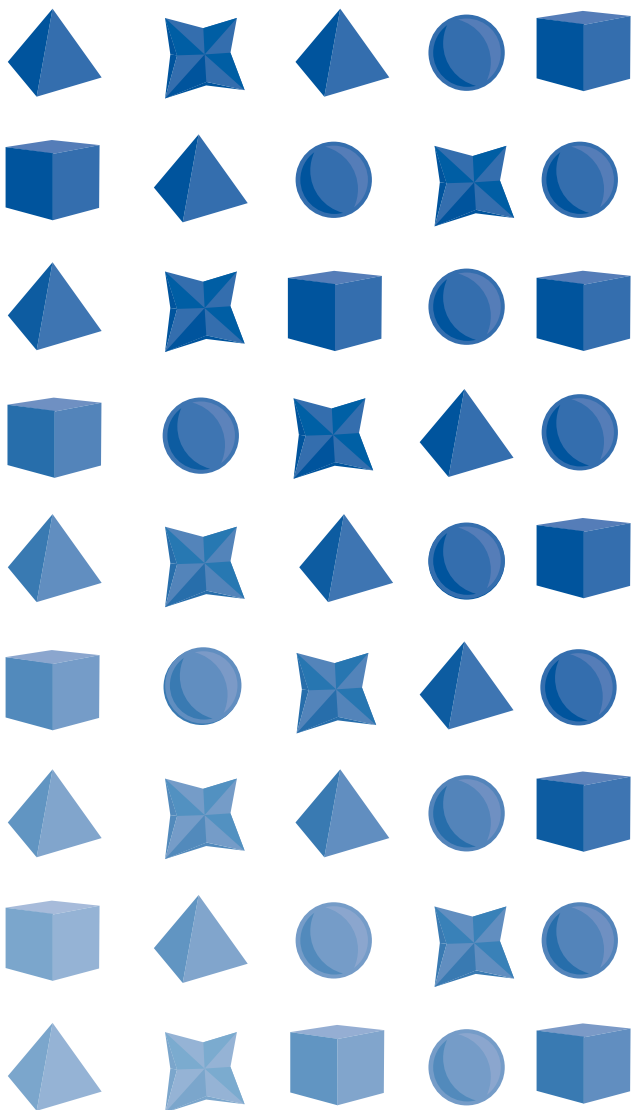




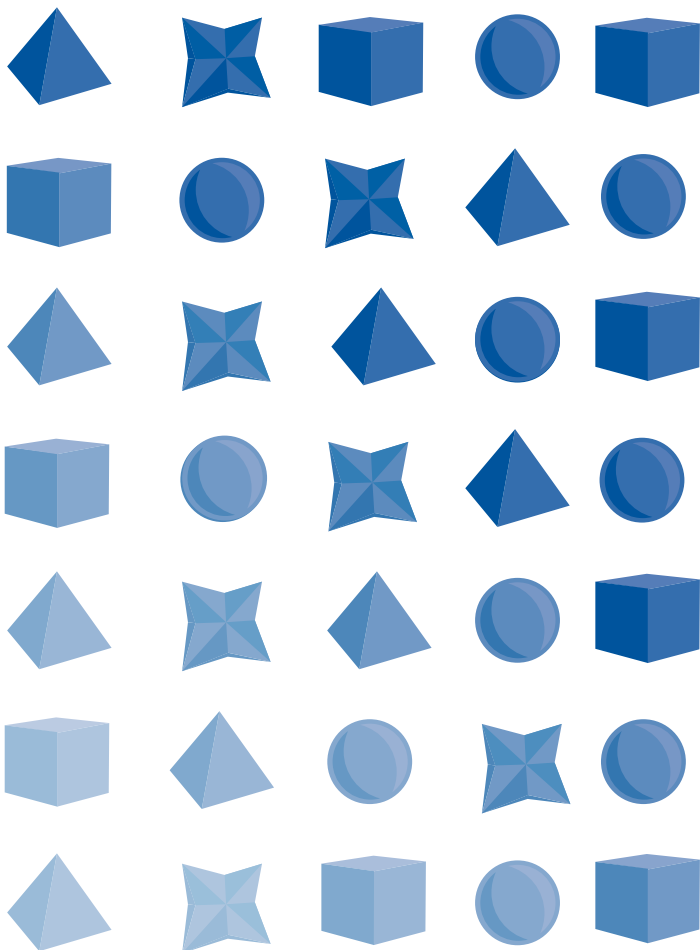
IRSN

INSTITUT
DE RADIOPROTECTION
ET DE SÛRETÉ NUCLÉAIRE

Enhancing nuclear safety



CODE OF ETHICS AND PROFESSIONAL CONDUCT



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CODE OF ETHICS AND PROFESSIONAL CONDUCT **of IRSN**

JUNE 2013 _____

This Code of Ethics and Professional Conduct meets the requirements of article 10.b. of the amended decree of February 22, 2002 concerning IRSN, the French Institute for Radiological Protection and Nuclear Safety. It sets principles of ethics and rules of professional conduct incumbent upon IRSN's staff in the performance of its missions.

The Code was approved by the Ethics Commission on April 24, 2013 and by the Board of Directors on June 18, 2013.

Its provisions meet the requirements of the Constitutional Charter for the Environment concerning the right to information and the right of participation. It complies with legislation related to the protection of information: medical confidentiality, defense, industrial and business confidentiality, intellectual property, and personal data.

THE INSTITUTE'S OBJECTIVE: ENHANCING NUCLEAR SAFETY

INTRODUCTION

The discovery more than a century ago of the properties of radiation emitted by certain naturally radioactive atoms and subsequently of the energy potential associated with the phenomenon of nuclear fission has led to the development of numerous applications in medicine, scientific research, industry, energy and defense.

While not immediately noticed by those who first used these properties, it became evident that acute or prolonged exposure to ionizing radiation, which is not immediately detected by the human body, may have serious harmful and even fatal effects in the short term or over time. In addition, experience has shown that the significant thermal energy that accumulates in nuclear reactor fuel can, in very exceptional circumstances, cause the destruction of the reactors. Accidental releases into the environment of large amounts of radiation could thus contaminate sizeable areas and even make them unusable for very long periods of time. In addition, the risks associated with nuclear technologies can persist over the very long term, much longer than the human lifetime (an issue for certain nuclear waste), or combine the considerable severity of the hazard (a nuclear reactor core meltdown accident) with a very low probability of occurrence.

For this reason, the sustainable use of nuclear technologies requires the ongoing development of knowledge and techniques to manage the associated risks so as to reduce them to levels that are as low as reasonably achievable while addressing societal concerns. Determining the uncertainties of safety parameters and calculating the probability and combination of rare undesirable events and their catastrophic consequences are important for risk management.

France created a specialized public institution, IRSN, as part of the regulatory framework specific to nuclear facilities and the diverse uses of ionizing radiation.

IRSN's missions are to develop research on nuclear and radiological risks, to perform independent risk assessments and to provide expertise, in support to the competent public authorities, to inform all concerned parties, and to facilitate public awareness of these risks by providing information on them. These missions enable the Institute's overarching objective of "enhancing nuclear safety". To accomplish its missions, IRSN interacts with all of the other parties involved in nuclear risk governance: the nuclear industry, users of and other parties involved in ionizing radiation, governmental authorities, and stakeholders (civil society, local information commissions, etc.).

These missions require that IRSN and its employees take into account a large number of constraints, which in some cases may prove to be contradictory. For example, they may involve:

- conducting research and studies in a wide range of disciplines according to rules of professional conduct and scientific approaches specific to each, while applying research priorities and integrating scientific advances for greater nuclear safety and better radiation protection;
- cooperating on a daily basis with a large number of contributors, both French and foreign, while maintaining independent judgment and its chosen priorities concerning risk assessment;
- making the Institute's knowledge available to industry as part of services provided to further safety and radiation protection, while these firms are accountable to the competent authorities, which in turn rely on IRSN technical support;
- distributing knowledge and relevant information from research and assessments to stakeholders so that they can respond accordingly, and releasing information concerning IRSN's actions without contravening applicable administrative procedures, the rights of third parties or the protection of information covered by medical, defense or business confidentiality.

This Code of Ethics and Professional Conduct establishes guidance for addressing these constraints and resolving conflicts that may arise. For the Institute and its staff, the articles of the Code constitute points of reference for enhancing nuclear safety, nuclear security and radiation protection and augmenting the safety culture. For IRSN's partners and parties involved in nuclear safety, these articles help understand how the Institute functions and thus facilitate dialogue.

ESTABLISHING KNOWLEDGE

ARTICLE 1



IRSN bases its observations, analyses and assessments on accumulated scientific and technical knowledge.

It broadens and consolidates that accumulation by producing new knowledge and integrating existing knowledge from outside the Institute.

TO ACCOMPLISH ITS MISSION OF ASSESSING NUCLEAR AND RADIOLOGICAL RISKS, THE INSTITUTE PLEDGES TO:



Take a position despite the inevitably incomplete nature of knowledge



Increase the knowledge it uses through research conducted on its own, in partnership with others and through experience feedback



Identify research needs, taking into account discussions with all stakeholders as well as research performed at the national and international levels



Draw attention to identified knowledge key gaps



Make explicit and regularly update knowledge bases derived from research and analysis of experience feedback



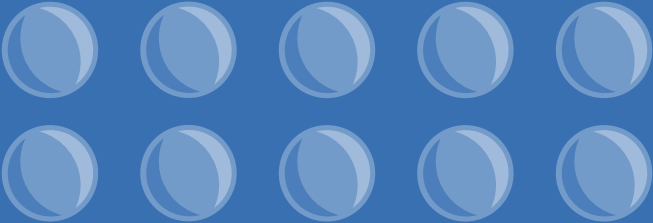
Periodically assess the quality of its research based on independent scientific assessment



Identify the risks of losing critical skills and knowledge and prevent such loss by adequately managing human resources and knowledge. Professional education is one way to accomplish this

WORKING COLLECTIVELY

ARTICLE 2



The need to call on knowledge that is extremely varied, evolving and open to multiple interpretations prompted IRSN to implement collective working processes capable of consolidating the quality and strength of the efforts mentioned in article 1.

To the same end, the technical information on which the Institute bases its positions must be accessible and discussed with the parties concerned (public authorities, industry and civil society), each having its own competencies and concerns.

FOR THIS REASON, IRSN PLEDGES TO PERFORM ITS WORK ACCORDING TO A SET OF COLLECTIVE WORKING PROCESSES:

1

Engage stakeholders in order to identify their expectations and understand their point of view

2

Make teamwork a priority

to bring a multifaceted view to risk evaluation by calling on knowledge from groups of “generalist” and “specialist” experts involved in preparing IRSN's positions and assessments

3

Give its staff timely access to a pool of scientific and technical knowledge

4

Examine and maintain the traceability of any internal scientific or technical controversy

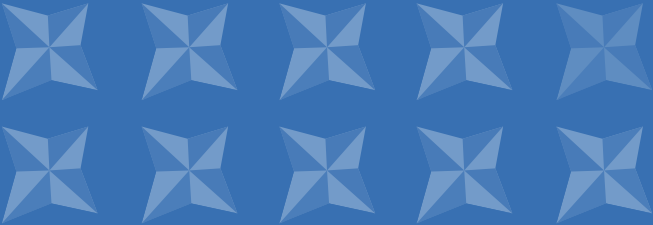
with due respect to the opinions of others, recognizing that internal consensus may not always be achievable

Establish its positions with due consideration of the uncertainties and gaps in available knowledge

and of any scientific controversy and divergent opinions that may influence analysis; report on such issues if necessary when formulating its opinions; and endeavor in each case to express a conclusive position

SHARING KNOWLEDGE

ARTICLE 3



To enhance nuclear safety, nuclear security and radiation protection, IRSN interacts and shares its knowledge with public authorities, industry and civil society in such a way as to encourage the maximum use of the results of its work.

FOR THIS REASON, IRSN PLEDGES TO:



Give a public character to the main results of the work performed by the institute as technical and scientific support to government administrations, agencies and public authorities



Give priority to provisions that authorize the publication of key results, when establishing commercial contracts for service.

If this is not possible, the Institute will ensure that the reasons invoked for confidentiality are well justified and, in case of doubt, may refer the matter to the Ethics Commission. Such contracts include procedures for publishing the results and for their use in the conduct of the Institute's activities



Make publicly available other results of works performed as part of its missions, in particular research and the results of national radiological monitoring activities



Apply the commitments of IRSN's charter on openness to society in its work with societal stakeholders



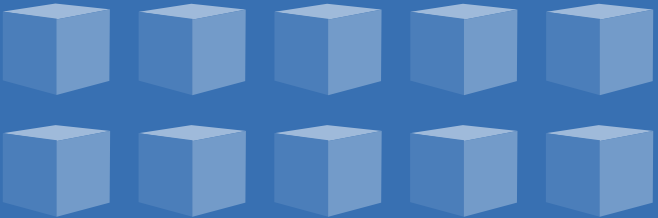
Alert the responsible entity, or in its absence public authorities, about situations that in IRSN's opinion present serious nuclear or radiological risks. It shall immediately alert public authorities if it judges that the situation requires a rapid response



Promote good practice with regard to safety, security and radiation protection in work involving standardization and harmonization in France and abroad, and more generally with regard to safety culture in its areas of competence

ACHIEVING INDEPENDENT JUDGMENT

ARTICLE 4



IRSN shall preserve its independent judgment and is organized to avoid conflicts of interest when performing its missions. To this end, it shall take measures to ensure that competing interests do not affect its independence.

FOR THIS REASON, STAFF MEMBERS SHALL:



Comply with the requirements for declaring and updating any potential interest as set forth in the national regulations and by IRSN



Be aware of their possible exposure to individual conflicts of interests, ensure that those of a financial nature are minimal and, in any case eliminate those that would be of a contractual nature

IN PARALLEL, THE INSTITUTE PLEDGES TO:



Inform the Ethics Commission annually of the status of its potential conflicts of interest with industry (not including standard services). It shall also inform recipients of its technical support of such potential conflicts of interest, insofar as they are concerned



Ensure that funding from industry in its research activities remains limited so as not to influence the work of its laboratories



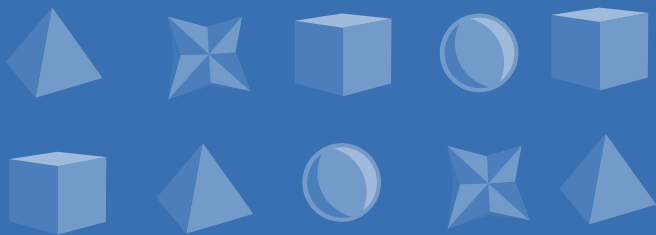
Include clauses protecting the freedom of interpretation of results in commercial contracts, especially those concerning research conducted in partnership with industry



Organize its work processes so that potential services of conflict of interest concerning the Institute, its staff or its subcontractors does not influence its judgment. The director-general shall refer the matter to the Ethics Commission when he believes that the risk of undue influence is significant



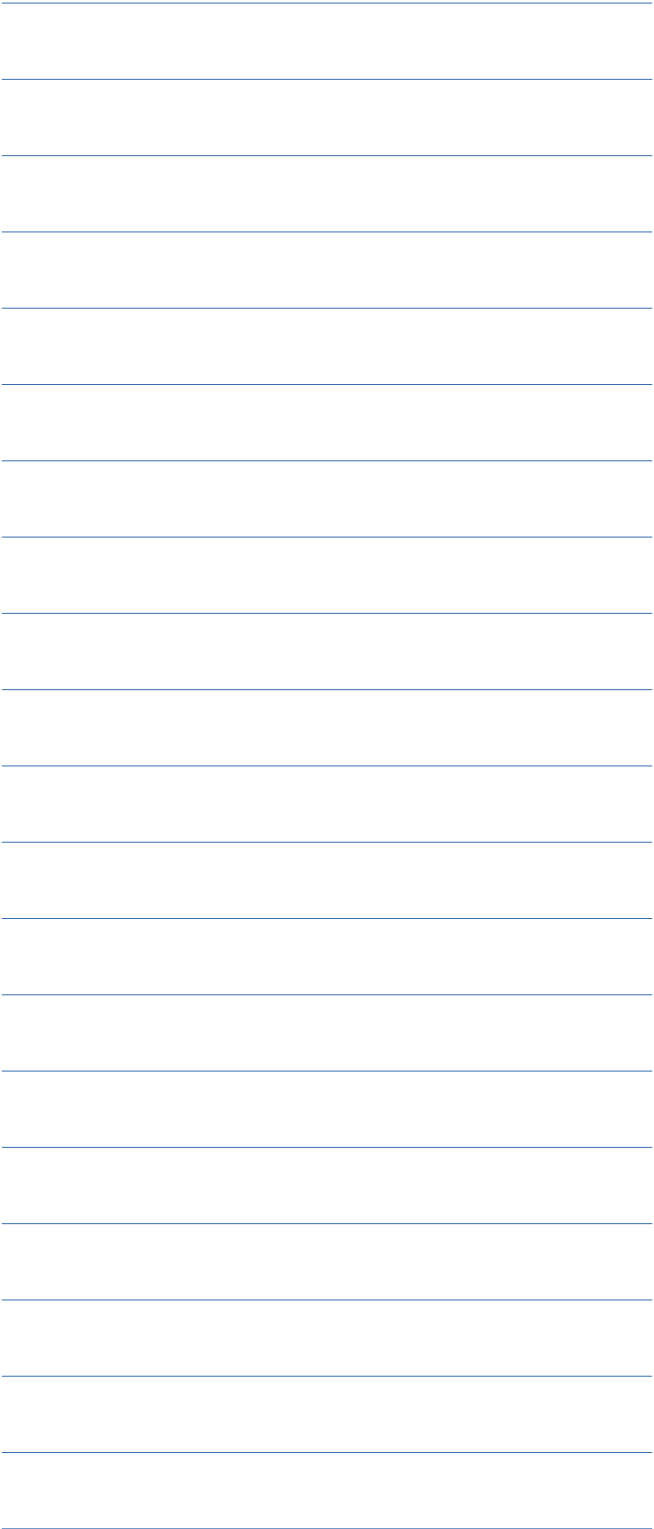
Notify the customer, for any commercial service offered, that the use of the results of such service within a regulatory framework shall not in any way influence the Institute's assessment if requested by the competent authority



The provisions of this Code are not exhaustive as concerns rules of professional conduct. IRSN monitors compliance with laws and regulations, particularly in the environmental, public health and defense codes, which include requirements in this field. In addition, some of the Institute's internal documents, present and future, supplement the provisions of the Code of Ethics and Professional Conduct, such as the Charter on Public Communications and the Charter on Openness to Society. The conditions for application of the Code also take into account the general requirements of the NFX 50-110 standard on quality in expert assessments.

In the event of uncertainties about the application of this Code, staff members may address the matter to their supervisors. If this does not resolve the uncertainties, and for any matter of interpretation or implementation of the Code that the Institute may raise, the matter may be referred to the Ethics Commission in accordance with the provisions of its rules of procedure.

The Ethics Commission is kept informed of the follow-up given to application of this Code and submits an annual report to the Board of Directors. It may propose updates to the Code.



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IRSN certified quality
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IRSN

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