

Sharing experiences about the uses of social sciences in risk assessment and/or regulation organizations in fields related to health, food and the environment

CSO

Workshop - 7 & 8 January 2013

Sciences Po - Amphitheater Erignac - 13, Rue de l'Université - 75007 PARIS

Summarized proceedings

AGENDA

8h45 - 9h15 Regist	ration				
9h15 - 9h30 Openin	ng by Marc Mortureux, Director-General of ANSES				
Chair: Ragnar Lofsted	t – King's College London, UK				
9h30 - 9h50	"A role for the social sciences in science-based decision making?" - Olivier Borraz (CSO)				
9h50- 10h30	Presentation of the results of the study on « The use of social sciences in public risk assessment and risk management organisations" - Cécile Wendling (CSO)				
10h30 - 11h15	"The role of social sciences within the BfS (Federal Office for Radiation Protection - Germany): risk communication and empirical research" - Bernd Grosse				
11h30 - 12h15	"E.T. go home: social sciences in the Environmental health unit, at the Institut National de Santé Publique du Québec"- Geneviève Brisson				
12h15 - 13h00	"Social sciences at the UK Food Standards Agency as illustrated by meat controls research and Food and You" - Sian Thomas & Joy Dobbs (SSRC)				
Lunch					
Chair: Lise Rochaix - French National Authority for Health, France					
14h00 - 14h45	"The opening up of expertise and uses of social sciences within Anses" - Benoit Vergriette (Anses) & Daniel Benamouzig (CSO)				
14h45 - 15h30	"Social sciences at the BfR (Federal Institute for Risk Assessment - Germany): the example Nanotechnology" - Astrid Epp				
16h00 - 16h45	"It is all a matter of mind. An RIVM (National Institute for Public Health and the Environment –NL) perspective and two cases."- Ric Van Poll				

16h45 – 17h30 "Social sciences in a delivery body"- **Ronan Palmer, Environment agency - UK**

TUESDAY 8 JANUARY 2013

Chair: Danielle Salomon - CSO, France

9h00 – 9h15 "Key points from first day of the workshop". **Alain Kaufmann - University of Lausanne, Switzerland**

9h20-11h00 Two parallel sessions working simultaneously on two themes:

Theme 1 – What should be done in terms of knowledge production, capitalization and diffusion in the social sciences on issues related to health, food and the environment?

- How should available knowledge be collected, analyzed and made available to agencies and their experts?
- o How should social science researchers and experts interact?

Theme 2 – Should a network of social scientists and social science research centers working in or for agencies be set up?

- What should be its ultimate goals and practical objectives?
- o How should it be organized and how should it operate?

Coffee break

11h30 – 12h45 Restitution of the two parallel sessions and general discussion

12h45 -13h00 Conclusion of the workshop

Lunch and end of the workshop.

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OLIVIER BORRAZ

A role for the Social Sciences in science-based decision making?

Olivier Borraz is CNRS research professor at the Center for the Sociology of Organisations at SciencesPo.

Human and Social Sciences (HSS) are gradually being more involved in risk assessment and management. A bulk of research is now available to managers and regulators and a lot of people are willing to be involved in this collaboration. This echoes a trend in HSS themselves: more research is being conducted on environmental health, food safety and occupational risks.

HSS have been historically involved in risk assessment activities, through their various sub-fields, epistemologies and methods. However, they often stay "at the margins" of regulation activities, as shown by the four main domains in which they are called upon, whether it is:

- (1) To bridge the gap between Science and Society: a gap seen as leading to a loss of trust from the public. Works on the public's understanding of Science is mobilized to reduce this gap (risk perception and communication, public acceptance etc.).
- (2) To reinforce the legitimacy of the agencies' work: acknowledging the fact that the thickness and complexity of society needed particular expertise prompted the use of HSS to accompany the work of agencies, without really changing it (cost/benefit analyses, impact assessment, problem-framing, relations with stakeholders etc.).
- (3) To analyse the context: sometimes in order to avoid controversies and conflicts, HSS were involved either upstream (providing information on social contexts, the origins of a problem, advice on stakeholders etc.) or downstream (e.g. for discussing the results) in agencies' work.
- (4) Altogether, core processes remained around natural and medical sciences; HSS knowledge did not seem robust or scientific enough to fit within the framework of risk analysis.

But HSS have now begun to be involved in the core production of knowledge inside agencies. It is now recognized that agencies' objects are very complex and raise political and social questions that cannot be solved by Science alone. Providing knowledge on actor's practices and behaviours is no marginal help: it is an essential work (how do farmers use pesticides? How are they exposed to it? How is the antibiotics market organized? How do people use them?). Besides, there are different epistemic cultures, ways of producing evidence, views on causality and conceptions of uncertainty: HSS are important because they can reveal those conceptions. HSS can study the political economy of knowledge production and diffusion, as well as the production of ignorance, doubt, and uncertainty.

HSS sometimes tend to reveal more problems than they solve initially, thus widening the range of uncertainties. The need for this kind of knowledge is recognized but does not always fit in the existing procedures: it rather tends to question them. In other words, social sciences have implications for the organization of risk assessment: they may point out contradictions or limits in the procedures. Thinking about what socio-economic expertise could be in the future, it appears that we need to move from: (A) producing a single advice to a continuous production of expertise, a constant reevaluation of data and recommandation; (B) from risk assessment based on data to risk assessment based on experimental knowledge: for instance, following technologies as they are implemented and developped; and (C) from expert groups working on building a consensus to building scenarii based on different points of view and assumptions.

CECILE WENDLING

Results of the study on "The use of Social Sciences in public risk assessment and risk management organisations".

Cécile Wendling is Director of studies at the think tank Futuribles and a research associate at the Center for the Sociology of Organisations at SciencesPo.

The study excluded Law and Economics, focusing on the rest of Human and Social Sciences. Seventeen risk organisations in Europe and North America were surveyed, in which units where HSS scientists worked were identified (only a few of them were specifically HSS-oriented), and a total of 150 phone interviews were conducted.

Why use social sciences in risk organisations?

In the first instance, HSS are brought into agencies to improve methods: e.g. to assess sample quality or to conduct qualitative interviews. Units were created to have a better understanding of the fears of the population, to be a link with society, sometimes after a crisis or the unfavourable public reception of a report. Ethical reasons were an incentive for hiring philosophers and theologists (e.g. in Germany). HSS are supposed to clarify the distinction between scientific and political debate, and scientific and ethical issues. Finally, HSS are used for a better understanding of the organisational aspects of expertise and the institutional context of a risk.

Choices: different roles...

When deciding to involve HSS in risk assessment procedures, agencies can opt for different layouts. Should HSS experts be embedded in specialized teams or constitute separate groups? Should they be internalized (as in the RIVM and the BfR) or outsourced through calls for research projects (as in Canada)? HSS may also play different roles in the organisation: they may **reveal implicit aspects of risk** assessment and management (RIVM); **contextualize issues** (HSE); provide a strategic foresight and **improve social awareness** towards new risks (Austria); **enhance communication** with stakeholders and the general public (BfR); be an **ex-post** analyser, highlighting lessons learnt (Canada); guaranty the good use of methods and **provide data** (FSA) or **represent minorities** and educate people to risks (Canada). Occasionally, HSS have no part in risk expertise at all and provide only fundamental research.

...For different outputs.

HSS expertise allows for multiple kinds of results. It may be a report on the **social aspects of risk** (literature review, survey, focus group, Delphi, discourse analysis etc.); a "mini checklist" or "**quick scan**" of social aspects to consider; a **foresight study** on emergent risks; a **statistical study**, together with the Economics or Communications unit. Besides, HSS can operate at the Micro (individual behaviour) or Macro (systemic, political aspects of risk) level.

Different organisational structures.

If there is a dedicated HSS unit, it could be inside the Strategy, Ethical, Communications or Methodology department. HSS expert panels' denomination may vary and they are difficult to locate in the organisation. In a few agencies, a Social Sciences research committee has been set up. HSS can intervene at different steps of the risk assessment process: before the work starts (question framing), during the expertise (long-term involvement) or after the work is done (communication with the public and stakeholders, based on a report).

Difficulties and opportunities

At times, it appears that there is no clear understanding of the added value of HSS: when the organisational culture is not prone to integrate it or when the HSS unit is in small numbers or without a clear budget line. People with double curriculums are key resources, being conversant in several disciplinary languages. Building an interdisciplinary approach and training experts to HSS methodology and tools takes time but is very rewarding. That is why HSS units in agencies need to regroup together.

Discussion

Major crises are indeed windows of opportunity, but can also draw the process backwards. There is probably no optimum structure for HSS in agencies; no one-size-fits-all model. Embedded social scientists in expert panels, gathering information and sending feedback to a specific HSS unit could be an idea. HSS units need to deal with different schools of thought inside Social Sciences and look for interdisciplinary people.

BERND GROSCHE

The role of social sciences within the BfS: risk communication and empirical research.

Bernd Grosche is the Head of the Working Group Radiation Risk and Radiation Protection Concepts incl. Risk Communication at the BfS.

Involvement of social science in the Federal Office for Radiation Protection – and its predecessor organisation – in relation to radiation risks dates back to 1981 (at first, for social indicators at a district level). BfS now engages about 15 social scientists among its 800 employees, the majority of them working for press information and public relations. With respect to research, competence in social sciences was important in the aftermath of the Chernobyl accident and later when studies were planned and carried out, investigating the incidence of childhood leukaemia around nuclear power plants. More recently, the execution of the German Mobile Telecommunication Research Programme (DMF) revealed the necessity to involve social sciences in planning and conducting large-scale research programmes. Other relevant topics are nuclear waste issues and the Fukushima crisis.

The BfS Department of Radiation Protection and Health (DRPH) monitors, *inter alia*: risks from ionizing (e.g., radon in homes) and non-ionizing radiation (e.g. mobile phones, UV, EMF). Topics for HSS experts in these areas are amongst others: risk awareness surveys (e.g. on radon); development of concepts for public participation procedures, in particular for nuclear waste disposal matters and for construction of new high-voltage power lines; and preparing for crisis situations like nuclear accidents. The Department does not only direct communication on particular occasions but also undertakes information campaigns, e.g. with respect to UV radiation.

Work on risk awareness has to be continuous and stakeholders have to be constantly involved in the process. Evaluation of BfS' work and its public perception is regularly conducted. A Handbook on Risk Communication for internal use has been elaborated as a tool for non-HSS experts and is considered as a living document for which the content will be updated on a regular basis and new topics added. It focuses on Office's key topics and aims at practical uses. Additionally, it sums up risk communication basics, the core features of the BfS and works on risk perception, production of scientific evidence and uncertainty, stakeholder participation etc. The Department of Protection and Health is currently developing behaviour models, combining approaches from behavioural sciences (e.g. sociology, psychology) with environmental economy.

The German Mobile Telecommunication Research Programme¹ (DMF), conducted between 2002 and 2007, embodies the BfS's commitment for actors' participation (online and physical public consultations were held during the process) and acts as a showcase for BfS' work. Communication is of central importance: everything was made public via the internet. Network operators joined the programme voluntarily and participated in the funding without influencing the research projects and their design. The research projects themselves were defined with the participation of representatives from a dozen institutions. The public had the opportunity to comment of the study plan. To that end, it was made

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¹ http://emf-forschungsprogramm.de/

available on the internet before it started. Further, a 'best practice' portal has been set up in order to provide advice to communities willing to build new antennas.

Discussion

It is very important for the BfS to cooperate with NGOs and 'lay experts' when possible. DMF and childhood leukaemia programs included concerned groups. Another example of the importance of cooperation with NGOs can be seen in Fukushima. After the March 2011 accident, agencies and counter-experts throughout Europe and in Japan generally came up with similar results from environmental radiation measurements: a remarkable concurrence. The BfS, as other agencies, is often confronted to controversial matters: hence the need to deal with dissent among experts and scientists. It should be acceptable to justify personal doubts about an official statement in a public meeting. The public acceptance of DMF study results was much higher due to early involvement of stakeholders.

GENEVIEVE BRISSON

« Rentre à la maison E.T. »: la place des sciences sociales dans l'unité de santé environnementale de l'Institut national de santé publique du Québec. Présentation donnée en anglais, avec support visuel en français.

'E.T. go home': social sciences in the Environmental Health unit, at the *Institut National de Santé Publique du Québec.*

Geneviève Brisson, Ph.D (Anthropology) is coordinator of the Environmental Risk Assessment Team, Environmental Health Unit, at the INSPQ.

The Institute for Public Health (INSPQ) is one of twenty in the province of Québec, one for each administrative region. Clinical medicine and individual health do not fall under its scope, and the bulk of the decision-making in public health takes place at the federal or province level. However, National Institutes are in charge of public information, risk assessment, prevention, and protection of the populations in Québec. Unfortunately, NGOs are not major players in this system. The INSPQ supports the regional health network with expertise and services (labs, research...) on health-related issues (e.g. public health policy, toxicology, occupational and environmental health, life habits). It has 900 employees with various backgrounds.

The Environmental Health Unit (EHU) accounts for more than 110 people, split into 12 scientific units (air and water quality, radiation, emergency, toxicology, environmental impact etc.) but it employs only one social scientist. For fifteen years, the Institute has followed a global, holistic approach from question framing to feedback on current interventions, guided by seven principles: Protection of health, Caution, Scientific accuracy, Equity, Transparency, Openness, and Empowerment. Risk assessment in this model is not taken as an isolated activity; it is intertwined with every step of risk management. HSS methods are not only used for usual enquiries, they engage a long-term questioning about utilitarianism, reflexivity in Science and giving a voice to laypeople, creating equity between stakeholders involved.

HSS expertise in the INSPQ is ensured by one environmental anthropologist, providing supporting information (e.g. literature, advice) to the health network on multiple topics. She intervenes at all levels in the regional organisation, often regarding human-nature interface issues such as erosion, agriculture, dams or windmills. HSS are called upon to provide advice on management and feedback methods, as well as for developing dialogue between experts and to include lay knowledge in risk assessment processes. Cyanobacteria "green blooms" on lakes in 2007 triggered a crisis and drew a lot of media attention on

environmental health policies. The EHU released a study relying on two separate reports: one in HSS², one in Epidemiology.

The reports identify and quantify causes for health risk and environmental factors, along with social representations of the bacteria and public perceptions of risk management by the two ministries in charge. They were handed out simultaneously to informants and decision-makers but presented separately. The HSS report, which did not only focus on quantitative risk assessment but included qualitative results on the bacteria's public representations, was more widely used than the epidemiological study. It highlighted contradictions in messages delivered in information campaigns and was eventually of a bigger help for decision than the first report, which found no risk at all. The report can be considered a success but the next step, or challenge, will be to integrate HSS methods and results to epidemiology and risk assessment studies from the beginning, and present joint results.

For HSS knowledge to gain wider use in the health field in Canada, it will need to convince "hard science" experts of its usefulness when other units have greater budgets and equipment needs. Communication work has to be done to explain the need for solid field work, for instance, or when it comes to the expert's own subjective perception of risk. HSS research seems actually more valued outside the INSPQ, among health network members: outside recognition (University, broader network etc.) can be of tremendous help inside a work environment, provided that the HSS work is at least as rigorous and accurate as epidemiological studies, for instance.

SIÂN THOMAS AND JOY DOBBS

Social Sciences at the UK Food Standards Agency as illustrated by meat control research and Food and You.

Siân Thomas is the Joint Head of the Social Science Research Unit at the Food Standards Agency and Joy Dobbs is the Deputy Chair of the Social Science Research Committee.

The FSA is an independent government department responsible for food safety and hygiene across the UK. It reports to a board and communicates through the Department of Health; to which a former Agency's domain, dietary health, has been transferred following the 2010 change of government. A key consideration in the Agency's work is transparency: all the evidence supporting advice given by the FSA is made publicly available and all meetings of the Scientific Advisory Committees (SAC's) and the board are held in public (with board meetings being webcast), making occasional dissent among scientists in SACs visible.

Social Sciences have been used in the Agency practically since its inception, with the Social Science Research Unit (SSRU) being established in 2007. In 2008, the Social Science Research Committee (SSRC) was set up, to provide social science expert input across the remit of the Agency, including working with the other SAC's. The social science resource within the Agency is not large: the SSRU has seven posts (with only four filled at present) and the SSRC is comprised of ten expert and two lay members. A key measure of success of integration of social science within the Agency is that social science is accessed and used in policy making in a way that is similar to the Agency's use of the natural and physical sciences.

The FSA carries out reputational surveys on the Agency's work (by quota sampling, recently reduced from every quarter to every six months) and other surveys on an ad hoc basis. Shortly after its creation, the SSRC considered the Agency's access to data from public surveys and recommended the initiation of a time series based on random probability sampling. Initially, the Committee focused on quantitative methods in social science, not to mimic 'hard science', but to promote a wider use of social science in general (i.e. among natural scientists) by making surveys more robust. As a result of the SSRC

²Dimensions Sociales Associées à la Prolifération des Cyanobactéries au Québec (PDF)

recommendation, in 2009 the FSA's "flagship survey", Food and You³, was commissioned. To date there have been two waves between 2010 and 2012, with the survey providing snap shots of peoples knowledge, attitude and behaviour in relation to the Agency's key priorities. In wave 2 analysis included development of composite measures: an index of recommended practices considering individuals behaviours in relation to the Agency's key food safety messages.

A useful lesson from the Food and You survey was that few people are actually doing all that the Agency advocates. Differences in attitudes across the population (according to gender, age, profession etc.) towards domestic food safety, new food technologies or "concern" were also questioned. Furthermore, an important result of the study is that, compared with wave one (2010), there was more evidence in wave two (2012) of people changing their behaviour for financial reasons.

In 2009, the FSA initiated a review of evidence underpinning the meat control system in the UK. As part of this the Agency commissioned a social science research project which had three domains of inquiry: behavioural and social influences of meat industry actors, how they take ownership of food safety and their approaches to enforcement. The project consisted of twenty-four two-day case studies (in depth and follow-up interviews, observation) - conducted in a harsh research environment (noise, smell etc.). It adopted a continued analysis scheme for more accurate insights and improved interviews in each round. An important clue from the study is that no actor takes ownership of the entire food chain, but only of what they deem the most important.

Discussion

The SSRU contracted out the conduct of the Food and You survey but worked with an advisory group to specify the methodology and make sure that the research focused on the agency's objectives. The initial concentration on quantitative methods has worked well in gaining acceptance for social science across the agency and helped top open the way for subsequent qualitative research and follow-up. Articulation between both approaches is very important. Transparency guidelines pushing towards a "consumer approach", the Food and You survey implicitly assumes that some food-related risks lie in people's attitudes and behaviours. The SSRC focuses on these, whereas in France it is considered that food safety lies outside the habitat. There was discussion of the possible tension between guidelines based on 'expert' views of what is safe and public perceptions of food safety and risk. If the bulk of the respondents don't follow the Agency's recommendations, the survey could be a tool to convince decision-makers to adjust their policy to make it more relevant to peoples' lives.

BENOIT VERGRIETTE AND DANIEL BENAMOUZIG

The opening up of expertise and uses of Social Sciences within ANSES.

Benoit Vergriette is the head of the Risks and Society Unit at ANSES. Daniel Benamouzig is a sociologist and CNRS Senior Research Fellow at the Center for the Sociology of Organisations at SciencesPo. He is also a permanent member of the Public Health and Economic Assessment Committee in the Higher Authority of Health (HAS) in France.

French National Agency for Food safety, Environmental and Occupational Health's missions include: human health and safety at work, in food and the environment, plant safety and animal welfare. The Agency employs a staff of 1350. 800 external experts are appointed to participate in expertise collective after applying to open calls. The independence of ANSES's expert assessment is based on several essential points: compliance with ethical standards to prevent conflicts of interest, a formal framework for collective and adversarial expertise allowing for the expression of minority opinions, and social representativeness which respects the roles of all the stakeholders involved.

³ http://www.food.gov.uk/science/research/ssres/foodandyou/foodyou10#.UQ6Gc6XuDJI

Risk assessment is accomplished by collective expertise, including dialogue with stakeholders and more recently inputs from Social Sciences. The Risk and Society Unit (four staff members), in charge of promoting these two activities, has cross-functional activities in the agency (intervening at various stages of risk assessment processes, in expert groups etc.) and partners up with academic research centres (e.g. the Groupe de Sociologie Pragmatique et Réflexive, which deals in digital humanities and the Center for the Sociology of Organizations).

Stakeholders' participation is promoted in different ways and levels in the organisation: participants from NGOs, Industries, or Trade Unions are included in the Agency's governance bodies (administration board, Thematic Orientation Committees on specific domains etc.) as well as in dialogue committees, focusing on emerging issues (e.g. Radiofrequencies or Nanomaterials). From upstream engagement to downstream information, conditions for fruitful discussions are sought. Information meetings are held twice a year on transversal themes, consultations, hearings and interviews are conducted regularly and treat lay knowledge as a valuable input. A constant watch is maintained over international networks and social movements related to the Agency's topics. These activities are in accordance with a charter⁴ signed by ANSES in 2001 designed to (1) improve openness and transparency in expertise and risk assessment activities, (2) make visible scientific knowledge and uncertainties (e.g. minority positions, controversies) and (3) augment public participation (e.g. information, training, public debate).

Several expert groups now incorporate HSS skills when dealing with particularly complex and controversial topics, such as radiofrequency emissions, nanomaterials, endocrine disruptors, pesticides, etc. To strengthen the integration of these disciplines in the collective expert appraisal groups, a group of HSS experts (primarily in sociology, economics and law) was established in November 2012. The mission of this group of sociologists, lawyers and economists is to provide analytical information useful to the risk assessment process, from its construction until receipt of its results. It will also help formalise the contribution of cross-disciplinary approaches in the Agency's work.

The CSO delivered a second outcome after the study presented by C.WENDLING: a checklist of sociological questions to be included in the production of expertise. Aiming for practical uses, to scope and frame new topics, this tool is addressed to non-specialized agents working at ANSES at an early referral examination stage. The methodology used benefitted from a former study⁵ conducted for the French National Authority for Health (HAS) and followed the same format. The checklist focuses on stabilized knowledge rather than cutting-edge development or heterodox theories; it encompasses several HSS sub-fields. Its design is experience-based: it draws from topics defined by ANSES, interviews of experts and working sessions with experts and sociologists.

The document is divided in two parts: a 'quick scan questionnaire' and the core checklist. The first part is for assessing if the issue at stake addresses sociological questions; it is made up of nine simple yes/no questions (e.g. "is the issue characterized by persistent scientific uncertainties? By social inequalities? Is the reputation of ANSES at stake?"). The last part has a very comprehensive scope, addressing six main areas of concern with 30 simple questions, in order to characterize accurately the social dimensions of an issue (e.g. institutional, socio-economic context; social inequalities; forms of knowledge). The checklist will be available in English by June 2013, once approved by the scientific committee of ANSES.

⁴La « Charte d'ouverture à la société des organismes publics de recherche, d'expertise et d'évaluation des risques sanitaires et environnementaux » signed along with four other public organisations involved in environmental risk assessment ». http://www.anses.fr/fr/content/charteouvexpertise.

⁵ « L'évaluation des aspects sociaux. Une contribution sociologique à l'évaluation en santé (PDF)»

ASTRID EPP

Social sciences at the BfR: the example of Nanotechnology.

Dr. Astrid Epp, Federal Institute for Risk Assessment (BfR), Risk Research Perception, Early Detection and Impact Assessment Unit; Risk Communication Department; Berlin, Germany.

The German Federal Institute for Risk Assessment (BfR) was founded ten years ago, but its history dates back to 1876, to the Imperial Health Office. The BfR is under the responsibility of the Federal Ministry of Food, Agriculture and Consumer protection (BMELV); its main tasks are risk assessment and risk communication, which are separated from risk management in reaction to an eroding trust from the public. Its area of expertise extends from biological and chemical safety to product and food safety. It hires around 760 people: among them, 300 'hard scientists' (e.g. Chemists, Pharmacists, Physicians and Toxicologists). The Institute has a statutory remit to provide information about known or emerging risks as well as a transparent account of risk assessment processes, and does so via its website.

It also communicates on risk management by targeted, stepwise stakeholders' involvement. At an early stage, experts-only meetings are held, and then the process progressively opens to authorities, NGOs and eventually consumers and media (e.g. roundtables, open door events). This falls under the responsibility of the Risk Communication Department (RCD), which employs a multidisciplinary staff of 37, including sociologists. In 2011, a Committee for Risk Research and Risk Perception was set up to advice the Institute e.g. on methods, perceptions, emerging risks. It gathers fifteen experts from independent research and consumer institutions. The Committee can assist the institute in times of crisis but also in routine situations (e.g. to strengthen and evaluate communication programmes).

HSS at the BfR have, firstly, a coordination purpose: the RCD assists key processes either within the Institute (e.g. Working Group on Nanotechnology), between the BfR and European institutions (e.g. EFSA) or with international agencies (e.g. ANSES) or organisations (e.g. OECD). Secondly, Social Scientists in the RCD provide a number of services to agency staff, including conceptualisation of scientific events (e.g. themes, questions and speakers), in-house consultancy on study and questionnaire design, and development of checklists and guidelines for the Institute's risk communication. The third and most important aspect of HSS work in the BfR is risk research, at the interface between natural and social sciences. Its objective is to grasp the publics' knowledge, opinions, behaviour and perception; to analyse media representations and, based upon these results, to develop risk communication strategies. It follows a mixed-method-approach by combining quantitative methods (e.g. surveys, media analysis) with qualitative data (e.g. Delphi method, literature review, focus group discussions, chat room analysis).

Nanotechnology at the BfR has been a cross-cutting issue since the early stages of its development, being on the agenda of several departments. In charge of the coordination of the Nanotechnology Working Group, the RCD has conducted a number of studies on this topic since 2006: analyses of print media, internet-based discussions, consumer risk perceptions, Delphi study on Nanotechnology in food, textiles and cosmetics etc. In 2006, the BfR hosted a consumer conference on Nanotechnology, a space of discussion and an inquiry into the assessment of risks and new technologies by informed laypeople. A first representative survey on public perceptions about Nanotechnology was carried out in 2007; a follow-up survey was carried out in 2012 and will be published in 2013.

Discussion

The "in-house consultancy" role for HSS has made them more visible, people come to the RCD for advice and Social Scientists are now invited to other departments and have their say earlier in assessment processes. On the separation of risk assessment and risk management in reaction to diminishing public trust: the separation is organisational and has proven to be a success in Germany. Regarding the relation between the risk assessment departments and the RCD, the first ones sometimes have to be convinced that information should be published. After the *E. Coli.* scandal in Germany, a representative survey was

set up and consumers were asked their opinion about the crisis management: while a majority could not really tell who was in charge of what, 75% understood why the agency had changed its mind about the risk at some point.

RIC VAN POLL

It is all a matter of mind: an RIVM perspective and a case study.

Ric Van Poll is a Senior Academic staff member in Environmental Health at RIVM's centre for Sustainability, Environment and Health, reporting directly to the Director General of RIVM and its Chief Science Officer.

Netherland's National Institute for Public Health and the Environment is owned, as an agency, by the Ministry of Public Health, Welfare and Sports. Its biggest commissioners are several Ministries (Health, Environment, Economy and Agriculture): they set the objectives but cannot control the research done (it is independent). The Institute was established in 1909 and employs 1500 people. The RIVM has seven core tasks: policy advice, national coordination of health-related policies, prevention and intervention programmes, information for citizens and professionals, research and knowledge development, advice to inspectorates and emergency response. Its top research topics include infectious diseases, nanotechnology, public health forecasts (four-yearly reports), integrated risk assessment, nutrition and health ("Our food, our health" report) and environmental health (e.g. air quality).

HSS involvement in the RIVM is explicitly supported by its general director, who wishes to incorporate it not only to integrate or produce knowledge but to put already available insights in their social context. The agency conducted an internal survey so as to chart the needs for HSS expertise, identify already trained employees and assess existing partnerships as well as potential alliances. As it turns out, roughly five per cent of the RIVM's workforce (80 employees) has any experience in HSS (e.g. in Political Science, (Health) Psychology, safety studies or Cultural Anthropology) but they hardly meet. A certain amount of expertise is already there but not arranged to serve HSS functions. Some respondents, at all levels, say that HSS are not the Institute's business. Among potential partners, Universities have been approached, as well as other research organisations (on Food, societal issues or the Environment) and advisory institutes (GR [Dutch Health Council], WRR [Scientific Council for Government Policy]).

The need for HSS expertise has been identified in six main areas: Risk perception, uncertainty and crises; Interaction with audiences; Behaviour influence; Communication quality; Policy development; Economics of health and environment. Also, accessibility of RIVM skills and information to the numerous parties involved in its work (NGOs, educational institutions, businesses, citizens, media etc.) is high on the agenda for 2020; HSS methods may serve this purpose as well, making RIVM products attuned to different needs. Six Chief Science Officers assist the general directorate in decision-making on specialized scientific topics.

Case study: food safety.

The methodological background used is the psychometric risk paradigm: an appraisal of a series of risks on a series of aspects (dread/controllable risk; observable/unknown risk) represented as a factor analysis. The Ministry of Health had difficulties to prioritize pathogens in food. The RIVM suggested looking at food safety as a multidimensional concept, bound to risk perception among other criteria. The study aimed at assessing risk perception of four pathogens (Toxoplasma, Salmonella, BSE and Norovirus) among two groups: citizens (n=1223) and food safety experts (n=34). A web-based questionnaire was designed to grasp three main criteria for risk perception: urge of each problem, familiarity with the risks and relative weight (importance) given to each pathogen.

The results were that experts tend to embrace the "classical" perception of risk (health effects, probability and number of people affected matter the most) where citizens tend to put aside the number of people

affected and rate personal control over the risk higher. About familiarity: the Norovirus is virtually unknown although it is the one that affects the more people every year. Finally, contamination is still the most urgent food safety problem for citizens whereas experts indicate that would be pathogens.

Discussion

The Norovirus is not taken up by the media because of the low concentration of the epidemics – happens all year round – hence its lower rating in importance. Also, citizens tend not to look at the number of people affected, or casualties, but rather at the gravity of the illness. There are no known NGOs for salmonella; neither is there for air pollution, but there are some for EMF, although no one dies from it. The RIVM makes public-oriented information and delivers it to policy-makers but their public relations may improve.

RONAN PALMER

Social Sciences in a delivery body.

Ronan Palmer is Chief Economist, Head of Economics and Social Science, Environment Agency, UK

In 1996, the UK's Environmental Agency (EA) merged more than a hundred nation-wide bodies from national and local levels. Why a delivery body? Because the agency *delivers* government policy (e.g. on flood risks); it provides regulation rather than fundamental research and reports to the Department of Environment, Food and Rural Affairs. England and Wales are soon to be separated to give Wales its own agency. The EA has an Economics and Social Science team that sits with many other (Natural) Scientists in an Evidence Directorate. In total, there are three social scientists and twelve economists for a total of 11.000 staff. Other social scientists can be found in the Communications team. Contractors do much of the work for HSS.

The number of social scientists in the EA changes drastically through time: since the economic recession the headcount (including economists) has doubled. Economics appears to be about money; economists seem to have a solution in times of crisis (although people tend to forget they may be part of the problem!). Economists tend to simplify complexity: they provide rules and guidance, which are a stable structure for organisations to function. They are also able to make strong arguments about methods and numbers – which is useful in hierarchical relations – but from a Social Science point of view, it seems odd to dismiss other people's conclusions as invalid that easily. Nonetheless, the position of Chief Economist allows for HSS to be on the agenda.

HSS in the EA are used to better systems, to help the agency build and do things like the flood risk reduction plan. In order to send text messages to say your property is at risk or make phone calls to the households exposed, a lot a HSS research on behaviours and habits had to be done. For instance, knowing that no agency can make people do thing but only alert them in the more precise way possible, the EA adjusted its messages to make clear the level of importance and damage of the flood each time. In general, the EA is committed to working with local environments rather than with one-size-fits-all solutions.

Another example is the illegal waste disposal issue. The Agency had to deal with illegal waste disposal in some sites – no tax being paid and the fees staying far below the legal options; hundreds came, spoiled the land and disappeared. Social scientists in the Agency help challenge deeply rooted beliefs among some of their colleagues: illegal waste disposal sites may well become high-performing sites when made legal. The first piece of work HSS scientists delivered to decision-makers was a somewhat thin analysis of the situation, but posed a question interesting enough to make them want to go more in depth: "are we spending money wisely?"

Peter Bailey, Social Sciences Manager at the EA, wrote a Repertoire (or survival guide) for social scientists in governments or regulatory bodies. Here are his top tips:

- Consider the organisation you are in: what is their organisational culture? How do they work? What could possibly convince them to adjust their methods?
- Decide how much of your discipline you have to reveal; unnecessary persuasion may be counterproductive.
- Systematically help your colleagues understand society; but prioritize: focus on smaller topics and problems at a time.
- Have the confidence to assess that HSS are as every bit as valid as other disciplines, that they really add value to the work of the organisation.
- Colleagues need to be favourably disposed to listen to you an intense crisis might help!

NEXT STEPS

The discussion on January 8 2013 was organized around two themes: 1) What would be done in terms of knowledge production, capitalization and diffusion in the social sciences on issues related to health, food and the environment? 2) Should a network of social scientists and social science research centres working in or for organisations be set up?

The resulting propositions can be organized around three entries: 1) Functions of a network; 2) Issues that still need to be worked out; 3) Tasks to be fulfilled in the coming year.

FUNCTIONS OF A NETWORK

1. **Identify and share best practices** and 'success stories'

- Establish a list of operations undertaken by experts or organisations in one country that could serve as a model in other contexts.
- Need to define what can be considered a 'success' (and for whom): one suggestion is to consider that a successful project is one that achieved a better integration of HSS (human and social sciences) in risk assessment and risk regulation.
- Establish a list of mistakes and failures, from which much can also be learned.

2. Identify **needs for further research in HSS**

- The network could identify topics on which research is needed, either for operational purposes or simply to fill a gap in available knowledge.
- Members of the network could fund some of the research.
- These topics could also be added to national or European calls for research.

3. Identify relevant experts

• Set up a directory of HSS experts in related fields in Europe, on the same model as IDEAS: http://ideas.repec.org/f/pca288.html

4. Create a pool of **shared knowledge** on **methodology and tools**

- Clarify and formalize the different forms of involvement of HSS in risk assessment and regulation.
- Mutualise a set of tools that could easily be shared or be the source of specific training.
- Suggestion to write a 'handbook' of case studies.
- 5. **Communicate on the added value** of introducing HSS in risk assessment and regulation.
 - Elaborate a general narrative concerning the role of HSS in risk assessment and regulation, clarifying their "added value".
 - Elaborate a statement presenting the network and its goals.

6. Establish a 'call for help' function

• For short-term knowledge sharing: social scientists working within organizations sometimes have to deliver answers in a very short period of time. They would send out a message to the entire network to collect existing data or recent experiences on the topic.

7. Promote longer-term **knowledge transfer** on common topics

- Social scientists working within or for organizations would be able to share both existing data and research, and reflect on recent experiences.
- Shared interests have already been identified (e.g. nanoparticles, pesticides, nutrition...) but this should not exclude agencies working with similar questions on other topics.

8. Draw a list of **members' work topics**

• Each member would draw a list of topics he or she has worked on or is working on: this would provide a more precise way to interact by contacting only the members of the network interested by and/or working on a topic.

9. Identify and assess existing unpublished research

A significant amount of research exists in different countries, which has not always been
published in academic journals, yet may contain useful data. It would be important to
provide an inventory of these unpublished works (PhDs, research reports, etc.); and to
provide a rough assessment of the quality of the work and of the reliability of its data.

10. **Bridge the gap** between academic and agencies' research

- Not all organizations have stable working relationships with HSS academics; and the latter, when they work on environmental health issues, do not always interact with risk organizations. Hence, it is important to formalize their relations:
 - For agencies experts, it is an opportunity to reinforce the legitimacy and robustness of their work.
 - For HSS scholars, contact with 'real-life' situations and access to data should compensate the relative loss of freedom as compared to routine academic work.
- There is a need for a common language inside the network in order to organize these relationships

GENERAL ISSUES THAT NEED TO BE WORKED OUT

- 1. Regarding the network's **general objectives**, how to:
 - Organize a community of isolated social scientists in various organizations.
 - Get a visibility upgrade and add more legitimacy to what is already being done.
 - Justify a formal network for social scientists working within organizations.
 - → Suggestions: drafting a common statement will provide the foundations for the network and its justification (see function 5).

2. **The need for rules to join** the network:

- The networks needs to expand to other organizations, social scientists and experts, but not everyone should be able to join.
- Growth should be controlled at first, in order to stabilize the network.
- Network needs to rest on mutual trust between its members.
 - → Suggestion: criteria for adhering should be the members' ability and will to dedicate time and resources to the network.

3. Defining the **boundaries of environmental health**

- It is important to define what falls under the scope of the network.
- At the same time, diversity in interpretations of the boundaries illustrates different national configurations, and this is part of the problem.
- Furthermore, it is important to be pragmatic and not exclude individuals or organisations from which we could learn.
 - → Suggestion: no need to define fixed boundaries at this stage. The country organizing the annual workshop should be free to set boundaries that correspond to its own institutional constraints. As these workshops move around from one country to another, it will be possible to get a better idea of possible borders. The term 'risk' could be broad enough at this stage to cover the topics discussed.

4. The network's **name**

- Should appear in emails sent to members of the network, but not the most urgent matter.
 - → Suggestion for a temporary name: Paris Risk Group.

5. Working languages

• The network's primary working language is English. Members' working papers, communications and other shared knowledge should systematically be translated in English but everyone is encouraged to provide an additional version in their first language whenever possible to preserve its subtleties and cultural specificities.

NEXT TASKS

→ How to share? Easy, low-cost tools (LinkedIn) were preferred over more costly and time-consuming solutions (wiki platform, website...). But, there is still a need for physical meetings (e.g. once a year), which require hosts and a minimum amount of funding. Funding is another important issue for the existence of the network.

It would be interesting to have some **feedback** from the participants' institutions about how they received the group's work. This should be done in a three-month time.

TASKS	LEADERS	TIMING	REMARKS
Create a LinkedIn group	Beverly BISHOP (HSE) – provided that everyone is on LinkedIn.	End of February 2013.	ANSES should confirm it is possible to create a page in www.era-envhealth.eu website
Search for other partners in European agencies	B. VERGRIETTE (ANSES) for national and European agencies –	Workshop synthesis in March2013.	ANSES should officially promote the network.
Identify funding sources	COST: Ric Van POLL (RIVM ERC: R. LOFSTEDT will contact Helga Nowotny SRA: O. BORRAZ, R. LOFSTEDT and R. Van POLL	End of February 2013.	
Organize the next meeting	LONDON: FSA + HSE + King's College	March 2014.	
Draft of a narrative and statement	Olivier BORRAZ, Daniel BENAMOUZIG, Astrid EPP, Sîan THOMAS, Geneviève BRISSON, Ric Van POLL, Hans KEUNE	First draft by end of February	1 1
Create a steering committee			
Organize a web session on a topic or method of interest for members			Virtual workshops or debates
Prepare a special issue of the EJRR	Cécile WENDLING		orly February, full papers cation December 2013

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