

**BASIS FOR A WASTE MANAGEMENT PUBLIC COMMUNICATION POLICY:
ACTUAL SITUATION ANALYSIS AND IMPLEMENTATION OF
CORRECTIVE ACTIONS**

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ABSTRACT

Argentina will require new sites for the location of radioactive waste final disposal systems. It is currently mandatory to have social and political consensus to obtain the corresponding agreements.

The experience obtained with the cancellation of the project "Feasibility Study and Engineering Project - Repository for High Level Radioactive Waste", reinforces even more the necessity to count with the acceptance of the public to carry out projects of this kind. The first phase of the former was developed in the 80's: geological, geophysical and hydrogeological studies were performed in a compact granitic rock located in Sierra del Medio, Chubut province. This project had to be called off in the early 90's due to strong social rejection.

This decision was closely related to the poor attention given to social communication issues. The governmental decision-makers in charge underwent a lot of pressure from social groups claiming for the cancellation of the project due to the lack of information and the fear it triggered.

Thus, the lesson learnt: "*social communication activities must be carefully undertaken in order to achieve the appropriate management of the radioactive waste produced in our country.*"

The same as in other countries, the specific National Law demands the formulation of a Strategic Plan which will not only include the research into radioactive waste, but the design of a Social Communication Programme as well. The latter will be in charge of informing the population clearly and objectively about the latest scientific and technological advances in the issue.

A tentative perception-attitude pattern of the Argentine society about the overall nuclear issue is outlined in this paper. It is meant to contribute to the understanding of the public's adverse reaction to this kind of project.

A communication programme is also presented. Its objective is to install the waste management topic in the public's opinion with a positive real outlook.

INTRODUCTION

Chernobyl nuclear accident (April 1986) triggered a worldwide sort of *radiophobia*, which generated distrust, and which was generalized to all nuclear activity by non-governmental organizations, initiating an international anti-nuclear movement.

Radioactive waste management and the location of a suitable place for the installation of a Deep Geological Repository for the disposal of high level waste and spent fuels (derogatively called "nuclear waste bin"), have arisen public controversy due to the social and political importance of environmental issues.

Until the mid 80's, decisions taken officially in Argentina did not require public consensus. Nevertheless, the environmental aspect was always considered, fulfilling all the nuclear security requirements, radiological protection in the existing facilities and in the new projects to avoid undesirable effects on personnel, population and environment.

Nowadays, it is mandatory to count with social and political consensus to decide upon the location of new facilities. Therefore, the way mass media inform the public about certain events or report their own research has great importance due to the effect their opinion exerts on the public.

To some extent, mass media build up the social reality image about a controversial issue, as the one described above, affecting public opinion in the short and long terms. The information gaps left by the National Atomic Energy Commission (NAEC), in charge of radioactive waste management, are filled by the opinion of those who overtly oppose nuclear activity or others who become spokespeople of these fundamentalist-environmentalist groups, due to the lack of suitable objective information.

It is also important to reach society by means of a permanent communication link with their legitimate national, provincial and municipal representatives; together with other opinion leaders such as non-governmental organizations, private companies, schools, professionals, neighbour associations and other live community forces.

Scientific knowledge in all disciplines, not only the nuclear topic, must be regarded as a strategic instrument. Society as a whole is the true owner of this asset, since taxes support the scientific and technological developments of a country. Materializing the alliance between citizens and scientists would be the ultimate celebration of democracy (Grenada congress conclusions "Communicating science in the XXI century").

Besides, the need for adequate information is basic in democratic countries where society has every right to take part in decision-making processes. Defence from radical groups is not enough. An active permanent communication policy, transparent and well coordinated among all the areas of an organization must be performed.

ACTUAL SITUATION ANALYSIS

Public acceptance or rejection of the nuclear issue as a whole is related to the way that reality is perceived. Perception is a selective phenomenon by which, different people or social groups, perceive different things of the same reality by means of a subjective process. However, acceptance or rejection of the nuclear issue refers not only to its risks, but to its benefits as well.

The comprehension of why this anti-nuclear attitude has grown in society has been explained by the analysis of risk perception. Drawing conclusions on this analysis we learn that public ignorance of the risks is extremely high, and that an unknown risk cannot be accepted

S. Pêtre points out that man lives simultaneously in the bare world of facts and in the sea of symbols and that, in the nuclear energy world, a large sector of society has a merely symbolic-sustained attitude due to the lack of rational information. Reaction is thus in defence of the symbolism.

This large sector has defined its attitude based on a symbolic system of perception. They reject the risks because they are unknown to them, and do not accept its benefits because they do not know them either. However, this sector limits politicians' actions and decisions. In the future, it will condition nuclear energy as a whole: its peaceful applications, research and technological development.

This vast majority of society ignores almost everything about nuclear energy, wants to know even less about it, fears, rejects and has a symbolic structure that sustains all the above mentioned. All these features have one in common: lack of information.

Several authors (Slovic, Sjöberg, etc.) have stressed the difficulties transmitting rational messages on the topic to large social groups entail, and have stated communicators' disagreement and/or impossibility to carry out this task.

This large public has decisive power in the future of nuclear energy. All indicators seem to point out the need for information on the subject.

The structure of society according to levels of perception on the nuclear issue

Four large groups can be distinguished with their own different levels of perception.

- A.- The public in general.
- B.- Politicians and decision-makers.
- C.- A well-informed public versed in the subject.
- D.- Members of the specific technological field.

It has to be noticed that group D is the only capable of generating the communicative dynamics of this issue.

Group A: The public in general

Being the orphan in this story, the public in general has been recognized by members of group D (individually or structured in an organization) as the main target for communicative efforts.

Nevertheless, they cannot go any further than having public diffusion in scenarios such as fairs, congresses, exhibitions, schools, universities, news programmes, interviews, etc. which will slightly enlarge group C, but will not result in communication actions capable of altering group A's status- quo.

This group lacks information and perceives us negatively. It is influenced by its prevailing symbolic system that induces it to resist reality, withhold its own prejudices and be influenced by international groups who oppose nuclear energy based on slogans and simple but effective images (symbols).

Group B: Politicians and decision-makers

Group D is also responsible for communication actions carried out with politicians and decision-makers.

For various reasons (group size, background, interest in receiving information, communication channel effectiveness, etc.), actions implemented by group D have drawn a general result that qualifies politicians as an informed group. However, due to their different backgrounds, three sub-groups could be distinguished which would lead to a sub-categorization of this group: politicians belonging to the public in general who have little information, well informed politicians and another one of experts versed in the subject.

It could be therefore inferred that this group perceives us positively (with the exception of group B-A which does not perceive us at all), but its actions are strongly conditioned by group A due to political and electoral reasons.

Group C: A well-informed group versed in the subject

Group D's actions together with this group's own initiatives, constitute group C.

This group perceives us positively, with a few exceptions, but has little or no power to modify the situation of rejection and not acceptance sustained mostly by group A's perception.

Group D: Members of the specific technological field

In this group there are also sub-groups A, B and C (public, politicians and decision-makers and well-informed public).

We have highlighted in groups A, B and C, the importance of group D. The group as a whole has this responsibility, not only a part of it. That is why the definition of the existence of sub-groups A, B

and C inside group D is not secondary, it highlights the need to direct communicative policies to the internal public before sending it outside of it.

Mass media and opinion leaders

Mass media constitute a group that can be compared to politician group B with its corresponding sub-groups BA, BB and BC.

The difference between group B and the politicians is that their role is not making decisions in the community's benefit but informing. In order to inform, they have had to decide what and how to inform in order to do profitable business. In this way, it is they who decide what can be informed, communicated and what is news; according to the objective set and under the false pretence that they are interpreting society's needs and will.

The group has already decided (mass media at least) that science and technology have almost no rating or the hierarchy required to "be", or exist as news.

This has made a clear-cut division: mass media and those who are not. This has established a dual derivation channel: on one hand are nuclear energy detractors with their simple, symbolic, effective and apocalyptic message and the mass media with their immense and massive power targeting perception group A. On the other hand are nuclear energy advocates with their rational, academic and boring messages transmitted by the rest of the media (cable TV channels, specialized magazines, etc.) limited to the other perception groups.

Different ways to understanding and possible solutions

Having stated the problem, the solution seems easy. The idea is to change the direction of the equation. Assuming rightness and truth are on our side, and that nobody will be convinced by tricks, nuclear energy advocates should beat mass media.

Nuclear reality in Argentina. Similarities in other countries of the world

In several surveys and opinion polls carried out in Argentina (Sofres Ibope, 1995. H. Muraro, 1997 and others) in the field of risk perception, the image of nuclear related institutions and the general nuclear issue show similarities compared to others performed in different countries. What is common to all of them is the lack of positive well-meaning real information given to who has been defined as the public in general or perception group A.

Rational or symbolic, true or false, what has come to light is that, at least the level of the group above mentioned lacks information.

Considering that "information is in itself a complex mix of truths and symbols" (Prêtre); it is therefore mandatory to assume that informing massively, that is, carrying out *social communication in the nuclear area*, will be neither easy nor financially irrelevant, but will certainly be unavoidable.

IMPLEMENTATION OF CORRECTIVE ACTIONS

As the situation is stated, the solution is linked to the inclusion of the nuclear issue (including the location of sites for waste final disposal systems) in the mass media, through a social communication programme. Its objective will be to modify group A's perception (the public's) which conditions group B's actions (the politicians').

Fulfilling what has been established in “Radioactive waste management regulations” [Law 25018 (1998)], NAEC has designed the “Strategic plan for the management of radioactive waste generated in Argentina”. The plan has been approved by NAEC’s Board and sent to the President of the Country who, after consulting the Nuclear Regulatory Authority, will pass it to the National Congress to be treated and approved by law. This plan must be checked and updated every three years.

The Strategic Plan includes a “Social Communication Programme” to inform society about scientific and technological aspects of radioactive waste management which have to be carried out by NAEC.

The programme must give clear and objective information. This will allow the public to have access to the scope of activities included in the project. It will also report on the direct and indirect benefits that communities linked to the repository will receive. The way the media inform society has great importance due to the influence they exert on opinion and the public’s acceptance.

Basic structure for the design of a social communication programme

The basic structure is related to the necessity to define the situation, size it up, and adopt a tactic and a planning strategy. Later, when put into practice, permanent assessment will be carried out to implement corrective actions of this programme, which is of permanent improvement.

The different stages the proposed social communication programme comprises are the following:

- 1.- Strategic stage
- 2.- Tactic stage
- 3.- Implementation stage
- 4.- Assessment and feedback stage

which are described below:

Stage 1: Strategic

Consists of searching, acquiring and taking advantage of the information available. It will allow strategic planning in general and comprise the following phases:

Contextual outlook of the situation. It is the preliminary research, carried out from the gathering of the available information. It will allow placing the situation in its historical background context.

Preliminary diagnostic research. It is performed by means of adequate indicators. These will allow the collection of updated data to be able to extrapolate the situation. In this way, goals will be established to determine programme strategies.

Objective setting and strategy definition. They are carried out to orient knowledge and diffusion of the nuclear issue positively; together with the specific matters related to radioactive waste management, such as the location of a nuclear repository.

Stage 2: Tactic

It comprises the following phases:

The choice of audiences and tools. It is associated to the necessity to distinguish general topic messages (emotional and symbolic), oriented to the general public (group A), from others of a more

rational and explanatory nature. The latter are oriented to other segments of society belonging to groups already described.

The design of a preliminary programme and schedule. They are performed so that communication actions will enable society to reach the levels of comprehension and knowledge required to support the decisions taken by its direct action or in its name. Progress will thus be achieved in an orderly and pre-determined way.

Budget and resources. They must be matched to the existing ones and those needed to complete the general programme.

General planning. It is carried out by designing a tentative schedule that will include estimated time, budget and description of the human resources needed to achieve those objectives; each of which will be constituted by the concrete aspects to be achieved. They will have to be measurable and achievable over a feasible period.

Stage 3: Implementation

It is made up of the following phases:

Responsibility appointment. International experience shows that large work teams constituted by scientists, technicians and social communication experts (tandem team) achieve the best results. It is therefore necessary to train the groups above mentioned, who will have the responsibility to set the objectives and general outline of the programme. These will be carried out by means of their media training so that they will enhance their skills to interact with reporters and the public.

Tool definition. As has been mentioned in the first tactic stage, the objective is to orient diffusion messages to the public (by emotional and symbolic messages), and to other segments of society belonging to groups already described (by rational explanatory messages). All communication channels and suitable tools are used together in a coordinate way, following preliminary research diagnostic studies to ensure goal attainment.

Stage 4: Assessment and feedback

Its phases are:

Permanent assessment. Strategic plan fulfilment must be monitored while the programme is carried out. The objective of which will be to detect deviations, non-coordinated actions, perform the corresponding corrections and adapt planning to the new scenarios that might arise due to social and/or political changes.

Management and strategy control. They must belong to the organizational structure that controls the permanent assessment systems that could be hired. The use of scientific research opinion methods as a permanent element of public consult allows verifying objective attainment and strategic efficiency.

Strategic stage revision. If it were necessary to set new goals, or correct unattained objective strategies, planning must be fed back checking the strategic stage.

CONCLUSIONS

Mass society, its most homogeneous segment, defined as perception group A, is informed by the mass media. The media (important newspapers, AM radio and TV) refer to the nuclear issue considering the negative-symbolic model already installed in public opinion, after the long absence of information to the mass level from the sector itself.

Very rarely do the media include descriptive and/or explanatory information related to any benefit of this technology. If they did, they would deserve distrust from the public due to the defence of the prejudices already mentioned. Consequently, the communication campaigns the sector requires in order to be accepted by society must be preceded and supported by symbolic transformation elements. These will allow the inclusion of social communicators from the nuclear area in the media. These social communicators from the nuclear area will have to represent as a unity perception-attitude group D. Efforts will have to be made to prevent the formation of sub-groups A, B and C.

Repeating concepts already expressed, and taking into account that “information is always, in itself, a complex mix of truths and symbols” (Prêtre), it is indispensable to assume that mass information, that is, carrying out *social communication in the nuclear area* will be neither easy nor financially irrelevant, though it will be unavoidable. The history of scientific and technological nuclear development is a succession of complex events that have had to be solved. This one not only seems to be another of them, but the one for which world development is being delayed at the moment.

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