

Unclassified

NEA/CNRA/R(2008)4

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

01-Jul-2008

English - Or. English

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

Cancels & replaces the same document of 19 June 2008

**ACHIEVEMENTS AND CHALLENGES IN NUCLEAR REGULATORY COMMUNICATION WITH
THE PUBLIC**

Outcome from the CNRA Workshops held in 2000, 2004 and 2007

June 2008

JT03248509

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format



**NEA/CNRA/R(2008)4
Unclassified**

English - Or. English

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

* * *

This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

NUCLEAR ENERGY AGENCY

The OECD Nuclear Energy Agency (NEA) was established on 1st February 1958 under the name of the OEEC European Nuclear Energy Agency. It received its present designation on 20th April 1972, when Japan became its first non-European full member. NEA membership today consists of 28 OECD member countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Portugal, Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities also takes part in the work of the Agency.

The mission of the NEA is:

- to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes, as well as
- to provide authoritative assessments and to forge common understandings on key issues, as input to government decisions on nuclear energy policy and to broader OECD policy analyses in areas such as energy and sustainable development.

Specific areas of competence of the NEA include safety and regulation of nuclear activities, radioactive waste management, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability, and public information. The NEA Data Bank provides nuclear data and computer program services for participating countries.

In these and related tasks, the NEA works in close collaboration with the International Atomic Energy Agency in Vienna, with which it has a Co-operation Agreement, as well as with other international organisations in the nuclear field.

© OECD 2008

No reproduction, copy, transmission or translation of this publication may be made without written permission. Applications should be sent to OECD Publishing: rights@oecd.org or by fax (+33-1) 45 24 99 30. Permission to photocopy a portion of this work should be addressed to the Centre Français d'exploitation du droit de Copie (CFC), 20 rue des Grands-Augustins, 75006 Paris, France, fax (+33-1) 46 34 67 19, (contact@cfcopies.com) or (for US only) to Copyright Clearance Center (CCC), 222 Rosewood Drive Danvers, MA 01923, USA, fax +1 978 646 8600, info@copyright.com.

COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES

The Committee on Nuclear Regulatory Activities (CNRA) of the OECD Nuclear Energy Agency (NEA) is an international committee made up primarily of senior nuclear regulators. It was set up in 1989 as a forum for the exchange of information and experience among regulatory organisations.

The committee is responsible for the programme of the NEA, concerning the regulation, licensing and inspection of nuclear installations with regard to safety. The committee's purpose is to promote cooperation among member countries to feedback the experience to safety improving measures, enhance efficiency and effectiveness in the regulatory process and to maintain adequate infrastructure and competence in the nuclear safety field. The CNRA's main tasks are to 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 or avoid disparities among member countries. In particular, the committee reviews current management strategies and safety management practices and operating experiences at nuclear facilities with a view to disseminating lessons learned.

The CNRA action plan recognises the importance of communication with the following observations:

- Public communication is an issue of relevance to many member countries.
- International co-operation is essential, or at least useful, to address and possibly resolve the issue.
- The expected output will provide significant added-value to nuclear safety.
- The NEA is the best place for international co-operation on this specific issue.

From the beginning, CNRA focused on technical regulatory activities. In 1998 the idea was raised to expand work into new non technical fields. International relations had raised concerns in many countries and it was clear that the public trust towards the regulator could be very different from one country to another, even though they are neighbours. It was recognised that there were opportunities for member countries to gain valuable experience from each other and learn lessons about best practices.

To this purpose the CNRA set up in 2001 the Working Group on Public Communication of nuclear regulatory organisations (WGPC), the mandate of which is currently as follows:

- The WGPC will share information, news, documents, data, views, ideas, and experiences in the field of public communication and stakeholder involvement. It will keep abreast of activities of a similar or related nature undertaken by other parts of the NEA.
- The WGPC will review developments, progress, techniques, tools, procedures and achievements in the area of nuclear regulatory communication with the public and stakeholders. It will highlight lessons learned and good practices.
- The WGPC will provide assistance to CNRA members, through technical notes and workshops, by addressing specific issues and practices.
- The WGPC will co-operate, internally and externally, with other organisations in regulatory public communication and stakeholder interaction matters, in line with the NEA policy.

In implementing its programme, the CNRA establishes cooperative mechanisms with the Committee on the Safety of Nuclear Installations (CSNI) responsible for the programme of the Agency concerning the technical aspects of the design, construction and operation of nuclear installations. The committee also co-operates with NEA's Committee on Radiation Protection and Public Health (CRPPH) and NEA's Radioactive Waste Management Committee (RWMC) on matters of common interest.

ACKNOWLEDGEMENTS

This report was prepared by Anders Jörle, formerly Director of the Public Communication Office at SKI, Sweden, who participated to the Organising Committees of the three CNRA workshops and skilfully chaired the WGPC from its creation in 2001 until January 2008. The following persons have also contributed to the preparation of this report by their personal efforts: Elisabeth Besenyei (HAEA, Hungary), Marina Calvo (CSN, Spain), Yeon-Hee Hah (KINS, Korea), Elizabeth Hayden (NRC, United States of America), Laurel Herwig (formerly at CNSC, Canada), Elena Kaliberda (Rostechnadzor, Russian Federation), Anne Marit Ostreng (NRPA, Norway), Felicity Robinson (HSE, United Kingdom), Mari Yano (JNES, Japan), Dagmar Zemanova (UJD, Slovak Republic), Luc Chaniel (ASN, France), Didier Degueudre (AVN, Belgium), Risto Isaksson (STUK, Finland), Peter Storey (HSE, United Kingdom), Dominique Van Nuffelen (FANC, Belgium), Anton Treier (HSK, Switzerland) and Uichiro Yoshimura (NISA, Japan). In addition, all members of the CNRA Working Group on Public Communication (WGPC) are recognised as important contributors to the success of the three CNRA workshops which provided the basis for this report. Jean Gauvain has been the NEA secretariat officer and contributed to finalising this report.

TABLE OF CONTENTS

| | |
|--|----|
| EXECUTIVE SUMMARY | 11 |
| 1. INTRODUCTION AND BACKGROUND | 13 |
| 1.1 Current society’s expectation regarding information and nuclear energy | 13 |
| 1.2 Development in CNRA public communication activity..... | 14 |
| 2. LESSONS LEARNED FROM THE CNRA WORKSHOPS ON COMMUNICATION | 17 |
| 2.1 Investing in trust: Nuclear regulators and the public - Paris, 2000 | 17 |
| 2.2 Follow-up of the Paris workshop: Creation of WGPC and “Flashnews”..... | 19 |
| 2.3 Building, measuring & improving public confidence - Ottawa, 2004 | 19 |
| 2.4 Follow-up of the Ottawa workshop: Reports on commendable practices..... | 21 |
| 2.5 Transparency of nuclear regulatory activities - Tokyo & Tokai-Mura, 2007 | 22 |
| 2.6 General observations | 25 |
| 3. BENEFITS FOR REGULATORS' COMMUNICATION PRACTICES..... | 27 |
| 3.1 Development of communication plans | 27 |
| 3.2 Development of stakeholder involvement..... | 28 |
| 3.3 NRO websites development | 29 |
| 3.4 NRO communicators' network | 30 |
| 3.5 Need for improving crisis communication | 30 |
| 3.6 Importance of transparency and openness..... | 31 |
| 3.7 The challenge of measuring public confidence | 31 |
| 4. CONCLUSIONS AND PERSPECTIVES..... | 33 |
| 4.1 Results achieved | 33 |
| 4.2 Proposals for future work..... | 34 |
| 5. REFERENCES | 35 |
| 6. APPENDIX: NROs WEBSITES OF PARTICIPATING COUNTRIES..... | 37 |

EXECUTIVE SUMMARY

After having identified that the public trust towards the regulators could be very different from one country to another even though they are neighbours, the NEA Committee on Nuclear Regulatory Activities (CNRA) has developed an activity in public communication and three successful international workshops have been held during this last decade:

1. Paris, December 2000 – Investing in Trust: Nuclear Regulators and the Public.
2. Ottawa, May 2004 – Building, Measuring and Improving Public Confidence.
3. Tokyo, May 2007 – Transparency of Nuclear Regulatory Activities.

Collectively these workshops have illustrated valuable feedback experience can be exchanged amongst countries. The **objective of this report** is to:

- summarise the lessons learned from the three CNRA workshops on public communication and related CNRA/WGPC activities over the past decade,
- assess their influence on the developments of the different countries' approaches in public communication,
- propose a way forward for future work.

Over the last two decades public perception of nuclear in some countries has changed substantially and there is an increasing public thirst for information. This, coupled with the generalisation of Freedom of Information Acts in OECD countries and new transparency laws, has resulted in Nuclear Regulatory Organisations (NROs) turning their attention to activities which inform and engage the public.

The extensive participation of top regulators and of members of their staff to this workshop showed the highest level of support for issues raised at the first workshop. One of the key findings was that the **countries had different approaches to public communication** but could benefit from better exchange. This why the CNRA created in 2001 the Working Group on Public Communications of Nuclear Regulatory Organisations (WGPC) which discussed a number of communication topics, set up a quick information exchange system and issued commendable communication practices.

It is difficult to quantify the impact of CNRA/WGPC activity in various countries and among the participating regulators. However, it has proven itself to be a useful forum for discussing mutual difficulties and challenges, as well as comparing different solutions to them, in the field of public communication. In addition a number of qualitative observations can be made.

A first general observation is that Acts related to the freedom of information (FOI), which give the public the right of access to all types of recorded information, are in force in all OECD countries since 2006 and in some countries they have been supplemented by specific Acts highlighting the **importance of Nuclear Regulatory transparency** and providing for its implementation.

A related general observation is that public expectations regarding the Nuclear Regulatory Organisations (NRO) have significantly increased in every country during the last 20 years and in turn the **communication of most NROs has tremendously developed** its activities toward informing the Public.

A last general observation is that the former prevailing opinion that NRO communication was very dependent on cultural context and that very little feedback experience could be exchanged amongst countries was less and less true: NRO communication practices show that **more and more common principles and practices** for public communication about nuclear regulatory activity are now shared by OECD countries' nuclear regulators. Public Communication of NROs is clearly an area where the experience of the more advanced has been used to help the less advanced.

From the lessons learned from this CNRA activity, it appears that most OECD NRO have now a communication department or at least press officers, which reflects the fact that public communication is identified as integral part of the NROs mission. To this purpose NRO **Communication Plans** have been developed in many countries, which define the mission statement of the organisations, their communication strategy, their communication objectives and their communication targets.

Conclusions of workshops and WGPC discussions have identified **Stakeholder Involvement** in nuclear safety as a necessary practice which helps enhance safety and support public confidence. It requires establish communication mechanisms and tools for discussions between the interested parties and those responsible for decision making. It has been highlighted that such a stakeholder involvement policy need dedicated resources to be efficiently implement.

The use of the Internet has dramatically changed the audience of original documents and papers in allowing direct access to the public. In this respect, the **development of Nuclear Regulators' websites** which have dramatically improved during this decade, allows that the interpretation and transfer of decisions and technical documents for the public are not only left to the media. This is a radical change in the possibility for directly communicating with the public and the ways to build confidence.

Despite communication practices being driven by the cultural context of a country, NROs recognise that many lessons can be taken from abroad. In today's global village the public are interested in, and have access to, what is happening in other countries. It is paramount that NRO communicators maintain close contact between themselves to ensure they are the primary source of information for informing the public about nuclear safety. Thus, the **NRO communicators' network** (with the electronic "Flashnews" platform) has become an essential feature for consistently informing the Public. In case of an event in one country NRO are now informed in advance of the media and can have a more internationally consistent communication toward the public.

However, **some challenges remain for the NROs** such as how to develop an efficient and timely communication towards the public in case of a crisis, for instance when an event occurs in a nuclear facility. Another challenge is to set a proper balance between the need to strive for transparency and the need to cope with restrictions in disclosure of information which may arise for security reasons. A last challenge is how to measure the public confidence in NROs so they can continue improving their public communication.

In summary, as a consequence of an **increasing convergence between OECD countries** on communication principles and practices, new areas of practical interest are emerging for nuclear regulators. Continuous attention must be given to increase public confidence in the way that NROs are responsible for the supervision of nuclear safety and for the protection of public health and the environment.

The CNRA/WGPC has covered much ground and come a long way since its inception. However, there is still work left for the group to improve the efficiency and effectiveness of public communication and to gain a high level of public confidence in the nuclear regulators within all OECD countries. The CNRA/WGPC, stressed the fact that the existing exchanges between countries are useful and should be made as visible as possible, within nuclear regulatory organisations, sharing the good practices could have been (or are planned to be) implemented in practical terms. This report concludes with a list of areas for producing a WGPC Integrated Plan structuring its work for **further assisting the improvement of NROs' Public Communication**.

1. INTRODUCTION AND BACKGROUND

1.1 Current society's expectation regarding information and nuclear energy

In modern societies, the public is inclined to request justification to any decisions taken by governments, but the guarantee provided for in most nations' constitutions are rather vague. This is why in many countries specific laws related to the freedom of information (FOI) have emerged, which ensure public access to any official information or records held by government bodies, with only limited restrictions, that are variable from one country to another. If the oldest such law was enacted as far as 1766 (Sweden's Freedom of the Press Act), the second one appeared only in 1966 (USA) and only five other OECD countries had passed a FOI law before the Chernobyl accident occurred in 1986. This issue of every citizen's access to governmental documents gave rise to lengthy discussions in many countries and this was only in 2006 (with Germany and Switzerland) that all OECD countries had a specific FOI act which came into force.

In this respect the development of nuclear energy, which started before the implementation of most of these FOI acts, became a topic of public concern in many countries especially after the 1979 Three Miles Island 2 (TMI-2) accident. If there had been for a long time some public concerns about the use of nuclear energy due to its first use in weapons, this TMI-2 event has been seen by many as a turning point in public opinion, which started from then to request more information about nuclear activities. On the other hand public confidence is important to all developed countries with an open society. The existence of nuclear power in a democracy is built upon a certain trust towards the political system and the national authorities. This is the reason why a number of Nuclear Regulatory Organisations (NRO) started developing various processes to proactively inform the public about their supervision of the nuclear activities or even to involve it in their decision making process.

Furthermore, in some countries, specific Act/Regulations were passed which give the public the right of access to all types of recorded information and is available to anyone without restrictions on, nationality, geographical location, or the age of the information. As a public body, the Nuclear Regulatory Organisation must tell applicants whether they hold the information sought. If information is held it must be provided to the applicant unless it is subject to one of the exemptions/exceptions in the Act/Regulations.

One of the most recent examples for such an Act was in France the entry into force in June 2006 of the law called "Transparency and Nuclear Security", which renewed the French Nuclear Safety Authority (ASN) and set up a High Committee for Transparency and information on nuclear safety and strengthened the Local Information Committees related to every nuclear facility.

A second very recent example was in Spain, in November 2007, the entry into force of the Law 33/2007, renewing the Nuclear Safety Council (CSN), confirming and strengthening the transparency and public communication mandates given to the regulator. It also introduced the creation of solid instruments of social participation such as an Advisory Committee and underlined the obligations to comply the rights of access to information, public participation and access to justice in matters relating to the environment derived from the ratification of the Aarhus Convention. This reflects exactly how top regulators look upon the regulatory role as discussed at the WGPC workshops.

However, a nuclear renaissance is gaining momentum and is one of the main features of energy policies around the world in the new century. Clearly public perception of the nuclear issue in some countries has changed substantially. Significant time has passed since Chernobyl and the general public and journalists may now perceive nuclear energy as less risky than before. A communication activity that works in one country does not necessarily work in another. But, in general terms, public opinion on nuclear power is more favourable.

Clearly the renaissance also contains an increasing amount of projects in all parts of the world. In Europe the first plant building projects for many years began in Finland and shortly thereafter in France. Huge nuclear programs were already present in countries like India, China, Korea and Japan at the millennium, and are now even more extensive. The USA received several applications for new plants in 2007 after nearly 30 years without any applications. There is also a long list of countries that are looking to nuclear energy as a new option to supply their energy needs. In this respect a number of NRO have set up a stakeholder involvement process for assessing new plants. An example is in the UK where the Nuclear Regulators (the Health and Safety Executive and the Environment Agency) have developed a Generic Design Assessment (GDA) process for new nuclear power stations and are making information publicly available via their websites.

On the other hand, the nuclear programs from 1970 to 1985 were mainly national and many companies were building NPPs. Now, the corporations supplying NPPs are multinational. Development of reactor designs is done in an international context of cooperating companies and nations. More and more countries are transferring from public companies' investments to private industrial fundraising for building new nuclear power plants. Some projects might also be regional (like the proposal for a successor to Ignalina in Lithuania from Baltic states and Poland). But, the increasingly international mode of operation on all levels is subject to international concern and awareness. Even smaller incidents and regulatory actions are taken into account in the opinion of the international public.

1.2 Development in CNRA public communication activity

Nuclear regulators are studying design concepts, like in the Multination Design Evaluation Programme or in the Generation IV Forum, in a multinational context with the support of the IAEA and the OECD/NEA. They are looking at common safety concepts and developing guidelines aimed at harmonising regulatory work and establishing fundamental principles of a national nuclear power programme. Another example of this is the work of the Western European Nuclear Regulators Association (WENRA). With a programme for development of safety indicators for both reactor safety and nuclear waste, WENRA through joint work with regulators is trying to establish an overall European way of looking at these questions.

From the beginning the CNRA understood the benefits of exchanging topical information through specific working groups such as the Working Group on Inspection Practices and the Working Group on Operating Experience. Although the public communication area was not as mature as these technical subjects, it is becoming increasingly important and sophisticated so the current CNRA action plan recognises the role of regulators' communication. It is important to note that the CNRA is a body solely devoted to regulatory issues. Though risk communication, communication on nuclear matters in general and emergency issues is well covered in many other industrial organisations, the regulatory perspective is stronger in CNRA than any other forum.

Why then is international cooperation useful? As already mentioned above, one country is dependent on the other on subjects where there is a general feeling of discomfort or an agreed perception of risk. Nuclear energy, nuclear waste and use of radiation are some of these subjects. By discussing how NROs communicate about the different topics that evolve in regulatory activities they have to understand the political situation, the media behaviour and plan their actions according to more than their own national

context. The practices of one country can affect other countries so the exchange of information is critical in maintaining and increasing safety of nuclear programmes.

Over the years the NEA Committee on Nuclear Regulatory Activities (CNRA) has developed a more and more fruitful international forum on regulatory activities based on technical issues. In 1998 the idea was raised to expand work to new fields. The relations with surrounding societies raised concerns in many countries and it was clear that the public trust towards the regulator could be very different from one country to another even though they are neighbours. Also on this non-technical field, the regulators could gain valuable experience from each other and learn lessons about the best practices. The idea of creating a top regulators' workshop on trust and confidence was brought to a decision at CNRA and a workshop "Investing in Trust – Nuclear Regulators and the Public", was organised in Paris in late November 2000. The extensive participation of top regulators and members of their staff showed the highest level of support for issues raised at the workshop.

One of the key findings of the workshop was that the countries had different approaches to public communication. The next step therefore, was to create the Working Group on Public Communications of Nuclear Regulatory Organisations (WGPC). This second working group of CNRA first met in November 2001. The CNRA/WGPC is a mixed group consisting of both technical staff involved in communications and communicators with typical skills and currently 20 countries are now members. In 2005, new fields of activities were identified and a reviewed mandate was endorsed by the CNRA. The WGPC thus shares information, news, documents and experiences in the field of public communications. It also exchanges views regarding the policies of nuclear regulatory organisations in the area of public communication and identifies ways of promoting efficient collaboration.

This activity is unique since public communication has up to lately been considered a national issue. However, a shrinking world and new means of communication and media activities require new solutions to old questions. Nearly a decade of work with communication issues has shown a valuable development that will be addressed later in this paper.

During the early days of CNRA/WGPC work it was often understood that the participating regulators committed themselves to the idea that promoting communication, or at least providing information, was a crucial function of a nuclear regulator. Lost confidence was found to be a disaster in itself and therefore strategies for information to the public about regulatory behaviour and incidents at different facilities must be done.

This attitude has been under strong development since the first days. New interactive web design creates new possibilities to communicate both ways and some regulators are taking advantage of that technique. While public meetings and consultations are almost mandatory in many countries they still only reach very few. By using web techniques, broader interactions with much bigger audiences are clearly possible.

It is quite clear that behaviour and expectations are different in different regions of the world. Law for instance requires some regulators to expose and make public almost any document kept in the office and used to evaluate an incident. Elsewhere practises can be very different. As mentioned above one of the most important problems directly aimed at this work of the CNRA is the possible lack of harmonisation among countries. Differences in response to common issues could easily create mistrust in regulators, especially in neighbouring countries. This is of course even more troublesome in a world of ongoing international news and where the internet provides fast information.

The objective of this report is to summarise the lessons learned from the three CNRA workshops on public communication and related CNRA/WGPC activities over the past decade during which three workshops

were held, to assess the influence on the different countries' approaches in public communication and to propose a way forward. But, before assessing all benefits for the regulators from the CNRA work, it may be worthwhile to highlight the fact that in most events having international impact, CNRA/WGPC members are often the fastest interfaces between countries where an event has occurred and the technical staff in their NRO in charge of assessing lessons for their own national use and thus participate to the improvement of International Operating Experience Feedback

2. LESSONS LEARNED FROM THE CNRA WORKSHOPS ON COMMUNICATION

The CNRA has therefore arranged a total of three workshops in the period 2000-2007 to discuss nuclear regulators' issues in communicating with the public. The first workshop, entitled "Investing in Trust: Nuclear Regulators and the Public", took place in Paris in December 2000.

After summarising the results of the first years of work in public communication, the CNRA made a suggestion for a follow up of the first workshop and an invitation was made from the Canadian regulator to host the second workshop in Canada. It was prepared by the CNRA and entitled "Building, Measuring and Improving Public Confidence in the Regulator" and it took place in Ottawa in May 2004.

In the recent years, it was observed a general change in public opinion on the nuclear issue. The possible effects of climate change made its way to the headlines of world media which has influenced and reflected a change in public perception of possible dangers. The risks of nuclear energy are now considered to be one among several other threats. In combination with an ever increasing demand for electricity, especially in the emerging countries of Asia, the nuclear arena has seen new interest across the globe.

Looking at where most of the new nuclear power installations are located, it was clear that Asia was the appropriate next continent to host a workshop. Japanese experiences of different incidents which attracted media interest finally cleared the way for a decision and after an invitation from the Japanese regulator the CNRA established an organising committee for a third workshop to be held. After an invitation from the Japanese regulator, it was decided to have the third workshop in Tokyo and Tokai Mura in May 2007 under the title "Transparency of Nuclear Regulatory Activities".

2.1 Investing in trust: Nuclear regulators and the public - Paris, 2000

This first workshop devoted to public communication issues was held in Paris, in conjunction with the CNRA December 2000 meeting, and attracted nine heads of national regulatory bodies, among them the top regulators from USA, Japan, France and UK.

A main conclusion and generally agreed to by the 80 participants of the workshop, was that obtaining and maintaining public confidence in the nuclear regulatory body is essential for effective nuclear regulation. For the nuclear regulator, public confidence is of equal importance to technical competence, independence and adequate resources, Jukka Laaksonen, at this time CNRA chairman and chairman of the workshop, said in his concluding remarks. If public confidence is lost, also political confidence is lost and the regulatory body may no longer be provided with the necessary means for securing reliable operations in the future.

Some communications approaches recommended to the regulators were discussed and found essential for successful operations:

- The regulators should have a long-term strategy for public communication built on culture of openness and active collaboration with the media.

- The regulator should never be involved in, or be perceived as promotional when it comes to nuclear energy and other regulated activities.
- The regulator must build confidence in the regulatory programmes and its decision-making and, therefore, must provide the public and the elected decision-makers with all relevant information.
- A certain distance must be kept from the licensees and stakeholders involved.

Nuclear regulators had also to define what they mean by “trust”. What kind of trust is aimed for regulators? The answer was “sustainable trust”. Nuclear regulators don’t aim for trust that can be suddenly lost by effects of an unexpected incident. Sustainable trust is the result of an open and self-critical communication that also deals with all the difficulties that challenge the regulator. Nuclear regulators have to recognise, admit and correct all known weaknesses and shortcomings in the regulatory programmes.

In communication science it is well known that a condition for achieving trust is to be well known. If the regulator expects to be trusted during incidents and emergencies, its credibility has to be earned in advance during more regular contact with the public and media. It’s therefore necessary to regularly communicate about the existence of a national nuclear regulator, its role and responsibilities.

Many good examples on how to establish oneself in the environment of one's society was presented at this workshop. Also the workshop discussed the various channels available for the outreach of the regulator. It was agreed that there was no single channel that could do all the work but NRO web sites were already established by all the participating regulators and were found to be very valuable because of sites to directly address journalists, decision makers and the interested general public.

It was also stressed that one-way information was no solution for achieving trust. Good communication is information transferred in two directions. In addition it is uncommon for experts to fully understand and identify what perception the public and other stakeholders have of risk and dangers. If there is no possibility to receive and evaluate the topics that concern the public, there is a great danger that the experts may not address the correct issues in their risk communication. Even emotional and non-rational feelings must have a proper and understanding response from the regulator.

Though a communication specialist may be better prepared to actually understand what goes on in media and the general public, communication is not to be left to communicators only. Of course managers of a regulator on all levels must understand the importance of good communication with the surrounding society, but communication training is also an essential part of all staff training. To succeed in being perceived trustworthy to the external stakeholders and media, it is of course absolutely necessary to have internal openness and good information exchange within the regulatory organisation.

If communication is not done timely in the right manner, the efforts needed later may be much greater than the ones that would have been necessary in the beginning.

A problem directly aimed at the work of the CNRA in public communication is the possible lack of harmonisation between countries. Differences in responses to common issues could easily create mistrust in regulators, especially in neighbouring countries.

Is public criticism a resource possible to be perceived the same way as operational feedback provides useful information to improve plant operations? The answer was not given in Paris in November 2000 but the issue was brought forward to the next workshop, “Building, Measuring and Improving Public Confidence in the Regulator”.

2.2 Follow-up of the Paris workshop: Creation of WGPC and “Flashnews”

As already mentioned, a key finding of the workshop was that the countries had different approaches to public communication and that they would benefit from exchanging experiences. This led CNRA to create the Working Group on Public Communications of Nuclear Regulatory Organisations (WGPC) in June 2001.

The WGPC meeting agenda has always included a round-table discussion with a presentation given by each country on topics of interest to the others. Looking back at the summary records it is quite clear that these presentations gained a lot of interest from the group. But, meeting once a year was not enough and the group soon realised that systems aimed at communicating nuclear issues of relevance to the regulator was either slow or limited to emergency only.

At the 2000 Workshop one subject of interest was how to quickly exchange information between the regulators. Of course a lot of informal networks exist but many of them are based on a personal knowledge level. The answer was the creation of an e-mail exchange system amongst a registered WGPC list called "Flashnews" that was established at the first WGPC meeting. This system was easy to use and quickly conveyed information over the Internet and for which a manual was published in September 2002. The system is used more by some countries than others but it has in several cases solved an emerging issue of misunderstanding in the international media. It has clearly been the fastest, and sometimes, the only way of communicating information between regulators.

This electronic information platform, managed by NEA, is a very helpful tool for all members of WGPC as well as for CNRA. In case of urgent information, the system can send first-hand information as soon as possible out in the whole world of NEA/CNRA. This was the case, in some recent incidents such as Forsmark. Today about 50 addresses representing 23 countries and 3 international organisations are members of the “Flashnews”.

The WGPC networking with the “Flashnews” system and the good personal understanding existing within group members are important. As a result, for most events having international impact, the WGPC members are most often the first interfaces between what occurs in the affected country and the technical people in their Nuclear Regulatory Organisation in charge of assessing lessons for their own national use. In that regard their role in the improvement of International Operating Experience Feedback is essential.

2.3 Building, measuring & improving public confidence - Ottawa, 2004

The success of the millennium workshop in Paris was to be reproduced. New issues addressed in Paris requested answers and it was clear that the communicators wanted to discuss more true communication skills, and exchange good practices. Originally the suggestion was for a workshop already in year 2003 but, after reconsideration and an invitation from the Canadian regulator and its president Linda Keen, the workshop was scheduled for Ottawa in May 2004. The geographical location also stressed that the work of the WGPC was an intercontinental issue and thus a significant amount of North American participation was possible.

The purpose of the workshop proposed to CNRA in setting up this second workshop was:

- To share practises of planning and implementing public confidence building activities at nuclear regulatory organisations.
- To share practises of measuring and evaluating public confidence in the nuclear regulator.

- To share the experience of how results of measuring public confidence impacted the regulator.
- To discuss the issue of restoring public confidence after a loss of trust.

In her keynote address introducing the workshop, CNSC President Linda Keen stressed the importance of defining what is a “high level of public confidence”, which implies clearly setting the regulator’s objective with regard to public confidence. Included is the important promotion of a regulatory culture which has as its core goals service to maintaining public trust in the regulator in order for it to continue ensuring safety and security. The regulator also has the task of creating new and innovative approaches to building and maintaining public confidence.

The same ingenuity used in solving technical problems and challenges can be applied in building confidence in regulatory work.

With these words Ms. Keen very precisely captured the view on communication work as a skill in itself with its own techniques and means of work.

Discussing the actual practical work in exchanging and sharing methods showed to the participants of the workshop many clear differences in culture between countries and between regulators. This was also noticed in the concluding remarks of CNRA Chairman Jukka Laaksonen. Likewise, there are differences in culture among countries. Similarly, in one given country, differences in culture also exist (social classes, ethnic groups...).

All these different cultures and subcultures need to be taken into account, because they have an important implication for trying to achieve public confidence. Clearly using the “universal principles” that were widely agreed to during the workshop may be difficult for some regulators due to the national context. The general trust towards government and authorities in a country can impact public perception of the regulator to be trustworthy.

A number of common principles were identified. First of all, building and maintaining public confidence should be given high priority. In fact stakeholder confidence was seen as a prerequisite for successful regulation. Lack of confidence can result in heavy economic losses for the society which was shown by the TEPCO case discovered in 2002 in Japan.

Emergency management in the case of a nuclear or radiological accident requires a regulator regarded as a reliable source, something that must be achieved during normal operations.

A clear requirement to achieve trust, confidence and be regarded as a valuable source of information is to be well known through normal ongoing media engagement, something that is not always easy. Certainly regulators with a broader mandate of operations have a better chance to make themselves heard and thus more well-known.

Proactive methods of work are needed and information provided to the public recognising:

- Overreaction is better than underestimation.
- Rather a lot of information compared to too little.

The target audience, skills, knowledge, social environment, need to be considered in communications. The regulator needs to be accessible and respond to questions when needed. This is not only for the communication staff. Experts and managers have to be prepared to speak to the media and at meetings and should be trained to handle such situations. It may be necessary to choose lower level individuals who are more skilled in communications to bring a message successfully to the public.

For effectiveness, the regulator should “be true to the three basics of communication”: First, the Message (what you say), second Myself (how you say it) and third Media and/or Public (who are you talking to).

Practices in communication were exchanged. A consensus of all participants was that it is important to establish every time that the regulator be the prime source of information. This normally requires a prepared communication policy with established goals, strategies and likewise. Among the important stakeholders the local municipalities must be focused.

Although not common practice, some of the participants reported their attempt to measure public opinion and public confidence. Different approaches were given as examples. It was also clear that trying to measure confidence cannot be done without properly defining what NRO actually mean by confidence and trust. Here Social Sciences can be helpful in providing quantitative and qualitative scientific tools to understand the various social constructions and behaviours of the various publics.

Can one control, improve and even restore public confidence? From presentations, it was clear that it all begins within the regulator itself. If there is no internal openness or awareness of the importance of communication activities there are many risks ahead. On the contrary involving communication as part of the regulatory programme and project planning at least creates a potential environment for achieving the goals above. Being early and proactive in planning of communication activities will save a lot of future work and problems.

When leaving Canada the WGPC members and other participants saw a third activity coming, this time in still another continent.

2.4 Follow-up of the Ottawa workshop: Reports on commendable practices

As mentioned earlier in the report, after the Ottawa Workshop, the WGPC mandates was revised to include the production of reports addressing developments, tools, procedures and achievements in the area of nuclear regulatory communication with the public and stakeholders. These reports aim to reach a large audience, identifying specific regulatory challenges in public communication and suggesting ways to deal with them.

In June 2006 two reports were thus published as a result of matters identified as particularly difficult and worth addressing. The WGPC addressed a common view on how to communicate to the public during abnormal (but not emergency) situations and on the issues of communicating regulatory decision-making to the public.

2.4.1 Public communication during abnormal situations

The first subsequent topical WGPC discussion was on how, why and when NRO should communicate nuclear matters. When there is no clear emergency but still a concern at the regulator, should this be made public? The answer, for communicators, is normally 'yes' because information provided by any other organisation but the regulator may not be reliable or accurate. True transparency requires pro-activity. While discussing these issues the group realised that the discussion would be more valuable if summarised in a report from the group to the CNRA. This resulted in a report on “Public Communication during Abnormal Situations”.

This report was based on the increasing demand for information on nuclear malfunctions and failures. An abnormal situation is defined as an unexpected event or situation not covered by actual

emergency preparations but still likely to raise media and public concern. Six challenges were identified and addressed in the report:

- Timeliness and preparedness.
- Characterisation of safety significance.
- Providing appropriate and exhaustive independent information.
- Being transparent reflecting possible lack of information.
- Coordination with other government and official bodies.
- Communication across the national border.

A successful strategy on communication must consider all these six challenges. One of the very good tools recommended in the report is the use of the INES scale which is directly aimed at communicating incidents to the public.

2.4.2 *Publicity of regulators decisions*

The second topical discussion was related to how efficient decision-making of a nuclear regulator can enhance public trust. How, when and why the regulator communicates is therefore an essential component of regulating nuclear activities aimed at achieving nuclear safety. It is quite clear that most of the regulators participating in CNRA work see the importance of having a communication strategy. WGPC meetings also showed that the members had a common view on most of the principles concerning regulatory communication, of course taking into consideration the differences in law, culture and administrative processes. This resulted in another report to CNRA entitled “Publicity of Regulators Decisions”.

To some extent this report can be seen as an extension of, or complement to, the CNRA report on “Nuclear Regulatory Decision-making” which describes how regulators can ensure that their decisions are technically sound, consistent from case to case, and timely. The report describes the general requirements of public communication on regulatory decisions. In the report five challenges are described on the publicity of regulatory decision-making:

- Access of information has limits and this must be considered in writing decisions.
- What should be the nature and content of a decision document? Who is addressed and how will it be perceived?
- Timing is important, especially if NRO wants to provide public involvement.
- Which tools of communication should be used? New technology or classical approach?
- Facing the globalisation of information exchange and the impact on decisions on other nations.

Quite clearly, the report concluded, the NROs are increasing their efforts to be more open to the public and involve the public in the decision-making process. It is of course necessary that each regulator builds its own communication strategy. Still it is definitely beneficial to learn from others by benchmarking.

2.5 *Transparency of nuclear regulatory activities - Tokyo & Tokai-Mura, 2007*

This third CNRA workshop related to communication was hosted in Tokyo with an optional day in Tokai-Mura from May 22 to 24, 2007. Organisation of the programme and premises was done in close cooperation with Japan Nuclear and Industrial Safety Agency (NISA) and Japan Nuclear Energy Safety Organisation (JNES). Particular emphasis was put on the transparency of nuclear regulatory

activities. The Workshop included five topical sessions in Tokyo and a session with local residents in Tokai-Mura.

During the trip to Tokai-Mura where participants visited some facilities of interest for public communication related to nuclear activities and the criticality accident that happened on 30 September 30, 1999. They also participated in a discussion about communication practices with local residents and stakeholders.

2.5.1 *Main attributes of transparency and main stakeholder expectations*

The Tokyo workshop started with a session devoted to the attributes of Transparency and how it is connected to trust. The debated included presentations from two Senior Regulators and from one journalist and was moderated by Professor Kitamura. It was first noted that transparency contributed to public confidence, although it is not the only element of confidence. Transparency can increase public confidence and NRO credibility if regulators are perceived as being well-informed, professional, namely: competent, open, accountable and having good internal communications within the NRO.

Transparency includes not only access to information (passive transparency) but, also providing understanding of regulatory processes (active transparency) to stakeholders. This requires effective interactions between public and NRO, between licensees and inspectors, between inspectors and regulatory management and between regulatory body and political decision makers. The regulator's transparency could be limited when it is not balanced by adequate industry transparency.

Participation of stakeholders is essential: it cannot be just a one-way flow of information and claims for developing a common understanding of "risk governance". It should be about true engagement, two-way dialogue, and promotion of understanding. However, one should be aware of a side-effect of transparency and that is the possible misuse of information but this should not impede the regulator's response to stakeholders' expectations.

The workshop then discussed in a second session Stakeholders' expectations with presentations from a utility, a journalist and a Major from a NPP neighbouring city. The first observation was that there is a need to allocate specific resources in order to seriously address stakeholder involvement and this should be seen as an investment on the path to developing public confidence. To allow this, the NRO strategic goals should include public confidence, in addition to safety oversight.

NRO needs to be perceived as a reliable and independent source of information in order to gain the public's confidence in a crisis situation. This can be achieved by various means that were identified by earlier workshops. Regular reporting and public information on topics of public concern or NRO activities is important similarly to proactive communication with local and regional stakeholders to address their concerns with respect to the nearby nuclear facility.

A journalist pointed out that if the NRO is not honest about the potential for mistakes and the uncertainties, the public will ask for "zero risk". The public would appreciate the NRO showing humility and being ready to acknowledge the uncertainties or accept different views: lying, hiding information and falsifying results can lead to a loss in public confidence which can take a long time to reverse.

It was recalled that is essential to provide timely information and to use understandable language. Jargon and technical language creates mistrust. It should also be remembered that a single event somewhere affects public perception everywhere, especially in a smaller world like the one everyone can now see.

It was finally generally observed that there is a preference to trust individuals rather than organisations. Trustworthy information is perceived to come from reliable people – quality of spokespersons influences the image of the organisation. The right to be heard is essential for the public; an exchange of views helps moderate and disperse conflict.

2.5.2 Ensuring and evaluating transparency

The workshop continued with a third session, devoted to conditions within NRO for ensuring transparency, which included presentations by NRO communicators from four countries. It was first highlighted that Freedom of Information (FOI) Acts and their related regulations, which have developed over several decades, are necessary to ensure transparency. As already mentioned, this means normally having public access to any documents of interest (NRO, utility). Educating journalists could also make them more objective in seeking information and reporting on it. This was used by some countries but most regulators found difficult.

It was then noted that the attitudes among regulatory management towards openness are equally important as formal rules on openness and that if internal transparency of NRO is improved this will help make the organisation become more transparent externally. In that respect it may be useful to survey NRO staff satisfaction on internal communications. That can lead to improved staff training policy as this is likely to affect external transparency.

Socio-economic differences between countries mean that there can be no standard approach to transparency. However, good practices should be understood and applied where applicable. The development of a “branding policy” was observed as a modern approach to give the NRO a positive image and cohesiveness but it needs to be better understood.

The fourth session was devoted to NRO practices for ensuring transparency and included presentations by RROs on lessons learnt from events occurred in Vandellós II, Paks and Forsmark NPPs and in Thorp plant as well as non conformities discovered during the construction of the new Oikiluoto plant. This session raised the questions on how much both the regulator and the utility should communicate.

The first observation was that there is a clear need for well established communication between the NRO and licensee and the NRO and the region/local authorities before an incident occurs.

Regarding the respective roles, it was observed that the regulator cannot communicate alone: it is imperative that utilities also communicate openly so that mistrust is minimised. Consistency in communications also garners greater public confidence. The utility should address the technical issues and conditions of its facility. The NRO should address the safety significance, the assessment of licensee performance and the regulatory actions being taken. However, the NRO must also know the technical facts and be able to explain them when asked.

It was finally noted that the best way to avoid loss of confidence is to disclose and investigate potential safety concerns in a proactive manner before they lead to concerns arising from a lack of information. This could be done by promptly reporting on the start of an investigation and providing results to the media, making the report available to the public, and avoiding underestimation of risk in the early stage. It is essential to avoid absolute statements before facts are known and evaluated and to check what information is available. In answer to the question “what if public confidence of the NRO is lost during an event?” experience has shown that it is advisable to invite an independent foreign organisation or group, or a trustworthy national evaluator, to investigate the incident, the NRO performance and/or plant performance and to report the results in public. Several options exist to achieve such an evaluation.

The last session was devoted to methods for evaluating transparency. It involved several nuclear regulators and one NGO. This session showed first that measuring transparency is difficult but it was agreed that what gets measured and made public gets done and done well. It also showed that it can nevertheless be done by different means: no single measure can evaluate transparency – multiple measures which are complementary are needed.

Opinion surveys may be a help as feedback on public confidence and awareness of the regulator. Public opinion surveys have, like other means and like all quantitative tools, their limits and it may be questionable whether they do actually evaluate the transparency of the regulator or something else.

It was also noted that new means of communication also provides new opportunities. Notoriety and transparency can be easily evaluated by looking at the overall Internet presence of your NRO.

2.6 General observations

After Europe, North America and finally Asia a first cycle of Public Communication workshops around the globe was achieved and this was considered as an opportunity to draw some conclusion in looking back to the progress made.

The concluding session in the Tokyo workshop led to the observation that progress had been made in developing common international understanding of the main features of public communication of the nuclear regulators since the first WGPC workshop in 2000. At that time the main conclusion was that only a few very general common statements could be made since communication was highly dependent on national culture and local practices.

However, it appears with time and this may be a consequence of the “media globalisation” that the public in many countries behave more and more in similar ways regarding its information request from a nuclear regulator. The continuous exchange of practices amongst nuclear regulators has enhanced their capacity to better address the concern of the public by a greater understanding of their expectations. In that regard the topic of regulatory transparency has proved to be a useful working area since there are common threads but the approach can differ from one country to another due to different socio-economic conditions and organisational structures.

Regarding the topic of transparency, it was observed that the more open a regulatory body is the greater chance it has to gain the confidence of the public. It could be said in other words: “The more naked - the more trusted”. In order to be better trusted by the public and media, it is essential to provide information likely to be of interest before it is even asked for, and to be prepared to answer any question, by being open and disclosing knowledge within the bounds of security and commercial restrictions.

The local session located to the nuclear city of Tokai-Mura, north of Tokyo, was devoted to an exchange with Japanese local residents about practices for improving communication in nuclear safety of their neighbouring nuclear facilities. It involved nuclear regulators and members of local associations.

It was observed that communication at this local level is a very important supplement to the official communication at the national level. It appeared that most of the lessons drawn from the Tokyo sessions at the national level regarding communication of the NRO with the public could be transposed at the local level in this particular situation. However, this would imply also that this is considered as part of the mission of a local NRO administration where there is one in place and also that resources are allocated for

NEA/CNRA/R(2008)4

this specific communication to the public. This implies also that effective and fast communications exist between the national and the local level of the regulatory organisation with regard to addressing stakeholder expectations.

3. BENEFITS FOR REGULATORS' COMMUNICATION PRACTICES

It is difficult to quantify the impact of WGPC activity since 2000 on the communication practices in various countries and among the participating regulators. However, a number of qualitative statements can be made.

The international news impact of any incident or event or media attention is reflected today much more at the national regulators. Some good examples from the recent years are the prompt information provided by national regulators on incidents like those of Paks NPP in Hungary, Forsmark NPP in Sweden, Leibstadt NPP in Switzerland and the earthquake impact on Kashiwazaki-Kariwa NPP in Japan.

The workshops and meetings organised by the CNRA/WGPC emphasised the important role of communication in the activity of the regulatory body. They confirmed that the regulators are faced with similar challenges including globalisation. Sharing experiences helped a lot in learning from each other and the members found new solutions for problems that arose in regulatory work. Some examples can be cited to show the usefulness of participating in the activity of the WGPC.

The CNRA/WGPC has proven itself to be a useful forum for discussing mutual difficulties and challenges, as well as comparing different solutions to them, in the field of public communication. To reach a round-table consensus on what constitutes “best practices” in public communication may not always be achievable, or even desirable, due to cultural dissimilarities, but the discussion itself may nevertheless provide new ideas and insights for the participants to bring home. In the long run, therefore, it is likely that public communication practices within the WGPC will change in the direction of greater harmonisation.

This chapter summarises hereafter the main areas where are identified the benefits of the CNRA/WGPC work for the NRO communication activities.

3.1 Development of communication plans

Development in nuclear regulators' communication activities is ongoing in most OECD countries and there is today practically no NRO that does not have a communication department or at least officers dedicated to deal with the issue of public communication. This reflects the fact that public communication is, more and more, identified as being an integral part of the regulators overall duties and responsibilities.

NROs have to implement specific actions in order to be first (better) known and then recognised as being a credible, legitimate and reliable source of information. This can be effectively managed only if this relies on a communication plan which has been established before. In the national as well as in the international field NROs, respectively the national authorities need established ways of communication. In case of an incident, the regulator or authority cannot be the only communicator. Communication – especially in an incident or in a crisis – needs coordination.

For most NROs, one of the missions consists of providing neutral and objective information about nuclear safety and radiation protection. Communication plans were established or even developed in many NROs at the turn of the millennium. They define the mission statement of the organisations, their communication strategy, their communication objectives and their communication targets.

In some countries, public confidence in nuclear safety regulations has become a pressing issue. In coping with this, many countries participated in WGPC activities actively to discuss how to better communicate with the public. On the basis of their experience from the communication with the public and lessons learned from the WGPC workshops, many countries formulated strategies for more effective communication: planning to identify public needs, using easily accessible and understandable mode, providing information in an open and transparent manner. The information exchange and discussion with the WGPC members were very helpful to several countries for benchmarking the best practices and particularly, WGPC workshop outputs provided them with the good direction for better communication with the public.

Finally, it was observed that several NRO had some difficulties to implement their communication plan. On the one hand, it appeared that the organisation was not well known by the population and on the other hand, internal communication was not well managed. This has been a topic discussed at WGPC meetings and workshops. Clearly, the lessons learned during these exchanges of experience between WGPC members were of a great help, however, this internal communication issue still justify further improvements.

3.2 Development of stakeholder involvement

One important task that is often discussed during the WGPC meetings is stakeholder involvement. Conclusions of workshops and WGPC discussions identified necessity of stakeholder involvement in nuclear safety as a serious matter which may enhance safety and support public confidence. It requires establish communication mechanisms and tools for discussions between the interested parties and those responsible for decision making.

NROs and national authorities should establish contact with national, regional and the local inhabitants. They should participate at public hearings and events. This is one way of openness and transparency and can help getting credibility and confidence. In more and more countries NRO staff takes part in public hearings or meetings (on national, regional and local level). People like to know “who is who”. The presentation of persons (e.g. employees of the authority) is easily remembered and credible.

For instance, in the UK, the Nuclear Installation Inspectorate (NII) site inspectors participate in Local Liaison Committees (LLC)/Site Stakeholder Group (SSG) meetings as part of the commitment to making information about inspection and regulatory activities relating to licensed nuclear sites available to the public. Each major licensed nuclear site has a liaison committee or stakeholder group, run by the licensee that includes local authorities, trade unions, interested local groups and members of the public. Reports covering activities associated with the regulation of safety at the sites are distributed quarterly to members of the committees and published on the HSE website.

It may be also worthwhile to mention that the WGPC has served as an inspiration and a model for the establishment of a Nordic public communication group. This group is represented by communication experts from Nordic nuclear and radiation protection regulatory organisations.

Another example, during these last months, is a round table that was organised in Belgium on the theme of accidental irradiations in the medical sector. Press and public opinion has been watchful since such an accident occurred in several hospitals. It appeared that some confidence would be lost among the population if there was no communication with the relevant stakeholders (patients, medical sector, journalists, NRO...). More recently, another example of round table concerned the issue of pregnant women. Many of them did not know the risks inherent to some radiological medical procedures, especially in the early stages of pregnancy – when numerous women do not know or are not sure they are pregnant. A communication campaign was organised, including FAQ, booklet, poster and website. Here again, it

seemed obvious that all relevant stakeholders (pregnant women, physicians, NRO, etc.) had to be involved. The expected results included a closer understanding of the needs and preoccupations of the patients; a better communication with the patients; a higher level of equity and quality concerning the NRO; and a greater confidence in the NRO.

It is also based on the exchange of experience among the communicators participating in the WGPC that, for instance, in Hungary the nuclear regulator HAEA has started a new communication strategy to directly contact people. It started cooperation with organisations well-known by thousands of people. With their help they are organising public seminars with several hundreds of participants and have had open house during the European Cultural Heritage Days since 2005. The name and methods of the cooperating organisations were used to attract many people to these events. They started to participate in events like Health Valley in Hungary which attracted about 60,000 people. Among them there were several hundred interested in nuclear issues. They used this opportunity to discuss nuclear safety and radioactive waste issues with them.

Finally, in more and more countries, NROs have built or are building-up a network of persons representing different sectors of the society: mass media, population, authorities, health professionals, etc. In parallel, several NROs have created and implemented a new graphic strategy (website, logo, picture...) closer to human preoccupations (protection of people and environment, transparency and openness). As a result, journalists are now using the photographs of these NROs, are taking part in their press conferences, are relaying their press releases and are interested in their actions. Doing so, step by step, the NROs have implemented a SI (Stakeholders Involvement) approach with their publics and partners. Relevant stakeholders are identified and involved in the decision-making process.

3.3 NRO websites development

Among others, it is clear that the use of the Internet has changed the audience of original documents and papers in allowing direct access to the public. By doing so, the interpretation and transfer of decisions and technical documents for the public are not only left to the media. This is a radical change in the possibility for directly communicating with the public and the way to build confidence.

In countries with extensive legal requirements on freedom of information and public access to official documents the web page is the natural way to expose and give out documents to the public. In some countries this is done with almost all documents being kept at the NRO. In other countries an evaluation is made of what might be of public interest for posting to the web. In any case, public access definitely increases the confidence in the regulator.

It is a problem for every organisation how to inform as many people as possible and to conduct two-way communications. The use of the Internet is increasing and NRO can measure how many visitors have gone to the site in a given period of time.

The websites of most NROs have been dramatically expanded (see addresses in Appendix) and improved during this decade, including very often the addition to English summary or highlights to the information given in the national languages. It is better fit to the real needs of the various target audiences. General information can still be found, but also specific responses to particular demands (scientists, NRO users, journalists...).

The internet has matured in recent years and the use of the web has become normal. Still the web is under rapid development. This rapid change is a challenge to the regulators, too. One has to provide new services for the public and for different stakeholder groups through the web. Public demands develop all the time.

3.4 NRO communicators' network

Hungary was among the first to use the “Flashnews” system mentioned before when they inform the WGPC about the serious incident at the Paks NPP in 2003. It proved to be a very fast and effective tool in communicating with colleagues working in other regulatory bodies. Moreover the next meeting of WGPC provided the opportunity to give a detailed presentation on the issue followed by a discussion on communication issues in an emergency.

Most WGPC members have highlighted the high interest for the NRO communicator to know each other and to be linked through this effective “Flashnews” e-mail network which allows them to be always prepared to respond to national media's questions about nuclear event occurring in another country and possible impact for the safety in their own country.

It is worthwhile here to highlight the fact that in most events having international impact and thanks to the efficient network developed through the WGPC members, they are the fastest interfaces between countries where an event has occurred and the technical people in their Nuclear Regulatory Organisation in charge of assessing lessons for their own national use. In that regards their role in the improvement of International Operating Experience Feedback may also be recognised as essential to successful communication.

3.5 Need for improving crisis communication

A challenge of itself is the use of the web during incidents and crisis situations. What information should be published and when and how can one guarantee access to the site for very large crowds.

An example of a recent difficulty in this area was observed at the Kashiwazaki-Kariwa Nuclear Power Station, in Japan, which was struck by Niigataken Chuetsu-oki Earthquake on July 16, 2007. The reactor performed its function of “Shut down, cooling and confinement”. However, such events as a fire of the outdoor substation and a release of a minute amount of radioactive materials happened. Even though it does not end up with nuclear hazard, when the whole site of a nuclear facility is struck by natural disasters such as earthquake, typhoon, tornado, tsunami or flood, it requires a crisis communication because it is not sufficient to communicate as if only the facility is concerned by the event.

Unfortunately, this event occurred before the public communication of the NRO and the utility could be improved on the basis of the CNRA workshop held a few weeks before in Tokyo. On this occasion, many insufficiencies have been revealed in the country's organisation, structure and ability to cope with such situations. Furthermore, from the view of the residents, it is not sufficient to be provided with information on the safety of the individual nuclear facility corresponding to the importance of the event. The lesson on the communication with the region can be summed as follows: to provide timely and concisely the information requested by the local residents on what happens in the whole nuclear plant (e.g., whether the evacuation is required or not). With regard to how the information will be provided in future, this was deliberated by the Investigation and Management Committee and a number of recommendations were agreed and presented in a report that was eventually published in February 2008.

In its (ongoing) work on developing an International Action Plan for strengthening the international preparedness and response system for nuclear and radiological emergencies, one of the actions identified by the IAEA was International communication (Action A), and more specifically, to review and enhance public communication arrangements (Action A.4). The expert group working on Action A.4 has profited on the comments given by the WGPC.

3.6 Importance of transparency and openness

Since the 2000 workshop, special attempts have been made at many NRO to improve transparency and openness with external and internal communication's targets. The interactions with the media become more and more frequent and press conferences are more systematically organised when an event of public interest occurs.

In many countries there are officially set of rules and procedures how to open important documents to the general public for comments. Individuals, groups or organisations have the right to present comments and proposals that decision makers should analyse and evaluate, before a decision is finally taken. It is very useful to share information about various methods for participation of stakeholders and discuss lessons learned from their use.

But after terrorist attacks in 2001 the questions emerged on need of restrictions on some information. Regulators should carefully calculated risk of releasing information that is too sensitive from the point of view of nuclear safety and security. Regulators should consider how to cope with questions of their responsibility for nuclear safety and security and openness and transparency. In some cases they should withhold the requested information.

Of course it is no doubt that final decision and inspection finding of regulatory bodies should be made public. The open question in this matter is what kind of information should be considered as sensitive? It might be an interesting task for future discussion in the WGPC.

3.7 The challenge of measuring public confidence

Measuring public confidence was not common in all regulatory bodies. Some of them conducted public opinion polls regularly while others did not have enough resources for such surveys. During the workshop in Ottawa the omnibus poll was mentioned as a possible way of asking the opinion of the public about regulatory issues without conducting a separate opinion survey. In some countries the NRO decided to join the regular opinion survey of local NPP and some extra questions have been included in the survey about the NRO. Since then they have been measuring the effectiveness of their communication by asking questions about the regulatory body and its performance.

4. CONCLUSIONS AND PERSPECTIVES

4.1 Results achieved

In about a decade expectations of the public regarding the Nuclear Regulators from all around the world have significantly increased and in turn the communication of Nuclear Regulatory Organisations has seriously developed its activities toward informing the Public. Communication practices, despite the fact they are, and they will remain for long, partly driven by the cultural context of the country, take more and more lessons from abroad. In addition, since the public is interested in what is occurring in other countries, it has become of paramount importance that NRO communicators maintain close contact between themselves so the community of NRO communicators has become the reference that cannot be ignored for informing the Public about nuclear safety. In that respect the long term objective of the NRO communicators' networks proved to be essential.

As mentioned in this report, amongst all benefits from the WGPC for the regulators, it should be highlighted the recognised importance of the WGPC networking with the “Flashnews” system and the good personal understanding existing within group members. Consequently, in most events having international impact the WGPC members are the fastest interfaces between what occurs in the affected country and the technical people in their Nuclear Regulatory Organisation in charge of assessing lessons form their own national use. In that regards their role in the improvement of International Operating Experience Feedbacks is essential.

In parallel, this decade of WGPC activity has shown that the former prevailing opinion that nuclear regulatory communication was very dependent on cultural context and that very little feedback experience could be exchanged amongst countries was less and less true. First the development of national Regulators' websites, which are by definition easy to access by foreign countries, has shown more and more commonalties in the type of information that is provided to the Public. It is clearly an area where the experience of the more advanced has to be used to help the less advanced. But – and this might be more important – it is now clear that a number of common principles and practices for public communication about nuclear regulatory activity are now shared by NEA countries' regulators.

As a consequence of an increasing convergence on communication principles and practices, new areas of practical interests are emerging for nuclear regulators so as to continue increasing the confidence of the Public. It should be emphasised that the main task of the NROs are the supervision of nuclear safety and the protection of public health and the environment.

Finally, it has appeared more and more with time that Public communication cannot indeed be only the duty of a small team but implies the involvement of the whole Nuclear Regulatory Organisation. Every NRO members should consider themselves as possible spokespersons of the values of their organisations, to continue increasing its communication efficiency. This may be of interest to be reflected in all NROs Actions Plans.

In summary, the CNRA/WGPC has covered much ground and come a long way since its inception. However, there is still work left for the group to improve the efficiency and effectiveness of public communication and to gain a high level of public confidence in the nuclear regulators within all OECD countries. Continuous attention must be given to increase public confidence in the way that NROs are responsible for the supervision of nuclear safety and for the protection of public health and the environment.

4.2 Proposals for future work

As a consequence of an increasing convergence between OECD countries on communication principles and practices, new areas of practical interest are emerging for nuclear regulators. This report has highlighted that NRO communication is clearly not a mere theoretical concept, but an act materialised through actual activities. Therefore, there exists a wide range of methods to conduct communication and it is needed to explore more effective ways of communication based on many new attempts.

Communication also starts with confirming whether the public is satisfied with what regulators do. For this purpose, a next workshop is recommended to discuss how to improve efficiency of the public communication.

As a working method, it is suggested that specific topics to be discussed at a meeting should be prepared in advance with designation of a “task leader” and resulting in a short document that captures the main outcomes in a format that is easily transferable within the whole NRO staff. Among the topics suggested for discussion and future work of the WGPC are the followings:

- Preparation of communication strategy for a NRO.
- Internal communication (topics, channels, evaluation of effectiveness etc.) and its impact on NRO public communication efficiency.
- Methods for effective communication (and possibly, development of public communication indicators).
- Measure and frequency of the communication of the NROs (How and when to communicate? How much is enough? Could it be too much?...).
- Surveys on public perception and the use of their results.
- Type of use of Internet by the nuclear regulatory organisations.
- Communication with special target groups (politicians, decision makers, local community etc.).
- Relation with the media in general (when to contact them, training, etc.).
- Relations with media in case of events (“how an event is defined”, “how the regulatory body is informed”, “what are the criteria used to decide when to communicate”, “what kind of communication”).
- Relation between openness and security issues.

After the third workshop, it was also suggested by the CNRA that the WGPC discussions do not limit itself to exchanges of practices for improving communication methodology but also provide assistance to regulators for communicating to the public specific messages, such as those contained in CNRA publication, for instance: “what is nuclear safety?”, “how the NRO ensure nuclear safety?”, etc.

In order to efficiently manage all this his work and taking stock of the experience of other Working Groups, the WGPC will develop its Programme of Work into an Integrated Plan, including tasks and schedule with a several years perspective that will be regularly updated and that will allow a closer follow-up and more efficient reporting to the CNRA.

5. REFERENCES

- [1] Investing in Trust: Nuclear Regulators and the Public - Workshop Proceedings - Paris, France, 29 November - 1 December 2000, OECD/NEA, 2001.
- [2] Building, Measuring and Improving Public Confidence in the Nuclear Regulator - Workshop Proceedings - Ottawa, Canada, 18 - 20 May 2004, OECD/NEA, 2006.
- [3] Transparency of Nuclear Regulatory Activities - Workshop Proceedings - Tokyo & Tokai-Mura, Japan, 22 - 24 May 2007, OECD/NEA, 2007.
- [4] Publicity of Regulatory Decision - NEA/SEN/NRA/WGPC(2006)4, June 2006.
- [5] Public Communication During Abnormal Situations - NEA/SEN/NRA/WGPC(2006)5, June 2006.

6. APPENDIX: NROs WEBSITES OF PARTICIPATING COUNTRIES

| Country | NRO | NRO Web site address |
|--------------------|----------------------------|--|
| Australia | ARPANSA | www.arpansa.gov.au |
| Belgium | FANC | www.fanc.fgov.be |
| Canada | CNSC | www.nuclearsafety.gc.ca |
| Czech Republic | SUJB | www.sujb.cz |
| Finland | STUK | www.stuk.fi |
| France | ASN | www.asn.fr |
| Germany | BMU | www.bmu.de |
| Hungary | HAEA | www.haea.gov.hu |
| Italy | APAT | www.apat.gov.it |
| Japan | NISA | www.nisa.meti.go.jp |
| Korea | KINS | www.kins.re.kr |
| Mexico | CNSNS | www.cnsns.gob.mx |
| Netherlands | VROM | www.vrom.nl |
| Norway | NRPA | www.nrpa.no |
| Russian Federation | Rostekhnadzor | www.gosnadzor.ru |
| Slovak Republic | UJD | www.ujd.gov.sk |
| Spain | CSN | www.csn.es |
| Sweden | SSM <i>formerly SKI</i> | www.stralsakerhetsmyndigheten.se <i>formerly www.ski.se</i> |
| Switzerland | HSK | www.hsk.ch |
| United Kingdom | HSE | www.hse.gov.uk/nuclear |
| United States | NRC | www.nrc.gov |

| | | |
|----------|--|--|
| OECD/NEA | | www.nea.fr |
| IAEA | | www.iaea.org |