

Public perception of the activities of the Nuclear Energy and Advanced Technologies Agency of Cuba

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ABSTRACT

The work presents the results of a study of perception of the nuclear activities of the Nuclear Energy and Advanced Technologies Agency of Cuba, carried out by means of a study of image. The public object was a wide group of clients, providers, journalists and experts of the governing and regulatory organs which constitute its external public. For the investigation a methodology was prepared with a questionnaire and a semi structured interview, which allowed to obtain complementary information of qualitative character. In general, the perception of the Agency turned out to be positive and the human resources were the best evaluated aspect. Nevertheless, the visibility of the Agency in the public day pupils is considered to be insufficient. The study provided the necessary information so as to design the strategy of communication of the Agency.

Keywords: nuclear energy, perception, communication, public image, Cuba

INTRODUCTION

The Nuclear Energy and Advanced Technologies Agency (AENTA) is a system of institutions that belong to the Ministry of Science, Technology and Environment (CITMA), whose mission is to manage knowledge, services and products related to the nuclear technology and other advanced technologies, in accordance with the priorities of sustainable development of the country, and to execute and to control the policy of the State in the frames of his competition.

Five centers related to the nuclear activity belong to the Agency: the Center of Isotopes (CENTIS), the Center of Protection and Hygiene of the Radiations (CPHR), the Center of Management of the Information and Development of the Energy (CUBAENERGIA), the Center of Technological Applications and Nuclear Development (CEADEN) and the Center of Environmental Engineering of Camagüey (CIAC).

As the leading institution for the promotion of the nuclear activity in Cuba, the AENTA understands the need to manage the institutional communication in a planned way and based on the social studies that allow it to know the public perception of the nuclear energy, the acceptance of the nuclear applications and its image in the internal and external public.

The institutional or corporate image is the perception that different members of the society have about an institution and it is constituted by the set of ideas, credence and impressions that the social subjects have on it [1]. The study of the perceptions (which is proper of psychology) opens the way for the study of image, which leads to the corporate reputation and to the need of any institution to know its image so as to manage the communication with its public.

The corporate image has turned into one of the most valued intangibles of the companies, of the marks, of the products [...]. The institutions, on their part, have also incorporated this intangible into their values. Although they do not want a commercial response on the part of the public they are looking, indeed, for the appreciation of the public by means of generating a corporate suitable image. In such a way that the corporate image has turned into the keystone of the whole communication process of companies and institutions [2].

The corporate image has three dimensions. The Autoimage: which is the image that the internal public have of itself; the Intentional Image: which is the image that the entity constructs itself and wants to project on the base of his corporate identity; and the Public Image: which is the image that the external public construct themselves in regards to the company ” [3]. In accordance with these dimensions, the investigation was carried out on the public image, and it allowed to design the strategy of communication of the Agency for his nuclear activities.

METHODOLOGY

The study implied four phases: the methodological design, the identification of the sample, the capture of information and the analysis of results. For the investigation they were taken as a reference the methods used internationally [4] and a proper method was prepared with two instruments: the poll and the semistructured interview to obtain complementary information of qualitative character. So that the methodology combines the qualitative and quantitative analysis [5].

It was previously carried out a piloting or a trial run of the instruments application for their adjustment. The processing of data and information was carried out by means of the procedure: Statistical Product for Service Solutions (SPSS), a statistical computer program much used in the social sciences and in companies of market research.

Selection of the sample

The public object of the investigation was a group of clients, providers, journalists and experts of the governing and regulatory organs which constitute its external public.

RESULTS

Poll

For the study, a poll with open and closed questions was designed so as to investigate and gather information on the image of the AENTA in its external public. The poll was applied to 90 subjects. Of the 56 who answered, 41 are clients, 6 users, 7 beneficiaries and 1 provider.

The poll was applied in the National Center of Nuclear Security (CNSN), the Higher Institute of Technology and Applied Sciences (InSTEC), the Center of Environmental Studies of the Center (CEAC), in Cienfuegos, and in the Cuban Institute of Sugar Investigations (ICINAZ). The rest of the sample belongs to institutions of health, industry, the Ministry of Science Technology and Environment (CITMA) and the Institute of Civil Aeronautics of Cuba.

Significance of the Agency

Concerning the question: What is the Nuclear Energy and Advanced Technologies Agency for you?, 24,4 % answered that AENTA promotes the use of the nuclear energy in the country, 13,3 % showed that it manages the investigation, development, application and control of nuclear procedures and other advanced technologies.. 10 % stated not to know anything on this matter and 5,6% did not answer.

On the question : How did you know about the existence of the AENTA? , more than the half of those polled referred to the ties of work, previous or current. Only 2 subjects (2,2 %) expressed not to know about it and 16 (17,8 %) did not answer the question.

Evaluation of several aspects

To evaluate the work of the AENTA, eight aspects were considered (Figure 1). The best evaluated one was the professional competences, which was considered good for 68,9 % of those polled, next there appears the activity of investigation and development with 62,2 % and the update of knowledge with 52,2 %. These three items did not receive any qualification of poor.

The image of the Agency appeared to be good for 48,9 %, the quality and the efficiency for 42,2 %, and the fulfillment in time of its commitments for 41,1 %. The poorest evaluated aspect was the equipment with 30 %.

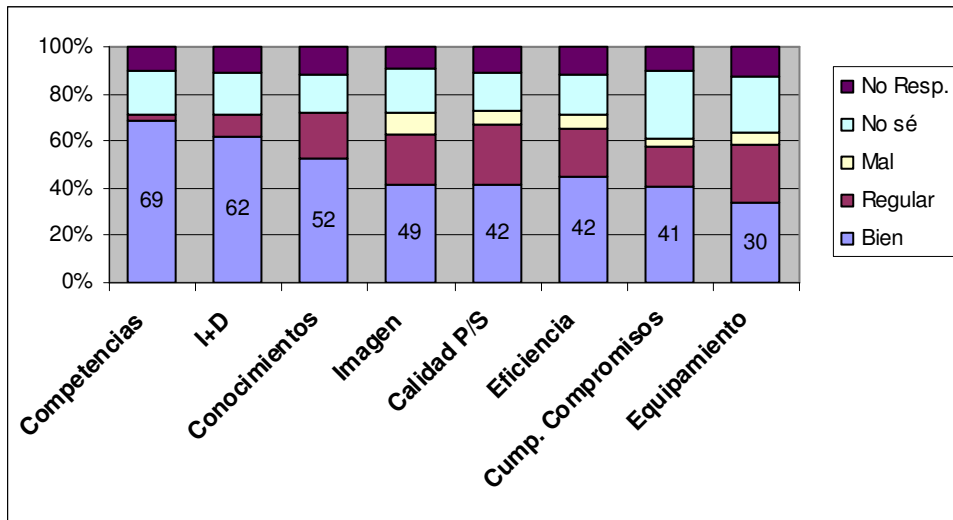


Figure 1. Evaluation of several aspects.

Current situation

On having investigated on the current situation of the Agency, almost the half of those polled (46,7 %) marked normal and stable development, 15,6 % believes that it has not changed, it is just as it was from its emergence, and 12,2 % with serious difficulties and in retrogression. 11 % thought that it is flourishing and in expansion and other 11 % did not answer. A 3 % does not know (Figure 2).

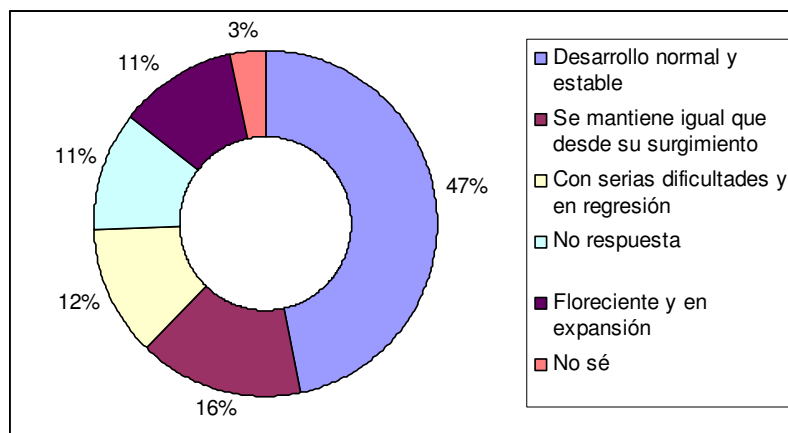


Figure 2. Current situation

Evaluation of products and services

The best evaluated aspect is the professionalism of his personnel with 58,9 % and secondly the reliability with 45,6 %. The quality of the services and products was evaluated of good by 37,8 % and the presentation by 34,4 %. A high percentage of those polled (about 20 %) did not answer the question (Figure 3).

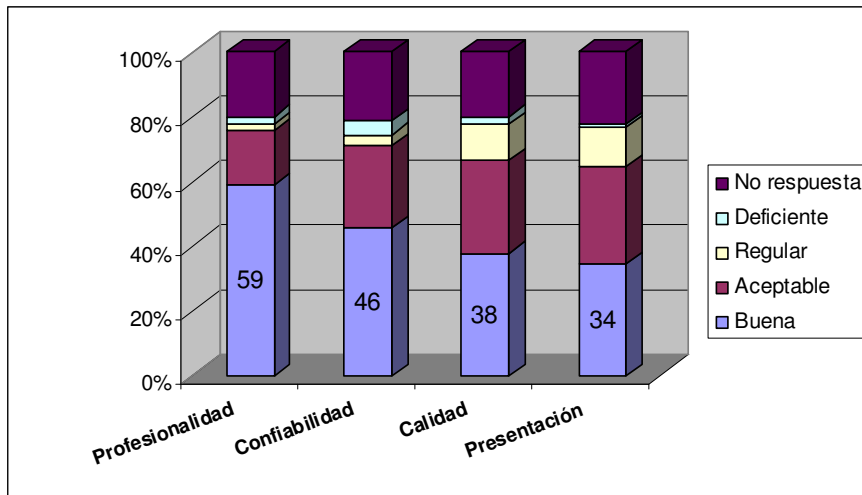


Figure 3. Evaluation of products and services.

Aspects to improve in the institutions of the Agency

To investigate on the needs of progress 10 aspects were provided to those polled: quality, prices, presentation, stability, variety of choices, and professionalism of its personnel, container, packing, services and transport. The intention was to give them the possibility of correctly expressing the content of their ideas by means of several responses.

Although a high percentage did not answer (55,2 %), the results are an inestimable indicator to know the areas at which the Agency must lead its main efforts. Also, there appear the areas in which there are not demanded progresses which are container and packing, which were not indicated by any polled subjects. The aspects to be improved appear in the figure 4 in terms of check-marked times.

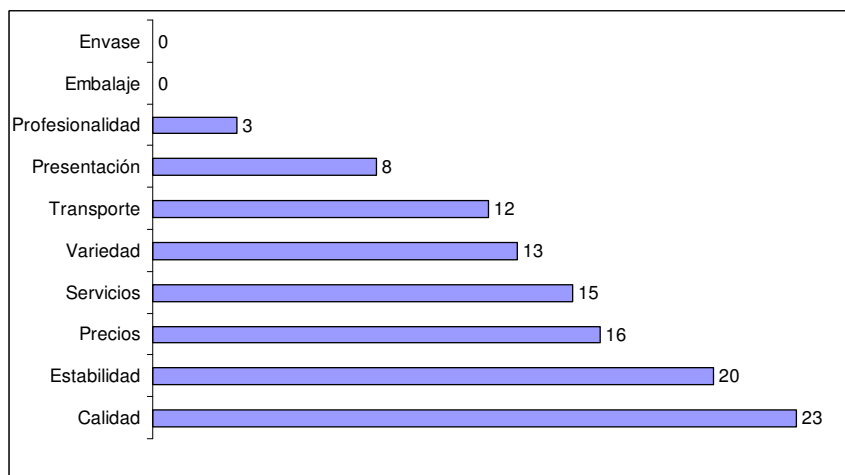


Figure 4. Aspects to improve in the institutions of the Agency

The responses also corroborate the results of the previous questions: the professionalism of the personnel, aspect best valued for the previous response, here only was marked three times. The quality, the second aspect best evaluated earlier, is the one which must be improved the most.

Before the possibility approaching other aspects not included in the question, and that was considered necessary to include, those polled expressed a varied number of very interesting topics that must be born in mind also, especially because they reflect the aspect of communication: publications, to make the public know about the use of the nuclear energy, promotion of the nuclear techniques, to improve the technology in its institutions and to allow to professionals of other branches a major contact with them and with their different specialties.

Experts' interview

The identification of the experts was carried out by means of a non-probabilistic sampling, selecting the experts who best represent the governing and regulatory organs directly related to the Agency. A whole of 10 experts was selected but there was answers of only seven of them.

The responses contribute valuable information to know how the Agency is seen from out and, consequently, to establish concrete actions of external communication. The principal expositions were:

State of the corporate image of the AENTA

Five of seven experts catalogued the image as: very good, good, satisfactory and suitable. An expert catalogued it like not adapted and other as slightly visible between his recipients.

The evaluations are based that the image is positive in the formal thing and as for the ethics, education and commitment with the organization that his specialists show. The rigorous formation, of discipline and seriousness that the specialists of nuclear profile receive in Cuba and in the world for the high responsibility of the work with the radiations ionizantes forces them to support an extreme discipline in all the tasks that dock, and this appears in the projects, consultancies and works with the IAEA where Cuba enjoys big prestige.

Fulfillment of the mission and the vision

All the experts, except one know the mission and the vision of the Agency, and think that it is provided with the infrastructure and with the human resources qualified and formed well to face his mission and vision. One of them suggested that they must take care of the relief of his technical force that it is aging.

Positive aspects of the diffusion of the nuclear activities in Cuba

In general, the experts coincided that the positive aspects are small, between them that the Agency is provided with human resources prepared in the topic of communication and the publication of the pacific applications of the nuclear energy in all the ambiances, especially in the medicine. Also they mentioned the course of University for All "Radiations and life", the exhibitions in the Pavilion of the Science in EXPOCUBA, the courses and other activities of dissemination.

Negative aspects of the diffusion of the nuclear activities in Cuba

In general, it is not known enough on the part of leaders, institutions, scientific community and Cuban society what does the Agency and his potentialities. There were mentioned medical doctors who do not know the existence of the nuclear medicine, the journalists who do not know the nuclear topics, the limitation of a scientific event as the NURT that in the decade of 90 was including all the areas of the nuclear sphere (industry, health, safety, radiological protection) and today not.

The experts suggested:

- To work with a strategy of diffusion and designed well communication.
- To encourage the orientation and vocational formation for the careers of nuclear profile, from Circles of interest in the schools next to the centers, with cycles of chats and conferences in the IPVCE of the whole country.
- To recover the direct tie of communication with specialists of other sectors, to promote joint events and to perfect the ties of work with the regulatory organ.

Interview the journalists.

The journalists who attend to the topics of the Agency are the belonging ones to the Circle of Science and Skill of the Journalist Union of Cuba (UPEC) and that in turn attend to these topics in the organs of press. This Circle is integrated by approximately 30 professionals, of whom 10 answered the poll.

70 % of the interviewees answered that the social mission of the AENTA is:

- To socialize results of investigation with topics of nuclear energy and technologies of advanced.
- To develop the pacific application of the nuclear energy in the improvement of the quality of life of the population.
- To promote in the Cuban society the knowledge on the renewable sources and the kindness of the nuclear energy.

On the importance of the mass media for the AENTA, the majority of the responses were positive, nevertheless many people think that limitations exist to cover certain events as shortcomings with the transport, distance of the events and of space for the journalists.

Of the whole of subjects, 7 expressed his dissent with the update that they must have of the scientific results and contributions of the AENTA, only 3 of them mentioned the bulletins, conferences and seminars for journalists realized by the Agency.

The diagnosis is a synchronous or sectional study that refers to a specific moment. The study of image that appears in this work finished in 2010, when the Agency did not have direct relation with the journalists. In this year one decided to summon directly the press, from what the work with the journalists became more direct and systematical.

The results of the diagnosis allowed to design the current strategy of communication for the nuclear activities of the Agency.

CONCLUSIONS

The principal results of the study allow concluding that:

- The human resources are the best evaluated aspect of the AENTA for his professionalism and prestige.
- The experts believe that the image of the Agency is positive; that it is in conditions to fulfill his mission and vision, and that the communication must work with a designed well strategy.
- Clients, users, experts and journalists coincide with the “few publication of the nuclear activities” with the country.

Nuclear Energy and Advanced Technologies Agency is the institution of the system of science and technological innovation that leads the development of nuclear applications with pacific ends.

It is essential for Cuba to be provided with a system of science and innovation which nuclear slope should be visibility for his pacific approach and in favor of the life, in contrast to the vision alarmist and destructive widely used. This mission demands a communication based on the rigor, the transparence, the professionalism, the planning and the investigation of the perceptions of the public on this technology.

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