CRN ROUNDTABLE REPORT

2ND ZURICH ROUNDTABLE ON COMPREHENSIVE RISK ANALYSIS AND MANAGEMENT

Risk Communication in Turbulent Times

Zurich, 12 May 2006

organized by the Comprehensive Risk Analysis and Management Network (CRN)





This report is available on the Internet: www.isn.ethz.ch/crn

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Table of Contents

| 1 | The | e Zurich Roundtables on Comprehensive Risk Analysis and Management: Background | and |
|---|------|--|-----|
| | Obj | jectives | 2 |
| | | | |
| 2 | Risl | k Communication: Introduction and Selected Key Questions | 3 |
| | 2.1 | Preliminary definition | 3 |
| | 2.2 | Approach | 4 |
| | 2.3 | Selected Key Questions | 4 |
| | | | |
| 3 | Key | note Address and Presentations | 6 |
| | 3.1 | «Expect the Unexpected»: Keynote address by Urs P. Knapp | 6 |
| | 3.2 | «Handling the Fear – The Case of 'Bird Flu'»: Presentation by Mr. Marcel Falk | 8 |
| | 3.3 | Presentations by participants | 10 |
| | 3.4 | Conclusions | 12 |
| | | | |
| 4 | Sele | ected References and Further Reading | 14 |
| _ | Dei | undtable Conclusions and Outlook | |
| 5 | KOL | indtable Conclusions and Outlook | 15 |
| 6 | Rou | undtable Program and Participant List | 16 |
| | 6.1 | Agenda of the day | 16 |
| | 6.2 | List of Participants | 17 |

1 The Zurich Roundtables on Comprehensive Risk Analysis and Management: Background and Objectives

The 2nd Zurich Roundtable, which took place on 12 May 2006 at ETH Zurich, continued the Roundtable series of the Comprehensive Risk Analysis and Management Network (CRN). It was successfully launched in December 2005 as a new format of discussion and exchange within the CRN, a Swiss-Swedish internet and workshop initiative for international dialog on national-level security risks and vulnerabilities. The CRN today consists of several partner organizations in Switzerland and other European countries, including the Swiss Federal Office for Civil Protection, the Swedish Emergency Management Agency, and the Norwegian Directorate for Civil Protection and Emergency Planning. Recently, the CRN initiative took important steps in expanding its international circle of partners. The German Federal Office of Civil Protection and Disaster Assistance, the Danish Emergency Management Agency, and the Ministry of Interior and Kingdom Relations of the Netherlands will join the initiative in the coming months.

The CRN Roundtables are intended as a platform for bringing together a select group of experts exploring the character and dynamics of the contemporary risk environment. By establishing a collaborative relationship and exchange among likeminded experts, they foster the permanent international risk dialog and contribute to a better understanding of the complex challenges confronting the risk analysis community today. The CRN Roundtables take place twice a year.

The CRN initiative is academically and logistically supported by the CRN research team, which is part of the Center for Security Studies at ETH Zurich, a renowned academic institute in the field of international and national security policy, guaranteeing top-quality organizational and academic support for the CRN initiative. More information about the CRN (www.crn.ethz.ch) and the Center for Security Studies (www.css.ethz.ch) can be found on the internet.

2 Risk Communication: Introduction and Selected Key Questions

2.1 Preliminary definition

The term «risk communication» implies a variety of definitional approaches. In its broadest sense, it refers to any public or private communication that informs individuals about the existence, nature, form, severity, or acceptability of risks. A more narrow use of the concept, which is specific to risk management, focuses on an intentional transfer of information designed to respond to public concerns or public needs related to real or perceived hazards.

Such a definition is often restricted to explaining how «experts» inform others about the «truth». However, in a broader and more comprehensive use of the term, technical elites are not the exclusive trustees of risk information. The following table shows how definitions of risk communication vary greatly in their latitude:

| | from a broad definition | to a narrow definition |
|------------------------|--|---|
| Intentionality: | Risk communication goal unnecessary | Intentional and directed outcome |
| Content: | Any form of individual or social risk | E.g., health or environmental risks |
| Audience directed: | Targeted audience not necessary | Targeted audience |
| Source of information: | Any source | Scientists and technical experts |
| Flow of message: | From any source to any recipient through any channel | From experts to non-experts through designated channels |

Table 1: Latitude of risk communication (Plough/Krimsky 1987: 7)

2.2 Approach

Approaches to risk communication may vary according to several factors. First, the approach depends on the *audience* that the message is targeted at: the general public, the media, organized interests (political parties, NGOs, etc.), other governmental agencies, private corporations, or other actors. Second, it depends on the specific moment in time at which communication is attempted: before the occurrence of a risk (hazardous event), at the time of occurrence (crisis), or after the occurrence of the risk. Third, communication can have different objectives: acquiring, promoting, and sustaining public trust and credibility; controlling the external and internal flow of information; or evaluating and optimizing risk communication

2.3 Selected Key Questions

A sample of selected key questions was formulated by the CRN team and distributed to the participants in advance. The goal is to give all participants the chance to prepare themselves. They also serve as common «guidelines» and offer an excellent starting point for profound discussions.

Risk communication management

Risk communication matters for policy success. A clear and well-defined risk communication management process covers objectives, responsibilities, planning, implementing, and evaluation.

What is your organization's approach to risk communication management?

after a crisis. And fourth, the *perception* gap between «real risks» and «perceived risks» must be considered. We know that risks are generally more worrying (and less acceptable) if they are perceived as being involuntary rather than voluntary, if they are inequitably distributed, if they cannot be avoided by taking personal precautions, if they arise from an unfamiliar or novel source, if they result from man-made rather than natural sources, if they cause hidden and irreversible damage, if they pose particular dangers to future generations, if they hurt identifiable rather than anonymous victims, or if they are thought to be poorly understood by science.

Are there any country-specific factors, e.g. due to a particular risk exposure?

- Do you have an established set of «best practices» throughout all governmental agencies?
- Is there a need to specify different objectives for different risk situations in different countries?
- ...

The role of risk analysts in risk communication

Risk analysts play a central role in risk management. However, getting the message across to the targeted audience is usually the domain of communication experts. Therefore, an intense exchange between the two is of crucial importance.

- What is the role of risk analysts in your organization's risk communication management?
- Do risk communication experts sufficiently take into account the expertise of risk analysts?
- What does your organization do in order to improve the exchange between analysis and communication?
- Which criteria ensure that scenarios (or risk analysis in general) are useful for communication experts?
- ...

Engaging the stakeholders and targeting the audience

Engagement and dialog with those interested in and affected by risk issues are vital. Thus, the key stakeholders have to be identified in order to tailor the risk communication message to the needs of the targeted audience.

- How does your organization identify and understand the opinions, beliefs, or preferences of stakeholders?
- In your country, which factors favor establishing an exchange or even a dialog with

stakeholders, and which factors militate against such a process?

- Does your organization take responsibility for facilitating a dialog between risk experts and lay people?
- ...

Integrating risk communication in a publicpolicy context

Risk communication is a principal instrument for putting policy into practice. It enables people to participate in deciding how risks should be managed, and it is a vital part of the implementation of governmental decisions.

- What is your organization's approach for connecting with political decision-makers in order to overcome the limits of our (country-) specific bureaucratic framework?
- How can risk analysts and communication experts work together in order to integrate risk issues more effectively into the regulatory process?
- Does your organization enable stakeholders to participate in the decision-making process on risk issues?

- ...

6

2nd Zurich Roundtable on Comprehensive Risk Analysis and Management

Keynote Address and Presentations 3

«Expect the Unexpected»: Keynote address by Urs P. Knapp 3.1

The 2nd Zurich Roundtable on Comprehensive Risk Analysis and Management was opened

with a keynote address delivered by Urs P. Knapp, Partner and Member of the Executive Management of Farner Consulting Ltd. Under the title «Expect the Unexpected», he divided his presentation into three parts. First, he positioned reputation and reputation management at the core of all risk communication activities. Then, he showed how risk communication must be based on strong issues management. Finally, he presented crisis communication as a tool to protect an organi-

zation's reputation, identified the essential aspects of crises and crisis management, and provided a series of case studies to exemplify his propositions. This summary briefly outlines Mr. Knapp's interesting and thoughtprovoking remarks, including the «questions and answers»-session, which was held after his address.

The essential task of risk communication is to protect an organization's reputation and to keep the trust of its stakeholders. To understand what reputation is, Urs P. Knapp cited Jeff Bezos, the founder and CEO of Amazon, who said that reputation is «what people say about you when you have left the room». Reputation takes years, even decades, to build. Yet it can be lost in seconds. Arthur Andersen, a

Urs P. Knapp is a Partner and Member of the Executive Management of Farner Consulting Ltd. Zurich/Bern. Prior to joining Farner Consulting, he was chief editor of the "Coop-Zeitung" from 1989 to 1999. Mr. Knapp is a specialist in crisis communications and issues management, on which he is also lecturing at the University of Applied Science Northwestern Switzerland.

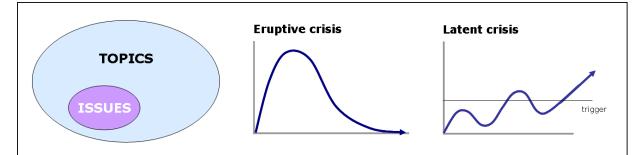
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Email: knapp@farner.ch Phone: +41 44 266 67 67. Big Five auditor with a proud and long heritage, vanished within weeks due to a single five-letter word: Enron. The reputation of an institution is largely dependent on the publicly accessible information regarding its trustworthiness. Stakeholders observe organizations mainly through the media and interest groups make use of the media to influence reputations. Thus, the media are important trust conveyers: they can grant – and withdraw – public trust.

Reputation management is a vital management task. The basic components of reputation are credibility, reliability, trustworthiness, and responsibility, which are all interconnected. The perception of an organization as trustworthy, credible, reliable, and responsible - that is: an organization with a solid reputation - is a very powerful tool that helps to quickly regain control over crisis situations. Reputation management must be implemented in all parts of an organization and is the responsibility of all employees.

Risk communication and reputation management must be based on strong issues management. Henry Kissinger, the former US secretary of state, once said: «An issue ignored is a crisis invited.» However, what is an issue? An issue is linked to topics, trends, or events, it establishes links between target groups and organizations, generates public awareness, creates potential conflicts, and shows actual or potential impact on the organization and its room for action. Therefore, not every topic is an issue. A good issues manager creates, secures, and exploits room of maneuver for the organization through an early spotting of risks, creating suitable plans for actions, making the organization and its top management fit for managing these issues, and communicating its position in-house and to the outside world. Strong issues management reduces the peramples include regulatory changes, strikes, or growing social tensions. Because most crises are latent crises, the need for a strong issues management is especially evident.

A variety of *driving forces* can aggravate a crisis situation: first, a lack of advance notice or inopportune timing makes crises more dynamic; then, interactions among participants influence crises; next, information that is incorrect, error-ridden, incomplete, or requires interpretation erodes credibility; and finally, memories of previous crises add fuel to new ones. The experience of various crises suggest some *critical lessons* for dealing with such situations: First, ensure orderly information flow internally and externally; second, observe



ception gap between the stated goals of an organization and the perceived reality by its stakeholders, and consequently can prevent an organization from entering unprepared into a crisis situation.

A *crisis* comes in two basic forms. On the one hand, there are eruptive crises, which occur abruptly, are often short-lived, and attract a high degree of media interest in the beginning. Examples are natural hazards or accidents of technical systems. On the other hand, there are latent crises, which send ambiguous signals, whose course and pressure alternate, and which attract cyclical media interest. Exand assess the world outside the organization and incorporate your findings into the strategic planning; and third, keep in touch with target groups, and absorb and analyze their reactions.

When it comes to the practical requirements of *crisis communication management*, one of the real cornerstones is calculability. Mr. Knapp's advice was: be consistent in what you have said, are saying, and will say; do as you say, and say as you do; state your intentions; and do all you say all the way. An important tool to help prepare for a possible crisis situation is a crisis manual, which provides the basic 2nd Zurich Roundtable on Comprehensive Risk Analysis and Management

facts on issues such as scenarios, target groups, checklists, or media training.

Mr. Knapp exemplified his comments with a variety of interesting *case studies*. They included an air traffic accident, faulty media reports on a terror attack and the calling-in of a faulty product. At the end, he confronted the participants of the Roundtable with a series of seven questions (plus sub-questions) with which any organization can perform a first check for assessing its crisis-preparedness.

After the presentation, the participants used the opportunity to ask questions and to make critical remarks. Four points should be highlighted: First, it was stated that there is a reciprocal relation between reputation and communication: on the one hand, it is necessary to communicate adequately to build up a solid reputation; on the other hand, a good reputation also helps to communicate, especially in crisis situations. Second, participants were advised not to speculate vis-à-vis the media about what could be or could possibly happen. It is better to tell the media only what you know for sure and to talk especially about the next steps in the information process, for example at what time the next press information will be released. Third, the situation in a business environment is not entirely the same as a governmental context. It was stated, for instance, that in government, there is an issue manager for every single issue, because the scope of governmental activities is global and all-encompassing. However, in both contexts, the decision-makers face a great variety of risks that have to be identified, assessed, and managed. Although differences can be observed that have to be acknowledged by risk analysts and communication experts alike, the basic objectives as well as the concrete tasks to be performed are more or less the same. Fourth, risk analysts should be aware that most governments are not interested in speaking about risks; especially not in public. Usually, they want to talk about security and safety, but not about possible risks. All decision-makers have a fear of becoming associated with certain risks, which would only hamper their reputation and diminish the trust of the people in the ability of its leaders. This is a largely media-driven logic, which risk analysts should understand, especially when complaining that risk analysis is not sufficiently taken into account by political decisionmakers.

3.2 «Handling the Fear – The Case of 'Bird Flu'»: Presentation by Mr. Marcel Falk

The afternoon session was opened with a presentation by *Marcel Falk*, spokesperson of the Swiss Federal Veterinary Office He spoke about the case of bird flu, which is an instructive and typical illustration of the challenges

faced in risk communication. Mr. Falk's central thesis was that risk communication is to a large extent about handling the *fear* of the people. Fear of bird flu is stimulated by many contributing factors: migratory birds infiltrating from the east; a changing and spreading agent that cannot be seen, smelled or tasted; popular misconceptions and ignorance concerning the risks for humans; and the lack of protection or defenses against it. Consequently, all the losses that occurred were due to fear: not a single chicken died of bird flu, but up to 20 per cent fewer chickens have been sold (in Switzerland). This also shows that the Federal Office has *two roles* to play: on the one hand it has to reassure the public that the situation is under control, and on the other hand it has to make clear to the chicken breed-

ers that the threat still exists and that the precautionary measures must be respected.

The *media* play an important role in shaping the risk perception of the public. Often, they do not mirror the existing fears correctly, or use alarmist headlines in order to win more public attention. The variety of fears connected

to bird flu also meant that the media covered this issue very extensively. However, a survey by a Swiss tabloid on public perception of the risk of bird flu also showed that the vast majority of the Swiss people felt well-informed and were not particularly worried. This result was quite surprising to the editors and did not match the newspaper's lurid headlines. In order to assess the level of fear, the Federal Veterinary Office operated an in-house hotline as a feedback instrument.

Mr. Falk recognized that there are *critical points* to discuss concerning the Office's risk communication in the case of bird flu. First,

bird flu as an animal disease on the one hand, and its possible effects on humans on the other hand, were often mixed together. Therefore, the Swiss administration decided to communicate separately on these issues through the Federal Veterinary Office on the one side, and the Federal Office of Public Health on the other side. The decision was often criticized and there were demands for a «bird flu czar». Nonetheless, Mr. Falk is convinced that it proved to be the right strategy.

Second, there was a gap between the Office's reassuring statements, which were cited

Marcel Falk is the Spokesperson of the Swiss Federal Veterinary Office. He is also the author of the Office's crisis communication concept. Prior to joining the Federal Veterinary Office, he was a freelance science writer and trainee editor for several Swiss and German newspapers and magazines. He studied molecular biology at the University of Basel. in the media, and the pictures published by the newspapers, which showed dying animals or humans investigating the disease in protective clothing. This contrast disturbs the broader public and instills even more fear. Therefore, the Office organized a photo opportunity for media rep-

resentatives to take pictures of healthy birds in an idyllic environment in order to communicate its own messages better.

Third, a gap also existed between the messages from the Swiss Federal Offices and the messages distributed by international organizations (such as the FAO or the WHO). The reasons can be found in their different tasks and objectives. First, global organizations have a different audience: they must take the needs of the whole world into consideration (and not only those of the Swiss public). Second, their primary task is to prepare for a global pandemic: they have to warn of the danger of the virus spreading to human beings in a more dramatic way than is necessary in a relatively safe country with a wellworking public-health system such as Switzerland.

Mr. Falk then presented some important *lessons* for risk communication. First, to build popular trust in the communications of the Office is a daily task: do not present too many faces and get your messages across in a comprehensible manner. Second, transparency is a

3.3 Presentations by participants

The Zurich Roundtables are intended as a platform for bringing together experts from various countries and different government agencies in order to share their knowledge and experiences. With this goal in mind, each participant – or small group of participants – is invited to give a short presentation from their national perspective on the topic under consideration. At the 2^{nd} Zurich Roundtable, eight participants used the opportunity to provide their colleagues with valuable input and thought-provoking insights.

The first speaker was *Dorte Juul Munch* of the Danish Emergency Management Agency. She highlighted that in Denmark, there is no central agency or office that is responsible for risk communication. In a crisis event, responsibility lies entirely with either the specific sector concerned or the police. She also mentioned that risk communication is largely focused on risks for individuals, because usually there are only a few large incidents in Denmark over a certain period of time. Finally, she explored key aspect: say what you are talking about, say what you know, and say what you do not know. Third, avoid disputes among experts by all means. Furthermore, Mr. Falk noted with respect to risk analysis that in a crisis, circumstances change very rapidly, so that expert opinions are more influential than risk analysis. Conversely however, risk analysis and possible risk scenarios are very important tools for designing the Office's long-term policy and communication strategies.

various aspects of risk perception that typically create communication problems. First, she asked how the authorities can convince people to take certain risks seriously, especially when their impact is underestimated by the general public. Second, she emphasized that various actors are involved in creating public risk images and especially the clash between the opinions of experts and those of laypeople can lead to discrepancies that ultimately disturb the whole risk management process.

Marc-Alexandre Graf of the Swiss Federal Office for Civil Protection pointed to the approach of anchoring risk communication in the Swiss civil protection organization through educational measures. This means that all staff, in particular the cantonal crisis management staff, are specifically trained in information and communication activities. Further, he underlined the need to enhance the dialog beyond the expert level to the general public in order to bring the publicly perceived risks in line with what the government considers to be the actual risk reality.

The next speaker was Stein Henriksen of the Norwegian Directorate for Civil Protection and Emergency Planning. He started his presentation with a basic taxonomy for differentiating risk and crisis communication. In his view, risk communication deals with potential risks (threats and hazards) before an event actually occurs; crisis communication conversely deals with manifest risks - or: crises - during and after the event or crisis. He criticized that there is much more awareness of crisis communication, which is also reflected in the manpower or resources allocated, as well as in the number of exercises or trainings conducted. Next, reiterating what had been said by his Danish colleague, he pointed out that there is no particular high-profile risk to Norway, and risk communication activities are not centralized, but fragmented and compartmentalized throughout the administration. Finally, he argued that many risk analysts are not aware of communication problems, are left on their own in communication situation, and tend to speak a «tribal language» nobody understands. The best way to communicate risks is to assist clients and stakeholders in performing the analysis themselves: they know their risks best, accept the analysis much more easily, and take the outcome seriously. Therefore, risk analysis should be process-oriented, methodologically simple, facilitate an easy learning curve of all participants, stick to plain language and illustrations, and not consume a lot of resources.

Jan Lundberg of the Swedish Emergency Management Agency pointed to the distinction between risk and crisis communication made by his Norwegian colleague. He claimed that risk communication is much vaguer and more difficult to justify. As a matter of fact, however, dealing with risks is the crucial task of government – before a risk becomes a manifest threat or hazard. Consequently, more attention should be paid to techniques such as «horizon scanning» or «forecasting». In addition, he again underlined that risk communication is fragmented within the administration, which is mainly due to the necessity of managing risks at the most appropriate and, preferably, at the lowest possible level of authority.

Lodewijk van Wendel de Joode of the Ministry of Interior and Kingdom Relations of Netherlands spoke as a communication expert to the participants. He presented the Dutch Expertise Center for Risk and Crisis Communication (ERC), which was established one year ago. In the Netherlands, therefore, there is a central agency for assisting the authorities on all levels of government (local, regional, and national) in mastering the communication challenges in a crisis event. The main domains of the ERC are the development of expertise through research and evaluation, assistance in policy-making through advice on risk and crisis communication (e.g. development of a practitioner's handbook), the provision of educational measures and the preparation of exercises, as well as the introduction of new technological tools (such as cell broadcast). The ERC has also established a website (www.crisis.nl) that serves exclusively in crisis situations as a platform for distributing all essential information (otherwise it is inactive).

Roland Bacher of the Swiss Federal Office of Transport gave an overview of the risks that may face a public transport system and of administrative task-sharing within the Federal Office. He started his presentation by emphasizing that the safety requirements in public transport have increased in recent years, largely driven by public concerns due to such accidents as the mid-air crash at Überlingen. The central goal of the newly established safety and risk management unit is to improve the management-process within the Federal Office in order to keep and enhance public trust in the safety of the transport system. At the same time, the message has to be communicated to the public that there is always a residual risk, even though the authorities are dealing with it to the best of their abilities. The specific task of risk communication lies within the scope of activities of the «public affairs» unit, which is composed of communication specialists. However, the tasks of the risk management unit and the public affairs unit cannot be separated. Consequently, they stay in close contact and regularly share their information and knowledge.

The next speaker was *Thomas Kuhn* of Armasuisse, the procurement and technology center of the Swiss Federal Department of Defense. He stated that the task of communicat-

ing risks is not emphasized at Armasuisse: there is neither an organizational unit dealing with risk communication, nor a clear concept for answering the question for what risks the organization is equipped for. He also noted that the risk assessments of the authorities and the surveys on risk perception by the general public reveal certain gaps that have to be addressed at the political level.

The last speaker was Giulio Gullotta of the German Federal Office for Civil Protection and Disaster Assistance. He argued that risk communication is always a two-way-process: It is essential to listen to the needs and thoughts of clients and stakeholders in order to come up with tailored solutions. Further, he claimed that the main topic of risk communication is how to deal with the residual risk. In his view, the residual risk a society is willing to take largely depends on its culture, history, experiences, and values. Lastly, he identified some key elements to describe the role of the risk analyst in risk communication. First, the analyst should trigger the communication process; second, she should provide information and input to the communication experts through regular or situational briefings; and third, she should assist the communication experts in «translating» expert knowledge into a comprehensible language.

3.4 Conclusions

A variety of topics came up repeatedly in the presentations and the discussions among participants during this one-day roundtable. These conclusions briefly summarize some of the most important points. They will also be linked to additional questions for which answers have yet to be found. *Trust and reputation* are the keywords in risk communication. To establish and maintain the trust of clients and stakeholders in the credibility, reliability, responsibility, and trustworthiness of governmental authorities – that is, trust in political leaders, public managers, and policy experts respectively – is the bottom line for all risk communication activities. More thinking and research should be applied to the question of what «reputation» actually means in a public-policy context, and what it means for a public agency to lose its reputation.

It is not surprising to note that the *media* play a crucial role in risk communication. In particular, they are an essential element in shaping public risk perception. This is even more important if one acknowledges that risks are to a large extent the product of a social process where risk perceptions are individually and collectively shaped according to preexisting values, preferences, identities, or interests. In this process, the media are a very important - in today's media society, maybe even the most important - actor. What remains to be explored in more detail is the question of how risk and communication experts can gain influence on the way the media covers certain issues. One instructive example in this context is the attempt of risk communication managers to provide the media with pictures that match the messages they want to get across to the public.

The different and rapidly changing risk perceptions in society are posing big challenges for risk communication. To get the right message across to the right group of people at the right time is quite a difficult task. Nevertheless, this challenge also opens up new op*portunities for risk analysts*. In the future, they should try to spot emerging risks at an even earlier stage as well as develop a sense for the possible reactions of the people vis-à-vis upcoming risks. Because good risk communication starts with a survey on public risk perception, risk analysts will gain a crucial position in an organization's risk management if they are able to contribute effectively to this process. It also follows that risk analysts and communication experts have to work closely together in order to get the best results, which means building public trust in the ability of government. More emphasis in research and practice should be put on exploring the best and most established practices for managing the relations between risk analysts and communication experts.

Risk and crisis communication can be distinguished from each other: while the latter deals with actual crises or «manifest risks», the former is concerned with communicating about emerging or potential risks. These different tasks also require different approaches. Nowadays, crisis communication is quite well established and accepted as an important governmental task. Consequently, the necessary resources to perform this task are usually made available. The need for risk communication, however, and therefore the need for appropriate resources, is much more difficult to justify because this discipline deals with possible risks that may or may not materialize into actual damage. This makes risk communication a much more difficult and challenging task.

4 Selected References and Further Reading

- Comprehensive Risk Analysis and Management Network (2003). *Risk and Crisis Communication: Creating a Research Agenda from a Security-Policy Perspective (CRN-Workshop Report)*. Zurich.
- Freedman, Lawrence (2005). «The Politics of Warning: Terrorism and Risk Communication.» *Intelligence and National Security*, 20(3), pp. 379-418.
- Gutteling, Jan M. (2002). «The Role of Expertise in Risk Communication: Laypeople's and Expert's Perception of the Millennium Bug Risk in The Netherlands.» *Journal of Risk Research*, 5(1), pp. 35-47.
- Gutteling, Jan M. / Wiegman, Oene (1996). *Exploring Risk Communication*. Dordrecht: Kluwer.
- Inter-Departmental Liaison Group on Risk Assessment (1998). *Risk Communication: A Guide to Regulatory Practice*. London.
- Kasperson, Jeanne X. / Kasperson, Roger E. (eds.) (2005). *The Social Contours of Risk: Publics, Risk Communication and the Social Amplification of Risk.* London: Earthscan.
- McComas, Katherine (2006). «Defining Moments in Risk Communication: 1996-2005.» *Journal of Health Communication*, 11(1), pp. 75-91.
- Munich Re Group (2002). *Risikokommunikation*. Munich.
- Plough, Alonzo / Krimsky, Sheldon (1987). «The Emergence of Risk Communication Studies: Social and Political Context». *Science, Technology, and Human Values,* 12 (3/4), pp. 4-10.
- Slovic, Paul, «Perception of Risk», Science, 236 (4799), 1987, pp. 280-5.

5 Roundtable Conclusions and Outlook

The main purpose of the CRN Roundtables is to facilitate the international dialog on risk analysis by offering a platform for sharing experiences and exchanging views, opinions, methodological approaches, innovative solutions, etc. The problems of risk analysis are often quite similar in different countries, so that risk practitioners and experts can learn a lot from each other and motivate one another.

The participants of the 2nd Zurich Roundtable on Comprehensive Risk Analysis and Management again provided the organizers with very positive feedback on the preparation and the realization of this event. This encourages the CRN initiative to continue this successful format and to invite participants to a 3^{rd} Roundtable on Friday, 24 November 2006, again at ETH Zurich.

The next Roundtable will take up the question of how emerging risks can be identified at a very early stage. It will explore the area of future studies (or futurology), present expert opinions on methodical approaches, and again provide enough time for discussion and informal exchange of (national) experiences.

The CRN research team is already looking forward to the 3rd Roundtable and will be very happy to welcome you in Zurich.

6 Roundtable Program and Participant List

6.1 Agenda of the day

| 09:00 | Arrival of participants / Coffee & Tea | | |
|---------------|---|--|--|
| 09:30 - 09:45 | Opening of the 2 [№] Zurich Roundtable | | |
| 09:45 – 10:00 | CRN Introduction: New Developments Myriam Dunn, <i>CRN Coordinator</i> | | |
| 10:00 - 11:30 | Session I: • Keynote Speech: Mr. Urs P. Knapp, Partner, Farner Consulting AG, Zurich • Questions & Answers, Discussion | | |
| 11:45 - 13:15 | Lunch Break Dozentenfoyer, ETH Zentrum Hauptgebäude | | |
| 13:30 – 15:00 | Session II: A practitioner's point of view: Mr. Marcel Falk, Spokesperson, Swiss Federal Veterinary Office, Bern Questions & Answers, Discussion Presentations by participants | | |
| 15:00 – 15:30 | Coffee break | | |
| 15:30 – 17:00 | Session III: • Presentations by participants • Questions & Answers, Discussion | | |
| 17:00 – 17:15 | Conclusions / Final Remarks | | |

6.2 List of Participants

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The 2nd Zurich Roundtable took place on 12 May 2006 at ETH Zurich. It continued the Roundtable series of the Comprehensive Risk Analysis and Management Network (CRN), a Swiss-Swedish internet and workshop initiative for international dialog on national-level security risks and vulnerabilities.

The Center for Security Studies of the ETH Zurich (Swiss Federal Institute of Technology) was founded in 1986 and specializes in the fields of international relations and security policy. The Center for Security Studies is a member of the Center for Comparative and International Studies (CIS), which is a joint initiative between the ETH Zurich and the University of Zurich that specializes in the fields of comparative politics and international relations.

The Comprehensive Risk Analysis and Management Network (CRN) is an Internet and workshop initiative for international dialog on national-level security risks and vulnerabilities, critical infrastructure protection (CIP) and emergency preparedness. Originally launched as a Swiss-Swedish Initiative, the partner network today consists of partners from six countries: the Federal Office for Civil Protection and Disaster Assistance (BBK), Germany; the Danish Emergency Management Agency (DEMA), Denmark; the Directorate for Civil Protection and Emergency Planning (DSB), Norway; the Federal Office for Civil Protection (FOCP) at the Swiss Federal Department of Defense, Civil Protection and Sports, Switzerland; the Federal Office for National Economic Supply (NES) at the Federal Department of Economic Affairs, Switzerland; the Ministry of Interior and Kingdom Relations, Netherlands; and the Swedish Emergency Management Agency (SEMA), Sweden.

As a complementary service to the International Relations and Security Network (ISN), the CRN is coordinated and developed by the Center for Security Studies at the Swiss Federal Institute of Technology (ETH) Zurich, Switzerland. (www.isn.ethz.ch/crn)