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Communication Planning by the Nuclear Regulatory Body

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COMMUNICATION PLANNING BY THE NUCLEAR REGULATORY BODY

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FOREWORD

The national regulatory body, whose primary mission is to exercise regulatory control over nuclear facilities and the use of radiation sources, but not to promote their use, may be the most credible source of neutral, balanced and accurate information about issues relating to nuclear and radiation safety. It is therefore important for a regulatory body to establish and exercise an effective communication programme to acquaint the public with its oversight functions, capabilities and effectiveness.

If the regulatory body is to maintain credibility and to deal promptly and effectively with nuclear or radiological accidents and any other events that may give rise to significant public concerns, and is to communicate clearly and effectively with the public, it must have adequate resources, including experts in nuclear safety. And if maintaining public confidence in the authorities and avoiding unnecessary concerns are among its principal objectives, it must be able to communicate understandably and truthfully about the known extent of any accident, the actions taken in response to it and its implications.

In the past, psychological effects as a result of certain severe nuclear and radiological accidents have been compounded by a lack of candour with the public on the part of the authorities and an absence of an appropriate programme of public information.

This publication describes good practices and gives practical examples of how the regulatory body can establish a systematic and structured programme for enhancing effective communication with various parties and under various circumstances. The report presupposes an adequate national infrastructure, including an independent regulatory body with sufficient authority and resources to discharge its responsibilities for the regulation of safety.

The contributions of experts from several countries and from the OECD Nuclear Energy Agency are gratefully acknowledged. The technical officer responsible for the report was P. Wieland of the Department of Nuclear Safety. The contributions of various regulatory bodies to this report are also acknowledged.

EDITORIAL NOTE

Although great care has been taken to maintain the accuracy of information contained in this publication, neither the IAEA nor its Member States assume any responsibility for consequences which may arise from its use.

CONTENTS

1. INTRODUCTION

1.1. BACKGROUND

For a nuclear regulatory body, a strategy for safety is most effective when integrated with clear public communication on all aspects of potential nuclear risks and safety measures. Regulatory bodies should be proactive by communicating with the broader public on work that is carried out as part of their overall regulatory activities. However, this communication has to be carried out within the other conditions placed upon the regulatory body, notably that "A regulatory body…shall be effectively independent of organizations or bodies charged with the promotion of nuclear technologies or responsible for facilities or activities" (Ref. [1], para. 2.2 (2)). Moreover, "In order to discharge its main responsibilities…the regulatory body...shall communicate with, and provide information to, other competent governmental bodies, international organizations and the public" (Ref. [1], para. 3.3 (6)). Therefore, the regulatory body's task is to provide information in an open and transparent way about safety and the regulatory measures used to ensure safety. Caution needs to be exercised to avoid appearing to promote the technologies concerned when engaging in such communication.

The Safety Requirements publication [1] on Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety also requires that "Legislation shall be promulgated to provide for the effective control of nuclear, radiation, radioactive waste and transport safety. This legislation...shall define how the public and other bodies are involved in the regulatory process" (Ref. [1], para. 2.4 (16)).

The principles and objectives relating to a national infrastructure for radiation protection and safety are stated in the publication International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (BSS), Safety Series No. 115 (Ref. [2], Preamble). These include the responsibility

> "to set up appropriate means of informing the public, its representatives and the information media about the health and safety aspects of activities involving exposure to radiation and about regulatory processes. This provides information to facilitate the political process of setting national priorities and allocating resources for protection and safety and also helps to make the regulatory process more readily understandable."

The IAEA publication on Communications on Nuclear, Radiation, Transport and Waste Safety: A Practical Handbook [3] is a source of information on this topic and is referred to in several sections of this Safety Report.

1.2. OBJECTIVE

This Safety Report describes good practices and gives practical examples of how the regulatory body can establish a systematic and structured programme for enhancing effective communication with various parties and under various circumstances.

1.3. SCOPE

This Safety Report covers the elements of a regulatory body's programme for communication with various audiences and under the different circumstances that may be encountered, both routine and emergency, and, for example, following events that give rise to public interest.

The range of subjects for such programmes includes: the safety of nuclear installations; radiation protection and the safety of radiation sources; the safe transport of radioactive materials; planning, preparedness and response to emergencies; and the safe management of radioactive waste. For the sake of simplicity, unless otherwise stated, the term 'nuclear safety' is used in this publication to include nuclear, radiation, radioactive waste and transport safety.

1.4. STRUCTURE

Section 2 outlines the general aspects of a communication programme. Section 3 describes the elements of a structured programme, including guidance for its implementation and evaluation. Section 4 summarizes the activities of the regulatory body in relation to the programme.

2. GENERAL ASPECTS OF COMMUNICATION PROGRAMMES

2.1. ROLES AND RESPONSIBILITIES

The operating organization has the primary responsibility to ensure the safety of its nuclear facility. The operating organization customarily takes the lead in providing the public with information about the level of safety at its facility or activity. The role of the regulatory body is to inform the broader public of its strict safety

oversight without in any way appearing to promote the nuclear industry. The mission of a regulatory body is to ensure that human health and the environment are not put at risk from the operation of nuclear facilities and the use of radiation sources. The public relies upon the regulatory body to require that mechanisms be in place to ensure that serious degradation in equipment, operational procedures or management control are promptly corrected. The objective of the regulatory body in communicating with the public is to foster better public understanding of, and trust and confidence in, its regulatory programme and activities.

2.2. THE PARTIES INVOLVED

The public is one of the most important clients of the regulatory body, and its legitimate interest in safety matters and its 'right to know' need to be acknowledged. Furthermore, experience in recent years has shown that one way communication, with the public told only what experts consider important to communicate, is not the best practice. The public has an important role to play, as issues of safety and health are addressed. The regulatory process needs both to be transparent and to provide for appropriate public involvement, with input not only from the community that is being regulated but also from members of the public, interest groups and the information media, as well as public representatives in local and national parliaments and assemblies.

2.3. OPENNESS

Efforts need to be made to ensure that the public is informed in a timely manner in order to have the opportunity to participate in the processes whereby decisions are made. It may be helpful for the regulatory body to actively seek and consider the public's views and concerns as it prepares to make decisions, and whenever possible to incorporate meaningful and effective public involvement in its regulatory processes. For achieving these objectives, communication needs to be transparent and technically sound, clear, accurate, reliable, timely and understandable to the public. Such communication includes direct expression of opinion as well as positive and constructive debates and discussions. It is important to ensure that the regulatory body's decisions are shaped not only by the safety significance of the issues concerned and considerations of regulatory effectiveness but also by considerations of public trust in it and its credibility.

The regulatory body gains and maintains public confidence by: ensuring that it has effective processes for meaningful public involvement; increasing the objectivity and the orientation towards results of its regulatory approach; and ensuring openness in its decision making. The more open it is with information, the more

likely it is to win and hold the public's trust. It is important that the regulatory body can present itself as a credible, unbiased and frank source of information. If the public loses confidence in the forthrightness of personnel in the regulatory body, that confidence may never be fully regained. If there is a communication gap between the regulatory body and the public, this gap could well be filled by speculation, rumours or misinformation. Such misinformation and misunderstanding could lead to undesirable effects such as anxiety and unjustified pressure on the decision making process, and more weight might be given to emotional or ideological arguments than to technical ones.

2.4. BALANCED INFORMATION

Communication on nuclear issues may at times involve difficult psychological considerations and politically sensitive issues. Expressing complicated technical matters in a manner that can be generally understood and countering inaccurate press reports can also pose problems. Clear communication with the public is a very difficult task that requires specialized and trained professionals. In order to give the public confidence that the regulatory body is fulfilling its mission in relation to health and safety, while giving an account of its findings to the public, the regulatory body needs to be scrupulous in putting events, practices and conditions into clear perspective, neither overstating nor understating their significance, with the emphasis on how they relate to safety. The regulatory body needs to achieve a careful balance in describing what it finds and what it requires. The art of simple, concise, accurate, factual and balanced explanation and clear exposition is important to ensure that written and spoken accounts are understandable to the general public.

2.5. BASIS FOR COMMUNICATION

In summary, effective communication can be established and maintained through a programme based on the following factors:

(a) The regulatory body is independent of any organization which has a promotional interest in nuclear or radiological applications, and it has the ability to regulate effectively the activities and facilities under its control.
(b) There is a legislative framework that defines the mechanisms for involving the public and other bodies in the regulatory process (Ref. [1], para. 2.4 (16)). A regulatory framework is in place which defines a national policy on communications as part of the national infrastructure for ensuring safety. There is a clear allocation of responsibility for communication in different circumstances.

(c) In the organizational structure of the regulatory body, the officer in charge of the communication function is preferably directly linked to the head of the regulatory body and has timely access to all important information. There is close collaboration between the communication function and the technical departments.

(d) The communication programme depends on national circumstances and on the type and number of regulated facilities and activities. A range of appropriate mechanisms and means of communication is used to achieve the desired outreach.

(e) All communications should be factual, balanced, timely and clear.

(f) Whenever possible, circumstances that may be controversial, such as the transport of nuclear fuel or the siting of a radioactive waste repository, should be foreseen and there be proactive communication with the various audiences concerned.

(g) Staff members of regulatory bodies who may be involved in activities related to communication with the news media be trained to improve their communication skills and to be able to cope in diverse circumstances.

(h) The regulatory body communicates "directly with governmental authorities at higher levels when such communication is considered to be necessary for exercising effectively the functions of the body" (Ref. [1], para. 2.6 (9)).

(i) The regulatory body communicates with the public whenever necessary, to understand and to address its concerns and to provide information on nuclear safety, regulatory requirements, decisions and opinions and their basis (Ref. [1], para. 2.6 (11)).

2.6. COMMUNICATION WITH OTHER AUTHORITIES

There are other important communication functions both within the national legal and governmental infrastructure and within the international arena. They include the following:

(a) The exchange of information with other governmental bodies on safety matters, as necessary, in the following areas: environmental protection; public and occupational health; emergency planning and preparedness; radioactive waste management; public liability; physical protection and safeguards; water use and consumption of food; land use and planning; safety in the transport of dangerous goods, as appropriate (Ref. [1], para. 3.4). The exchange of information with other regulatory authorities on regulatory activities, as appropriate (Ref. [1], para. 4.2).

(b) The regulatory body promptly makes information available to other governmental bodies, to national and international organizations, and to the public, on safety significant events and lessons to be learned, as appropriate (Ref. [1], para. 2.6 (12)).
(c) "The safety of facilities and activities is of international concern. Several international conventions relating to various aspects of safety are in force. National authorities, with the assistance of the regulatory body, as appropriate, shall establish arrangements for the exchange of safety related information, bilaterally or regionally, with neighbouring States and other interested States, and with relevant intergovernmental organizations, both to fulfil safety obligations and to promote co-operation" (Ref. [1], para. 4.11).

3. COMMUNICATION PROGRAMMES ON NUCLEAR SAFETY

A communication programme on nuclear, radiation, radioactive waste and transport safety is needed:

(a) To disseminate information on safety to the public in both routine and emergency circumstances;
(b) To be attentive to and to address public concerns;
(c) To maintain public trust and confidence by keeping people informed of established safety standards and how they are enforced;
(d) To facilitate the decision making process on nuclear matters by presenting factual information in a timely and clear manner;
(e) To integrate and maintain an information network at both the national and the international level;
(f) To improve co-operation with other countries and with international organizations;
(g) To encourage the dissemination of factual information on nuclear related matters to the general public through schools, professional associations and other institutions.

In the context of this Safety Report, a communication programme comprises a set of structured and systematic activities aimed at establishing or improving communication between the regulatory body and the target audiences. These activities are part of an integrated strategy for the safety of nuclear installations and for radiation protection and the safety of radiation sources. There are two elements of a communication programme that need to be established:

(1) Elements for essentially routine circumstances such as: siting of nuclear facilities; licensing of nuclear facilities; transport of radioactive material, including transport of spent nuclear fuel; management of radioactive waste, including waste disposal; food irradiation; responding to incorrect and misleading reports in the news media.
(2) Elements for emergencies.

In routine circumstances, once the need for improving communication has been identified, specific objectives can be developed with goals for each audience. Communication plans can be developed that incorporate the following elements: information development, mechanisms for transmission of the information, and schedules for releasing the information in various types and formats. The implementation of these plans is monitored and evaluated, resulting in feedback for continuous improvements (Fig. 1).

In non-routine circumstances, such as emergencies, an essential element of communication is the establishment of a practical and effective programme for management of public information to provide accurate and up to date information about the nature and status of an emergency, the protective measures being taken and, if necessary, measures for the public to take to protect themselves. Communication during an emergency will depend on the established emergency plan and on the role of each organization in responding to the emergency. In any case, the public information policy and associated programme will define how external and internal groups will communicate in response to an emergency.

In communication programmes it has to be taken into consideration that, in the event of a nuclear or radiological accident, international and bilateral conventions require the contracting States concerned to notify both the IAEA and neighbouring countries [4]. Designated national points of contact are responsible for receiving and issuing consistent, accurate and timely information.

The safety significance of any event associated with radioactive material and/or radiation can be communicated using the International Nuclear Event Scale (INES) [5]. By means of this communication tool, an event can be put into perspective by classifying it on a seven level scale; the upper levels (4–7) are termed accidents and the lower levels (1–3) incidents. Events which have no safety significance are classified below the scale at level 0 and are termed ‘deviations’.

3.1. OBJECTIVES OF COMMUNICATION PROGRAMMES

Clearly stated communication objectives need to be established and agreed within the regulatory body. The mission of a regulatory body is not to promote nuclear energy or the application of radiation technologies, but to ensure the protection of

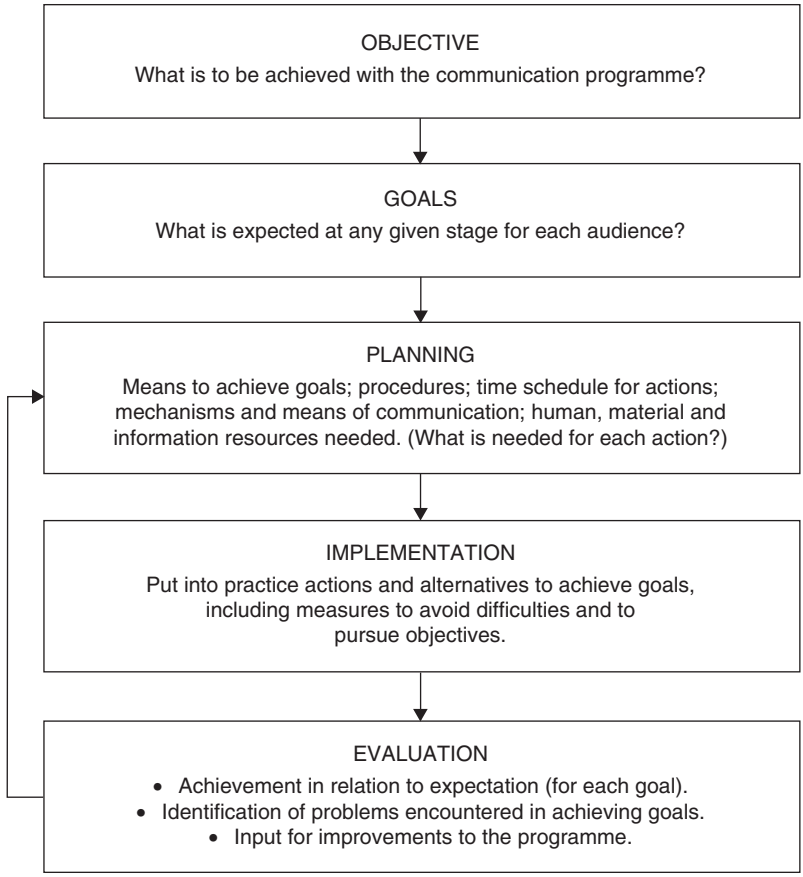

FIG. 1. Communication programme comprising structured and systematic activities.

workers, the public and the environment, and the safety of nuclear facilities and radiation sources. The prime communication related objective to support this mission is to foster better public understanding of, and trust and confidence in, its regulatory programme and activities.

Example 1

In the event of intervention due to an emergency, or due to measures to protect the public against chronic exposure, the decision to apply rigorous protective measures will not be taken lightly, since such measures could restrict individuals' freedom of action or choice, could impose costs on society, or could cause direct harm or disruption to some people. A communication objective for the regulatory body that

supports these decisions is to instil sufficient confidence in the affected communities to accept the validity of its decisions.

Example 2

Transport of spent nuclear fuel can be of public concern. Given that such transport is necessary, an objective of communication is for the regulatory body to be recognized by the various interested parties as competent and trustworthy in ensuring that all relevant international and national safety regulations and recommendations have been taken into account.

Example 3

Waste disposal facilities and waste treatment facilities have become a focal point for environmental concerns and public opposition. Communication objectives that could be derived are:

(a) To make society aware of the need for appropriate disposal of radioactive waste;
(b) To provide the scientific basis for the selection of a particular area;
(c) To explain the origin and characteristics of the waste, and to explain that it is managed according to international and national safety standards enforced by the regulatory body in order to protect the population and the environment.

These objectives could be approached by carrying out a broadly based process of public involvement addressing the concerns of the local community. To be successful, this should be based on good communications and interaction in an atmosphere of trust between the regulatory body, civil society in the region, and the local community and its leadership.

3.2. GOALS FOR INDIVIDUAL AUDIENCES

The communications priority of the regulatory body, for any audience, is to build trust and confidence in its competence and professionalism. Specific goals, such as fostering understanding of nuclear issues, are very difficult to achieve without trust and confidence. The regulatory body will, as necessary:

(a) Explain regulatory responsibilities and programmes;
(b) Address specific concerns about nuclear and radiation related activities and explain the mechanisms in place to address the concerns;

(c) Provide for any statutory public involvement in the regulatory process as required and consider any associated comments;
(d) Make information available to the public at accessible locations and through the Internet;
(e) Encourage a proactive dialogue with audiences of all kinds, without promoting the use of nuclear energy or other nuclear applications;
(f) Keep the local community informed about the regulatory process for a nuclear installation or a radioactive waste repository;
(g) Clarify any false information or any misunderstanding concerning the regulatory body's areas of activity.

It is important to identify and categorize audiences and to determine their information needs. Different audiences will have different needs, which then determine which option to select from a variety of strategies and approaches to communication. Audiences, or stakeholder groups, may vary from country to country. In Sections 3.2.1–3.2.8 a brief review is provided of the role each typical audience plays and the kinds of information it may need [3]. In some cases, it may be useful to use structured methods of assessment, such as a public opinion poll if resources are available, to gauge opinions for guidance rather than to use guesswork.

3.2.1. The news media

The news media play a crucial role in bringing issues to public attention. Some studies have shown that while the public believes that the news media often confuse the facts, they also believe that the media play an important role in keeping public figures and commercial concerns accountable for their actions. Most reporters, like the average citizen, do not have much knowledge of nuclear matters. While some reporters are willing to listen to all sides of an issue, others are advocates for a particular point of view.

Because the news media work on a news cycle, they need to have quick access to information and to high level spokespersons from a regulatory body, especially in emergencies. Editors and publishers are also very influential in deciding what information is published and setting the balance of an article. Also, there are many examples of balanced articles negatively affecting public perceptions because the headline (which may be all that is read) is biased.

Training seminars are a useful means of interacting with the news media. Other means are: distributing pertinent background material; keeping an Internet page about current issues; maintaining good relationships with journalists (and keeping a list of journalists and editors with telephone and fax numbers and e-mail addresses); holding press conferences and issuing press releases. In some countries,

exercises have been used to test the programme for communication with the news media in emergencies.

3.2.2. Decision makers

Government leaders who serve the public interest will want to hear all sides of an issue in order to achieve an acceptable balanced policy position, and will appreciate clear and concise publications that make specific points in unambiguous terms. Elected officials and commercial and industrial interest groups may likewise welcome such basic information.

3.2.3. Staff from the regulatory body (internal communications)

It is important to keep internal audiences informed and apprised of key decisions and information about safety procedures, as well as the process for responding to requests for information (such as by means of daily press reviews, Intranet and seminars). It is necessary to keep in contact with key staff who can provide technical information for the preparation of press releases or who can act as spokespersons, for which some staff would need special training.

3.2.4. Special and public interest groups

Special and public interest groups are linked to particular constituencies that are often motivated to achieve specific goals. Special groups include organizations with specific interests, which are often tied to their livelihoods, or to a demographic characteristic which they share. Public interest groups are those which claim to represent some aspect of the public interest and usually have a membership as evidence of their legitimacy. They include consumer and environmental groups, and groups opposed to nuclear energy. Labour and trade unions are another key audience with whom it may be necessary to communicate. Environmental groups and anti-nuclear groups may be very useful in pointing out deficiencies to be corrected. However, they need to be provided with factual information on current nuclear issues to help avoid misconceptions.

3.2.5. Professional categories

Medical and health professionals are among the most credible sources of information to the public. The information from the regulatory body to these parties may be more effective when it is provided in a newsletter format in which each edition explains a specific issue. Booklets containing basic information about exposure to radiation and its effects could be prepared and distributed among medical personnel.

Informative material about diagnostic and therapeutic applications of radiation can be provided via medical associations and medical journals. An increased level of knowledge on the part of medical personnel in these areas will help to establish and maintain greater public awareness and confidence.

The regulatory body needs to play a part in the dissemination of information to professionals in the nuclear industry and other industries using radiation sources or using and/or processing radioactive materials. This should cover information on new developments relating to safety, lessons learned from accidents, new regulatory issues and other topics that could be of interest to those professionals.

Academics and researchers in the nuclear field and third party experts who are not involved in the commercial uses of nuclear technologies or with regulatory activities often provide information to the news media and to the public. They are often considered to be neutral experts. It would be useful to establish a working relationship with this audience.

3.2.6. Academics and teachers outside the nuclear community: education in schools

Academics and teachers who are not from the nuclear community but who are experts in related disciplines are an important source of training and information for young people. Teachers ought to be provided with or to have easy access to up to date and factual information on nuclear issues. Use of an Internet home page and interactive training in nuclear topics via CD-ROMs can be effective for students, and are increasingly important for many people. The educational system provides an opportunity to present information on the uses of radiation and radiation producing devices as well an introduction to radiation safety. Science classes at the elementary or secondary level of education are a natural setting to provide such information. A substantial part of the general population can be taught the principles of radiation protection and the safe use of radiation by means of such an approach. In order to reach students in this way, specific seminars for elementary or secondary school science teachers could be considered. Teachers can be introduced to educational materials that can be used to teach a unit on radiation safety to their students. It is also useful to provide samples of audiovisual materials that would be suitable for such classes. Information on radiation detectors and equipment suitable for classroom use could be introduced and, where possible, such equipment could be made available for classroom use.

3.2.7. The general public

Usually members of the public rely on various sources of information when forming their opinions about issues. Television in particular has the greatest reach and

has a great influence in setting the public agenda and in framing how people think about issues. People contacting the regulatory body may want answers to specific questions. Answers can be formulated for each specific case and can be drawn from well prepared background information to make this process more efficient. The needs of the public living in the neighbourhood of a nuclear facility who receive benefits as a result of its presence — such as employment and better education and health services — will be different from the needs of the public living elsewhere. Different approaches or emphases will be necessary for children and teenagers than for adults.

Some radiation accidents can have significant consequences for members of the public, and yet most people have limited awareness of the nature of radiation hazards. A raising of the general level of public awareness about radiation and the means of radiation protection would clearly be beneficial, but is difficult to achieve. The provision of training for members of the public is not a realistic possibility, and experience indicates that educational programmes on television are not widely viewed. A practicable way to raise public awareness is to include general information on radiation hazards in elementary education, to maintain a profile in the news media, making use of magazines, newspapers and information centres, and to distribute information leaflets.

3.2.8. International organizations and national regulatory bodies

Regulatory agencies need to establish links with other national regulatory agencies and international organizations such as the IAEA and the World Health Organization. It is beneficial to ensure the free flow of safety related information with these agencies on a regular basis.

3.3. DEVELOPMENT OF COMMUNICATION PROGRAMMES

Responsibility for regulating radiation sources and nuclear facilities may rest with one organization or with several organizations nationally. There is no one communication programme that will meet the needs of all these organizations. It is important they all regularly co-ordinate and co-operate on their common plans.

Organizations will actually develop several communication plans. The first programme will cover communication under normal routine circumstances. The second will address communications in an emergency or under special circumstances.

A communication programme is part of an integrated strategy for achieving openness and transparency. Such programmes, moreover, depend on national circumstances and priorities and on the diversity of national radiation practices. The general aspects of communication described in Section 2 apply for the development of any communication programme by the regulatory body.

3.3.1. Communication under different types of circumstances

A regulatory body can gain credibility by providing information in a timely manner:

(a) Periodically, under normal routine circumstances or following a major event, such as a periodic safety review of nuclear facilities;
(b) In the event of an emergency;
(c) For an event of public interest.

It is important that a regulatory body responds to incorrect information and maintains its credibility.

Among the issues that might raise public concern and may necessitate a communication programme are: safety and security of radiation sources and nuclear materials; liability and compensation when an accident occurs; inspections; safety culture issues; the licensing and regulating of nuclear facilities, including site selection, commissioning, operation and decommissioning; transport of nuclear or radioactive materials; and radioactive waste management.

Under accident conditions the regulatory body needs to provide information to the public promptly and accurately by way of press conferences, for example, on measures being taken to mitigate the consequences of an accident and to protect health and the environment, and on whether there is any immediate danger to workers or the public. It must make clear that information will be provided quickly if the situation changes.

3.3.2. Resources

A well organized communications office will have ready access to news wire services, historic information on past accidents, copies of annual reports, information brochures and fact sheets. It is also important that the regulatory body maintains an up to date, easy to navigate Internet home page.

For an effective communication programme, key persons in the office for communications need to have direct access to the head of the regulatory body and the top officials of all its major departments. Full and timely access to information is necessary. The communication function ideally needs to be part of the regulatory body's organizational structure for planning and decision making.

It is vital to the credibility of the regulatory body that only authorized persons represent it before the public and the news media; others, if questioned by members of the news media, should refer them to an authorized spokesperson. Certain situations may require specific responses from key individuals. In some cases only the most senior official can make statements on behalf of the regulatory body. In other

cases someone with specific technical expertise may need to respond about a specific event, such as a transport accident. If the regulatory body has communication specialists, they should be kept informed and allowed to co-ordinate all responses to avoid issuing conflicting statements.

It is advisable to provide special communication training to management and selected technical staff in order to familiarize them with methods of communication. The learning objectives of such training are:

(a) To obtain a general overview of the strategic planning and implementation of public relations.
(b) To improve presentation and communication skills for interaction with the news media.
(c) To prepare for communication with the news media and the public in the event of an emergency, including regularly scheduled emergency exercises; close co-ordination with national and international organizations is also important.

Above all, once information has been approved for release, everyone must communicate only that information until new information is approved. It is necessary to create a formal but timely system for approving information. A clear hierarchy of who is responsible for drafting communications, verifying the facts and granting timely and final approval needs to be established.

3.3.3. Advance information

The communications office normally prepares press releases, fact sheets and other pertinent material on the basis of information from the technical staff of the regulatory body. Such material must be reviewed to ensure technical accuracy and approved at the highest appropriate level in the regulatory body. This process should take place as promptly as possible. Press releases will deal with various situations, including: new rules and regulations; safety culture; quality assurance; the safety status of nuclear power plants and other nuclear facilities; accidents or other unusual incidents; plant shutdowns; enforcement actions, such as regulatory fines; and international agreements relating to enhancing safety.

It is useful for the communications office to formulate a series of questions anticipated from the press and public so that the technical staff can quickly provide accurate answers, which need to be in simple clear language.

It is also helpful to have maps available showing the locations of nuclear facilities and other fixed facilities in the country, together with schematic drawings of how such power plants or nuclear fuel facilities operate, in order to illustrate a briefing on any accident or unusual event.

Prepared radiation safety fact sheets can be valuable in setting out information such as levels of background radiation, occupational doses for workers compared with dose limits for the public and any available results of epidemiological studies.

By assessing the attitudes and perceptions of the target audience, the communication managers will be able to tailor information and all other aspects of the communication programme to the target audience's key concerns and aim at dispelling potential misconceptions.

3.3.4. Methods and means of communication

There are many ways in which to communicate: written communication (including press releases, fact sheets, reports and studies); oral communication (speeches, press conferences and briefings (on and off the record)); visual communication (graphics, videos and films); direct interaction (interviews for newspapers, television and radio); visits, tours and special events; training seminars; electronic media (e-mail and Internet). Reference [3] describes each of these methods of communication. A visitor centre at the regulatory body itself, perhaps with an Internet connection, may also be useful.

One of the most effective methods of presenting information is through the Internet. The home pages of a number of regulatory bodies are available on the Internet. The Internet allows organizations to communicate directly with many audiences, including members of the general public and the news media. More and more people have access to the Internet and are using it to search for information, such as in relation to an accident or an event of interest. The visits to the site of the regulatory body could increase dramatically in the event of an accident, which may pose some problems with computer connections if this is not taken into account. Some features of an efficient home page and web site in general are as follows:

(a) The home page needs to be easy to find and to navigate through.
(b) The home page needs to be attractive, and the information contained on the site should be clear and understandable.
(c) The main menu has to be clear and inviting, i.e. it needs to give a clear overview of what the site offers; and the links should not contain detailed information but provide proper guidance for the visitor.
(d) The home page needs to be kept updated so that it remains a reliable source of information, especially for journalists.
(e) The home page needs to allow for quick downloading (for large files the size of the file could be given).
(f) The visitor should be encouraged to bookmark the site.
(g) There needs to be a page with frequently asked questions and with the facility for questions to be submitted.

(h) There needs to be a page with announcements of public meetings.
(i) There need to be links to other relevant organizations.

3.3.5. Public involvement in decision making

Some countries provide opportunities for members of the public to express opinions and to provide information, views and comments to the regulatory body before a decision is made. Decisions, however, need to be made on the basis of the merits of the case. Various approaches to inviting public comments are used, for example round table discussions, informational public meetings and formal public hearings. Each country will customize its approach in this regard. Another method is to put the text of a proposed rule onto the regulatory body's Internet home page and to provide the public with a reasonable period of time to register comments.

3.4. IMPLEMENTION OF COMMUNICATION PROGRAMMES

Each communication programme needs to be co-ordinated with senior management and all members of the communication staff of the regulatory body. The communication programme for routine circumstances will be conducted generally by the communication staff and will call upon technical specialists and management personnel, as necessary. Briefings on a programme need to be held for other organizations that would be involved in or affected by the programme, as follows:

(a) For an emergency communication programme, this would include communication staff and senior management of the regulatory body; selected staff of other regulatory agencies; officials of the national, regional or state governments; representatives of the news media; and communication staff of organizations that are regulated by the authority and of international organizations.
(b) For a special communication programme (for instance, about the siting of a waste depository or a transboundary shipment of nuclear or radioactive materials), this would include communication staff and senior management, representatives of the news media and staff of the other organizations involved.

It is important that all persons involved understand the purposes of the programme, their functions and responsibilities, and how various organizations will interact. In each programme, staff are assigned specific responsibilities (such as spokesperson or technical adviser). Training that will equip them to discharge their responsibilities needs to be provided.

For staff of the regulatory body, each programme needs to be discussed in detail, the training needs of members of the staff need to be identified and a schedule needs to be developed to practice a programme (this is especially important for an emergency plan). Regularly scheduled staff meetings — weekly, monthly or quarterly — will allow staff to review progress, make any necessary adjustments and identify any problems with the programme.

The regulatory body also needs to plan how it will make the transition from one communication programme to another. For instance, when an accident or an event of public interest occurs, the regulatory body will activate the emergency communication programme. After the accident or event is over, the regulatory body will return to normal operations. It is important to plan for these changes.

In the event of an accident or event of public interest, several actions will be taken immediately:

(1) The spokesperson for the regulatory body will be joined at times by senior officials, depending on the seriousness of the event. Technical experts will also participate in briefings. They will all have received special communication training. Technical experts and communicators will advise on questions that they themselves must be prepared to answer.
(2) Information will be released promptly in meetings with representatives of the news media rather than by release of press statements alone. Statements will need to be co-ordinated with the response organizations and with other regulatory bodies and governmental agencies.

3.5. EVALUATION OF COMMUNICATION PROGRAMMES

Any communication programme will need to include guidance on how to determine the effectiveness of the programme and of its various elements. Evaluation makes it possible to determine systematically the degree to which the elements of a programme are working, where to focus resources and how to prioritize their allocation. Continuous evaluation and improvement of a communication programme are essential to achieving its overall aims. The results are evaluated by comparing them with advance expectations or with performance indicators.

Feedback on impacts through the different communication channels (such as videos and home pages) is an essential element in determining the overall effectiveness of a communication programme:

(a) Research on public opinion can be a useful tool, for example to identify gaps in communication or to determine the effectiveness of the regulatory body in

communicating with the public. Reliable data can be collected using scientifically proven methods of research on public opinion.

(b) Face to face communication with a small group selected to represent pertinent points of view, although not as wide ranging as a public opinion poll, may provide valuable information for feedback to the communication programme.

(c) Identification of lessons learned from implementation of the programme is an effective evaluative technique.

(d) A peer review group — communicators from other regulatory authorities or other organizations which have similar communication needs and programmes, or journalists familiar with nuclear technology — invited to evaluate press releases, brochures and procedures with a view to suggesting improvements can also be useful.

(e) Newspaper, magazine, radio and television coverage of nuclear issues can also be instructive in determining where communications have been unclear.

With innovative communication concepts there is a stress on the need for the development of an in-house communication culture geared to openness and simple clear language, and the identification of difficulties in information flow from the source to a given audience. This is particularly important in dealing with complex technical issues.

4. ACTIVITIES OF REGULATORY BODIES IN RELATION TO COMMUNICATION

With the approaches described in Section 2 taken into account, the following activities of the regulatory body in relation to communication are summarized for the purpose of structuring the programme:

(a) To develop policies, programmes and procedures for informing the public about the regulatory body's activities concerning the safe use of radiation sources and nuclear energy:
- The nature of the activities regulated,
- National nuclear and environmental policies,
- Previous history in terms of nuclear safety.

(b) To develop policies, programmes and procedures for informing the public in emergencies and special circumstances:
- Events of public interest,
- Accidents with localized impact,

- Emergencies arising from major accidents,
- Major accidents in neighbouring countries,
- The need for reassurance of the public.

(c) To disseminate information to the public and the news media concerning the regulatory body's policies, programmes and activities for protection of the public and the environment, the regulatory body's publications, other technical publications such as the IAEA safety standards, and the International Nuclear Information System (INIS) by means of:
- Writing and issuing press releases,
- Structuring and presenting media briefings,
- Development and production of information brochures,
- Holding public meetings and meetings with special interest groups,
- Establishing and maintaining a capability for a timely response to enquiries from the news media,
- Maintenance of a media profile.

(d) To keep the regulatory body's staff informed on news media coverage and other activities of interest through the most effective mechanism:
- An Intranet,
- Staff briefing meetings,
- Information bulletins.

(e) To respond promptly and in a co-ordinated manner to all public enquiries on nuclear safety matters by means of the following:
- Nomination and availability of spokespersons,
- Information brochures and briefing documents,
- The Internet.

(f) To achieve and maintain public confidence as an effective regulatory body by means of the following:
- Mechanisms to establish and maintain dialogue with all target audiences,
- Regular contact with the news media,
- Maintenance of a capability for competent response to the news media,
- Good quality communication material,
- Timely response.

(g) To explain the adopted regulations and guides on nuclear safety, upon which its regulatory actions are based, in a way that is appropriate for different target groups by means of the following:
- Provision of clear and accurate information,
- Targeting of appropriate groups,
- Provision of opportunity for discussion of interpretation and implications.

(h) To co-ordinate with other regulatory bodies on nuclear safety issues of common interest by means of the following:
- Establishment of bilateral agreements on exchange and co-operation,

- Mechanisms for information exchange,
- Exchange visits for staff members,
- Joint meetings.

(i) To stay abreast of new scientific and technical developments in order to understand and to address effectively the concerns of the scientific community by means of the following:
- Availability of journals,
- Optimization of staff use of the Internet,
- Attendance by staff of conferences and meetings.

(j) To foster knowledge of nuclear safety matters in schools and in universities by means of the following:
- Sponsorship and support of specialist training courses,
- Provision of information, wall charts and fact sheets,
- Liaison with associations of science teachers and lecturers,
- Design of appropriate information for web sites,
- Sponsorship of competitions in radiation science and safety related matters.

(k) To disseminate information to target groups of particular relevance such as industrial associations and professional bodies whose members may have direct or indirect involvement with radiation sources and radioactive materials. These would include, for instance, scrap metal recyclers and customs organizations who may need information about the safe use of ionizing radiation, lessons learned from operational experience and events, and new regulatory requirements:
- Organization of seminars,
- Production and dissemination of information brochures,
- Regular liaison with and visits to such associations.

(l) To maintain liaison with medical associations and provide them with general information on the effects of exposure to radiation and, in particular, regulatory issues of which they may need to be aware:
- Organization of seminars,
- Production and dissemination of information brochures,
- Regular liaison with and visits to such associations.

(m) To provide expert advice and information in emergencies or when needed by the public:
- Training personnel,
- Preparing background material for use in emergencies and for other occasions,
- Establishing and maintaining contacts,
- Periodic testing of arrangements.

(n) To participate with other national or local organizations (e.g. civil defence, fire brigade and municipal authorities) in informing the public about procedures in nuclear or radiological emergencies:

- Establishing and maintaining liaison forums,
- Participating in open days,
- Testing emergency arrangements.

(o) To foresee potential situations of concern and to bring to the attention of the appropriate governmental authorities and provide advice for circumstances that might require high priority communication (e.g. transport of nuclear material in coastal waters or a nuclear accident in another country that could have trans-boundary environmental consequences) by:
- Reviewing and maintaining an awareness of current events,
- Nominating specific staff members to undertake reviews,
- Reviewing the history of events and maintaining staff awareness of this,
- Reviewing INES reports and establishing and maintaining mechanisms for involvement.

(p) To emphasize the independent status of the regulatory body and its ability to regulate effectively the activities and facilities under its control by:
- Ensuring that communication staff are aware of the reasons for independence,
- Preparing material explaining the need for independence,
- Preparing articles, brochures and presentations,
- Maintaining political contacts and maintaining awareness at the political level.

Each regulatory body will consider its own circumstances, national programmes, societal norms, legal obligations and national culture, and will determine which activities are of greatest importance for its communication programme. Such programmes carried out in an open, transparent, professional and timely manner will maintain and enhance the credibility and effectiveness of the regulatory body.

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