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**NUCLEAR ENERGY AGENCY
COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES**

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Road Map for Crisis Communication of Nuclear Regulatory Organisations - National Aspects

June 2011

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“The Committee on Nuclear Regulatory Activities (CNRA) shall be responsible for the programme of the Agency concerning the regulation, licensing and inspection of nuclear installations with regard to safety. The Committee shall constitute a forum for the effective exchange of safety-relevant information and experience among regulatory organisations. To the extent appropriate, the Committee shall review developments which could affect regulatory requirements with the objective of providing members with an understanding of the motivation for new regulatory requirements under consideration and an opportunity to offer suggestions that might improve them and assist in the development of a common understanding among member countries. In particular it shall review current management strategies and safety management practices and operating experiences at nuclear facilities with a view to disseminating lessons learnt. In accordance with the NEA Strategic Plan for 2011-2016 and the Joint CSNI/CNRA Strategic Plan and Mandates for 2011-2016, the Committee shall promote co-operation among member countries to use the feedback from experience to develop measures to ensure high standards of safety, to further enhance efficiency and effectiveness in the regulatory process and to maintain adequate infrastructure and competence in the nuclear safety field.

The Committee shall promote transparency of nuclear safety work and open public communication. The Committee shall maintain an oversight of all NEA work that may impinge on the development of effective and efficient regulation.

The Committee shall focus primarily on the regulatory aspects of existing power reactors, other nuclear installations and the construction of new power reactors; it may also consider the regulatory implications of new designs of power reactors and other types of nuclear installations. Furthermore it shall examine any other matters referred to it by the Steering Committee. The Committee shall collaborate with, and assist, as appropriate, other international organisations for co-operation among regulators and consider, upon request, issues raised by these organisations. The Committee shall organise its own activities. It may sponsor specialist meetings and working groups to further its objectives.

In implementing its programme the Committee shall establish co-operative mechanisms with the Committee on the Safety of Nuclear Installations in order to work with that Committee on matters of common interest, avoiding unnecessary duplications. The Committee shall also co-operate with the Committee on Radiation Protection and Public Health and the Radioactive Waste Management Committee on matters of common interest.”

FOREWORD

Nuclear regulatory organisations (NROs) have long agreed that public information is integral to the overall management of a nuclear or radiological emergency, understanding that effective crisis communication is essential to maintaining the public's trust in an organisation's good governance.

The impact of the March 11th, 2011 earthquake and tsunami on the Fukushima Daiichi nuclear power plants (Japan) has reinforced the need for nuclear organisations in general to be well prepared for crises, both at national and international levels. This report was prepared before these events and drafted with a national scope; therefore, it excludes the management of public communication among NROs regarding the failures in another country that would need a different study.

The present report results from the mandate given to the Working Group on Public Communication (WGPC) by the OECD Nuclear Energy Agency to survey member countries on their crisis communication experiences. It has been elaborated based on the analysis of public communication activities of NROs during abnormal situations. It also considers the achievements and challenges identified in various workshops held since 2000 by the Committee on Nuclear Regulatory Activities, as well as the recently agreed-upon Commendable Practices on Transparency.

To foster the exchange of information, the task group in charge issued a questionnaire in 2010. This questionnaire aimed to expand guidance for NROs in the field of public affairs at the national level and to provide a road map to help them to develop their public communication strategies, highlighting the essential elements that should be considered in each stage (pre-, during and post-crisis).

The resulting road map, which was based on the survey's findings and is included in this document, is intended to be generic enough to apply to all NROs and integrated within overall crisis communication planning. It is based on an important premise that is widely accepted among national regulators: "Each actor communicates in its own field of competence"; that is, each organisation's role during an emergency should be clearly defined and well understood by other competent stakeholders - as a preliminary step to ensuring effective crisis communication for nuclear regulatory authorities.

The March 2011 events at the Fukushima Dai-ichi nuclear power plant have further increased the awareness that effective public communication management during crises -especially those of a high magnitude- entails a comprehensive, quick and well-balanced response to the growing demand for information by the public and the media in this globalised world. Globalisation has made crisis communication even more multi-faceted: access to reliable up-to-date information is more difficult; media and social pressure increase; translation to other languages becomes more complicated, etc.

The CNRA endorsed this report at its June 2011 meeting, noting that this Road Map was successfully tested in several countries during the Fukushima Dai-ichi accident. The CNRA also decided at this meeting that the next task for the WGPC will be to address the international dimension of the communicative response to crises. In order to support this new task the CNRA decided also that it will be the subject of a new international workshop with participation of heads of NROs to be held in the spring 2012.

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¹ As of 01 April 2011 the UK NRO (referenced in the report as HSE's Nuclear Directorate or ND) became the Office for Nuclear Regulation (ONR). ONR is an Agency of HSE (Health and Safety Executive).

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EXECUTIVE SUMMARY

This report was prepared by the Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC) of the Nuclear Energy Agency (NEA) Committee on Nuclear Regulatory Activities (CNRA). It was based on a survey on national crises to which 17 countries responded, drawing on their own communication expertise and know-how in emergency response.

Considering a previous analysis of communication during abnormal situations, this guidance seeks to help nuclear regulatory organisations (NROs) widen their common knowledge of communication requirements and practices amongst different countries, as well as existing informative tools to use before, during and after crises.

The purpose of this document is to report on the survey's key findings and to draw a road map to improve the effectiveness of crisis communication management under all types of critical situations (from anomalies to major accidents). Among other topics, this report includes practical information on reaction time, elaboration and delivery of coordinated and accurate messages, new channels to be explored, and priority challenges to ensure transparency under close public scrutiny.

It should be kept in mind that the present document was mostly completed before the nuclear crisis in Fukushima (Japan) that followed the catastrophic natural disasters that affected the region in March 2011. Therefore, this report does not take into account the necessary analysis of national practices derived from international crisis communication management.

Key findings

NROs commonly agree that crisis communication is linked to media pressure and reputational risk, and all realize that their credibility could be jeopardised.

Because crises demand a quick response, an established communication plan by the NRO to deliver accurate information in the initial stage is critical. Providing early information, expected of nuclear safety authorities by the public, helps ensure transparency under high pressure and public scrutiny.

Regular public communication about the NRO and planned emergency actions in advance of a crisis helps to build the NRO's reputation as a reliable, independent and trustworthy source of information.

Timely correction of misinformation and unconfirmed rumors by the NRO helps the public understand the true situation and reduce confusion, which in turn helps preserve the NRO's credibility.

It is important to ensure the delivery of a consistent message from all organisations involved in a crisis and continuously provide updated information to the media and the public throughout the crisis to assuage concerns about competent management of the emergency situation.

One of the challenges observed by most NROs is that the reaction time in terms of communication does not always depend on the national regulator. New channels, like social media, have increased the difficulty for NROs to manage crisis communications quickly and accurately.

Some organisations are assessing the potential role of Web 2.0 innovations as effective crisis communication management tools, without abandoning traditional channels such as press releases and media advisories.

The importance of identifying and training spokespersons and ensuring coordination and sharing information between the different organisations involved in a crisis were commonly highlighted aspects. These remain priority tasks for NROs.

Additional note after the Fukushima Dai-ichi accident

It is worthwhile to mention that the final draft of this report was submitted to WGPC members for comments on 10 March 2011, i.e. the day before the Fukushima Dai-ichi accident occurred. This report was reviewed by the WGPC at its annual meeting (16-18 March 2011) and several members compared the Road Map with their practices during the Fukushima crisis. The findings were that, even though a deep reflexion on the international dimension was missing; the road map appeared to be a very relevant instrument to address at a national level a comprehensive communication strategy during a crisis.

1. INTRODUCTION

1.1. Background

The programme of work of the Working Group on Public Communication of Nuclear Regulatory Organisations for 2011-13 includes the development of guidelines on best practices for the communication of nuclear regulatory organisations, based on the experiences of member countries. The group has released several reports based on the exchange of experience and information between its members:

- In 2006, a report was published on the main challenges to be addressed for communication in abnormal situations (NEA, 2006).
- Lessons learnt from three workshops on public communication of the NEA Committee on Nuclear Regulatory Activities and the related CNRA/WGPC activities were gathered in *Achievements and Challenges in Nuclear Regulatory Communication with the Public* (NEA, 2008).
- As a follow-up to the 2007 workshop, the WGPC surveyed the transparency practices of regulators, in cooperation with the European Nuclear Safety Regulators Expert Group and the Working Group on Transparency Activities (WGTA). As a result, the report *Commendable Practices on Transparency in Nuclear Regulatory Communication with the Public* was issued in January 2011.

The current report is based on the results of a survey of crisis communication experiences and views. To foster the exchange of information, the task group in charge issued a questionnaire in 2010, aiming to expand guidance for NROs in the field of crisis communication. The survey, which 17 countries answered, covered expected situations, lessons learnt from emergencies or challenging events, and media tactics. The key findings show common practices and difficulties among the countries, and have helped identify interesting tools and ways to strengthen communication management. The following report also includes a practical road map of commendable practices, to help NROs to respond in a well-balanced manner and preserve social credibility during the different phases of a crisis (pre-, during and post-).

This section of the document looks at the definition of “crisis” for nuclear regulatory organisations and the importance of establishing coordinated communication procedures that will allow timely, effective responses to non-routine events. The key findings are as follows:

- There is a common agreement on the definition of crisis communication for NROs, related to situations of media pressure and reputational risk.
- No NRO feels immune to a crisis. This sense of unpredictability demands organisations to be prepared for effective crisis communication management under all types of critical situations, from anomalies to major accidents.
- Crises demand a quick response and an established reaction plan, which is designed to deliver accurate information and to ensure transparency under high pressure and public scrutiny.

1.2. The concept of crisis communication for nuclear regulatory authorities

*“Crisis communication is not only ‘public information’ or ‘information for the public’, but also communication between authorities in order to guarantee that public information is consistent.”
(BMU, Germany)*

Nuclear Regulatory Organisations (NROs) around the world are aware that the demand for information and transparency regarding nuclear activities is increasing day by day. The volume of petitions handled by the public affairs divisions of national regulators has risen during the last decade and will continue to do so, as a natural outcome of the proliferation of new digital media and personal communication devices. All countries are aware that this demand will also increase as a result of the *Freedom of Information (FOI) Act*, which governs NROs in all OECD countries since 2006 and gives the public the right of access official documents that authorities have in their possession (unless their disclosure is restraint by clauses protecting confidentiality, commercial aspects or intellectual property rights).

NROs have professional staff accustomed to dealing with common information requests under normal circumstances, helping to make technical issues and regulatory activities more understandable and transparent. However, as the respondents to the questionnaire emphasize, no organisation feels immune to a crisis, to extraordinary and unpredictable events that demand timely, accurate and first-class information management. Such events require a crisis communication routine and structure.

There is a lack of common agreement among scholars about the nature, meaning and definition of a crisis. But no matter how crises are described (isolated incidents, unfortunate accidents, etc.), national regulators involved in the survey are fully aware that some crises might be unpredictable, although not totally unexpected.

Whatever the nature of a crisis, the demand for information is extraordinary, and NROs face the challenge of handling the situation professionally under high pressure and public scrutiny. Effective crisis communication management is vital during any critical situation, especially when there might be a public perception of risk.

The materials collected by the WGPC show that participant NROs have a wealth of experience in crisis communication, which reflects many methods and approaches under different legislation and government structures. But is there a common understanding of what is considered crisis communication in the nuclear energy arena? The answer is yes.

As a starting point, most NROs agree by consensus to define crisis communication as: “the design, planning and implementation of communicative actions in order to satisfy the obligations and demands regarding public information and transparency in a situation of media pressure and reputational risk for the NRO. These will take into account the different phases of pre- during and post- crises”.

Nevertheless, some national regulators remark that the “situation of media pressure and reputational risk” does not have to be specifically related to a nuclear emergency, as any non-routine event affects or could affect an organisation.

2. CRISIS STAGES AND ASSOCIATED ACTIONS

This section of the document looks at the different kinds of crises that NROs may experience and at the actions taken in each situation. Actions are classified as one of the following:

- Proactive (carried out at the pre-crisis stage, they can be beneficial to increase NROs' credibility)
- On the run (launched during the crisis)
- Reactive (post-crisis)

The summary findings are as follows:

- All crises are different, and departments in charge of public communications react to them accordingly.
- NROs design different kinds of communication actions in preparation for a crisis.
- NROs need to be prepared to respond to crises, either at national or international levels, because anything "nuclear" is of particular attention to the media and the public.
- New channels of communication, like social media, are extremely quick to provide information that may not always be accurate. NROs therefore need to respond quickly and accurately to avoid misinterpretations or misinformation.
- Post-crisis measures often involve correcting misinformation. In a few cases, they also entail safety improvements.

The following sections relate to the different kind of actions (proactive, on the run and reactive) that NROs foresee in the different stages of a crisis (pre- during and post- phases). Germany noted that other categorisations are possible, including early identification, prevention, containment and recovery phases. A more general classification would entail consideration of the related field of the crisis itself: nuclear safety; radiation protection or health impact; security; natural or environmental disaster; pollution, among others. The report alludes to the first-mentioned categorization, to correspond to the answers provided in the survey from all NROs.

2.1. Allowing planned actions: pre-crisis measures

"In our view, all communication [...] is to be considered as pre-planned action: this is the communication through which our organisation can gain and build up credibility from all groups concerned. This type of communication, on a continual basis, helps also to create a climate of better understanding of the measures taken/proposed in case of an event/incident/accident."
(FANC, Belgium)

Many countries develop measures that can be considered as planned actions to deal with crises. These measures, which are undertaken on a regular basis, enable NROs to gain and build up credibility from stakeholders. In addition, the communication of risks in a non-crisis situation may help to build awareness on the role of the regulator and the measures it would propose if a crisis occurred.

In most cases, part of this preparedness includes public communication through contact with the media, information campaigns, press releases focusing on regulatory decisions, information on websites, leaflets, roundtables, public meetings, etc. In countries like Spain, France and UK, there are nuclear emergency exercise programmes that involve the media to help staff understand how best to work with the media. Similarly, in Switzerland, the staff, especially the members of the management board, undertake media training to be prepared to answer difficult questions. In this case, a think tank makes a selection of topics and works out a road map for crisis management.

NROs develop communication plans to anticipate messages and prepare strategies. For instance, in Hungary and Spain, NPP licence renewal reviews have involved the development of communication strategies consisting of providing information and being prepared to answer questions.

2.2 Ongoing crisis: entailing measures on the run

“In 2003, the serious incident of the Paks NPP arose quite a large media interest. There was no need for any protective action but the media interest was very intense and we had to answer many phone calls and give interviews to the media.” (HAEA, Hungary)

In most countries, events, incidents or accidents at nuclear power plants - either nationally or in other countries - have led to adopting communication actions to respond to high media interest. The majority of countries implement or activate crisis communication strategies or plans and convene crisis committees derived from their nuclear emergency preparedness procedures. For example, in Belgium, the national urgency plan exhaustively defines the levels of notification for operators, the role of each actor involved and the organisation of the different actions. As part of this plan, an Information Cell supplies information to the population through the media. At the local level, the provincial emergency plan includes ways to inform the population (sirens, police equipped with megaphones, radio and television). In a similar vein, Germany follows the “Guidelines for the information of the public in case of nuclear accidents”, which contain proposals to be taken into account according to the “Basic Recommendations for disaster response in the vicinity of NPPs”.

In most countries, information about the event is provided to the media, the public and cooperating authorities. Information includes, for instance, issues of radiation safety, how to handle a nuclear emergency or practical advice on what to do. Generally, the population and the media will request a safety guarantee via phone calls. The impact of these events on media and public opinion can threaten social trust and credibility and could have damaging effects in terms of transparency.

Certain experiences described by national regulatory authorities raise the question of how classical media can cope with the pressure to be the first to give a message, in the face of ever-faster channels and means of communication (i.e. websites and social media).

2.3. Provoking a reactive action: post-crisis measures

“The media has at times reacted and / or reported on relatively small incidents in a somewhat ‘sensational’ manner. The NRO responds quickly to such reports to correct misinformation and ensure that the facts are explained clearly.” (CSNC, Canada)

All NROs recognise the difficulties involved in dealing with information that has raised public concern and provoked negative reactions, especially from the media. On one hand, events, incidents or accidents can often trigger massive media and public attention independently of its level of hazard. On the other hand, some important messages may not receive public attention. In some cases, NROs affirm that media misunderstanding of reports or misinformation involve providing wrong messages to the public. A

consequence of these misunderstandings might be a crisis of the reputation of NROs. It is important that NROs provide quick and accurate responses at all times. They need to respond quickly to misinformation to correct it and ensure the facts are explained clearly.

In most countries, lessons were learnt after a crisis, and NROs have undertaken post-crisis measures as a result of the crisis' impact on public perception. For instance, in Norway, a wreck of the Russian cruiser Murmansk towed along the Norwegian coastline will be removed because the local community and the media alleged that it contained radioactivity. This information created a lot of headlines in the Norwegian media in summer 2008, even when it was finally determined that the wreck was not radioactive.

Finally, it is beneficial to assess how a crisis was managed. The NRO in Switzerland states that “after the end of a crisis, we should analyse the reason, measurements, communication, media reports and the conduct”. It can be seen as an advisable practice to assess the cause of the crisis, its scope, the communications adopted, the media impact for the NRO, and the effectiveness of how the situation was managed, once the crisis has ended. A systematic analysis could improve the implementation of responses to lessons learnt.

3. RESPONSIBILITY AND TIMING FOR CRISIS COMMUNICATION

This section of the document looks at how NROs confront crisis situations and provides some insight into the way they build their public communication response in time and form, according to their capacity (staffing, organisational) and regulatory framework.

The key findings are as follows:

- NROs believe that their first public reaction to a crisis should be within two hours of the event's confirmation.
- A challenge faced by NROs is that reaction time in terms of communication does not always depend on the national regulator.
- Information shared with the public has to be accurate, timely and structured.
- NROs' communication experts play an active role during any type of crisis, ranging from mere managers of information requests to strategy-makers.
- All countries agree on the importance of identifying and training spokespersons who are able to deliver consistent and clear messages.

3.1. Time frame for responding to a crisis

"We respond as quickly as possible: even if we don't have all facts, we always are quick to issue information on the website saying that the emergency group is gathered, trying to analyse the problem, and that we will be back with more information as soon as there is some." (SSM, Sweden)

NROs agree it is vital to respond to information demands in the most scrupulous way during any crisis, sharing accurate, timely and structured data with all the stakeholders, particularly the general public. External communication procedures do not only inform the media and the citizens of the situation and what they can or must do during a crisis; they also enhance messages sent to front-line response teams, alleviate speculation and provide a general sense of control.

NROs are aware that clear communication and transparency help to build a positive image of the organisation's capacity to respond to complex situations, provide an opportunity to empathise with those who feel involved or are directly affected by the crisis, and demonstrate the authority's will to resolve it.

All countries underscore that it is critical to react quickly during the first stages of a crisis and to share verified information as soon as possible, in order to meet social expectations and legal requirements, to convey the balanced and accurate message expected from nuclear safety authorities, and to avoid giving the impression of having something to hide from the public or being towed.

However, a challenge NROs that face is that reaction time in terms of communication does not always depend on the national regulator. This is sometimes the legal responsibility of industry operators (licensees). In other cases, if a nuclear incident is considered to have national significance, communications are co-ordinated at the government level, supported by the NRO's public affairs team. In

any case, if the terms of co-operation and timing among stakeholders are not clearly set out, NROs feel their credibility may be at stake and that public information could end up being jeopardized.

In general, NROs agree that reaction time depends heavily on the relevance of the subject and that it is difficult to establish a fixed time frame for the first press release or public statement after a crisis occurs. Nevertheless, all regulators underscore the importance of going public “the sooner the better”, normally within two hours after the event has been confirmed.

Even if there is an initial lack of data about the situation, national regulators consider it important to explain as quickly as possible the actions being undertaken by authorities and emergency teams (i.e. creation of a crisis committee, contact with other relevant organisations), but limiting communications to share confirmed data only, never rumours.

3.2. Planned procedures or *ad hoc* decisions

“In exercises we train the first media response of NRO which only consists of simple and brief messages to prevent information vacuums and to let people know what we know and that there is a quick response by NRO to manage the crisis.” (BMU, Germany)

NROs are aware that the key to effective crisis communication is to be prepared before any extraordinary event occurs, because once it happens there is very little time to plan successful strategies. As emphasised in the recent analyses *Public communication during abnormal situations* (NEA, 2006) and *Commendable Practices on Transparency in Nuclear Regulatory Communication with the Public* (NEA, 2010), “communication preparedness”, or being able to react adequately to any abnormal situation, is one of today’s main challenges for NROs.

All countries without distinction have internal procedures and policies in place to address public communication during any abnormal situation. However, they all recognize that their “communication preparedness” starts long before a crisis arises, through implementing strategies designed to gain the confidence of the media and to be perceived as a reliable, independent and trustworthy source of information.

Even though there is common agreement on the importance of reacting as soon as possible and with maximum transparency to any crisis, most NROs recognise that the timing and scope of their informative response depends greatly on the type and severity of the event they face. Decisions are mainly made *ad hoc*, on a one-by-one basis, as not all crises require the same reaction - some might be simply based on rumours, some might be located in neighbouring countries and some abnormal situations may not even be covered by the INES rating. However, they all need to be addressed in one way or another, following the organisation’s principles of transparency and openness.

In Ireland, for instance, in case of an actual nuclear emergency, the NRO would react to a crisis within one or two hours. Nevertheless, if the crisis is due to a rumour, the procedure to follow would depend on the public interest or concern.

The survey results indicate that even though NROs’ public communications departments have crisis guidelines, they all face the challenge of addressing each abnormal situation individually, finding the balance between the right of the public to be informed and national regulations on emergency planning.

3.3. Role of the department in charge of public communication during a crisis

“The active involvement of trained communications/public information specialists in the management of a crisis or emergency is critical to the success of the response activities.” (CNSC, Canada)

From managers of information requests to strategy-makers, the role of the NROs’ departments in charge of public communications varies according to the type of crisis (see Table 1). It also depends in great manner on the laws of each country, which sometimes require licensees to disclose information and in other cases to transfer the lead of public engagement to a ministry.

Table 1. Role of the NRO’s department in charge of public communication during crises

	Manager of information requests by the public/media	Active role (proposes actions to be adopted)	Decision-maker (has autonomous capacity)	Strategy-maker (elaborates policies, lessons learnt, etc.)
Belgium (FANC)	X	X	X	X
Canada (CNSC)		X		X
Finland (STUK)	X	X		
France (ASN)	X	X	X	X
Germany (BMU)			X	
Hungary (HAEA)				X
Ireland (RPII)		X		
Japan (NISA+JNES)	X			
Korea (KINS)	X	X		X
Norway (NRPA)	X	X		X
Russia (Gosnadzor)	X	X	X	X
Slovakia (UJD)	X	X		X
Spain (CSN)	X	X		X
Sweden (SSM)	X	X	X	X
Switzerland (ENSI)	X	X	X	X
UK (ONR)	X	X		X
USA (NRC)	X	X	X	X

For example, in Korea, the responsibility of announcing any accident or incident in nuclear facilities rests legally with the licensee. However, since media and public depend mainly on information from the NRO rather than licensees during a crisis, the Korean NRO collects the information and releases the written documents to the media and the public, assuming the exclusive role of “official channel” or information traffic manager.

Conversely, in Ireland, the NRO is not the primary communicator during a national emergency, but rather the primary source of technical advice. The government’s central communications department assumes the lead for public communication. Nevertheless, RPII (the Irish nuclear regulator) will disseminate complementary information on its website.

Regardless of different legislation, NROs' communication experts play an active role during any type of crisis in the vast majority of cases, supporting the lead authority as a primary source of technical advice and being part of the core emergency team. Their expertise is recognised and their proposals often adopted.

Five of 17 NROs responding to the survey declared some degree of autonomous capacity regarding crisis communication. However, in case of significant incidents, they work under the umbrella of a national crisis centre. For instance, in the USA, the NRC's Office of Public Affairs is able to react with a high degree of independence to a crisis, even though the decision-maker has to coordinate its actions with the agency's Chairman or designee.

In Belgium, if a nuclear incident is considered to pose a potential public risk, a team of political authorities take charge of the situation and decide the actions to undertake, advised by a multi-disciplinary team of experts (including communication staff). For all other emergencies, the national regulator acts autonomously, consulting with experts if needed.

In some countries disaster response to low-level or regional events may be handled by a number of competent authorities (i.e. the *länder* in Germany). In these situations, NROs indicate that the role of their communication experts is to co-operate with the leading teams, facilitating information flow and media requests.

3.4. The importance of key messages and the role and skills of NRO spokespersons

“The most important skill the spokesman needs to communicate with the media and the public is a quite comprehensive understanding of the crisis issues themselves, technically as well as consequently. The better they understand the crisis technically, the easier and the clearer they can deliver messages. The better the public understands the issues, the less uncomfortable they will feel.” (KINS - Korea)

NROs are aware that an essential component of communication preparedness is the identification of a spokesperson, a reliable senior-level official who during a significant crisis will interact with the public and be “the single voice” of the organisation. The role of this key individual is to ensure that messages are conveyed clearly to the media and are not contradictory. All NROs agree that spokespersons must have reliable communication skills and technical expertise in order to convey clear and understandable answers to the public under significant pressure.

However, not many countries have “fixed” pre-designated spokespersons. Almost all NROs designate their spokesperson *ad hoc*, according to the magnitude of the crisis and the characteristics of the response to be given (more or less technical, representing the Board, etc.). The roster of candidates managed for these roles usually includes presidents, commissioners, chief executive officers, managing directors, technical directors and director deputies, who generally have a range of experts on call to handle specific subjects. In many cases, the role can be also assumed by a senior official of the public affairs department.

Potential spokespersons generally receive specific training to address the public, and in some countries they also attend nuclear emergency exercises. Besides, the NRO's personnel who are skilled in crisis communication generally provide detailed and close support for the individuals speaking before the media, assist them with the talking points and define the messages to deliver.

With the aim of issuing high-quality, clear and comprehensible information, expressed in plain language, the French and Spanish Nuclear Safety Authorities, for instance, train their staff in spoken and written communication and emergency management. In the UK, emergency exercises involve communication tasks. Media training in the Nuclear Directorate is not mandatory, although strongly

recommended for all inspectors. In Norway, all potential spokespersons receive media training and participate in nuclear emergency exercises.

At the USNRC, the Office of Public Affairs headquarters' personnel participate in at least four exercises a year to test their crisis communication plans and techniques. Regional public affairs officers do this more frequently and participate in mock press conferences as part of the exercises. In Korea and Ireland there are plans in place to provide media training to specific employees or potential spokespersons.

Other parties involved in the management of crises (police, health officials, etc.) might also have a spokesperson. NROs acknowledge that having those individuals' contact information in advance improves the coordination of messages delivered to the audience when a crisis occurs.

3.5. Crisis communication 24/7

“The challenge [in crisis communication] is to ensure all messages from all sources are saying the same thing and are co-ordinated.” (RPII, Ireland)

All NROs have internal rota systems ensuring the availability of communication officers at any time. This 24/7 on duty staff belongs to the public communications departments and usually works on weekly shifts, which are modified *ad hoc* during a crisis in order to guarantee full-time operation over several days or weeks.

Anticipating a significant surge of the demand of public information, most countries have contingency plans, which include the possibility to request more staff to support crisis communication. In most cases, this manpower is pulled from other areas of the NRO. In other cases, like in the USA, the NRC has a roster of pre-selected and pre-trained adjunct public affairs officers, maintained by the Office of Public Affairs. In France, ASN set up in 2010 an on-call duty system for emergencies, which includes staff from the Legal and International Relations departments who are trained in crisis communication.

Staff can also be reinforced in some cases with personnel from external support organisations (Japan, Norway) or eventually by the National Crisis Centre (Belgium).

4. INFORMATION: CONTENTS AND COMMUNICATION CHANNELS

This section of the document looks at how NROs communicate with the public, the procedures they follow to deliver messages and the channels they use to disseminate information.

The key findings are:

- Regulators have pre-drafted messages (templates) ready in order to expedite communication flow during the early stages of a crisis.
- During a crisis, press releases are NROs' primary source of communication, followed by press conferences (depending on the relevance of the subject).
- All NROs rely heavily on the Internet and e-mail to disseminate their messages.
- A few organisations are assessing the potential role of emerging media as an effective crisis communication management tool.
- Public communications departments are subject to receiving information inquiries about events in neighbouring countries.

4.1. Templates to inform the public and media about crises

“Templates for both internal and external messages are useful to cover the early stages of an emergency situation.”(CNSC, Canada)

Crisis communications are expedited and potentially more effective if national regulators have a series of pre-written, pre-approved templates ready to be launched during the first critical hours of any emergency.

The majority of countries have ready-to-use templates for crises, to be disseminated among predefined groups of recipients. These brief “fill-in-the-blank” drafts range from official statements to news releases, text messages and websites. As a front-line communication tool, they all try to include at least the who, what, when and where of the situation (details of the why and of the regulatory consequences can come later). In that regard, the initial talking points of these first messages conveyed to the public generally include a short description of the situation, the scope of the organisation's mobilisation and the actions adopted in compliance with the authority's mission to ensure the safety of the public, the workers and the environment.

Spain's Nuclear Safety Council (CSN), for instance, operates with a sense of continuity to public communications throughout any crisis, building each press release on top of the previous one and adding new confirmed data, quotes and background. It ends each statement with a note saying that further information will be released as soon as available.

Most NROs consider it relevant to include the International Nuclear and Radiological Event Scale (INES) rating in their crisis communications as a way to convey the situation's magnitude and safety risks, if any. An IAEA representative who takes part in the WGPC acknowledges that countries using the INES rating

communicate nuclear events more accurately. In addition, the INES rating proves to be more effective if lower levels of the scale are also communicated. This is done on a regular basis in Spain, where events of level 1 or below (anomalies or events with no safety significance) are also communicated. However, the UK does not routinely publish INES information, and Norway, where the scale is not very well known among journalists, the NRPA rarely includes this information in its press releases.

Anticipating the likely information needs during certain types of emergencies, Finland's STUK and Germany's BMU have also prepared static communication products that can be rapidly distributed or adapted as necessary in case of a crisis. These cover aspects such as sheltering instructions, how to use iodine tablets, evacuation announcements, etc.

4.2 Channels used to inform the public and media about crises

"The decision on what information is to be given does not depend on the impact of certain stories or on any sort of media reflection, but on the relevance of facts, in strict compliance with laws and procedures." (CSN, Spain)

Depending on the event and its degree of social relevance and media attention, NROs use a mix of channels to inform the public throughout the course of a crisis.

All regulators use the traditional press release as their primary option to communicate a crisis situation to the public. It is difficult to misquote or misinterpret a written statement. Even though faxes are still used by some departments, all NROs distribute their press releases digitally, by e-mail and publish them on their national websites.

Some countries, like Japan and Korea, distribute certain type of alerts via mobile text messages to the public and media. In the event of a large-scale earthquake the "Mobile NISA" service will send sms messages within an hour to registered users and provide relevant information about the state of nuclear facilities and monitoring information.

Furthermore, some countries, such as the UK, have created a series of free online subscription news services as a way to ensure registered stakeholders will receive the latest alerts in their e-mail box. Other countries, including Norway, Spain and Sweden, have recently added RSS syndication feeds to their websites, as a simple and effective way to keep users updated on what new content is published online by the NRO.

There is a common agreement among NROs that the initial press alerts should be followed by a series of media briefings and interviews with spokespersons for radio, television and press (traditional and digital). Public affairs divisions manage these appearances according to the type of emergency and the communication priorities of the moment.

In Spain, for instance, some crises have allowed a public explanation of regulatory issues and bases for decisions of the Plenary Council, via technical and informative articles in the corporate magazine, and the occurrence of any relevant event usually entails a presentation at Local Information Committees (depending on the location of the affected nuclear power plant).

Many NROs express concern about the substantial increase of telephone calls they receive when an incident related to nuclear power plant operations is reported. Media, workers, residents and general population can show their concern about this shared information. Public communications departments do their best to handle these situations, even though in some cases they lack dedicated resources to effectively respond to a high volume of calls.

In Belgium, the experience of a minor incident in 2008 (a release of iodine-131 to the environment during about two weeks) encouraged the National Crisis centre to work on implementing a crisis call-centre. The alert concerned a 5 km zone that was later reduced to 3 km, and the enormous amount of phone calls received 24/7 from all over the world proved that many people still rely on the telephone to be reassured.

Furthermore, these minor events that do not jeopardise nuclear safety might trigger substantial media and public interest in neighbouring countries. NROs recognize the importance of being prepared to receive and handle inquiries concerning nuclear crises in other countries, not only as a public service but also as a way to improve transparency and minimize the risks of speculation.

For instance, in France, the ASN media department was contacted in 2008 about two events abroad: the event in the Krsko nuclear power plant in June in Slovenia triggered queries from the press concerning the technical problem that had occurred with the installation, the Écurie alert system, ASN relations with its European counterparts and the rating of the event as 1 on the INES scale. That same summer, in August, the radioactive iodine leak from the National Radioelements Institute in Fleurus (Belgium), rated 3 on the INES scale, was also of particular interest to the French media.

In Finland, on February 7, 2010, there was a piece of news about an explosion at the Kola nuclear power plant, Russia. Local journalists called STUK's media department, where officers were able to confirm in a few minutes that it was a non-nuclear incident.

4.3. NROs' websites and specific crisis management websites

“During all phases [of a crisis] the public should be provided with useful, timely, truthful, consistent and appropriate information.” (UJD, Slovakia)

New technologies are an important communication tool, and websites help provide a quick response during an emergency. All NROs have regular websites operating all year round, with specific areas for news updates, relevant documents and press releases. The majority also include public information about radiation monitoring, risks, countermeasures, etc.

In the event of a nuclear-related crisis, 10 out of 17 countries will continue to use these regular websites to communicate with the public, updating them with official information and public service messages related to the emergency. However, some of these countries have special areas, password-protected or separate, to share specific technical information with authorised users (not media) during crises (see Table 2).

Table 2. Relevant informative actions to improve crisis management response

	Specific crisis website (external server or dark site)	Website only for emergency management response team	RSS feed for regular website	SMS alerts
Belgium (FANC)	no	no	yes	no
Canada (CNSC)	no *	no	yes	no
Finland (STUK)	yes	yes	yes	no
France (ASN)	yes	no	yes	no
Germany (BMU)	no	yes	yes	no
Hungary (HAEA)	no	yes	no	no
Ireland (RPII)	no	no	yes	no
Japan (NISA + JNES)	yes	no	no	yes
Korea (KINS)	yes	no	yes	yes
Norway (NRPA)	no	yes	yes	no
Russia (Gosnadzor)	no	no	yes	yes
Slovakia (UJD)	yes	no	yes	no
Spain (CSN)	no	yes	yes	yes**
Sweden (SSM)	yes	no	yes	no
Switzerland (ENSI)	no *	yes	yes	no
UK (ONR)	no	no	yes	yes**
USA (NRC)	yes	no	yes	no

* planned

** limited

In Norway, for instance, in case of an emergency all relevant information for the public and the media is published on the regular website maintained by the NRPA's information unit. The crisis management website is primarily intended for personnel within the nuclear emergency preparedness organisation, and NRPA's section for emergency preparedness is responsible for that particular site.

Other NROs (7) will activate separate crisis websites, usually in different servers, that are much more streamlined and easy to update. These crisis management sites are designed to cope with a surge of traffic and avoid downtime.

In the USA, the NRC has a separate crisis management website called the Emergency Event Web Page that can be activated quickly in the event of a crisis. In Finland, STUK has a "dark site", an invisible site that is ready to be activated if needed, replacing the normal site during the crisis.

All NROs are aware of the importance of assessing the potential of Web 2.0 technologies, such as Facebook or Twitter, which could eventually support crisis communication, helping to disseminate messages more quickly than most traditional media. A limited number of NROs, like those in Korea, Spain and the USA, have recently started to implement social media strategies. In France, ASN has already incorporated new media in its regular crisis drills.

4.4. Media monitoring and correction of misunderstandings

The USNRC website section 'For the record' aims at "responding to information on controversial issues or to significant media reports that could be misleading. Also, a recently launched blog provides information to the public that supplements NRC press releases." (NRC, USA)

All NROs monitor media articles regularly and assess the external image of their organisations in the news. Some of the nuclear regulators carry out this task internally and others rely on external media monitoring contractors, who supply regular reports on a daily, weekly or monthly basis. During critical events, the use of media monitoring varies significantly among the countries surveyed.

In some cases, like in Norway, monitoring the media is undertaken on a daily basis (updated every 5 minutes). The regulator considers that knowing what is actually being reported in the media at all times may be useful for the nuclear emergency management team during a crisis, providing a good idea about the information needed to be given to the media and the public. In Russian Federation, monitoring the media is undertaken daily and weekly. The weekly issue presents information from all territorial branch offices and consists not only of national, but also of local news and press releases.

In Korea, the NRO's experience indicates that regular media monitoring is necessary, even though it does not cover all the information the public needs to know and which information is most useful to provide during a crisis.

Spain's CSN underlines that the decision on what information needs to be shared during a crisis does not depend on the impact of certain messages/information published by the media, but on the relevance of facts, in strict compliance with laws and procedures.

All countries emphasize that accuracy is important any time an organisation communicates with the public or the media refers to it. False information or unconfirmed rumours not only contribute to generating public alarm, but also damage the organisation's credibility. Bearing this in mind, many nuclear regulators train their press officers to manage misunderstandings with the media skilfully when a crisis occurs.

The majority of NROs tend to solve misunderstandings, false rumours or other inaccuracies *ad hoc*, on a case-by-case basis and depending on the degree of the error.

In the UK, besides seeking to correct misreporting with the media, the HSE press office also uses its own website to publish statements to clarify the facts of an issue considered to have been wrongly treated by reporters. For the NRO this is quite an important task, as some sections of the British media can be reticent about correcting mistakes and it can take time to rectify incorrect reporting.

In Canada, actions to correct misinformation or rumours are usually immediate and take the form of an information statement or update published in the NRO's website. Letters to the editor are often drafted to respond to rumours in the media or to correct inaccuracies in reporting.

In the USA, the NRC's website has a specific area in its Electronic Reading Room named "For the record", where the Public Affairs Office publishes statements that respond to information on controversial issues or to significant media reports that could be misleading. The site is also used to respond to large write-in campaigns more efficiently.

5. ORGANISATIONAL EFFECTIVENESS AND COORDINATION

This section of the document looks at how NROs are organised and structured in terms of dealing with emergencies and how they collaborate with other organisations to provide specific information during crises. In addition, this section deals with how NROs undertake exercises and drills, whom they invite to them and which lessons have been learnt from these experiences. Finally, the role of NROs in notifying others of a crisis at the international level, communicating crisis to the media and the public and providing advice to public authorities is also analysed.

The summary findings are as follows:

- All responding countries have a well-defined emergency organisation and most of them also have emergency centres, but the type of response provided varies from country to country.
- Shared responsibilities among the local authority, the licensee, the NRO and the government regarding crisis information are generally clear and commonly understood.
- Coordination and sharing of information between the different organisations involved in a crisis is seen as the main challenge to ensure the delivery of a consistent message from all agencies and increase credibility.
- NROs can be responsible for coordinating public information with other authorities, but it is often the national government that holds this responsibility.
- All NROs are responsible for international notification of a crisis at the international level, to inform the public and the media on nuclear safety. Most NROs are also responsible for providing advice to public authorities.
- Lessons learnt from emergency exercises and drills undertaken by NROs include the need to improve transparency, communication and coordination among different organisations;
- Some countries involve journalists in emergency drills to test media pressure exerted on NROs during crises.

5.1. Emergency structure and response of NROs

“The NRC operates under an all hazards approach in that we deal with safety and security no matter the triggering incident that could impact nuclear plant operations. In all cases our goal is the same - to protect people and the environment and help restore normal operation as quickly as possible.” (NRC, USA)

5.1.1. Emergency organisation

The majority of countries have well-defined emergency organisations, which are often detailed in official documents like intervention plans and procedures². Generally, emergency organisations have dedicated staff, material resources and count on technical experts that allow the NRO to rapidly identify, evaluate and react to different kinds of emergencies. Concerning the NROs' emergency structure, it is

² Depending on the country, intervention plans and procedures are equivalent to emergency preparedness programmes or emergency protocols.

worth mentioning that staff members in most countries are trained in communication or in public affairs on a professional level. In Germany, communication tasks belong to the Press Division (which is at the same time part of the emergency structure) of the NRO.

The type of emergency response provided by NROs depends on the regulator's mandate. In some cases, regulatory scope is limited to nuclear events, while in others, industrial accidents are also covered. Some NROs only react in case of nuclear accident, whereas others use an all-hazards approach to emergency response and management and respond in all cases to protect people and the environment. The response is scalable, depending on the type and nature of the incident. In some countries, differentiation of the emergency response allows clear distinctions to be made between events in nuclear installations and media crisis. In other countries, this distinction takes into account certain predefined situations, such as nuclear accidents (one country defines up to seven categories of nuclear events within its Initial Notification and Event Classification), terrorist attacks, and radioisotope-related crises.

In case of a crisis, all NROs declare that they have some kind of protocol, internal procedures or instructions, which include a "what to do" list and all key functions that define how to respond.

5.1.2. Emergency centres

Most NROs have their own emergency centres, which are at headquarters (as in Hungary, Spain, UK or Canada), in a special shelter (Switzerland), or deployed at both the headquarters and outside (like in Japan, USA, Korea and Russian Federation). They are equipped with all the necessary resources, such as computers, communication and data processing tools that enable swift mobilisation of staff and reliable exchange of information with different partners concerned.

In most cases, NROs participate in other emergency centres that depend on governmental organisations or at licensee centres near the plant site. The extent of participation in other emergency centres depends on the type of event concerned, but generally, it may range from cooperation to sending representatives. These representatives can be specialists or experts, observers or liaison officers. In Spain, these representatives can be technicians from the NRO, who hold of the position of head of the radiological group under the Nuclear Emergency Plan and therefore have operating responsibilities.

5.1.3. Staffing provisions for an emergency response

Most countries ensure that adequate staff are available in case of an emergency. This means that in most cases, NROs have an internal alert system for all staff involved in crisis management. This alert signal is sent to radiopagers or mobile phones.

In some countries, there are people on duty on a permanent basis (24 hours a day, 7 days a week). This is the case, for instance, in Spain where there is always an emergency technician and an auxiliary technician at the Emergency Centre (SALEM) or in Belgium, where there is a "role de garde".

5.1.4. Flow of information and communication channels

In all countries participating in the survey, the flow of information between the communication department and the department specifically involved in emergencies is normal business practice. In most cases, experts in the communication department (or public relations department) are involved in the emergency response organisation and in the preparation of emergency public communication plan and other procedures.

Furthermore, NROs have direct and secured communication channels with emergency centres in their countries. In the case of Spain, a Virtual Private Network for both voice and data communications is used.

In the case of France, the preferred means of communication is the videoconferencing system. Other communication systems which are used between NROs and other emergency centres, apart from the public telephone network include: reserved secured telephone lines, encrypted telephone systems, closed radio systems or dedicated emailing systems.

5.2. Collaboration between NROs and other organisations during crises

“There is a commonly understood division of responsibility between the local authority, the NRO and the government. Normally, the regulator will be the first to inform the media, the public and other authorities.” (NRPA, Norway)

5.2.1. On safety, radiation protection, security and natural disasters

During a crisis, NROs can collaborate with different types of organisations in the following areas: nuclear safety, radiological protection, security and natural disasters. In European countries, NROs have to inform the EU and collaborate with it in case of a crisis. Similarly, all countries have to report the event to the IAEA and in some cases, to neighbouring countries, depending on bilateral agreements. At the national level, NROs collaborate with different types of organisations during crises. Appendix 5 summarises the type of organisations with which NROs collaborate under the different topics, for the countries surveyed.

5.2.2. On public information

The responsibility to coordinate public information between different national authorities varies among countries. In some countries (such as Finland, Switzerland, USA or Canada), NROs coordinate public information with national authorities, whereas in others (such as France, Korea, Ireland, Hungary or Slovakia), coordination is the responsibility of the government. In some cases, like in Spain and the USA, coordination is undertaken by the director of offsite emergency plans. The case of Canada is particularly noteworthy because the communications messaging and activities are coordinated through an interdepartmental public affairs group. This group meets via teleconference at least once a day for the duration of an emergency response. It is recognised that coordinated and complementary communications and messaging are a key aspect of successful emergency management. In Norway, a similar system with an information group, consisting of national authorities and led by the NRPA, is in place. This group reinforces the NRPA's communication resources and convenes in the NRPA's emergency centre. The group provides a coordinated and consistent message about the situation at hand (in the acute phase).

In most countries, there are specific plans and procedures for public information and communication in case of emergency. Responsibilities between the local authority, the licensee, the NRO and the government regarding crisis information are generally clear and commonly understood. In some countries, like France, Korea, UK, Canada and Germany, the plans and procedures for public information in cases of emergency are stated in acts or legal documents. Some examples of these cases follow.

The French Government Directive is based on the fact that “each actor communicates in its own field of competence”. In case of emergency, ASN communicates independently and there are conference calls between different organisations. The USA communicates in a similar manner among its national partners and always communicates independently of the licensee and the nuclear industry. In Korea, the *Act on Physical Protection and Radiological Emergency and its Enforcement* defines roles and responsibilities for public information between local authorities, the government, the regulator and the licensee. It does not describe resources and manpower, but it is established that the licensee is the first to declare the crisis. The Ministry of Education Science and Technology (MEST) coordinates communication, while the Korea Institute of Nuclear Safety (KINS) provides technical advice. In the UK, *Radiation Emergency Preparedness and Public Information Regulations* (REPPiR) provide a legal basis for the supply of information to members of the

public who may be affected by a nuclear emergency. Personnel within a detailed emergency planning zone should receive certain prescribed information. The REPIR also require local authorities to prepare and keep up-to-date arrangements that ensure that the public affected by a nuclear emergency receive prompt and appropriate information. The main channel of communication with the public would be the media who will be provided with information via the police Strategic Command, the Licensee and the HSE Nuclear Directorate press office.

Other countries do not base their coordination plans and procedures on specific legislation, but may have agreements between different organisations. This is the case in Switzerland, where an agreement (between the national and cantonal authorities and licensees) concerns the coordination of information in case of an accident in a nuclear plant. In case of a severe event, conference calls are established, whereas in case of an accident, media conferences are coordinated by the national alarm central or by the federal chancellery.

Some NROs report room for improvement regarding the distinctive assumption of each organisation's role. In the case of Germany, it is unclear if distinctions established under the *Precautionary Radiation Protection Act* (1986) - which sets out the responsibilities of the federal government and states regarding information provision during a nuclear emergency - are fully understood. Under this act, BMU is responsible for "precautionary radiation protection" whereas states (länder) are responsible for "disaster control / emergency response".

Apart from specific plans and procedures, regular contact is generally maintained between communication and emergency units in NROs and those areas in other organisations responsible for dealing with crises. These contacts can take the form of regular meetings or working contacts, exchange of information and common exercises. Depending on the NRO, the type of organisations with whom contacts are maintained range from licence holders or NPP operators, ministries, regional or local authorities and other agencies. In the case of Norway, in addition to other contacts described above, the emergency and communication units meet twice yearly with their Nordic counterparts. Communication professionals from the federal government and some states meet quarterly in the USA.

5.3. Emergency exercises and drills

"In the comprehensive nuclear disaster preparedness training, scenarios are explained in the preliminary detailing stage so that media can understand how the government crisis control system is organised and the safety structure available in nuclear facilities." (JNES, Japan)

5.3.1. Frequency and types of emergency exercises

Generally, NROs practise emergency scenarios or drills every year. Depending on the type of installations, Belgium undertakes these exercises annually (for class 1 installations) or bi-annually (for class 2 installations). In Korea, a unified emergency exercise led by central government takes place every five years, and an integrated emergency exercise, led by local government, is undertaken every four years. In the USA, the NRC participates in numerous exercises with varying groups of players because nuclear plants are required to conduct exercises at least bi-annually.

If a drill involves evacuating residents near an NPP, NROs do not actively communicate with the affected population. The leading authority (local, regional or provincial), the police or the licensee is responsible for this communication, but NROs can make recommendations or communicate with the population through the media.

In general, NROs undertake "crisis or emergency exercises" that involve information or communication departments. These exercises are systematically evaluated as self-assessment activities or

by external experts. In the case of France, where four exercises per year include media pressure simulation, a communication agency evaluates the performance and also makes recommendations. In the UK, press briefs are generated and sent to the Press Office. These briefs are evaluated as part of the review of the exercise.

NROs also undertake “post-accident” exercises, including self-assessment meetings after a drill or recovery from a situation of crisis, for instance. The involvement of information and communication departments in these post-accident exercises by country. Some countries like the USA, Slovakia, Hungary, Germany, Korea and Switzerland do not involve information departments. Others, like France, have recently involved the communication department or plan to do so in the near future. In 2010, the French NRO undertook an exercise of this kind for the first time, and communication consisted of explaining the need for protective action to the media and the public. Finland and Germany will hold similar exercises in 2011.

As previously mentioned, emerging media are not yet an established channel of communication for NROs. Nowadays, NRO exercises do not generally simulate new social media, like Web 2.0, blogs or twitter. Some of them have an interest in exploring these issues in the future. Some, like Germany, have started to use web pages to distribute press releases, or use mobile phones text messages and Web 2.0 to upload information (like in Korea). France organises exercises on media pressure that simulate the use of new media, through activating a crisis management website and messages on twitter. Furthermore, journalists simulate difficult questions and polemics on Web 2.0 (blog, Facebook, etc). A communication agency systematically evaluates the NRO’s performance and makes recommendations.

5.3.2. Involvement of other organisations

During the drills, NROs normally maintain regular contacts with other organisations involved. The number and types of organisations with whom NROs maintain contacts differ depending on the country as well as the type and complexity of exercise. For example, in Spain, the interaction tends to be with the communication department of the concerned regional delegation of the government and with the civil protection department of the Ministry of Interior. In the USA, contacts with as many as a dozen other organisations are maintained if they are participating in the drills. In some countries, two to five organisations are involved. In Canada, national exercises involve the Government of Canada Public Affairs Group as well as other countries.

NROs within the CNRA WG do not tend to involve the media during emergency drills. However, journalists (former journalists or students in some cases) have been involved during exercises in several countries to test how an NRO would withstand media pressure, by posing difficult questions and creating controversy. The NRO spokespersons practise how to provide correct and clear answers to the demanding and often quite critical journalists.

In general, NROs do not invite the media to regular or specific drills. In a few cases, however, like in Korea, media is invited as an observer to some drills and has the possibility to address questions to the NRO or the licensee. In France, local authorities can invite the media to cover, attend or act as observers and in the UK, some of the bigger exercises may also involve the media, but this depends on the lead organisation.

5.3.3. Lessons learnt

The level of lessons learnt after emergency exercises and drills is different for each NRO. In most countries, there is a need to improve the amount and clarity of information available, as well as transparency of the communication process. As language is very important, it is critical to be empathetic and to use lay

terms; therefore, there is a need to train staff in media skills as well as in responding to public concerns in an understandable and sensitive fashion. In addition, a crucial aspect of communication is to monitor what media publishes and to promptly correct any false information or rumours.

It was deemed necessary to improve coordination and information-sharing between the different organisations involved. Different organisations generating too many messages can create confusion, appear to provide conflicting or contradictory information, and cause delays. In addition, failure to coordinate messages can reduce credibility and cast doubt on the ability of the responding organisations to manage the situation.

It is therefore important to ensure a consistent message from all agencies towards the public and the media, and to update information continuously. In the UK, the coordination of press releases is seen as the key to ensuring a consistent message from all agencies. In Belgium, videoconference is considered a very useful instrument during a crisis. In France, it is considered that a “numeric daybook” shared by the different organisations involved could be helpful.

5.4. Role of the NRO in crisis notification

"During the initial response phase to a major incident, HSE would play a supporting role to the emergency services, reflecting the agreed national protocols for dealing with such incidents. The extent of the media and public information released would depend on the incident and the arrangements agreed with the emergency services for releasing details. It would not be beyond question for nuclear inspectors to have a prominent role in press conferences and other public statements." (HSE, United Kingdom)

5.4.1. International notification

Following the *Convention on Early Notification of a Nuclear Accident* adopted in 1986, the competent authority has the obligation to notify the IAEA and affected States in case of a nuclear accident or emergency. In all countries, NROs are responsible for international notification as well as notifying the EU and neighbouring countries. The Emergency Notification and Assistance Convention website (ENAC) is the system used to notify the IAEA. In the event of a radiological or nuclear emergency in Europe, the early notification system is the European Community Urgent Radiological Information Exchange (ECURIE).

5.4.2. Media and public notification

In all countries, NROs are responsible for informing the public and the media of a nuclear emergency. In Germany a distinction is made between BMU, which is responsible for “precautionary radiation protection”, and the regions (länder), which are responsible for “disaster control and emergency response”.

In some countries, NROs support the role of other organisations in providing information to the media and the public. In Spain, the NRO cooperates with the emergency plan Direction to adequately explain the scope and aim of protective measures, but the Direction of the offsite emergency plan broadcasts information. The NRO issues its own press releases to explain the most relevant aspects of the evolution of the emergency, but these need to be coordinated with press releases issued by the offsite plan direction.

In the case of Hungary and Belgium, the NROs inform the media and the public, but the national public information group or the national crisis centre, respectively, can be activated and also provide information. In Belgium, if it is not an accident or an incident, the NRO takes informs the concerned population. In the UK the regulator is a member of the Strategic Media Advisory Cell (SMAC) which is a key element of media management. It consists of the Police, Operator, Local Authority and the

Government Technical Adviser (GTA). The GTA is the senior member of HSE/ND responsible for providing authoritative statements on behalf of Government. The SMAC has the primary purpose to advise the Strategic Group on media strategy and to ensure consistent communication with the media, it is led by the Police in the acute phase and the local authority in the recovery phase.

5.4.3. Advice to public authorities

In most countries, NROs are responsible for providing advice to public authorities in case of an emergency. In Hungary, the NRO prepares an analysis of the situation for the designated emergency management bodies, which are required to inform public authorities.

NROs may advise public authorities in areas that include radiation safety, security and protection of the population and the environment. Regarding the latter, NROs usually do not decide whether to adopt protective actions, but they can make recommendations to or advise local or governmental authorities. In the UK, the police are responsible for making decisions to protect the public, acting as Strategic Command at the Strategic Coordination Centre. In Spain, this role is assumed by the Director of the Nuclear Emergency Plan offsite, with the advice of the NRO. Similarly, in Korea, it is the Head of the offsite management centre who has the authority to decide urgent public protective actions, including shelter, evacuation, placing restrictions on ingesting food and water, and distribution of iodine prophylaxis. In the USA, the NRC would contact the appropriate authority (i.e. state Governor) with advice on recommended protective actions for the affected public.

In a few cases, like in Canada and Germany, the NRO holds the authority to order specific actions to prevent undue risks to persons or the environment. In Germany, recommendations should be made in agreement with the competent supreme länder authorities.

In Norway, by Royal Decree, the Director General of the NRPA chairs a Crisis Committee for Nuclear Preparedness, with the authority to issue orders concerning specified measures during the acute phase of an incident, including the order to secure areas that are or could be heavily contaminated, order emergency evacuations of local communities, order short-term food restrictions etc.

6. ROAD MAP FOR PUBLIC COMMUNICATION RESPONSES DURING CRISIS

The following road map is intended to help NROs develop their public communication strategies for the different crisis stages (i.e. pre-, during and post-crisis) identified in section 2 of this document. This road map highlights essential elements that NROs should consider during each stages, based on three central crisis communication activities: management, logistics and Public Affairs Office (PAO) operations. The road map is intended to be generic enough to be applicable to all NROs. However, its specific elements can differ based on the approach followed, since NROs operate in different cultural and social contexts.

Table 3. Synthesis of the Proposed Road Map

	Pre-CRISIS	During CRISIS-1	During CRISIS-2	Post-CRISIS
Management	Set CC plan	Implement CC plan	-	Notify end of crisis
" "	Set CC core group	Briefings/coordination	Keep one voice	Assess NRO actions
" "	Assign manag. roles	Staff in crisis config.	-	" " " "
" "	Set spokespersons	Prepare press conf.	Be accurate & calm	Assess NRO comm.
" "	Crisis area on intranet	Update intranet	-	Lessons on intranet
" "	Set liaison with NROs	Flashnews / IAEA	-	Internal lessons
Logistics	Identify staffing needs	Activate staffing plan	-	-
" "	Conduct regular drills	-	-	Assess drill efficiency
" "	Maintain EC equipmt	Activate EC	-	Deactivate EC
" "	Prepare call centre	Activate call centre	-	Deactivate call centre
" "	Identify media needs	Set-up media centre	Set pictures for media	Assess media satisf.
" "	Set translation means	Cal translators	Translate key info.	" " " "
Public Affairs	Draft PR templates	Issue quickly 1st PR	Announce 'next' in PR	Post crisis messages
" "	Media contacts' list	Messages to MC	-	Feed MC relations
" "	Prepare 'dark' website	Update website	Shadow usual website	Website back to usual
" "	Assess SM use	Decide SM use	Link SM to website	SM back to normal
" "	Prepare SMS use	Send SMS	-	-
" "	Set media monitoring	Check media monitor.	Correct misinformat.	Check message effect.
" "	Prepare doc. for media	Provide fact sheets	-	Follow-up information

Acronyms:

CC: crisis communication

EC: emergency centre

Flashnews: NEA/WGPC system

MC: media contacts

NRO: nuclear regulatory organisation

PR: press release

SM: social media

SMS: short text messages via cell phones

Details for each box of the road map are given in Appendix 1

7. CONCLUSIONS

The analysis of the survey results and the present report indicate that communication transcends the competence of the NRO during a national-level crisis. Sharing information and coordination with other organisations is crucial for effective public communication, and plans and procedures to deliver public information should be developed well in advance of any crisis. These plans and procedures should detail roles and responsibilities.

One of the important premises widely accepted among NROs entails that “each actor should communicate in its own field of competence”. Therefore, each organisation’s role in an emergency situation should be clearly defined and well understood by other competent organisations to ensure the effectiveness of public communication. In this regard, NROs could take a lead role nationally by encouraging coordination between emergency and communication departments within the organisation and with other stakeholders involved in emergency and crisis situations. Furthermore, as part of the plans and procedures to deliver public information, it is crucial to develop checklists or protocols assigning specific instructions (such as which activities, who, how and to whom) about the communication activities to be undertaken.

This report points out the need for skilled communicators on staff. NROs should appropriately train staff in communication or public affairs to provide support before, during and after a crisis. These professional communicators should coordinate with other emergency organisations and communication departments to provide a clear message to the media and the public. Failure to coordinate a timely, accurate and consistent message from all agencies towards the public and the media can create confusion and lead to a loss of credibility, which is very difficult to regain.

In any emergency drill or exercise it has proven beneficial to involve journalists and communication departments to test an NRO’s reaction media pressure in a crisis situation and to undertake self-assessments. An example of good practice in this area would be to systematically undertake emergency or crisis drills that media pressure simulation, and to independently evaluate the performance of the exercise and make recommendations.

Overall, although crisis communication practices in NROs have improved over the last years, there is still some room for improvement, particularly in information sharing, coordination with other organisations, protocols and procedures, and the use of emerging media. Even though the majority of NROs are increasingly applying a multimedia approach to their communication strategies, the use of new social media has yet to be explored and thoroughly evaluated as a way to reach a wider audience quickly and directly under extraordinary circumstances.

NROs should continue their exchange of experiences by widening the information provided in the survey and comparing their needs articulated in their respective legal frameworks. A specific workshop regarding crisis communication practices, both at the national and international levels - along with considering the public communication strategies among Member States after the events at the Fukushima plant - could be considered useful for addressing global concerns and sharing current practices in this field.

Additional note after the Fukushima Dai-ichi accident

It is worthwhile to mention that the final draft of this report was submitted to WGPC members for comments on 10 March 2011, i.e. the day before the Fukushima Dai-ichi accident occurred. This report was reviewed by the WGPC at its annual meeting (16-18 March 2011) and several members compared the Road Map with their practices during the Fukushima crisis. The findings were that, even though a deep reflexion on the the international dimension was missing; the road map appeared to be a very relevant instrument to address at a national level a comprehensive communication strategy during a crisis.

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APPENDICES

APPENDIX 1 – DETAILED ROAD MAP FOR NRO CRISIS COMMUNICATION

	<u>Pre-CRISIS</u>	<u>During CRISIS-1</u>	<u>During CRISIS-2</u>	<u>Post-CRISIS</u>
<u>MANAGEMENT</u>	Approve a Crisis Communication plan (including a comprehensive check list). Integrate it into the overall Emergency Response strategy.	The Head of the Public Affairs Office (PAO) communicates internally the occurrence of a crisis, distributing responsibilities following the Crisis Communication plan.		Crisis team communicates the end of the crisis mode. The Head of the PAO meets with communication / press officers to exchange impressions and feedback.
<u>MANAG.</u>	Establish the core Crisis Communication Group and its lead person. A small group, flexible, with experienced skilled team players. Define the line of command (who has to approve what).	The PAO will receive relevant briefings of the Crisis Team. Officers shall contact with communication experts from other organisations to exchange and coordinate messages. Only approved spokespersons are authorized to release information.	Keep "one voice" during the crisis. Keep focused; don't go beyond the NRO's competences. Verify all news before releasing them.	Report evaluating response from NRO, analysing coordination, actions and results (achievements, failures, media impact). Underline what can be improved in the future.
<u>MANAG.</u>	Assign crisis management roles to all public affairs officers according to the crisis level. Define the organisational chart and distribute internally.	Officers assume their crisis roles (non-emergency work delayed; meetings rescheduled). Contact on-call staff.		

	<u>Pre-CRISIS</u>	<u>During CRISIS-1</u>	<u>During CRISIS-2</u>	<u>Post-CRISIS</u>
<u>MANAG.</u>	Designate spokespersons. List by name and contact and include level of training and experience. Identify a roster of technical experts able to assist if necessary. All of them must have communication skills, be media-trained and approved by the Board.	Schedule press conferences as soon as possible with spokesperson(s) in NROs headquarters and/or affected area. PAO will assist at all time preparing talking points and the key messages to be delivered. Start press conferences with an opening written statement. Allow media questions.	Be accurate and consistent. Present clear information and maintain a calm presence. If a question cannot be answered, explain why (i.e."Beyond our competences / matter under investigation / further assessment needed").	The spokesperson should be available for more in-depth interviews, evaluating the outcome of the crisis, the role of the NRO, etc.
<u>MANAG.</u>	Intranet: establish a crisis management area (simple, clean, visible, easy to update by crisis team).	Update intranet with latest information on spokespersons, media officers, instructions for personnel, urgent messages, etc.		Update intranet with final assessment of the crisis and lessons learnt.
<u>MANAG.</u>	Appoint public affairs liaisons with other NROs. Maintain up-to-date list of stakeholders who need to be informed prior to the media (i.e. board members, health authorities)	Use the NEA flashnews platform (and other similar networks) to share information with NROs and ensure contacts between the officer in charge of international media requests and the contact points in charge of international notifications.		Share the report and lessons learnt internally. Assess the relevance of sharing experiences with other affected organisations and foreign NROs.

	<u>Pre-CRISIS</u>	<u>During CRISIS-1</u>	<u>During CRISIS-2</u>	<u>Post-CRISIS</u>
<u>LOGISTICS</u>	Identify additional staffing needs. Approve mechanisms to reinforce the PAO during relevant crisis.	Activate additional staffing plan.		
<u>LOGIST.</u>	Once a year conduct regular crisis drills and media-training exercises. Brainstorm possible crises. Identify those most likely to occur, or for which the NRO eventually must be prepared.			Assess the efficiency of crisis drills (self-assessment exercise or conducted by an external organisation), including the response to media pressure.
<u>LOGIST.</u>	Prepare and maintain technical equipment in the Emergency Centre (video conference, secure telephone lines, internet connections).	Activate the Emergency Centre.		
<u>LOGIST.</u>	Prepare Call-centre and Toll-free number (instruct operators in telephone-triage techniques). Record voice mail messages for crisis situations.	Activate Call-centre and Toll-free number (include number in all press releases). Communicate operators the process to follow with incoming calls.		Deactivate Call-centre and Toll-free number.
<u>LOGIST.</u>	Identify tools needed by journalists in any Media Centre and stock them if necessary (i.e. chairs, phone lines, sound and TV signals).	Establish Media Centre next to event scene. Anticipate media needs and assign technical staff to help.	Reporters will need images of the scene. If access is restricted, arrange press pools.	Evaluate to what extent the tools needed by journalists were provided.
<u>LOGIST.</u>	Identify translation services (cleared professionals with nuclear & radiological knowledge for written translation and interpreting).	Call translators/interpreters if needed.	Translate important messages and documents to languages of key immigrant communities.	

	<u>Pre-CRISIS</u>	<u>During CRISIS-1</u>	<u>During CRISIS-2</u>	<u>Post-CRISIS</u>
<u>PUBLIC AFFAIRS OFFICE (PAO)</u>	Draft templates for press releases and short sms alerts, ready to be updated as soon as any event is notified. Create a newsletter or subscription e-bulletin.	Issue first news release no later than 2 hours after confirmation of event. Follow with regular updates until the end of crisis. Send news bulletin to subscribers (referring them to the website to keep updated).	End press releases indicating that more information will be provided. Announce when you will issue further press releases and celebrate the press conference.	Distribute post-crisis communications.
<u>P.A.O.</u>	Maintain media contact lists (News Agencies, Print, TV, Radio and Online media; national, regional and local). Update periodically (twice a year).	Send news releases and statements via e-mail and fax. Follow-up calls may be made to main media outlets to ensure the information has been received.		Return unanswered calls to the media. Update contact lists. Establish trusting relationships with key media and journalists during non-crisis times.
<u>P.A.O.</u>	Prepare a "dark" website or a set of special web pages (light, in servers able to handle massive traffic, easy to update, hacker-proof). Train officers in basic web maintenance.	Initiate website modification (update with news releases, facts and figures, Q&A, practical information, contact numbers).	Be consistent and avoid duplicating efforts. If a dark website is launched, the regular website must redirect users to the crisis web	Return the crisis website to non-visible mode. Update the regular website with the latest information and final technical reports. Evaluate the website's performance during the crisis.
<u>P.A.O.</u>	Evaluate convenience of opening social media accounts (keep regular maintenance under normal circumstances).	Decide within the Crisis Team the use of emerging media to send out key information.	Link any communication via social media (i.e. Twitter) to the official NRO website.	If activated, return social media accounts to regular maintenance mode.
<u>P.A.O.</u>	Prepare a mass notification system to deliver text messages (sms) to mobiles.	Send sms alerts to pre-defined groups (authorities, press, and communication experts from affected organisations).		
<u>P.A.O.</u>	Establish a regular media-monitoring service (for traditional and new media). Contemplate the possibility to request a closer monitoring if needed under special circumstances.	Increase media-monitoring. If mistakes are made by the NRO in its interaction with the media, they must be corrected.	Identify inaccurate information and handle the situation case-by-case. Publish rectifications if necessary on the website.	Evaluate message effectiveness. Review coverage and identify if any issue needs further clarification by spokesperson or the PAO.
<u>P.A.O.</u>	Prepare pictures, maps and technical documentation useful for journalists and general population (i.e. INES scale). Use plain language.	Distribute a backgrounder and relevant fact sheets to the media. Publish all important information on the website.		Distribute useful information to the media. Organise conferences and events for journalists.

APPENDIX 2 – QUESTIONNAIRE TO GATHER INFORMATION ABOUT CRISIS COMMUNICATION

NEA/CNRA/WGPC Questionnaire to gather information about crisis communication (Distributed 20 November 2009)

Objective:

To establish a practical “road map” with good practice guidance for Nuclear Regulatory Organisations (NROs) on crisis communication, covering planning during normal situations, lessons learnt from emergencies or challenging events, and media strategy. It must be based on the identification of best practices and challenges when facing either planned situations or unexpected situations which might affect NRO’s credibility. The resulting document seeks to expand the guidance developed about “abnormal situations” to emergency and crisis situations.

Action:

To complete the questionnaire (below) by 1st February 2010 and return your comments to Jean Gauvain and the topic team (Marina Calvo, Anneli Hallgren, Yano Mari and Anne Marit Østreg), so that an analysis can be undertaken.

Questions are seeking sincere and clear answers which will help to establish a practical methodology to better face crisis communication. If possible, answer by YES or NO and please include - when appropriate- concrete explanations on how your NRO operates in order to communicate with the public and the media within the complex network of public organisations, covering both the national and local perspective.

Within the limits of confidentiality legally established, please provide copies of:

(In English if possible)

- Relevant documents or illustrations of NRO’s flux of work concerning public / media communication in abnormal situations / crisis situations / emergencies (please specify the responsibilities of each area and clarify who is in charge of external communication).
- Relevant document / scheme showing the involvement of NRO with other public organisations during an emergency.
- Any other document or abstract you might consider useful to approach this issue.

CRISIS COMMUNICATION QUESTIONNAIRE / COUNTRY: _____

I. CONCEPT DELIMITATION

1. Definition of crisis communication

2. Different kinds of crisis:

- a. Allowing a pre-planned action(s) by the NRO (Takes into account actions (facts/ events) which can be beneficial for the organisation's credibility)

Please comment your experience using examples:

b. Provoking a reactive action by the NRO

i. Following an event which can have impact and/or social relevance,

1. Implying the adoption of one or more protective actions (access control, sheltering means, use of iodine prophylaxis, evacuation of affected areas, or other).

Please comment your experience using examples

2. Other events exempt from adoption of protective actions.

Please comment your experience using examples

ii. "Blown up" by media (Headline news which can bring the organisation to answer in the early stage, for example in summer)

Please comment your experience using examples

Would you include new categories?

3. Crisis communication related fields (*Choose one or several options*):

- a. Nuclear Safety
- b. Radiation Protection/health impact
- c. Security
- d. Natural / environmental disaster
- e. Pollution

II. RESPONSIBILITY AND TIMING

4. When a crisis occurs, real or just based on a rumour, how quickly does the NRO respond towards the media and the public with information?

5. Does your NRO have pre-planned procedures related to response time (both to public and media) or is the decision made ad hoc?

6. Role of the Area/ Department in charge of public communication in crisis situations (*Choose one or several options*):

- a. A mere manager of information requests by the public / media
- b. Active role (proposes actions to be adopted)
- c. Decision-maker (has an autonomous capacity)
- d. Strategy-maker (elaborates policies, reports on lessons learnt on crisis management, etc.)

Comments:

7. Who assumes the role of spokesperson(s) in your organisation?

8. Does this person (s) have skills in public communication / engineering?

9. Do you have personnel trained in crisis communication or plan to include specific training activities focusing on crisis communication within the NRO's training framework?

10. Does your NRO have preselected personnel to be available to the media at all times during a crisis? And a preplanned roster of staff to serve the media at all hours?

11. Does your NRO have contingency plans for reinforcing the staff of the information department/unit with more manpower from other departments in the organisation or from external organisations in case of an (ongoing) crisis?

III. INFORMATION: CONTENTS AND COMMUNICATION CHANNELS

12. Do you have predefined messages/ templates to inform the public / media on crisis situations? *If so, please provide a sample*

Do you include a preliminary INES Scale rating? *If not, please explain why*

13. Please list the main channels (press releases, web, both, other?) you would use to inform the public / media on crisis situations in a timely manner.

14. Does your NRO have a separate crisis management website?

15. Is your website actively used to inform about radiation risks, countermeasures, monitoring results, prognoses, natural disasters etc. during a crisis? (*Choose an option*)

- a. Yes;
 - i. The regular NRO website
 - ii. The crisis management website
- b. No

16. Does your NRO monitor the media's articles, and do you subsequently use these to help you decide what information will be useful to provide to the media during a crisis?

17. Do you actively work to correct media misunderstandings during a crisis? Do you receive training within you NRO to do so?

IV. ORGANISATIONAL EFFECTIVENESS / COORDINATION

18. In an emergency, what role does your NRO play in relation with? *Should be related to the categorization in question 3:*

- a. International notification
- b. Public and media information
- c. Advice to public authorities

19. Does the NRO have the power to decide on the adoption of protective actions when necessary?

20. Does your NRO have an Emergency structure? (*Please explain*)

21. Does your NRO have an Emergency response differentiating types of crisis situations?

22. Does your NRO have a task list for all key functions - a "What to do"-list in case of a crisis situation?

23. Does the NRO's emergency structure cover staff trained in communication or belonging to the organisation's communication department?

24. Do you usually have a working flow between the communication department and the area dealing with emergencies inside your organisation?

25. Please enumerate the other organisations (Government, EU, media...) with which the NRO collaborates in crisis situations, specifying if there is a legal mandate to report to any of them
(Please provide schemes or any helpful document)

- a. Nuclear Safety: ...
- b. Radiological Protection: ...
- c. Security: ...
- d. Natural disaster: ...

26. Does your NRO possess plans for how to coordinate public information between different national authorities?

27. Are there national, regional or local plans/procedures on public information in place, which define roles and responsibilities, necessary resources and manpower?

28. Do your communication and emergency units maintain contacts / meetings with those areas of other organisations sharing the responsibility to deal with crisis situations? To what level? How many?

29. Is there a clear and commonly understood division of responsibility regarding crisis information between the local authority, the government, the regulator and the licensee? Who will normally be the first to inform? How the communication is coordinated or shared between those organisations?

30. Does your NRO have a plan ensuring the availability of manpower (obligation...)?

V. EXERCISES AND DRILLS

31. Do you practice on scenarios linked to emergency situations considered as such in your emergency organisation response? With what frequency?

32. Does your NRO carry out crisis/emergency exercises that involve the information department, and do you evaluate the outcome?

33. Do you maintain regular contacts during drills with communication departments of other organisations involved? How many, in average?

34. Do you maintain regular contacts with the media during emergency drills? How many, in average? How does the media exert pressure? Do the journalists play a credible / constructive role during exercises?

35. Do you invite the media to regular / specific drills?

36. Does the NRO attempt to reach the journalists to educate/ train them on nuclear and radioactive protection issues?

37. Are there any lessons learnt on the challenge of coordinating messages with other organisations involved in crisis management, especially in drills contemplating the adoption of protective actions?

38. When a drill implies the evacuation of residents nearby the NPP, does the NRO take an active role in communicating with the affected population?

39. Does your NRO practise “post accident” exercises that involve the information department?

40. Does your NRO practise exercises simulating new media (web 2.0, Twitter, blog)?

41. What are the lessons learnt concerning the NRO’s communication (transparency, pedagogy, empathy, expertise...)?

VI. EMERGENCY CENTRES

42. Does the NRO have its own emergency centre?

43. Does your organisation participate in other emergency centres?

44. If so, do you have direct and secured communication channels with other centres in the country?

APPENDIX 3 – COUNTRIES AND NROS THAT PARTICIPATED IN THE SURVEY

Belgium	FANC
Canada	CNSC
Finland	STUK
France	ASN
Germany	BMU
Hungary	HAEA
Ireland	RPII
Japan	NISA + JNES
Korea	KINS
Norway	NRPA
Russian federation	Gosnadzor
Slovak Republic	UJD
Spain	CSN
Sweden	SSM
Switzerland	ENSI
UK	ONR (formerly HSE/ND)
USA	NRC

APPENDIX 4 – CNRA/ WGPC CRISIS COMMUNICATION ACTIVITY

ADDITIONAL QUESTIONS TO MEMBER STATES

(Distributed 15 July 2010)

This document seeks to set the positions stated during the 11th meeting held in Paris last March and help us focus on the CNRA mandate regarding the activity on Crisis Communication. It refers to the first version of the questionnaire sent to MS in December 2009, but does only list those issues implying additional text or request for answers. In those cases, questions are numbered to help MS.

Please note that it does not always imply giving new answers. It does, in certain cases, contain additional questions to MS, or else old questions for which the collated responses were confusing. When needed, please include your comments directly into the text, using the “track changes” button.

Please return your comments to NEA Secretariat and the topic team before August 30.

COUNTRY:

I. CONCEPT DELIMITATION

1. Definition of crisis communication: *(Please support the following definition or rephrase)*

Design, planning and implementation of communicative actions in order to satisfy the obligations and demands regarding public information and transparency in a situation of media pressure and reputational risk for the NRO. These will take into account the different phases of pre- during and post- crises.

2. Different kinds of crises:
 - a. Allowing a pre-planned action (s) by the NRO: **Understood as pre-crisis measures**
 - b. **An ongoing crisis: Entailing measures on the run**
 - c. Provoking a reactive action by the NRO: **Understood as post-crisis measures**

II. RESPONSIBILITY AND TIMING

4. When a crisis occurs, real or just based on a rumour, how quickly does the NRO respond towards the media and the public with information? **Add Which channels are used and how is the choice made? Please specify timeframes and comment on the channels used**
5. Role of the Area / Department in charge of public communication in crisis situations *(Please choose one or several options)*
 - a. A mere manager of information requests by the public / media
 - b. Active role (proposes actions to be adopted)

- c. Decision-maker (has an autonomous capacity)
- d. Strategy-maker (elaborated policies, reports on lessons learnt on crisis management, etc).

Comments:

8. Does this person have skills in public communication? **(Omit engineering)** *The change only affecting the title, there is no need to answer the question*

III. INFORMATION: CONTENTS AND COMMUNICATION CHANNELS

15. Is your website actively used to inform about radiation risks, countermeasures, monitoring results, prognoses, natural disasters, etc. during a crisis?

- a. Yes;
 - i. The regular NRO website
 - ii. The crisis management website
- b. No

If the answer is Yes, *please comment* on: **How do you avoid duplication of effort?** (Are materials elaborated twice, for the regular NRO website and the crisis management one?)

IV. ORGANISATIONAL EFFECTIVENESS / COORDINATION

31. Do you practice on scenarios linked to emergency situations considered as such in your emergency organisation response? With what frequency: *Choose an option*

- a. Annual**
- b. bi-annual**
- c. once every 3 or more years**
- d. never**

39. Does your NRO practice “post accident” exercises (**recovery from a situation of crisis, self-assessment meetings taking place after a drill, etc.**) that involve the information department? *Please explain*

40. Does your NRO practice exercises simulating new media (web 2.0, Twitter, blog)? **Please detail your experiences**

Appendix 5 – NRO collaboration with different organisations on the four competence areas

COUNTRY	NUCLEAR SAFETY	RADIOLOGICAL PROTECTION	SECURITY	NATURAL DISASTER
BEL	Federal Coordination Committee (Emergency Director of the Authorities, Socio-economical cell, Information cell –public, media, neighbouring countries; Evaluation cell– EU and IAEA); Provincial Authorities; Intervention Teams.	Idem.	Idem.	Idem.
CAN	Federal Department of Public Safety and Emergency Management; Provincial emergency management agencies (EMOs).	Federal Department of Health, Environment, Transport; Provincial EMOs.	Federal Department of Public Safety; National Defence; Royal Canadian Mounted Police; Provincial police forces (in Quebec & Ontario only).	Federal Department of Public Safety; National Defence; Other federal department and agencies as required.
FIN	Governemental administration, Regional administration, Media, Operator, Other counterparts, Expert organizations, Neighbouring countries, IAEA, EU			
FR	Government: national scale (ministries) and local (prefecture); Independent technical support (IRSN); EU and IAEA; Operator; Media; Public; Local information commissions; Neighbouring countries.	Government: national scale (in particular Health Ministry) and local (prefecture); Independent technical support (IRSN); EU and IAEA; Operator; Media; Public; Local information commissions; Neighbouring countries.	Government: national scale (ministries) and local (prefecture); Independent technical support (IRSN); EU; Operator.	Government: national scale (in particular, Environment Ministry) and local (prefecture); Independent technical support (IRSN); EU and IAEA; Operator; Media; Public; Local information commissions; Neighbouring countries.

COUNTRY	NUCLEAR SAFETY	RADIOLOGICAL PROTECTION	SECURITY	NATURAL DISASTER
GER	EU and IAEA; Highest Länder Authority; Radiation Protection; Disaster response/ authorities of interior; Public; Parliament.	-	-	-
HUN	Ministry responsible for disaster management; DG Disaster Management; EU and IAEA; Local authorities; Media; Bilateral countries' competent authorities.	Idem "nuclear safety"; Ministry responsible for health issues.	Idem "nuclear safety"; Police.	Idem "nuclear safety".
IR	Committee of Ministers (Department of Agriculture, Fisheries and Food; Department of Health and Children; Department of Defence and Defence Forces; Irish Coast Guard; Health Service Executive; Local Authorities; Police); Expert Support and Advisory Government Info Service.	-	-	-
JAP	Governmental agencies (Fire Defence Agency, National Police Agency, Japan Coast Guard, Nuclear Safety Commission, Ministry of Education, Culture, Sports, Science and Technology, Cabinet Secretariat and Cabinet Office); Local governmental organisations concerned; Press; IAEA.	-	-	-

COUNTRY	NUCLEAR SAFETY	RADIOLOGICAL PROTECTION	SECURITY	NATURAL DISASTER
KOR	Ministry of Education, Science and Technology (MEST); Media; Public.	Idem.	Korea Institute of Nuclear Nonproliferation and Control; Media.	Government (central and local); IAEA; Operator; Media.
NOR	Government Council for Emergency Preparedness; Ministry of Health and Care Services; Ministry of Environment; Ministry of Foreign Affairs; Crisis Committee for Nuclear Preparedness: the Norwegian Radiation Protection Authority, the Directorate of Civil Protection and Emergency Planning; the Ministry of Defence, the National Police Directorate, the Directorate of Health, the Food Safety Authority (but also comprises – advisors, county governors); IAEA; Neighbouring countries.	Idem.	Idem.	-
RUS	Government; Ministry of Emergency Situations; Ministry of Health; IAEA; Russian and international mass-media; General corporation in nuclear energy field.	Idem.	Idem.	Government; Ministry of Emergency Situation; Ministry of Health; Russian and international mass-media.
SLK	EU and IAEA; Neighbouring countries; Government; Licensee; Media.	Public Health Authority; Ministry of Interior (Department of Civil Protection); Media.	Government (national and local); EU; Licensee.	Government (national and local); Civil protection authorities.

COUNTRY	NUCLEAR SAFETY	RADIOLOGICAL PROTECTION	SECURITY	NATURAL DISASTER
SPN	Director of offsite emergency plan; EU and IAEA; Government civil protection authorities.	Idem.	Idem; Police forces under the Ministry of Interior.	Director of offsite emergency plan; Government civil protection authorities.
SWED	EU and IAEA; Ministry of Environment Government's unit for emergency preparedness; Swedish Civil Contingencies Agency; National Board; County Administrative Board; National Food Administration; Swedish Customs; Swedish Police; Health authorities; Neighbouring countries and Germany, Russia and Ukraine.	-	-	-
SWITZ	National and cantonal governments; Neighbouring countries; IAEA.	Idem.	National and cantonal governments; Cantonal polices	-
UK	Government (national and local); EU and IAEA; Neighbouring countries; Licensee; Media ; HSE Secretariat.	Health Protection Agency.	Government (national and local); EU; Licensee; Media.	-
USA	Department of Homeland Security (DHS).	DHS; Federal Emergency Management Agency (FEMA); Environmental Protection Agency (EPA).	DHS; FEMA; Federal Bureau of Investigation (FBI).	DHS; FEMA.