

Nuclear Regulatory **Organisations and** **Communication Strategies**

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

Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC)

Nuclear Regulatory Organisation and Communication Strategies

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The mission of the NEA is:

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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

Since the Fukushima Daiichi nuclear power plant accident in March 2011, the need for Nuclear Regulatory Organisations (NROs) to enhance their communications abilities, not only during crises, but in their day-to-day activities, has been the focus of much discussion.

An NRO's basic objective of communication is to keep the public informed about the facts on nuclear safety and its own role in controlling the use of radiation. Consequently, proactive communications, both internally (NRO staff) and externally (target audiences) must be a priority for NROs.

NROs can no longer only be heard from during a crisis, they must constantly be communicating with their target audiences to ensure that all aspects of safety and security of nuclear facilities are in place.

Regular communication with stakeholders and target audiences helps reduce the risk of misunderstanding fed by fear and rumour. Simple, factual details that put a situation in context is often more effective than scientific explanations that may be difficult to understand.

ACKNOWLEDGEMENTS

This report was researched and written by the WGPC Team on NRO Communication Strategies led by Aurele Gervais (CNSC, Canada) and including Yeonhee Hah (KINS, Republic of Korea), Monika Kaczynska and Paulina Szycko (PAA, Poland), Dagmar Zemanova (UJD, Slovak Republic), Anton Treier (ENSI, Switzerland) and Anne Marit Skjold (NRPA, Norway), to whom the WGPC is thankful.

Based on a survey that was circulated to member countries, responses were received, collated and a report written. Input from the International Workshop with Stakeholders *Sharing Views on Nuclear Regulatory Organisations' Communication* held in April 2014 as part of the WGPC's 16th annual meeting in Paris was also taken into consideration.

Many thanks to those who also submitted case studies, making the report that much more practical.

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EXECUTIVE SUMMARY

This report was prepared by the OECD Nuclear Energy Agency (NEA) Committee on Nuclear Regulatory Activities (CNRA) Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC). The document – Nuclear Regulatory Organisation and Communication Strategies – discusses the importance for NROs to define a communications strategy in order to communicate with various stakeholders, including the public, and for developing a strategy that will enable them to manage expectations, ensure consistent messaging, improve productivity and measure outcomes. The CNRA approved the task at its December 2013 meeting.

In early 2014, a survey of 35 questions dealing with five broad areas of communication strategy and planning was sent to all members of the WGPC. 16 responses from Belgium, Canada, Finland, France, Hungary, India, Japan, the Republic of Korea, Norway, Poland, the Russian Federation, the Slovak Republic, Spain, Sweden, Switzerland and United States of America demonstrated that the development of communication strategies among NROs varies from one organisation to the next, and that there also exists a variance in NRO communications maturity levels.

The purpose of this document is to provide information and suggestions to all NROs, regardless of level of communications maturity, by describing various communication concepts and approaches, and listing any applicable case studies. The document discusses six different topics: strategic planning, targeted audiences and stakeholders, public opinion polling, resources and organisation, key messages and dealing with the media.

A summary of the responses to the survey can be found in the “What we heard” report in Appendix 1.

1. STRATEGIC PLANNING

For Nuclear Regulatory Organisations (NROs) to get their message out, communication planning is necessary. But before planning begins, there is a need to ensure that everyone understands the different terminology that is often used interchangeably when discussing communication planning. Terms such as “strategic plan”, “strategic communications plan” and just plain “communications plan” can cause confusion and can mean different things to different organisations. The definitions below explain each one but are, by no means, cast in stone and should be adapted to suit your needs. Whichever term you wish to use, the chosen process for your strategic communications should fit the nature and cultural processes of your NRO.

1.1 Strategic plans (also known as a “corporate plan” or a “corporate strategic plan”)

A strategic plan is a document that determines where an organisation is going over the next several years, how it is going to get there and how it will know if it succeeded in getting there or not. In other words, it gives direction to and guides the work of the organisation.

The development of a strategic plan depends on the culture of the NRO, and other considerations such as its complexity and size. The timeframe for a strategic plan can vary, but most plans cover a period of three to five years. This is where an organisation can do its S.W.O.T. analysis (Strengths, Weaknesses, Opportunities and Threats) (see chapter 1.2). Communication staff may be involved in its planning, but it is not absolutely necessary since the strategic plan is a high level document that lays out the vision, goals and objectives of an organisation.

1.2 S.W.O.T.

What is a S.W.O.T. analysis?

A S.W.O.T. analysis is an effective way to identify an organisation’s or a programme’s Strengths and Weaknesses, and to examine its Opportunities and Threats. A S.W.O.T. analysis will help to focus activities into areas where the organisation is strong and where the greatest opportunities lie. Carrying out a S.W.O.T. analysis helps point out what needs to be done, and puts problems into perspective.

While a S.W.O.T. analysis can be used in the development of a strategic plan, nothing prevents an organisation from doing the same analysis when developing a communications strategy.

When used in conjunction with others, a S.W.O.T. analysis can be a useful tool in helping make informed decisions.

Definition of S.W.O.T.

By identifying internal and external factors, a short and simple S.W.O.T. analysis is a useful resource which may be incorporated into an organisation’s planning.

Strengths: Internal attributes that are helpful to the organisation in achieving its objective

Weaknesses: Internal attributes that are harmful to the organisation in achieving its objective

Opportunities: External factors that help the organisation achieve its objective

Threats: External factors that are harmful to the organisation to achieving its objective

1.3 Communications strategy

Strategic communications develops, implements and manages strategic, actionable, achievable communication objectives, strategies and tactics that enhance and/or protect your organisation's brand and reputation both internally and externally. Communication is said to be strategic when it is consistent with an organisation's mission, vision and values.

1.4 Communications plans

There are two types of communications plans. A "**strategic communications plan**" (perhaps also known as a Corporate Communications Plan) guides the overall communications of an organisation and is a broad overview of what the organisation wishes to communicate to its stakeholders over a specific period of time. It usually describes high-level communications and does not generally contain specific details. The strategic communications plan usually supports an organisation's strategic plan, and can either be part of the strategic plan or a separate document.

A "**communications plan**" can be created to guide the communication efforts of a particular project, event or initiative. If a well thought-out communications plan is in place before a project or initiative is launched, everyone will know what is expected and be better prepared as the project is implemented.

As an example, if your NRO is in the process of preparing a new publication, a communications plan would describe how the document would be launched, which audiences would be targeted, which supporting products would be needed, etc. Communications plans can be short and simple, or lengthy and elaborate, depending on the scope of the project, and the number of pieces to the puzzle. If several communication plans are to be developed, they should be consistent with both the organisation's strategic communication plan and its corporate strategic plan, and as such, it is recommended that they be approved by management.

Again, communications plans will vary from organisation to organisation and should be developed to suit the needs of your NRO, taking into account organisational and cultural aspects.

1.5 Why communications plans are important

We live in a complex communications environment, in a world of 24/7 news cycles, where one single tweet can go viral in a very short period of time and where it is difficult for information in the digital world to be controlled or erased.

A communications plan will give your day-to-day work a focus, help set priorities, provide a sense of order and control, protect against last minute, seat-of-the pants demands and provide peace of mind. It will also help ensure that your messaging is received and understood by your target audiences in a timely manner.

In short, a communications plan details **who** to target, **what** are the key messages you want to convey, **when** is the best timing, **how** and **by whom** each message will be delivered.

1.6 Ten reasons for creating a communications plan

1. **To clarify your organisation's goals and objectives:** Think of your plan as your roadmap; you know where you want to go, but you need a route to get there. The plan is your route.
2. **To clarify the relationships between audiences, messages, channels, activities and materials:** Going through the communications planning process will help you identify who you need to reach, tell them what you want them to know, and how you will reach them. You will find that each of your audiences has unique characteristics, needs and motivations. Through planning, you will discover the most effective ways to communicate with them.
3. **To identify and implement a variety of communications activities/tools:** There are many different ways to spread your message. This will help you to settle on which activities you will engage in so that you are not continuously pulled in different directions.
4. **To clarify staff members', stakeholders' and others' roles in the process:** People need to know what they will be contributing to the organisation and what they are responsible for. A plan will help manage people and their responsibilities.
5. **To develop creativity and camaraderie among your team:** Involving many people in the planning process will bring in different perspectives and diversity of thought. Bring in staff, stakeholders, constituents, interns and junior staff members.
6. **To help your staff members and stakeholders get on the "same page":** A well-articulated plan will help people get on the same page and articulate a consistent message.
7. **To include stakeholder input in the communications process:** Stakeholders are important to your organisation, and this will show them how much you do value their input.
8. **To ensure that you are reaching out to your stakeholders and constituencies effectively:** This is an extension of the previous point: when you go through the process and identify strategies to reach stakeholders from the start, you will communicate with them more effectively. This will also create a scenario in which they are willing to give you honest feedback so that you can adjust your strategy accordingly.
9. **To allow everyone on your team to have a stake in your success:** Getting involved in the process and integrating participants' opinions brings a sense of ownership.
10. **To gauge your plan's success and areas in need of strengthening:** Organisations will often do a mid-course review to determine strengths, weaknesses and obstacles, and then create and implement new approaches. You can develop a unique, tailored evaluation strategy that will gather the information you need to improve your plan.

Source: www.fundraising123.org/article/top-10-reasons-creating-communications-plan#.VNTAytSEhaQ

1.7 Elements of a communications plan

The contents of communications plans can vary from one organisation to the next, but should include goals, target audiences, messaging, communication channels, activities and materials, implementation of the plan and evaluation.

Determining your objectives/goals

In this section of the plan, state what you want to accomplish as an organisation. Be as specific as possible. Specific, quantifiable goals are critical. Your goal statements should be expressed in such a way that it is clear what the desired end result is. The SMART¹ acronym is used to develop goals that are most likely to achieve results – goals that are **S**pecific, **M**easurable, **A**ttainable, **R**ealistic and **T**imely (See Section 1.12 for examples of SMART goals).

Strategic considerations

Strategic considerations are background information on the situation being communicated. It can include information on the NRO's current culture, the state of the industry, the economic and political situation in your country.

It can include any research the communications staff has access to or has done themselves, studies and articles from relevant publications, expert testimony – even anecdotal evidence can be included here. You want to provide as much information as possible in order to have a detailed portrait of the problem or opportunity.

Identifying your target audiences

In this section, outline your audiences and provide a description of each. Be sure to include both internal audiences (relevant and affected staff, senior management) and external audiences (stakeholders, licensees, non-government organisations, politicians, scientific community, academia, international organisations, media, medical and health professionals, public interest groups, etc.). Taking time to look at your audiences is essential in choosing the most effective ways to communicate with them. Once you have identified your target audiences, nurturing relationships with them is important to build trust. The better you know them, the more you understand their information needs.

Developing your key messages

In this section, you will create a series of key messages that will be used to ensure consistency across all communications. Your messages deliver important information and compel the target audience to think, feel or act. Key messages should show the relevance of the issue and should reflect basic values such as security, safety and trust.

Developing a series of key messages will help ensure that all persons asked to speak on behalf of your organisation will tell the same story. It will also help align messages in all your communications products. Mixed or inconsistent messages can result in confusion among staff and in loss of management confidence.

¹ The first-known use of the term occurs in the November 1981 issue of *Management Review* by George T. Doran

Choosing your communication channels, activities and products

In this section, list which communications channels, activities and materials at your disposal will most effectively carry your message to the intended audiences and accomplish your stated goals. Identify the most effective way to reach your expected goal, while meeting the needs and expectations of stakeholders. Take into account whether only providing information is sufficient or whether public participation is required.

Among communications channels are television and print media, the Internet and social media, and the use of video. Activities can include press conferences, town hall meetings, open houses, information sessions and webinars. Products can include news releases, dedicated brochures, websites, posters, backgrounders, fact sheets and promotional items. Do not forget to include activities and products for organisational staff, either through Intranet or information sessions.

Implementing your plan

This section will give you an overall view of tools, products and an outline of the steps that will lead to their completion, timelines and costs (if any). If you are working with external service providers, allow extra production time in your schedule. To effectively implement your plan's activities, sufficient staff and funding is crucial.

Evaluating the implementation of your plan

In this section, include the activities, tools and metrics that will be used to evaluate your communication efforts. Evaluation will help you identify mistakes to improve further communication. Ways to measure the success of a communication effort include:

- Web page hits
- Number of people requesting information
- Number of “shares” and social media monitoring
- Stakeholder surveys
- Level of stakeholder interest
- Media hits and requests for information and interviews
- Tone of coverage in social and traditional media

1.8 Case study: The importance of “plain language” in communication plan messaging (United States)

Summary

The US Nuclear Regulatory Commission (NRC) Office of Public Affairs staff members work with technical staff to develop issue-specific communication plans when there is an expectation of a high-level of public interest and/or a degree of co-ordination of messaging for different audiences (such as the media, general public, elected officials, the industry, etc.).

NRC Communication Plans generally include many sections (see example of template), but for the Office of Public Affairs, the most important section is the Key Messages (sometimes also called Talking Points). These messages are often used verbatim when public affairs staff members respond to media inquiries. Since they are used in this manner, it is extremely important the verbiage be plain language, easy to

understand and – to the extent possible – in a conversational tone. The ultimate goal would be for the key messages to be so well crafted they become a direct quote or sound bite in media reports.

Working with technical staff to rewrite their complex, complicated, scientific verbiage into plain language key messages can be very challenging. To help the technical staff understand the difference between “good” and “bad” messaging, the Office of Public Affairs developed a comparison document as a training tool.

Here are some excerpts from that document:

Implementing a new regulation

Bad example: In developing its supplemental additions to the aforementioned rulemaking, the Commission sought significant and extensive feedback from a variety of external stakeholders in order to better inform the requirements, including, but not limited to, law enforcement, intelligence agencies and the nuclear power industry. Industry input was but one factor, and not a particularly significant one, in the Commission's ultimate and final decision.

Good example: The Commission asked for, and received, extensive input from stakeholders when the new regulation was being considered. While the nuclear power industry also provided input, it was not considered to have more weight than input from other stakeholders.

Radiological materials issue

Bad example: The NRC's strategic objective is to enable the use and management of radioactive materials and nuclear fuels for beneficial civilian purposes in a manner that protects public health and safety and the environment, promotes the security of the nation and provides for regulation actions that are open, effective, efficient, realistic and timely.

Good example: The NRC has several objectives. One of them is to make sure that radioactive materials are used in a way that is safe for people, workers and the environment, and that these materials are kept secure. The NRC also works to make sure its actions – and its regulations – are fair and that its actions are transparent to the public.

Research Project

Bad example: The objective of the research project is a realistic evaluation of severe accident progression, radiological releases and offsite consequences with the scope of the project including a spectrum of risk significant scenarios of a frequency greater or equal to 10^{-6} per reactor-year and truncating of lower frequency scenarios as shown in SPAR models. SPAR modeling is being used to screen possible scenarios and determine some of the bounding assumptions that are used to evaluate reactor consequences. Operator action credit will also be incorporated into the risk evaluations as the data becomes available. In addition, MELCOR calculations, based on major plant classes of boiling and pressurised water reactors, will be used to determine the thermal hydraulics, accident progression, and fission product release timing and magnitude.

Good example: This research project will look at several scenarios and study how a nuclear power plant accident progresses. It will also look at how a release of radiation could impact the environment and the communities around the plant.

Lessons learnt and recommendations

The Office of Public Affairs found that providing examples of talking points that were too technical and then providing the same information in public-friendly verbiage helped the technical experts understand the importance of translating scientific information, and encouraged them to assist the public affairs personnel in the development of useful key messages.

1.9 Case study: Communications plan for a study on populations living near nuclear power plants (Canada)

As a nuclear regulatory organisation, the Canadian Nuclear Safety Commission (CNSC) often receives inquiries about the radiation doses to members of the public who live within the vicinity of nuclear power plants (NPPs). In May 2013, the Canadian Nuclear Safety Commission completed a study on populations living within 25 km of three Ontario nuclear power plants. The purpose of the study was to determine the radiation doses to members of the public living within 25 km of the Pickering, Darlington and Bruce NPPs, and to compare cancer cases among these people with the general population of Ontario from 1990 to 2008. The study was conducted using data from the Canadian and Ontario Cancer Registries and the Census of Canada.

The most important finding of the study is that there is no evidence of childhood leukemia clusters around the three Ontario NPPs. The rates of cancer incidence for children aged 0-4 and aged 0-14 were similar to the general Ontario population.

The study concluded that public radiation doses resulting from the operation of the NPPs are 100 to 1 000 times lower than natural background radiation and there is no evidence of childhood leukemia clusters around the three Ontario NPPs. All cancers for all age groups are well within the natural variation of the disease in Ontario. Thus, radiation is not a plausible explanation for any excess cancers observed within 25 km of any Ontario NPP.

A communications plan was developed to determine the most effective way to communicate the findings. A copy of the plan can be found in Appendix 2.

1.10 SMART goals

The SMART acronym is used to develop goals that are most likely to achieve results – goals that are **S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**ime-framed.

A **specific** goal is one that clearly identifies an end point. Be specific by stating exactly what it is you wish to achieve and exactly how are you going to do it. Objectives are written in an active tense and use strong verbs like “plan”, “write”, “conduct” and “produce”.

A **measurable** goal provides a way for you to know if you have hit your target (e.g.: percentage of people contacted, number of presentations completed).

Goals need to be **achievable**. The objective is achievable given time period, resources allocated, etc.

Even if your goal is attainable, it may not be realistic. The objectives can be achieved using the time and the resources available.

Finally, goals need to be **time-framed**. When will you achieve the goal? This week? Three months? One year? Longer?

The development of goals/objectives is a process that involves discussion and careful consideration of the multiple impacts that affect your activities. It can be frustrating to realise that a legitimate goal cannot be achieved because of internal constraints on resources – budget, staff, etc., in spite of an obvious need, but if that is the reality of the environment in which you operate, those factors need to be taken into consideration.

1.11 Examples of strategic documents

In response to the survey questions dealing with strategic plans and communication plans, most NROs indicated that their organisations were guided by some type of strategic document when it came to communications. Examples of strategic documents from France, Spain and the United States can be accessed at the following URLs:

France: www.french-nuclear-safety.fr/content/download/54302/369182/version/1/file/ASN-Strategic-Plan-for-2013-2015.pdf

Spain: www.csn.es/images/stories/publicaciones/unitarias/documentos_csn/plan_ing.pdf

United States: <http://pbadupws.nrc.gov/docs/ML1424/ML14246A439.pdf>

2. TARGET AUDIENCES AND STAKEHOLDERS

Audiences matter. If you do not know who your audience is, how will you know if you are reaching your goal? You need to consider the people or the organisation that has a stake in your initiative or project.

When defining a target audience, it is important to be as specific as possible. To say that the “general public” is your target audience will not help you in your communication efforts. You need a clear understanding of your target audiences. Without them, you are like a boat adrift without navigational tools.

Examples of target audiences are local citizens living in proximity to a nuclear facility, non-governmental organisations, anti-nuclear activists, politicians, media, local representatives, opinion leaders, pressure groups, cross-border countries, employees, scientists and specialists, youth, and the list goes on.

Once you have identified your target audiences/stakeholders, try to determine their knowledge and attitudes. What sources of information do they rely on to get their information? Do you know what their positions on your initiative may be? Can you mitigate any negative reactions beforehand?

Using the 10-80-10 rule may guide you in your key message development. There will always be about 10% of your targeted audiences who are highly supportive of your initiative, and about 10% who are highly opposed. Nothing you say will change these peoples’ minds. Go for the 80% in between – they are the ones that you want to influence.

Monitor all media for any insight that might be provided on what people are saying and why they are saying it. What are their concerns, their most pressing issue? What keeps them awake at night? Are there any barriers that are preventing these audiences from helping you achieve your goal? Defining your audiences’ concerns will help you decide the best way to reach out to them and what communication tools or activities you will need to develop or organise in order to increase their knowledge or change their point of view.

2.1 NRO’s target audiences

In response to the NRO survey regarding target audiences, there does not appear to be any specific process in place for identifying target audiences. In many cases, target audiences are already known and identified, and depend on the subject matter at hand. Spain includes some of its stakeholders on an Advisory Committee for information and public participation, which helps identify target audiences.

In responding to questions about where target audiences get their information, NROs reported that media reports, government institutions, social media and the NRO website are the most common avenues for obtaining information on nuclear safety. Public meetings/hearings, the nuclear industry, non-profit organisations and academia are other sources of information.

Stakeholders can also assist NROs in reaching their goals. Canada has partnered with a national museum and France has an extensive network of local information committees (CLI) that the French Nuclear Safety Authority (ASN) works with to disseminate information.

2.2 Case study: Partnership to enhance nuclear science and technology education, literacy and outreach (Canada)

Let's Talk Science is a national outreach organisation that prepares youth for their future careers and role as citizens in a rapidly changing world by offering unique programmes and services that engage youth and educators in science, technology, engineering and math. For a yearly contribution, the CNSC entered into a three-year partnership with Let's Talk Science. Some of the deliverables included:

- a national curriculum review to assess where nuclear content appears in school curricula to inform ongoing and future opportunities for programme and resource development
- the delivery of an annual half-day training programme to support CNSC staff capacity to lead meaningful hands-on outreach activities with children and youth
- developing career profiles that showcase diverse careers across the nuclear sector
- working to grow the number of Let's Talk Science volunteers who have expertise in nuclear safety
- seeking opportunities to showcase nuclear safety for Grades 6-8 students
- adding a component about nuclear safety to existing outreach kit
- ensuring that nuclear safety is a component of relevant high school outreach symposia.

The anticipated outcome is an increased literacy in nuclear science and safety by students and teachers, improved student understanding of nuclear medicine and radiation facts and safety, and an increased awareness of and pride in Canada's leadership role in the nuclear sector, and particularly in nuclear safety.

Partnering with other organisations provides the CNSC with a better understanding of school curricula to help it with ongoing and future opportunities for programme and resource development. In addition, it provides the CNSC with new and unique opportunities to reach out to young Canadians to showcase nuclear science and how it is regulated.

Sometimes, the partner's outreach initiatives can conflict with the CNSC's mandate as a regulator. If, for example, the partner is promoting nuclear energy, the CNSC would defer participation to the nuclear industry. It also sometimes occurs that the CNSC's safety message gets lost in showcasing and promoting awareness of nuclear science and technology.

2.3 Case study: Implementation of a national public information campaign and preventive pre-distribution of potassium iodide pills (France)

In 2009, France's Autorité de sûreté nucléaire (ASN) implemented the fourth national preventive potassium iodide (KI pills) pre-distribution campaign for areas surrounding nuclear power plants (NPPs), including a new procedure and public information campaign. The campaign targeted about 500 000 people living within a 10-kilometre radius of France's 19 existing NPPs.

At the request of the ministry of health, ASN drafted a new KI pill pre-distribution procedure, focusing on the most sensitive populations and harmonised with those of neighbouring countries. Previous work with Belgium, Switzerland, Germany and Luxembourg had led to the adoption of a common dose limit of 50 mSv at which KI pills would be administered.

KI pill pre-distribution was done in three phases: first, people were invited to collect the pills within six months from their local pharmacy; after six months, pills were mailed to any households that had not collected them; finally, pills were made permanently available in pharmacies.

An accompanying public information campaign strove to:

- make every citizen responsible for their own protection by providing them with clear messages:
 - taking KI pills is a simple and effective way of protecting the thyroid gland against the effects of radioactive iodine;
 - young people and pregnant women are the most vulnerable, and their protection is a priority;
 - taking KI pills must be associated with other protective actions;
- develop a long-term, health-risk-prevention culture by creating a comprehensive set of instructions on protective actions necessary during a radiological emergency.

The health-risk-prevention communications plan was organised by ASN and the national ministries of interior and health, with support from licensees and local information committees and pharmacists. A working group managed by ASN implemented the communications plan, which included several outreach tools:

- 1) People living around each NPP received a letter from local authorities asking them to collect a box of KI pills, free of charge, from a participating pharmacy. The letter was accompanied by brochures on the use of KI pills and on the nuclear safety oversight performed at the plants.
- 2) A dedicated educational website was also created, providing useful information such as pharmacy addresses, how to take KI pills, etc.
- 3) 19 local press conferences were organised (one for each NPP site), leading to comprehensive media coverage (almost 140 press articles).
- 4) Posters were deployed in town halls and pharmacies, and several public meetings were organised.

On the one hand, nationwide, nearly 50% of the target population collected their KI pills from their local pharmacy, which means about 250 000 households received their pills this way. The campaign had a very high profile (almost 90% of the population became familiar with it).

On the other hand, despite extensive communications efforts, the KI pill collection rate from pharmacies did not exceed 50%. Some of the reasons for this lack of interest could include carelessness, doubts about KI pill efficiency, deliberate personal choices or pre-existing considerations (some people still have their old pills).

To better identify potential obstacles to the pre-distribution of KI pills, ASN carried out two opinion surveys. They revealed that the public apathy was largely attributable to two opposing attitudes: over-confidence in the safety of the facilities, or doubts about the effectiveness of the KI pills in the event of a nuclear accident.

ASN is convinced of the need to reinforce risk culture by making each citizen feel involved in their own protection, and convincing the public about the importance of KI pills.

3. PUBLIC OPINION POLLING

A public opinion poll is a type of survey or inquiry designed to measure the public's views regarding a particular topic or series of topics. Interviewers ask questions of people chosen at random from the population being measured. Polls tell us what **proportion** of a population has a specific viewpoint. Interviews can be conducted by phone or face-to-face, by mail or on-line. Properly conducted public opinion polling gives the general public an opportunity to be heard.

If your organisation decides to go ahead with a survey, make sure that you have specific goals. It is important that you know exactly what you want to get out of your survey. Surveys are carried out to obtain statistical information about a subject, so the objectives should be specific and clear.

In order to guarantee a high degree of reliability, public opinion polling should be carried out by a professional polling firm. There are a number of factors that they will take into consideration, such as picking the respondents for the survey. In a scientific poll, the pollster identifies and seeks out the people to be interviewed. In other words, the sample should be random, and should reflect, as best as possible, the diversity and distribution of the population.

Public opinion research is not cheap. But if your organisation has never done any public opinion research, it will be difficult to determine how the public views your organisation and what strategies you should have in place to ensure that your organisation reaches its goals and objectives. Contracting the work to a qualified firm will give you basic information on which to begin to build. Repeating the process on a regular basis, perhaps every two or three years, will tell you whether your communication strategies are working or if the public's perception of your organisation is improving.

3.1 NRO's current practice regarding public opinion polling

NROs' responses to the question on public opinion research indicated that half of the respondents undertake some form of public opinion polling. Of those that do not currently do any public opinion polling, some are considering it. In most cases, NROs will take into account the results of third party public opinion research in their communication planning if the research is significant and carried out by a credible third-party source.

3.2 Case study: Perceptions and attitudes towards the Federal Agency for Nuclear Control and nuclear technologies in the Belgian population (Belgium)

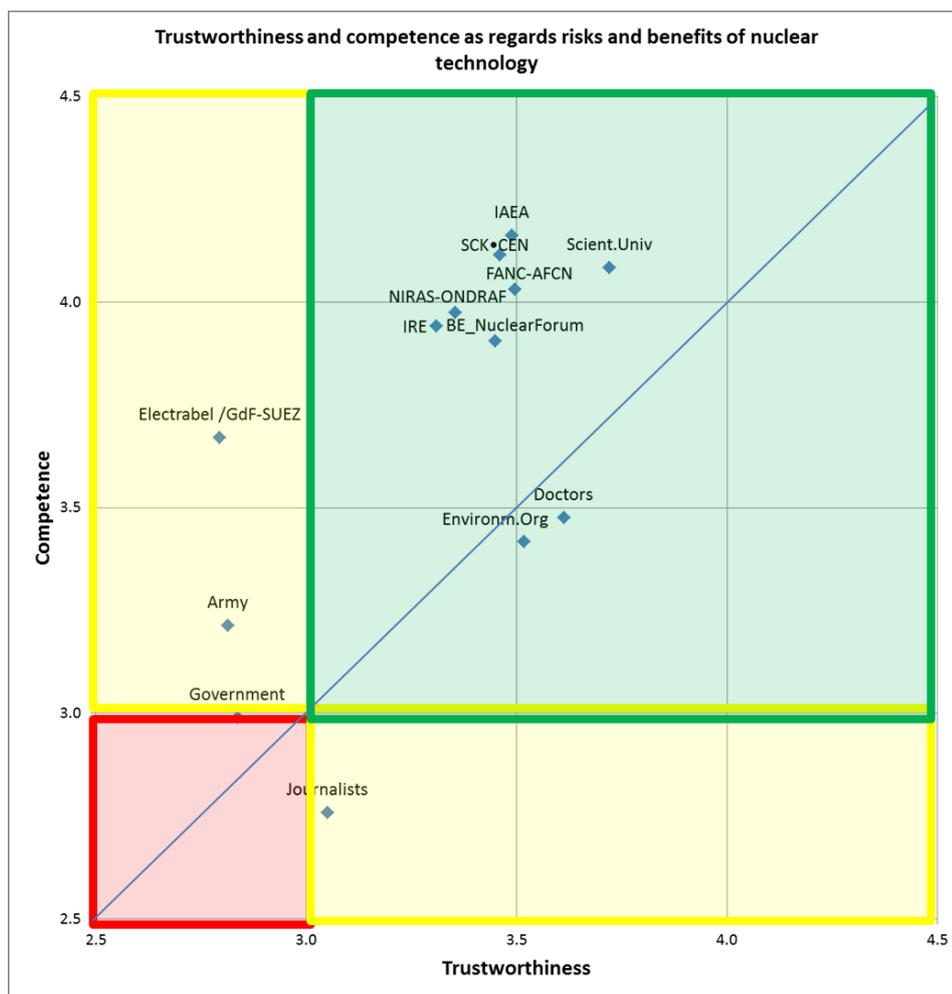
The Belgium Federal Agency for Nuclear Control's (FANC) communication unit uses two types of tools to measure its presence and trustworthiness among the Belgian population: general polls and media monitoring.

A general poll is administered by SCK-CEN (Mol, Belgium) every two years, on "perceptions and attitudes towards nuclear technologies in the Belgian population".

The 2013 poll covered topics such as risk perception, confidence in authorities, opinion about nuclear energy, trust in nuclear actors and knowledge about the nuclear domain. It also addressed issues in detail such as: strength of arguments supporting or opposing nuclear energy, the Fukushima Daiichi nuclear power plant accident (trust and use of various information sources, and consumer attitudes towards contaminated food) and communication about ionising radiation. The fieldwork was carried out between 15 August and 13 September 2013 by a company of professional interviewers, specialised in opinion research (IPSOS Belgium). Using the CAPI ("Computer Assisted Personal Interviewing") data-gathering method, the answers were directly recorded on a computer. The sample consisted of 1 002 Belgian adults and is representative of the Belgian population above the age of 18 for gender, age category (three categories), province, education and habitat. The average duration of the interview was 35 minutes.

Through this survey, FANC can follow public opinion trends (see picture below). For the communication unit, this is a useful tool for gathering objective data about how the regulator's competence and trustworthiness are perceived by the Belgian people, in comparison with other authorities, universities and media.

FANC's communication unit pays attention to this survey, and uses it to develop communication action plans.



Source: The SCK-CEN Barometer 2013, p. 44

Annual media monitoring of FANC coverage in print and audio-visual (radio/TV) media is also reviewed to extract important public opinion indicators. The Mediascore concept developed by Auxipress helps them evaluate the scope of dissemination of information through the media.

Mediascore uses a mathematical model to integrate the most important media parameters, such as:

- each surveyed publication's print run (number of copies) and audience, to determine the scale of distribution of information and the media spin-offs of public attitudes;
- the text (title, lead, size) and images (photos, illustrations, info charts) that provide indications of media interest and coverage;
- the enhancement and amplification factors (such as the layout or presentation of information, the highlight of the day, the scoop or exclusivity, the rectification or judgement, the information slot on the TV news), as well as whether the information was presented on a "live" or "deferred" basis.

Aside from the quantitative aspect, there is also a qualitative measurement of attitude (positive, neutral, negative), which improves the assessment of media coverage and story evolution.

Mediascore attempts to balance media coverage and story development, to create a media "diagnosis", through:

- the scope of the stories covered by the print and audiovisual media, on a regular basis;
- the creation of a hierarchy based on priority of themes, according to the impact of their dissemination;
- the evaluation of the nuclear sector's positive and negative levels;
- the estimation of the sector's image, and a follow-up on its evaluation;
- the media spin-off analysis, according to the types of public impact;
- the identification of the media's importance in each language or geographical zone;
- the establishment of main policy lines;
- the identification of dominant trends and media weaknesses.

Lessons learnt and recommendations

As the saying goes, "What is not measurable does not exist". This applies to communication as well: FANC collects facts and figures, which give it a broader picture, used to identify communication trends and/or actions.

FANC uses these tools as communication indicators, to increase or decrease its efforts in any particular field of interest, according to results and desirability.

For example, in 2014, following the statistics received from Auxipress, FANC tried to be more proactive in the medical sector. Thanks to these tools, they will be able to compare the impact (whether negative, positive or neutral) of specific actions, and follow up on the increase (or decrease) of its visibility in each particular sector.

3.3 Case study: Nuclear Regulatory Authority of the Slovak Republic's experience with public opinion polling (Slovak Republic)

The Nuclear Regulatory Authority of the Slovak Republic (UJD SR) developed its first management-approved communications strategy in 2006, along with a simultaneous public opinion survey to get feedback and evaluate its success in achieving the desired communication goals.

The first poll was carried out by an external marketing and social research company in 2006, with follow-ups in 2008, 2010 and 2012. The polls were conducted by a network of trained interviewers, on a representative sample of more than 1 000 members of the general public across the country. The data was collected through face-to-face interviews according to a standard set of questions. Selection characteristics for respondents included gender, age, education, community size and region of residence. The size of the selected sample versus the entire population (age 18 and over) of the Slovak Republic guarantees a 3% margin of error. The results obtained over the four years of polling were compared.

The questions were focused mainly on the public's perception of the UJD SR (whether the respondents were aware of the existence of a national nuclear regulatory organisation, its main responsibilities and competencies, and what their opinion was on the reliability of UJD SR's regulatory activities). Additional questions concerned the effectiveness of nuclear legislation (which is part of the UJD SR's mandate) and the safety of nuclear installations in the Slovak Republic. The survey results were used to assess the effectiveness of the regulator's communications and public relations programmes.

The surveys showed an increasing public awareness of the UJD SR and its role. From year to year, the number of respondents able to identify the correct name of the organisation increased; similar trends were noted on the UJD SR's role and competencies, and in 2012 the perceived reliability of the nuclear regulatory organisation increased noticeably.

Since the public living near nuclear installations is the primary audience/stakeholder, the regulator conducted additional targeted opinion polls in the Bohunice and Mochovce regions where all nuclear installations in the Slovak Republic are located. Telephone survey campaigns were carried out by a professional agency in 2007, 2009 and 2011. The local surveys asked the same questions as those used at the national level. The responses demonstrated that the public living near nuclear power plants had a good knowledge about the UJD SR and its activities, and that knowledge increased from year to year.

The UJD SR considers opinion polls to be a good tool for monitoring the public's perception about the regulation of nuclear safety in the Slovak Republic, as well as the activities of the nuclear regulatory organisation in general. The analysis of the poll results demonstrates the need to improve communications with the general public (more specifically young people, citizens living in small villages, etc.). To reach this goal, more intense communications for these priority groups should be incorporated in our regular communications plans. This effort requires adequate human resources; the UJD SR communications staff incorporated one more person in 2014.

The UJD SR recommends the use of opinion polling to get feedback from the public and to help improve the implementation of communications strategies.

3.4 Case study: The Norwegian Radiation Protection Authority broadens its use of public opinion polling (Norway)

In 2001, the Norwegian Radiation Protection Authority (NRPA) tasked an external consulting firm to conduct a survey of the general population on information needs, preferred information channels and trust in the regulatory body, in case of a nuclear or radiological accident. The survey was inspired by the accident that occurred one year before, involving the Russian nuclear submarine "Kursk", in the Barents

Sea. Although the accident did not cause any radiation leak, the event challenged NRPA to cope with heavy national and international media attention. The 2001 survey focused only on issues related to nuclear or radiological events. NRPA saw the need to broaden its scope and include other questions, from 2004 onwards.

There were three reasons for broadening public opinion polling:

- NRPA wanted to find out more about the Norwegian population's general knowledge and attitudes on radiation and nuclear safety issues, in a systematic way.
- NRPA was curious about its reputation as a national regulator – whether it was perceived as trustworthy, and to what extent people were familiar with it (if at all).
- NRPA wanted to see how it could improve and strengthen its information and communication efforts. Public opinion polls performed regularly (every three years) allow NRPA to be aware of any developments, trends or changes over time that they need to take into account in their communication strategies and plans.

Public opinion polling has also proven to be a good tool for NRPA to measure the effect of specific communication efforts. Radon is perfect example: a new regulation on radon came into effect in January 2014, making measurements of radon levels mandatory in privately owned rental housing. NRPA announced the new regulation using several communication channels, with a special emphasis on local and regional media coverage, to reach the target groups. A public opinion poll was then done in February 2014, and showed that 60% of people renting out apartments already knew about the new regulation; quite surprisingly, 43% of the general population was also aware of the new requirements.

The NRPA uses an external firm to carry out its surveys; this firm also randomly selects and interviews over 1 000 respondents over the age of 18, by phone. Using a professional polling firm not only increases the reliability of the polling methods, but gives added legitimacy to the results.

Some of the most interesting background variables that affect general findings are age, gender, level of education and general media interest, as well as (to some degree) geographic location. For instance, about 30% of the general population is familiar with NRPA, but this number increases to 40% for people with university-level (or equivalent) education.

NRPA also carries out regular surveys of the media, as well as targeting particular licensees/subjects of regulatory supervision. All target groups are surveyed every three years.

4. RESOURCES AND ORGANISATION

All NROs have different communications capacity and capabilities, whether it be human resources and expertise, or financial resources. As a result, the NRO may decide to hire a third party contractor to develop a communications strategy or specific communication tasks, such as the development and implementation of a communication plan. When determining whether or not to outsource all or part of your communications planning, it is important to consider your available resources. You may also decide to enlist the assistance of a consultant to help at the beginning only or with other aspects of communication.

4.1 Internal resources

4.1.1 *Setting up a strategic communications capability*

Given the different levels of maturity of each NRO, there are also different levels of strategic communications capability within each NRO. If your NRO is considering expanding its communications unit or taking on more responsibility internally for its communication programmes and need to convince senior management of the benefits of doing so, keep in mind that the effort requires a combination of strategies.

How are communications viewed in your organisation? Does senior management support your communications efforts and understand the benefits of a robust communications unit? You will need to demonstrate to senior management that communications is not just a service resource but a strategic element that will help your NRO attain more credibility and public confidence. If you are able to convey and convince the leaders of your NRO of the benefits of an integrated communication capability, you are likely to have more success, save time and be more efficient.

4.1.2 *Toolkits*

Having or developing a toolkit of different products will help you better plan and work more efficiently (this is where communication plans can be useful). In addition to communication plans, develop standard templated examples of different types of products, style guides, anything that will help you communicate consistently and efficiently.

4.1.3 *Human and financial resources*

All the communication plans and tools in the world will not ensure the best results unless you have a team of people with the right spirit and skill set. If your communication staff is miscast, meeting your goals and objectives will be a challenge. They may be high performers in other jobs but if they are not experienced in strategic communications, your efforts may be compromised, reflecting poorly on your NRO and causing frustration among senior management.

While most NROs responded that they had dedicated communications staff (in most cases not surpassing 5% of total NRO staff), it is most likely that other NRO staff also contribute in some way to

communication efforts. So although the majority of NRO communications are centralised, staff from other divisions of your organisation can be a valuable asset and can indirectly complement your communication efforts. As an example, while the US NRC's Office of Public Affairs has 15 professional staff, "there are staff responsible for communications to employees, outreach for recruitment, outreach to Congress, states, international communities as well as staff who do outreach within office or between technical/programme offices and select stakeholders, and those who are responsible for holding public meetings, managing the website".

If you are currently using the services of an outside firm for your communication needs or for particular types of services, make the case to your NRO management that you feel your NRO might be better served with additional in-house staff. It may make more sense from a financial point of view to hire part-time staff, instead of spending financial resources on an outside contractor.

As responses to the survey demonstrated, NROs do not have unlimited communication budgets and in times of financial restraint, communication divisions are often the first casualty when cutbacks are being considered. If your NRO's communication unit is small with no possibility of hiring additional staff due to financial constraints, it may be time to take a hard look at your objectives, and stop doing some of the things that you are doing. It is better to do a few things well instead of many things poorly. If you need to scale back some of your communications projects, do so to maintain credibility and public confidence.

4.1.4 Case Study: Training staff on the development of useful communication plans (United States)

Summary: The US NRC has a long history of developing and implementing communication plans for specific issues expected to have a high degree of public interest and/or requires the co-ordination of messaging across many offices in the agency and for different audiences. Over time, however, staff members created large, cumbersome communication plans of very limited usefulness for the Office of Public Affairs, which usually served as the "end user" of the plans. In an effort to make communication plans more useful – and to reduce the staff time spent developing them – the NRC's Office of Public Affairs developed an internal training module and made presentations throughout the agency. Most staff members were very enthusiastic about the assistance – and with the concept that the plans could be much less lengthy and complicated, and thus less time-consuming to create.

Lessons learnt and recommendations

Communication plans can be useful. But they can also be a resource-draining endeavor of limited assistance if they are not done correctly. Training is very important to ensure the time and energy spent results in a useful communication product.

4.2 External resources

Deciding to use external resources or "outsource" all or part of your communication needs can be a complex process, but doing so can add considerable expertise, skills and activity to your NRO's communications function.

4.2.1 When to use external resources

You should consider hiring a communications firm if: (1) you are concerned about presenting your ideas in the most positive light possible, or are uncertain about which means of communication will best serve your needs for your initiative; (2) if local media are unresponsive to your requests for coverage (e.g. will not run public service announcements, refuse to send reporters, etc.); or (3) if key influencers are opposed to your project or initiative for some reason and begin using local media (newspapers, radio or television) to air their opposition.

4.2.2 *Financial resources*

A decision to use external services depends largely on budget availability. Doing a cost-benefit analysis may help you decide if it is a good use of available funds. Compare internal costs (staff salaries and benefits, plus other staff costs) to external costs (cost of the project contract and project management costs). If a decision to outsource the work is made, request regular detailed billing reports to ensure accountability and that costs will come in under budget. The last thing you want is to find out that the budget has been spent half way through your project.

4.2.3 *Other considerations*

There are other factors that your NRO should take into account if it is seriously considering using external resources for your communication strategies. Anyone who has worked in a communication shop knows that it operates at full capacity.

If your project will have a high impact on your NRO, and you do not have the internal resources necessary to manage the project, consider outsourcing.

In the same vein, you may have internal staff, but not the capacity and the ability to deliver a project from start to finish. If you feel that staff bandwidth will affect the quality of the project, consider working with a communications firm to ensure success.

If a decision to outsource has been made, you will need to find a communications firm that produces quality work, and if possible, already has a certain amount of knowledge about your NRO and what it does. If it is the first time working with them, build in some time in the work schedule for the contractor to familiarise itself with details of the project and your NRO.

4.3 Are NROs used to outsourcing for communications?

Most NROs have at one time or another prevailed themselves of the use of the external resources, not so much for planning purposes but more so for the development and production of communication products, or communication services such as translation.

4.4 Case study: The Polish regulator's experience with outsourcing (Poland)

To develop a strategic plan, co-operation between the Polish National Atomic Energy Agency (PAA) and an external consultant can be described as both professional and smooth.

At the beginning of the project, the consultant was given clear guidelines on what the strategy should contain and where to find the relevant information. In addition to data as well as some documents and materials from other NROs, the consultant had done his own research before presenting to PAA the first draft of the strategy. As a result, the first draft was based on both internal and external input, which contributed to relatively high quality drafts. The consultant showed relevant experience in working with civil service clients and was accommodating modifications and remarks.

Although co-operation between PAA and the consultant was satisfactory, there were some issues. In the initial drafts, the media/communication tools were not described as precisely as PAA wished, but after a meeting with senior officials, the consultant included a more detailed description of every particular tool, that was to be used to achieve the goals set out in the PAA's Communication Strategy.

In addition to that, at the end of the project, the consultant was quite reluctant to include PAA's final remarks and suggestions into the "final" product, but after some discussion, the consultant incorporated all of PAA's comments and remarks.

The co-operation can therefore be generally described as very smooth, well organised and on schedule. The two issues mentioned above did not have an impact on the final product, which is regarded by PAA as a high-quality strategic document prepared by an experienced and professional external consultant.

5. KEY MESSAGES

Key messages are messages you want your target audiences to see or hear. There are a number of factors to take into consideration when developing your key messaging but one that you absolutely need to know is: What issues are important to your key audiences? Once you know that, you can develop your key messages.

Another factor that is important when developing key messages is clarity – the use of clear and simple language. If you are trying to win over your target audiences, whether it be with talking points, fact sheets, articles or presentations, they must understand the information that they are being given, and then believe it. If they do not understand it, it will be difficult for them to believe it or agree with it. Stay away from nuclear jargon and use language that they will understand. Do not “spin” an issue to death. Most audiences, and particularly the media, will see right through it and it will do nothing to increase your credibility as a nuclear regulatory organisation.

Consistency in your messaging is also important. Any messaging that is focused on a topic needs to be consistent with previous messaging, and based on a communications strategy. Make sure that different communication products on the same topic carry the same message.

Knowing your audiences attitudes and behaviour will help you develop your messaging. If you can think of three or four sentences that might change their attitudes and behaviour, those sentences are your key messages. Be concise and have a limited number of messages that you are trying to deliver.

In a nutshell, your key messages should:

- Communicate what you are doing and why you are doing it: focus on the main points but be brief.
- Fit with your objectives: whatever your objectives are, write your messages to reflect that.
- Speak to all your audiences: look at each audience and craft your messages to meet their needs.

Commendable practices of NROs regarding key messages

Ensuring that the same messaging is used by all spokespersons for the NRO was often cited as a way to make sure that there is consistency of messaging outside the organisation. This is accomplished through good internal co-ordination, the development of communication plans and a rigorous approval process.

Some of the NROs have created an inventory of standard messaging, that is updated as needed, available to all NRO staff and which can be applied to a variety of topics and initiatives.

6. DEALING WITH THE MEDIA

As stated at the WGPC's April 2014 workshop dedicated to exchanges with journalists and experts in communications, the media industry's fundamentals continue to struggle with a continued erosion of resources. Beat reporting – the craft of in-depth reporting on a particular issue – is not as popular as it once was. Media outlets are more understaffed and unprepared, journalists and reporters cover a variety of topics, but do not necessarily have an in-depth knowledge of emerging issues or have a deep understanding of the events that they are asked to cover.

6.1 Media training

As a result of these changes in the industry, it is important to train NRO staff that will be able to explain complicated, scientific concepts clearly and consistently to reporters who have little knowledge of the nuclear sector or nuclear safety.

It is not necessary to have only one or two dedicated communication staff act as spokesperson for the organisation; subject-matter experts can also be a very valuable resource. If you decide to have a subject-matter expert as your spokesperson and he or she has not been media-trained, consider engaging a professional media trainer to work with them. A media trainer can help your spokespeople in presentation skills, delivering key messages in a targeted and concise manner, responding to challenging questions and situations and working with reporters to ensure the messages are delivered.

In Canada, a media relations position exists, but subject matter experts (SME) have also been trained to be able to respond to media requests for interviews on technical and scientific issues. For more important interviews, a “mock” interview is played out where difficult questions are asked and answers practised to ensure that the SME know how to convey the organisation's main messages.

While most NROs of the member countries have spokespersons to deal with the media, technical experts are also called on to respond to media requests of a technical nature. These experts go through media training or are well prepared by NRO staff prior to any dealings with the media.

Similarly, media training appears to be an appropriate response to the question of communicating risk to the public. When third-party training is not available, internal NRO staff provide the messaging and the techniques that should be used by NRO subject-matter experts.

6.2 Developing media lists

In order to reach out to the media, you need to know which outlets (e.g. community newspapers, talk radio, etc.) and specific contacts (e.g. education reporters, editors, news directors, etc.) to reach out to. It is also important to learn the primary news sources your audiences rely on for facts and information. A number of resources exist to help develop media lists, but the easiest and quickest way is to do a Google search, focusing on the type of media outlet and the geographical area in question.

6.3 Case study: Media coverage analysis to determine public perception of the Safety Nuclear Council (Spain)

In 2008, the Spanish Safety Nuclear Council (CSN) analysed how the Spanish media covered it as the national nuclear regulatory organisation and, by extension, how it was perceived by the public. Since then, this analysis has been regularly undertaken.

A comprehensive report of all media coverage generated by the CSN is produced every six months by an external company that was contracted through a public tender process, which helps keep costs low. After receiving the report, the CSN's communication department summarises and interprets the results.

The report is based on a qualitative analysis of the Spanish nuclear regulatory organisation's presence in domestic mass media (print, radio and television). Graphics, tables and other tools are used to provide a deeper understanding of the CSN's public image.

The approach to extracting valuable analysis from the report is as follows:

- Coverage is sorted into “positive”, “negative” or “neutral” categories that reflect attitudes towards the regulator.
- Consideration is given to the number of times an issue is reported (called “references”), and results can be viewed by type of media (print, print and radio, or television). Other factors are included, such as the amount of space in print media, the duration of broadcast coverage and the equivalent dollar value of coverage in all types of media.
- The final report is divided into four sections based on topic: corporate stories, nuclear safety, radiological protection and transport and waste. This provides a greater understanding of public opinion by subject area.

The most challenging tasks were deciding what topics to focus on, and establishing the best criteria to follow in media reports.

For the CSN, this type of media analysis provides a useful tool for measuring public opinions about the regulator, and can lead to better communications practices and outcomes. It also helps identify mistakes and enables CSN to solve them early on, supporting the goal of improving communication with media and the general public.

CONCLUSION

Communication strategies enable an NRO to inform and build relationships with its stakeholders as well as the public. By implementing various approaches to their communications strategies, NROs will increase awareness of their key messages and can improve their effectiveness by using a mix of various communication tools and activities. In addition, tailoring key messages to specific audiences will help NROs convey and control the information they are making public, and how their audiences perceive that information.

Effective communication strategies are core to an NRO's continuing success.

APPENDICIES

APPENDIX 1 WHAT WE HEARD REPORT – NROS COMMUNICATION STRATEGY

Introduction

In September 2012, the working group took on the task of developing a document dealing with “NROs Communication Strategy”. In its proposal to CNRA, the WGPC chair underlined the importance for NROs in defining communication strategies to various stakeholders, including the public. Having a strategy in place enables NROs to manage expectations, ensure consistent messaging, improve productivity and measure outcomes. It also ensures that stakeholders, including the public, understand what NROs are trying to accomplish.

The “What We Heard Report” provides a summary of the key comments received from responses to a questionnaire, giving an overview of NRO strategic communications and describing the communication strategies of member countries, the challenges they face and their best practices. Responses were provided by Belgium, Canada, Finland, France, Hungary, India, Japan, the Republic of Korea, Norway, Poland, the Russian Federation, the Slovak Republic, Spain, Sweden, Switzerland and United States of America.

1. Strategic planning

- Most NROs have a strategic plan or documentation which guides their communications strategy.
- Some of the strategic plans contain communication issues that support the NROs’ overall strategic plan.
- An approval process, which includes senior management, for communication plans is in place for most NROs.
- Supporting documentation such as outreach plans may be used to guide the NRO’s communications strategy.
- NROs have legal or regulatory obligations regarding transparency and dissemination of information to the public.
- Legislation (Freedom of Information, Access to Information, Open Files) that allows the public to request documentation that is not considered public information, such as briefing notes, staff email exchanges, meeting minutes, is in place.
- NROs’ communication strategy is mainly proactive; a reactive strategy is necessary when dealing with the media and misinformation.
- Most NROs have a communication network with other government agencies or are in touch with them regularly to share communication activities or actions.
- There exists among some NROs a close working relationship internally with their international affairs division.
- Feedback from social media and inquiries about issues regarding nuclear safety can also be used to measure knowledge and trust by the public.
- Advisory Committee meetings also are a means of receiving feedback on the NRO.

- SWOT analyses have been carried out by approximately half of the NROs who responded to the survey.
- About half of the NROs who responded to the survey have a web mobile website.
- Most NROs develop specific communication plans for upcoming initiatives or projects.
- Social media comments and news media reports on issues are useful when developing communications plans.
- Researching any similar past projects can provide guidance on current projects.
- The tone of media coverage, social media comments, public inquiries, surveys, website statistics, such as visits and downloads, can determine if a communication plan has been successful.
- NROs include several communication actions in their communication plans in order to reach their goals, or adjust their plan if it is not producing the intended results.

2. Target audiences and stakeholders

- NROs do not in general have a formal process in place to identify their target audiences/stakeholders.
- NROs have a general understanding of who their target audiences/stakeholders are.
- NROs use a variety of tools to identify their target audiences/stakeholders.
- Most NROs tend to not prioritise their audiences/stakeholders
- The identification of target audiences/stakeholders is dependent on the subject matter.
- NROs do not as a general practice differentiate between primary and secondary audiences/stakeholders.
- NROs have a variety of tools that provide information to their audiences/stakeholders: among some of them are their website, social media, info account, information sessions, information centres, public hearings/meetings, workshops.
- Many of the target audiences see the NRO as a credible source of information.
- Municipal representatives, other government departments, local committees, non-governmental organisations, academia, licensees and non-profit organisations are also seen as credible sources of information.
- While media can be seen as a credible source of information, some reporters and news outlets are not well informed about the facts, and focus on sensationalism.
- NROs use various methods and tools to determine the attitudes and behaviour of their audiences/stakeholders; they include traditional and social media, newspaper articles, briefings, face-to-face meetings, surveys, public opinion research, public inquiries and responses to the document consultation process.
- Many NROs feel that media and non-governmental organisations can negatively influence audiences/stakeholders.
- NROs have some sort of social media platform to communicate with their target audiences.
- NROs communicate with their target audiences on a regular basis.
- Licensees must inform their NRO of any significant event.
- Postings to the website and the issuance of news releases are tools to inform the public.
- The use of social media platforms helps inform the public quickly of any significant events.
- If inspection findings are of public interest, they are communicated to the public, through postings to the website.

- Non-traditional communication channels such as webinars, apps, partnerships, Wordpress are also being used to communicate with the public.
- NROs have an internal capacity to inform NRO staff of upcoming projects/initiatives through intranet sites, newsletters, magazines, the posting of management meeting minutes.

3. Public opinion polling

- About half of the NROs carry out public opinion research to help guide their communications planning.
- Some NROs have governmental restrictions regarding public opinion research.
- Third-party public opinion results are used by some of the NROs to determine their communications strategy when the results are useful and relevant.
- Many NROs conduct surveys to measure how well it is known and trusted by the public.

4. Resources and organisation

- Some NROs have used external communications services for developing communication strategies.
- Specific communication products or expertise that do not exist in-house, such as translation, document layout, training, event organising and video production are contracted in some NROs.
- For most NROs, the percentage of NRO staff dedicated to communications does not surpass 5%.
- For larger NROs, it is difficult to confirm the percentage of NRO staff dedicated to communications given the various areas of responsibility.
- For the most part, NROs' communications are centralised.
- While most NROs have the financial capability to carry out communications, some are restricted in the types of products that can be produced.
- Some NROs use external communications services for specific communication products or expertise that do not exist in-house.
- Most NROs whose first language is not English require translation services for communication products.

5. Key messages

- Transparency and independence are main elements of all messaging.
- Explaining nuclear safety concepts in simple language can be a challenge.
- Some NROs offer simple language training to their staff.
- The use of video and infographics can assist in explaining scientific issues.
- Having one spokesperson can help ensure consistent messaging.
- An approval process for messaging, whether through the communications division or senior management, is necessary.
- An inventory of “evergreen” media lines is a useful reference tool of standard and often used messages.
- Some NROs develop specific messaging for each target audiences while others do not.

- A variety of channels are used to communicate the status of nuclear safety and radiation protection: websites, social media, events, exhibits, information centres, public hearings/consultation, publications, newsletters, briefings.

6. Dealing with the media

- There are no official rules regarding NRO subject matter experts speaking to the media.
- Some NROs ask that all media calls be directed to the media relations unit, who then assesses the request and determines the way forward.
- Most NROs offer their subject matter experts media and communication training.

APPENDIX 2 COMMUNICATIONS PLAN FOR A STUDY ON POPULATIONS LIVING NEAR NUCLEAR POWER PLANTS

Issue

The Canadian Nuclear Safety Commission (CNSC) has completed a ground-breaking study on populations living near Ontario's three nuclear power plants (NPPs). The goal of this communications approach is to determine the most effective way to communicate the findings.

Background

The purpose of the Radiation and Incidence of Cancer around Ontario Nuclear Power Plants from 1990 to 2008 study (the "RADICON" study) was to determine the radiation doses to members of the public living within 25 km of the Pickering, Darlington and Bruce NPPs and to compare cancer cases among these people with the general population of Ontario from 1990 to 2008.

Findings of the CNSC RADICON study

- No evidence of excess childhood leukemia near Ontario NPPs;
- Doses from Ontario NPPs are 100 to 1 000 times below natural background radiation;
- Distance to an NPP, as used in the German KiKK¹ study is not a good substitute for dose information (dose estimates did not increase with proximity to all three NPPs);
- Overall, for all ages, there is no consistent pattern of cancer across the three facilities studied;
- Radiation doses to members of the public cannot explain the elevated rates of certain types of cancers found in this study; other factors (diet, lifestyle, smoking habits, etc.) likely had a much larger impact on the excess cancers observed in this study.

The main strength of the RADICON study is the use of detailed public dose information around each NPP that was generated from radiological release and environmental monitoring data. This methodology improves on recent epidemiological studies of childhood cancer that have used distance from a NPP as a substitute for radiation dose.

Cancer occurs naturally across populations. Excess cancer is defined as the increase in cancer above what is expected. This study found no consistent pattern of cancer between the three populations studied, which is good. If the study had found higher rates of cancer than expected at all three locations, that would have suggested something was at work making people sick. Simply put, because cancer rates were alternately the same as, lower than, and higher than the Ontario population, a link to radiation is not plausible.

¹ This study, named the *Kinderkrebs in der umgebung von Kernkraftwerken* (KiKK) study, looked at all childhood cancer cases diagnosed between 1980 and 2003 compared to control children without cancer.

While this type of study cannot determine the causes of the cancer, there are many other factors that lead to a study conclusion that radiation doses cannot explain the elevated rates of excess cancer around Darlington. Radiation doses from NPPs to members of the public are extremely low; at least 100 to 1 000 times lower than local natural background radiation and public dose limits. As such, doses are a minor risk factor compared to the high frequency of major risk factors such as tobacco, poor diet, obesity and physical inactivity which account for about 60% of all cancer deaths in developed countries. These factors represent a public health concern throughout Ontario, including the communities located near NPPs. Given these factors, the current scientific understanding of radiation risk, and the miniscule public doses, it is not realistic to attribute any excess cancers to the radiation doses from NPPs found in these communities.

Strategic considerations

- The RADICON study findings of no excess childhood leukemia around the three NPPs is very good news and will be an important study to counter the often-quoted German KiKK study that some people claim proves that radiation from NPPs causes leukemia.
- CNSC staff would like to reference the findings in this study at the Pickering hearing 29-30 May 2013 as it demonstrates a healthy population. There are interventions that quote the KiKK study as proof that radiation from NPPs harm populations nearby. The study would have to be public in advance of the hearing, putting time pressure on publication.
- Some of the science-based language in the report will not be well understood by the general public and can be misinterpreted as being frightening. For example “statistically significant higher levels of cancer” may overshadow the more significant conclusions. It is important that the CNSC manage the message and publish the study on our terms, with full context and background. If word of the study leaks and the CNSC is forced into reactive mode, it will be harder to tell the story properly.
- The RADICON study has been synthesised into a shorter summary version for release to the public. Because the results will be of interest to a layman population, significant effort has been made to simplify and provide more context than for a normal scientific paper.
- An advance copy of the RADICON summary document has been sent to the CNSC’s medical advisor for review. This begins the process of peer review to add credibility to the findings. This also offers the CNSC another spokesperson to discuss the results.
- Anti-nuclear activists will cherry pick the findings for language that supports their position. We may see “statistically significant higher levels of cancer near Darlington NPP” in their articles/social media headlines.
- There will be international interest in this study. Peer-reviewed journal articles will be an important method of communicating the results.

Key messages

- The CNSC’s RADICON study has found no more childhood leukemia around Ontario nuclear power plants than in the rest of Ontario. Children living nearby are as healthy as children living elsewhere in Ontario.
- Radiation doses from Ontario nuclear power plants to members of the public are extremely low: 100 to 1 000 times below natural background radiation.
- All cancers for all age groups are well within the natural variation of the disease and there is no consistent pattern of cancer across the three facilities studied.
- Known health risk factors like smoking, obesity, poor diet and physical inactivity are the most likely causes of cancer – not radiation.

- The study found that doses did not increase with proximity to all three NPPs. This demonstrates conclusively that distance to an NPP, as used in the KiKK study, is not a good substitute for dose information.

Strategy

To be able to release the results of the study before the Pickering hearing, the report will be posted in English only. The Executive Summary will be posted in English and French. A news release will be issued with overarching conclusions and an email to subscribers will be sent. The French version of the study will be published as soon as possible (likely within 7-10 days of the English posting).

Vehicles

Tactic	Timing
Phase 1: Post English RADICON document and the Executive Summary in both English and French to CNSC website, under Health Studies page	Late May
Issue news release	Late May
Send email to subscribers and post Latest News headline	Late May
Facebook post	Late May
Phase 2: Post French RADICON study to the CNSC website	Early June
Send email to subscribers and post Latest News headline	Early June
Facebook post	Early June
Solicit peer review	Underway
Submit journal articles	End May
Internal comms – Synergy article	Early June