EPR Public Communication Plan

2015

EMERGENCY PREPAREDNESS AND RESPONSE

Method for Developing a Communication Strategy and Plan for a Nuclear or Radiological Emergency

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Method for Developing a Communication Strategy and Plan for a Nuclear or Radiological Emergency

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Incident and Emergency Centre
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 Vienna, Austria
Email: Official.Mail@iaea.org

METHOD FOR DEVELOPING A COMMUNICATION STRATEGY AND PLAN
FOR A NUCLEAR OR RADIOLOGICAL EMERGENCY

EPR PUBLIC COMMUNICATION PLAN (2015)

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FOREWORD

The aim of this publication is to provide a practical resource for emergency planning in the area of public communication in the development of a national radiation emergency communication plan (RECP). The term 'public communication' is defined as any activity that communicates information to the public and the media during a nuclear or radiological emergency. To avoid confusion, the term public communication has been used in this publication rather than public information, which may be used in other IAEA publications and documents to ensure consistency with the terminology used in describing the command and control system.

This publication also aims to fulfil in part functions assigned to the IAEA in the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Assistance Convention), as well as meeting requirements stated in IAEA Safety Standards Series No. GS-R-2, Preparedness and Response for a Nuclear or Radiological Emergency. Under Article 5(a)(11) of the Assistance Convention, one function of the IAEA is to collect and disseminate to States Parties and Member States information concerning methodologies, techniques and results of research with regard to the response to nuclear or radiological emergencies.

This publication is intended to provide guidance to national and local authorities on developing an RECP which incorporates the specific functions, arrangements and capabilities that will be required for public communication during a nuclear or radiological emergency. The two main features of this publication are the template provided to develop an RECP and detailed guidance on developing a communication strategy for emergency preparedness and response to nuclear or radiological emergencies. The template is consistent with the outline of the national radiation emergency plan proposed in Method for Developing Arrangements for Response to a Nuclear or Radiological Emergency (EPR-Method 2003).

This publication is part of the IAEA Emergency Preparedness and Response Series and serves as a supplement to Communication with the Public in a Nuclear or Radiological Emergency (EPR-Public Communications 2012).

The contribution of J. Ford (Canada) to the present publication is gratefully acknowledged. The IAEA officer responsible for this publication was L. Berthelot of the Incident and Emergency Centre, Department of Nuclear Safety and Security.

EDITORIAL NOTE

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CONTENTS

1. INTRODUCTION

1.1. BACKGROUND

Previous experience has demonstrated both the importance of, and the challenges involved in, communicating with the public during a nuclear or radiological emergency (hereafter radiation emergency[1]). Effective communication can increase the efficiency of implementing protective measures, reduce the likelihood of inappropriate responses by individuals who perceive themselves to be at risk, and decrease stress and anxiety. It is important for every Member State, with or without a nuclear power programme, to be prepared to communicate with the public in a radiation emergency, even if the emergency occurs in another country.

The importance of developing a robust radiation emergency communication plan (RECP) prior to an emergency cannot be overstated. This plan would serve to communicate with the public before, during and after[2] a radiation emergency.

This publication presents a template for a national RECP, consistent with the outline of the national radiation emergency plan (NREP) proposed in Method for Developing Arrangements for Response to a Nuclear or Radiological Emergency (EPR-Method 2003) [1]. The template is intended as a guide to developing a plan and can be adapted as needed to existing NREPs and to national needs. It can also be used to develop RECPs for local authorities in addition to a national RECP.

The plan describes the organization, roles, responsibilities, principles and concept of operation for communicating with the public during an emergency. It needs to contain a description of the communication functions, as well as the resources, arrangements, personnel and organization necessary to prepare for, and provide, emergency public communication. It may also include the preparedness organization and process to maintain the capabilities required for response. In developing the RECP, it will be important to understand how the plan will function with an emergency specific communication strategy.[3] The strategy, when developed, is used to determine the communication activities and messages that are appropriate in light of the target audiences and communication channels identified. Such a strategy is the result of research and analysis by States to determine what should be communicated, to whom and by what mechanism. The RECP needs to reflect the functions and capacities that will be required to carry out the activities defined in the communication strategy.

While the focus of this publication is on communicating during an emergency, it should be noted that communication prior to an emergency (routine communication) plays an important role in the effectiveness of communication during an emergency (emergency communication). Organizations participating in an emergency response need to take this into account at the preparedness stage. During an emergency, the media and the public will tend to give greater credibility to an organization with which they are familiar from routine

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[1] Nuclear or radiological emergencies are referred to as radiation emergencies throughout this publication. Radiation refers to ionizing radiation.

[2] This would refer to the time after termination of an emergency, when the evaluation of public communication activities takes place. It would not cover public communication during the long term remediation phase.

[3] Although the terms communication plan and communication strategy are sometimes used interchangeably, in this publication these terms differ in meaning.

communication. Hence, they are likely to have greater confidence in the response actions performed by this organization. Being transparent and providing correct information are essential to both routine and emergency communication. Therefore, it is important for organizations that will be involved in the implementation of the RECP to also develop a robust programme for communicating with the public prior to an emergency. Activities such as providing effective spokespersons to the media, having information available on relevant topics in plain language and establishing an online presence will contribute towards organizational credibility that will be vital should an emergency occur.

It is essential that the RECP uses any pre-established communication arrangements and activities, which are coordinated among the on-site, local, national and international levels.

1.2. OBJECTIVE

The objective of this publication is to provide national and local authorities with guidance on developing a national and local RECP. It should be noted at the outset that such a plan is intended to document the specific functions, arrangements and capabilities that will be required for public communication during a radiation emergency. Critical tasks for the communication response function are set out in EPR-Method 2003 [1] and in Communication with the Public in a Nuclear or Radiological Emergency (EPR-Public Communications 2012) [2], and are consistent with the relevant IAEA safety standards [3, 4]. These critical tasks address providing information and issuing instructions to the public and keeping the public informed.

This publication provides an adaptable template that can be used by those responsible for public communication in Member States to develop an RECP. It is intended to support the development of communication plans and arrangements of all the responding or involved organizations and their relationships, as described in EPR-Public Communications 2012 [2].

The resulting RECP will need to be consistent with the NREP, which is a description of all roles and responsibilities in the overall response to a radiation emergency. The template may be adapted where necessary to reflect the structure of any existing national emergency response plan as long as the different prescribed sections are captured.

1.3. SCOPE

The guidance in this publication is applicable to the full range of radiation emergencies, regardless of whether they arise from an accident, natural disaster, negligence, nuclear security event or any other cause. It is not limited to what is commonly considered a radiation emergency, such as the loss or theft of a dangerous radioactive source or the release of radioactive materials from a nuclear power plant. The scope of this publication also includes any radiation event, which the public might perceive to be an emergency, regardless of the technical nature of the event. Guidance provided here, describing good practices, represents expert opinion but does not constitute recommendations made on the basis of a consensus of Member States.

Although the template is applicable to a radiation emergency regardless of its initiating cause, law enforcement or national security considerations in the case of an emergency initiated by a nuclear security event may preclude communication of certain information. Law enforcement or national security may also play a more significant role in public communication during such emergencies.

The RECP should also not be confused with the NREP as defined in EPR-Method 2003 [1], which is the overall plan that guides the national response to a radiation emergency.[4]

1.4. STRUCTURE

This publication is divided into two sections. Section 1 includes the background, objective, scope and structure of the publication. Section 2 provides guidance on developing a communication strategy or strategies. Appendix III contains the actual template for an RECP. It follows the structure set out for the NREP in EPR-Method 2003 [1], which should be consulted for specifics as needed.

[4] The NREP is the general description of the roles and responsibilities of all the responding organizations and their relationships. It provides sufficient detail to ensure that the functional areas that are performed by personnel drawn from many different ministries or organizations can function effectively. The NREP summarizes more detailed plans for each emergency response function, ensuring their integration, consolidation, compatibility and coordination for overall response effectiveness. At the next level, plans may be developed by individual agencies, governmental jurisdictions, and facilities or operators. The final level represents the procedures (e.g. implementing instructions and operational procedures) and resources that will be used during an emergency to carry out the plans. Planning should not be conducted by one organization or agency without consultation of the others [1].

2. COMMUNICATION STRATEGY

This section provides guidance on developing a communication strategy. The purpose of a communication strategy is to determine how to identify key issues, target audiences, appropriate messages and communication activities to deliver the intended information. A communication strategy can be overarching (i.e. to cover all potential radiation emergencies) or specific to one type of radiation emergency. Therefore, it may be possible to have several strategies, according to the potential types of emergency, or one overarching strategy that will be adapted to particular emergency situations. Although any strategy should be prepared in advance, it may need to be refined or adapted at the time of an emergency according to the specific circumstances and based on ongoing feedback as the emergency evolves.

2.1. ISSUE

The issue for which the communication strategy has been developed should be stated succinctly. For example, this could be for a specific emergency situation: communicating with the public about a lost dangerous radiation source, and efforts to prevent injury and to recover it. Alternatively, it could be an overarching strategy: to notify the public of an accidental release of radioactive material and to keep people informed of any necessary protective actions.

2.2. PUBLIC ENVIRONMENT

There is a need to describe the current public environment or context in which the communication strategy will be implemented. This should include any available, or collected, results of public opinion research or surveys that explore public perception of issues such as radiation and its risks, acceptance of related technology, disposal of waste and past radiation emergencies. Attitudes towards nuclear power plants, siting of radioactive waste facilities and any remediation activities are also potential sources of information about public opinion.

An analysis of media reporting on radiation, radiation safety and nuclear power issues can also be used to capture public sentiment, as can legislative debates. Looking at past emergencies, there should be a wealth of information on attitudes and issues of concern that can be captured from media reporting and social media, as well as from direct contact with, or requests for information to, relevant national authorities.

Such sources can also be used to determine the pre-existing public awareness of potential radiation emergencies and basic radiation protection concepts. However, it may still be necessary to update this analysis or to undertake public opinion research periodically before or even at the time of an emergency.

Other aspects to be considered include, for example, the prevalent acceptance of technology, influence and attitudes of non-governmental organizations (NGOs) on nuclear technology and trust or distrust in government. For effective emergency communication, it is also important to take into account the public's perception of risk (see PC-IS.6 and PC-IS.8 of Ref. [2]). It should be noted that the demand for public communication may be high in an emergency regardless of the actual risk, as the public tends to react to its perception of risk rather than to the actual risk.

2.3. STRATEGIC CONSIDERATIONS

An important step in developing a communication strategy is to describe the strategic considerations (e.g. uses of radiation, protective actions and past emergencies) that will be

used in its formulation. Such considerations are the main drivers for the objectives, target audiences and communication tactics in the strategy itself. When considered in the context of the public environment, the strategic considerations will dictate the most effective use of public communication activities to support the overall response objectives.

One of the methods that can be used to identify strategic considerations is the SWOT (strengths, weaknesses, opportunities, threats) analysis (see Appendix II). For communication in radiation emergencies, there are some specific considerations that need to be taken into account, which are described in the following sections.

2.3.1. Uses of radiation

The uses of radiation in the State will influence the types of emergency that could potentially occur. They will also influence the level of public awareness of measures in place to prevent accidents. Reference should be made to the hazards assessment contained in the NREP.

2.3.2. Protective actions

National nuclear and radiological authorities should have pre-determined harmonized criteria for protective actions according to the potential hazards and should have established operational intervention levels when these actions will be put into effect [3].[5] Experience has shown that implementing protective actions can reassure some individuals, while others will become more concerned, as they perceive greater proximity to the emergency when they are asked to take action. Another important consideration will be the consistent use of these protective actions among neighbouring States and trading partners. In case of differences in protective actions, it will be very important to consider how to explain them to the public.

2.3.3. Past experience

In addition to capturing the public's concerns during and after the emergency as part of an analysis of the public environment, it will also be useful to consider any recommendations made with respect to public communication through a lessons learned review past responses. The IAEA publication Lessons Learned from the Response to Radiation Emergencies (1945–2010) (EPR-Lessons Learned 2012) [5] is another useful source of such information (see sections 3.6 and 3.10 of Ref. [5] for relevant lessons concerning public information).

Past experience with an emergency is also a predictor of future experiences. Challenges in previous efforts with public communication will be amplified by the memory of past concerns and may result in higher demands for information and action, particularly if trust levels with the previous responses were not high.

2.3.4. International Nuclear and Radiological Event Scale (INES)

The International Nuclear and Radiological Event Scale (INES) is a seven level scale, used to communicate the safety significance of events[6] at nuclear facilities, events involving sources in industry and medicine, events during transport of radioactive material, events pertaining to lost or stolen radioactive sources or packages, discovery of orphan sources (such

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[5] The IAEA develops standard procedures and works with Member States to define common approaches so that protective actions do not differ much between States, which could result in possible confusion and mistrust among the public.

[6] The INES User's Manual, 2008 Edition, defines an event as: "Any occurrence that requires a report to the regulator or the operator or a communication to the public" [6].

as radioactive sources being found in scrap metal) and events involving the unplanned exposure of individuals in other regulated practices (e.g. processing minerals).

Although INES facilitates understanding of the safety significance of an event between experts, the public is much less familiar with the scale. The level of public concern will not necessarily correlate with the INES rating, but the media will definitely be looking to compare a current event with the most serious previous ones. Unlike the Richter scale for earthquakes, INES is not based on measurements but rather on technical assessments. Thus, careful consideration should be given before using the rating in public communication during an emergency. Technical assessments may change as more information becomes available or the event evolves. It might not be possible, therefore, to provide the INES rating immediately. Public communication, however, should never be delayed by waiting for an INES rating to be determined. If a rating is used, an explanation of the rating description in plain language also needs to be given. Providing consistent, concise and clear information will help the public to cope with the consequences of the emergency.

2.4. OBJECTIVES

After assessing the opportunities and obstacles and the strategic considerations, there is a need to list the objectives for the communication strategy. These should support the overall objectives of the emergency response, but may also address specific communication issues. For example, the overall objectives may be to explain details of implementing protective actions (e.g. sheltering in place, restriction of consumption of certain foods, and evacuation), and to prevent inappropriate or unnecessary actions by individuals (e.g. self-evacuation and unjustified request for medical monitoring).

2.5. TARGET AUDIENCES

Before any communication activities can be planned, the target audiences for these activities will need to be identified. Target audiences are those groups that are potentially affected by the emergency to differing degrees (directly and indirectly) and hence may have different information needs. These audiences should be prioritized according to their importance to the overall goals of the emergency response: primary, secondary and tertiary. For example, primary audiences could include those directly affected by the emergency, but may also include the 'worried-well'[7] (see PC-IS.11 of Ref. [2]). In addition, there may be internal as well as external target audiences.

It will be important to consider the information needs of those responding to the emergency, as well as those working for the response organization but not directly involved in the response. Both groups will have different information needs and means (communication channels) by which the information will be best communicated (see PC-IS.12 of Ref. [2]).

The media will be a very important target audience during an emergency, as many people rely on journalists to tell them what is important. However, the media can be considered both a target audience and a means for transmitting information to other audiences. It should be noted that, during the early response, the media can act as a transmitter of information about an emergency. As the emergency evolves, they might be more likely to question the response actions and to provide more critical reporting on the emergency.

[7] A person who has received neither sufficient radiation exposure nor been sufficiently contaminated to warrant medical treatment or decontamination but who is worried and wishes to be assessed for radiation exposure and contamination.

Social media sources are growing in importance over traditional media for some audiences (see PC-IS.13 of Ref. [2] for more information on communication tools).

2.6. KEY MESSAGES

The strategic considerations, objectives and target audiences mentioned in the previous paragraphs are the foundation to develop key messages that will be communicated in all public information products.

Key messages are concise points that can be easily remembered by the public and integrated into multiple information products and formats. For example, for a case of a lost radiation source, it may read as follows: "The radiation source can cause serious injuries if touched or handled. If you see a metal object with the radiation warning symbol, stay away from it and call the authorities."

2.7. STRATEGIC APPROACH

During an emergency, the overall approach for communication should always be proactive. The public and the media should be provided with relevant information about an emergency proactively, even before there is public awareness of the situation. At a minimum, the responding organization should always be able to discuss initial actions and to indicate when more information will be available. Although the overall approach to communicating is proactive, the activities and information used will have to reflect feedback as the emergency unfolds and to respond quickly to changing information needs.

2.8. RECOMMENDED TACTICS

Given the strategic considerations, objectives and target audiences, there is a need to determine the most effective communication activities, information products and tools, as well as the channels through which messages will be communicated (see Table 1). Some of these activities and products may be used at different phases during the emergency (e.g. long term recovery).

The capacity to undertake these activities and the resources required to perform them should be part of the national RECP.

TABLE 1. COMMUNICATION ACTIVITIES, INFORMATION PRODUCTS AND TOOLS FOR COMMUNICATION IN A RADIATION EMERGENCY

Examples of communication activities, information products and tools	Purpose of application
Media relations	Respond to all media enquiries with a dedicated spokesperson supported by press officers
News conferences	Announce new information to the media
Media/technical briefings	Provide updates to the news media on technical aspects and response actions related to the emergency
News releases	Keep the media informed of major developments in the emergency and response actions
Web site information	Provide information from all responding organizations on one dedicated web site or portal, or use existing web sites, with appropriate links to relevant content
Social media	Keep users of social media informed about the emergency and response actions through the response organization's Facebook, Twitter, blogs, etc.
Information products	Provide background information on radiation, its uses, radiation safety and emergency preparedness arrangements (such information should be developed in advance of an emergency)
Information products on the actual radiation emergency	To provide additional information such as graphics explaining what is happening at a facility, maps showing any exclusion or protective zoning, a timeline of events, questions and answers, and information on where to receive medical assistance
Public inquiries	Respond to all public inquiries by phone or email (a dedicated toll free hotline may be set up for the emergency)
Questions and answers	Address anticipated inquiries in general; frequently asked questions and answers should be prepared and may be posted on the web site or used to respond directly to email and phone inquiries
Public meetings	To be used for face-to-face communication with those directly affected by the emergency (such as those displaced or those identified for radiation monitoring)
Public information centre[a]	Provide a dedicated location where those directly affected or the media can obtain information
Radio and television announcements	Rapidly communicate any announcements relevant to the emergency or response to it, including protective actions
Printed publications	Provide information about long term restrictions or protective actions that may be put in place after the response phase of the emergency through printed fact sheets or brochures

[a] A single, dedicated location that may be established to communicate with the public and the media during a response to an emergency.

Particular information products and activities may be recommended for specific target audiences, including:

- Those directly affected by the emergency;
- First responders and medical personnel dealing with those affected;
- The 'worried-well';
- Those working for the responding organizations but not directly involved in the emergency response;
- Neighbouring States and the international community;
- Trading partners;
- Travelling public (especially by air and sea).

Appropriate communication channels for these audiences will also need to be considered so that they can be effectively targeted (see PC-IS.13 of Ref. [2]).

2.9. TESTING AND EVALUATION

The communication strategy needs to be evaluated after the emergency against the objectives. For example, this could involve identifying performance indicators aligned with those established for the overall emergency response, or using analysis of media monitoring and surveys. A measurable means for evaluating the strategy should be used where possible. As objectives are defined and the strategy is being developed, it will therefore be important to consider the evaluation mechanisms that will be used after an emergency. This evaluation should then be applied to improve the communication strategy for the response to future emergencies.

Similar to all aspects of emergency preparedness, the elements of the communication strategy should be periodically tested through simulation exercises.

Appendix I

ELEMENTS OF A COMMUNICATION STRATEGY AND POSSIBLE RADIATION EMERGENCIES

Table 2 has been developed as a planning aid only.

TABLE 2. ELEMENTS OF A COMMUNICATION STRATEGY AND POSSIBLE RADIATION EMERGENCIES

Communication strategy	Public environment	Strategic considerations	Objectives	Target audiences	Key messages	Recommended approach	Recommended activities/tactics	Testing and evaluation
Lost radiation source								
Transboundary radioactive release								
Nuclear emergency of national concern								
Transportation emergency								
Radioactive contamination								
Emergency triggered by nuclear powered vessel re-entry								
Emergency triggered by explosion of an RDD[a] or 'dirty bomb'								
Rumours of a radiation emergency								

[a] Radiological dispersion device.

Appendix II

SWOT ANALYSIS

A SWOT (strengths, weaknesses, opportunities, threats) analysis is a common strategic tool used to analyse specific situations or environments. It identifies strengths, weaknesses, opportunities and threats, both internally and externally for a specific situation. SWOT is one potential tool and is presented here only as a tool to be considered.

All too often in any strategy, the focus is on weaknesses and threats, but there may be strengths and opportunities as well. This would be the case, for example, if the response organization is viewed as credible and has a positive reputation with academia and NGOs. An emergency may also provide an opportunity to better inform the public about the uses of radiation and the safety and security measures that are in place.

The strengths, weaknesses, opportunities and threats, both internal and external, for the situation being analysed should be listed. Once this is completed, they should be summarized in the strategic considerations section of the communication strategy. For each item identified, specific communication tools and tactics may be developed as part of the strategy or separately, as appropriate.

For example, if one weakness is that the public has little knowledge about the uses of radiation in the country, an appropriate tactic may be to develop an information campaign, at the preparedness stage, before any emergency (see Table 3).

TABLE 3. SWOT ANALYSIS

	Strengths	Weaknesses
Opportunities	Strengths enable you to exploit opportunities (e.g. good relationships with key journalists facilitate the education of the public previous to an emergency)	Take opportunities to minimize negative effects resulting from weaknesses (e.g. public has no understanding of the uses of radiation in the country but can be educated via the media)
Threats	Strengths enable you to avoid threats (e.g. educating the public using established relationships with the media previous to an emergency will result in fewer misperceptions during an emergency)	Reduce weaknesses and avoid threats (e.g. educate the public to avoid misperception during an emergency)

Appendix III

RADIATION EMERGENCY COMMUNICATION PLAN TEMPLATE

This plan provides the basis for emergency preparedness in public communication for local and national response organizations. The plan is divided into three parts: planning basis, response and preparedness, as there may be different arrangements and requirements for each of the phases. The parts are presented in this order because they build upon each other's requirements. The intended purpose and content of each part is explained. Several appendices provide further elaboration or clarification and information on procedures.

TITLE (COVER) PAGE

On the title (cover) page, write the title of the plan, approval date, version number and signatures. The signatures should include those of the heads of all the participating organizations.

CONTENTS

1. INTRODUCTION

1.1. PURPOSE

Describe the purpose of the plan, for example: "The plan provides the basis for public communication in a radiation emergency that is effectively integrated into the response at facility, local, national and international levels" (see sections 2 and 3 of Ref. [2]).

1.2. PARTICIPATING ORGANIZATIONS

List all organizations participating in the plan. This should include all national level organizations (e.g. authorities and ministries of health, agriculture, education, environment, safety and security) and also NGOs, which may play a significant role in public communication during an emergency involving radiation, and should include those responsible for communicating with the public and the media.

1.3. SCOPE

Describe the scope of the plan, for example: "The plan addresses the public information needs in a radiation emergency in order to provide coordination of public communication activities." The types of emergency may also be specified according to the current uses of radiation within the Member State. At a minimum, it should consider lost radiation sources, transboundary contamination (such as through accidental releases of radiation or radioactively contaminated products) and radiation emergencies triggered by nuclear security events.

It should be noted that the plan itself will not provide sufficient detail for an adequate public communication programme. This level of detail should be contained in procedures that are developed based on the plan (see appendix 6 below). (For the sample template Generic Implementing Procedures Outline, see appendix 12.5 of Ref. [1]).

1.4. LEGAL BASIS

List the national laws, codes or statutes that define responsibility for public communication in the response to radiation emergencies. Where there is infrastructure to be developed, list planned developments.

1.5. RELATED PLANS AND DOCUMENTS

Give a brief description of how the plan relates to other major national plans that may be used along with the plan, including those for communicating in response to conventional emergencies and criminal activities. Describe how the plans are prioritized, and describe the relationships between the different plans (e.g. with a chart). Provide a complete list of all the supporting documents in an appendix.

2. PLANNING BASIS

This part describes the basis on which the plan will be developed, including the hazards[8] to be planned for, the roles, responsibilities and response structure, and the organization and resources.

2.1. TYPES OF HAZARD

Make reference to the NREP, which covers the radiation hazards, and give a brief description or summary of them in the plan (see Ref. [1] for the categorization of radiation hazards, and PC-AG.7 and PC-IS.2–PC-IS.4 of Ref. [2]). The types of hazard should be consistent with those used in any other national emergency response plans. Hazard category IV[9] applies to activities that can exist virtually anywhere and thus is the minimum level of hazard assumed to exist everywhere. Hazard category IV always applies to all jurisdictions, possibly along with other categories.

In appendices or other referenced documents (including maps, as appropriate), list any hazard category I, II and III facilities and local jurisdictions which fall within emergency zones.

2.2. TERMS

Refer to an appendix for standard definitions of terms that should be used consistently in other plans and procedures in order to promote coordination. Where possible, the terms used by the organizations involved in the response to conventional emergencies should be adopted.

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[8] 'Hazard categories' are referred to as 'threat categories' in IAEA safety standards and guidance (see Refs [3, 4]).

[9] Hazard category IV includes activities that could give rise to a nuclear or radiological emergency that could warrant urgent protective actions in an unforeseeable location. These include non-authorized activities, such as those related to dangerous sources obtained illicitly. They also include transport and authorized activities involving dangerous mobile sources, such as radiography sources, radiothermal generators and nuclear powered satellites.

2.3. RESPONSE ROLES AND RESPONSIBILITIES

Describe the roles and responsibilities of the public information officer/team (PIO)[10]. Where multiple ministries or national organizations (e.g. health ministry, civil protection and environment ministry) may be involved, specific roles and responsibilities should be explained (e.g. in an organization chart).

Describe, where appropriate, how responsibilities are delegated or transferred when conditions (the severity of the emergency) change (from response to recovery). For example, responsibility for public communication may be delegated to the lead responding organization on behalf of all responding government ministries.

2.4. RESPONSE ORGANIZATION

The public communication within the emergency response will need to be organized into a structure that can be scalable to the size of the emergency situation.

The public communication response organization forms part of the overall national level response. Provide a block diagram of the national level response organization components (sections, groups and teams) with a brief description of responsibilities of each 'block' and the facilities where each group will probably perform. The emergency response organization structure should be used by the national and local response organizations. The components of the public communication response organization should then be broken down into a similar block diagram (see pp. 4–6 of Ref. [2]). The functions with related job descriptions will be described in section 4.2 of the plan.

2.5. PUBLIC COMMUNICATION FACILITIES

Describe the public communication facilities, such as the public information centre (PIC), which may be functional during the emergency response. Some of these facilities may be set out in the overall emergency plan.

2.6. COORDINATION OF PUBLIC COMMUNICATION ACTIVITIES

Describe the internal and interagency coordination of public communication for emergency response.

Checklists for specific functions in public communication roles may be included as appendices to the plan (see appendix 6 below). Describe arrangements for coordination of communication where an emergency operations centre or PIC is established (e.g. who is the responsible organization). Because these checklists may need to be updated frequently, the procedures for updating them should be separate from those for updating the main RECP plan.

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[10] Person or group of persons primarily responsible for keeping the public and the media informed and for coordinating with all sources of official information to ensure that a consistent message is being provided to the public. Individuals from different organizations may be included in the team, particularly in a significant emergency.

2.7. LOGISTICS AND RESOURCE COMMITMENTS

Describe the arrangements for PIO logistics and resources in an emergency and the organizations that will be responsible for providing logistical support and resources required for public communication. For example, sufficient staff for 24 hour functioning over extended periods with rotations, establishing a PIC, translation, telephone lines, computer equipment and web site resilience (i.e. sufficient bandwidth and server capacity).

Describe the resources of government agencies and other organizations that will be made available under the plan to meet their roles and responsibilities for public communication during a radiation emergency or to provide support to local government in providing information to the public. This should include any arrangements or agreements established to share or pool resources, including technical experts, when the response capacity of one organization may be exceeded.

2.8. CONCEPT OF OPERATIONS

The concept of operations for the emergency communication plan needs to be the same as the one set out in the overall NREP. The PIO will be functioning within this operational concept, so it will be important to determine how best to coordinate the public communication response within this framework. The key goal is to ensure that consistent and timely information is provided to the public. In order to do this, the PIO needs to be integrated in the response structure to gather the necessary information and to provide insight and feedback on public perception of the emergency as it evolves.

Special consideration will need to be given to responding to high demands for information from the public and the media, regardless of the actual risk. Activation of public communication procedures could occur without the need for regular emergency response operations. The concept of operations in public communication could be different for radiation emergencies triggered by nuclear security events but should always be consistent with that of the NREP.

3. RESPONSE

Describe the national response arrangements for performing the public communication response functions listed in the following subsections. Identify which organizational component within the response organization will be responsible for all or part of the performance of these functions.

Detailed information required by other organizations, for example local governments, to develop compatible response arrangements for public communication should be included in an appendix, as needed.

3.1. ACTIVATION AND REQUEST FOR ASSISTANCE IN EMERGENCY PUBLIC COMMUNICATION

Describe the arrangements and processes for notification and activation of the PIO, including information on who will be responsible for activating this function. Describe the arrangements by which the PIO requests assistance within the response organization or at national or

international levels. Describe the arrangements for requesting national support for local officials involved in public communication.

3.2. MANAGEMENT AND COORDINATION OF THE PUBLIC COMMUNICATION FUNCTION DURING RESPONSE

Describe the place of public communication in the command and control system according to the NREP and the public communication organization structure (as set out in section 2.4, with the roles defined in section 4.2). Describe how the PIO functions within the overall control system and set out responsibilities for approving all information that is to be released to the public during the emergency.

Describe arrangements within organizations subject to the plan for coordinating public communication activities through unified command (decision making), assigning lead responsibilities or some other mechanism during an emergency response. Describe the arrangements for the coordination of public communication between and among authorities at local, national and international levels during a response.

3.3. PROVIDING WARNINGS AND INSTRUCTIONS TO THE PUBLIC

Describe the national role of providing information, warnings or instruction to the public for national emergencies or emergencies at local and regional levels, such as for a large release or loss of a dangerous source. Describe arrangements for the provision of public communication at the onset of an emergency, such as choice of spokesperson and key messages and communication channels (see PC-AG.5, PC-AG.6 and PC-IS.12 of Ref. [2]). Describe arrangements for communicating about protective actions and cancelling restrictions.

Consider including an appendix with templates for specific communication processes (such as for key communication activities at the onset of an emergency) or hazard specific news release templates.

3.4. MITIGATING THE NON-RADIOLOGICAL CONSEQUENCES

Describe the arrangements for monitoring and responding to concern, anxiety, distress and inappropriate actions on the part of emergency response workers and the public. Specific consideration should be given to monitoring for potential rumours (including those on social media) in real time, and arrangements should be made for responding to them quickly and forcefully to avoid further confusion and a lack of trust in the responding organization.

Consider the potential non-radiological consequences of a radiation emergency and the use of communication to mitigate them.

The arrangements should also include designating a contact point for coordinating public communication with the IAEA when required (see p. 7 of Ref. [2]).

3.5. FINANCING OPERATION

Describe the system for financing public communication operations if not set out in the NREP.

3.6. MAINTAINING RECORDS AND MANAGEMENT OF DATA

Describe the arrangements put in place to ensure that the relevant information and documents are recorded and retained for use after the emergency. For example, records of old news releases should be kept (some legislation exists for governments to make information publicly available). Such information will be useful for reviewing the effectiveness of public communication during the emergency response, such as through a lessons learned exercise.

3.7. MONITORING SOURCES OF INFORMATION

Describe arrangements for monitoring the traditional print and electronic media at the national and international levels and for monitoring social media (e.g. Twitter, Facebook and blogs), during an emergency. This should include arrangements to validate, assess and respond to social media in real time. Owing to the high level of potential media and social media interest, this may require enhanced capacity that may best be achieved by pooling resources among the responding organizations.

Describe arrangements for monitoring other important sources of information, such as email and telephone information requests, official statements (by other national authorities, licensees and the IAEA), web sites and NGO opinions.

4. PREPAREDNESS

Describe the arrangements used to perform the preparedness functions listed which are needed to develop and maintain a public communication capability during a radiation emergency. Identify which organizational component within the PIO will be responsible for all or part of the performance of these functions.

4.1. AUTHORITIES AND RESPONSIBILITIES

Describe arrangements for developing and maintaining the plan and supporting infrastructure. Include all relevant organizations and authorities, describing the roles of each key player (e.g. nuclear power plant operators, technical support organizations and NGOs).

4.2. ORGANIZATION

Describe the functions (not the numbers), specific skills and job descriptions of roles required during the response (e.g. media officer, media monitor, webmaster and spokesperson). This will be used during a response to allocate people with appropriate skill sets to the required positions in the PIO. Describe the human performance/resilience[11] capacity considerations that should be taken into account in assigning specific roles, given the high demand, high stress environment that will exist during an emergency response.

[11] Resilience is the acquired ability to overcome difficult situations. Effective problem solving skills, being able to manage strong feelings and changeable situations, a sense of self confidence and optimism are factors that can contribute to individual resilience. Social support networks, including those provided by response team members, can also improve resilience.

4.3. COORDINATION DURING PREPAREDNESS

Describe arrangements used to ensure that public communication planning is continually coordinated with other preparedness planning efforts at the local, national and international levels.[12] Describe arrangements used to plan for coordination of public communication within this framework. For example, describe the process in place to prepare and maintain contact lists of PIOs at different authorities.

4.4. PLANS AND PROCEDURES

Describe arrangements for developing, distributing and maintaining the national RECP and supporting procedures and documents.

4.5. TRAINING DURING PREPAREDNESS PLANNING

Describe the training programme or refer to it. Describe the arrangements to ensure that personnel responding under the plan are adequately trained and meet the minimum training requirements. This should include basic training on the plan itself, as well as relevant topical training, such as media training and training on the use of social media.

4.6. EXERCISES

Describe the arrangements for the preparation and conduct of emergency preparedness exercises, either specifically for public communication or as part of a broader exercise. At a minimum, public communication should be a part of all emergency response exercises, including specific inclusion of public communication response actions (e.g. contending with rumours on social media, intense media attention and high volume of calls to hotlines). PIO specific drills should be organized to exercise the functioning of the plan.

4.7. QUALITY ASSURANCE AND PROGRAMME MAINTENANCE

Describe the arrangements to ensure a high degree of availability and reliability of all personnel, training, supplies, equipment, communication systems, and facilities (including the PIC, as appropriate) necessary to perform the functions specified in the plan. Describe the arrangements to maintain, review and update the plan, supporting procedures, and other arrangements and to incorporate lessons learned from research, exercises and response to actual emergencies.

REFERENCES

List relevant references for the plan.

ABBREVIATIONS

Define all abbreviations used in the plan.

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[12] It should be noted that impartiality and independence from the operator will be important to the credibility of the emergency response. Therefore, care should be taken in developing the communication plan and relevant arrangements to ensure that the regulatory authority remains detached from the operator, although the communication activities should all fall under a common and agreed upon communication strategy, in the event of an emergency.

DISTRIBUTION LIST

List all individuals/organizations that are parties to the plan or that will be developing response arrangements that should be consistent with the plan. Distribute the list to all participating individuals/organizations.

APPENDICES

APPENDIX 1. AUTHORITIES, RESPONSIBILITIES AND CAPABILITIES OF NATIONAL AGENCIES, MINISTRIES AND ORGANIZATIONS

List all major ministries and agencies that play a role in the development, maintenance or implementation of the plan, along with their authorities and responsibilities. It will also be useful to capture main capabilities and resources with respect to public communication activities.

It may be useful to list these items according to how radioactive materials are currently used *in the State and the type*s of potential emergency, including those triggered by a nuclear security event. Table 4 is intended only as a guide.

TABLE 4. AUTHORITIES, RESPONSIBILITIES AND CAPABILITIES OF NATIONAL AGENCIES, MINISTRIES AND ORGANIZATIONS

	Ministry/agency	Authority/ responsibility	Capability	Resources
Lost radiation source				
Transboundary nuclear release (from abroad)				
Domestic nuclear emergency				
Transportation emergency				
Radioactive contamination				
Emergency triggered by nuclear powered vessel re-entry				
Emergency triggered by explosion of an RDD[a] or ‘dirty bomb’				
Rumours of a radiation emergency				

[a] Radiological dispersion device.

APPENDIX 2. INTERNATIONAL LEGAL AUTHORITIES AND AGREEMENTS

List the international legal authorities, conventions, agreements (bilateral and multilateral) and standards that apply to public communication activities during a radiation emergency.

APPENDIX 3: NATIONAL GUIDANCE

Provide detailed national guidance or refer to relevant documents that provide information needed to ensure that the plan will be compatible with other national requirements for public communication.

These can include policies or other guidelines on access to government information, privacy requirements, media relations, web communication, publishing standards, plain language, official languages, alternate formats and public opinion research.

APPENDIX 4. EVENT SPECIFIC COORDINATION

Provide (or refer to documents providing) a description of how the public communication response will be coordinated with other pre-planned responses for:

(a) Hazard category I and II facilities [1]: Coordination of public communication with the response at the facility site and with local jurisdictions;
(b) Radiation emergency triggered by nuclear security events: Coordination of public communication with national and local law enforcement agencies;
(c) Radiation emergency triggered by natural disasters: Coordination of the public communication on radiation issues with communication of information related to natural disasters (e.g. storms, floods, wild fires and earthquakes).

APPENDIX 5. SUPPORTING DOCUMENTATION AND PLANS

List all the supporting documentation and plans relevant to the maintenance and implementation of the plan. This should include any specific plans and documents for public communication activities, such as media monitoring, emergency specific communication strategies and news release templates.

APPENDIX 6. PROCEDURES AND CHECKLISTS

Because these procedures and checklists may need to be updated frequently, the procedures for updating them should be separate from those for updating the main RECP.

Procedures should also be developed for the wide variety of public communication activities. These may include media monitoring, media relations, translation, developing and posting information to the web site, issuing news releases, organizing news conferences, establishing a dedicated emergency hotline for calls from the public and setting up a PIC (for the sample template Generic Implementing Procedures Outline, see appendix 12.5 of Ref. [1]).

Checklists may also be developed for specific functional roles within the public communication response structure (see PC-IS.7 of Ref. [2]). For example, checklists may be developed for the media officers, spokespersons, media monitors, social media monitoring, liaison officers and technical experts. Such checklists should include activation/de-activation procedures as well as specific tasks to be undertaken by the function.

APPENDIX 7. KEY CONTACTS

As with the procedures and checklists, key contacts may change frequently and procedures to update them should be separate and faster than those to update the main RECP plan.

List all key contacts by organization. This should include subject matter experts, PIOs in other organizations and key media contacts. It may also be useful to include those independent experts who may be sought by the media during an emergency.

APPENDIX 8. TERMS

Provide a glossary of terms that should be used consistently in the national and local response plans and procedures. This should include those specific to public communication as well as to the overall response activities, organization, facilities and response stages.

REFERENCES

[1] INTERNATIONAL ATOMIC ENERGY AGENCY, Method for Developing Arrangements for Response to a Nuclear or Radiological Emergency, EPR-Method 2003, IAEA, Vienna (2003).

[2] INTERNATIONAL ATOMIC ENERGY AGENCY, Communication with the Public in a Nuclear or Radiological Emergency, EPR-Public Communications 2012, IAEA, Vienna (2012).

[3] FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR ORGANIZATION, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, UNITED NATIONS OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS, WORLD HEALTH ORGANIZATION, Preparedness and Response for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GS-R-2, IAEA, Vienna (2002).

[4] FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR OFFICE, PAN AMERICAN HEALTH ORGANIZATION, UNITED NATIONS OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS, WORLD HEALTH ORGANIZATION, Arrangements for Preparedness for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GS-G-2.1, IAEA, Vienna (2007).

[5] INTERNATIONAL ATOMIC ENERGY AGENCY, Lessons Learned from the Response to Radiation Emergencies (1945–2010), EPR-Lessons Learned 2012, IAEA, Vienna (2012).

[6] INTERNATIONAL ATOMIC ENERGY AGENCY, OECD NUCLEAR ENERGY AGENCY, INES: The International Nuclear and Radiological Event Scale, User's Manual, 2008 edn, IAEA, Vienna (2013).

ABBREVIATIONS

INES	International Nuclear and Radiological Event Scale
NGO	non-governmental organization
NREP	national radiation emergency plan
PIC	public information centre
PIO	public information officer/team
RECP	radiation emergency communication plan
SWOT	strengths, weaknesses, opportunities, threats

CONTRIBUTORS TO DRAFTING AND REVIEW

Berthelot, L.	International Atomic Energy Agency
Bigot, M.-P.	Institute for Radiological Protection and Nuclear Safety, France
Boemeke, M.	International Atomic Energy Agency
Buglova, E.	International Atomic Energy Agency
Ford, J.	Consultant, Canada
Krusteva, M.	Nuclear Regulatory Agency, Bulgaria
Lafortune, J.-F.	International Atomic Energy Agency
Lehtinen, J.	Radiation and Nuclear Safety Authority, Finland
Marfak, T.	National Centre for Nuclear Energy, Sciences and Technology, Morocco
Martinčič, R.	International Atomic Energy Agency
Meschenmoser, P.	International Atomic Energy Agency
Pagannone, B.	International Atomic Energy Agency
Rock Zuccato, M.	International Atomic Energy Agency
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