Description of Ethical Bio-Technology Assessment Tools for Agriculture and Food Production
Interim Report Ethical Bio-TA Tools (QLG6-CT-2002-02594)

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II

IV

Contents

1 Introduction

The objective of 'Ethical Bio-TA Tools' (QLG6-CT-2002-02594) is to develop and improve tools for the ethical assessment of new technologies in agriculture and food production in general and modern biotechnologies in particular. The developed tools need to be designed for various purposes and contexts. They should facilitate ethical (bio)technology assessment by 1) governmental and non-governmental regulators; 2) citizens/consumers and their organisations; and 3) economic actors in the food chain. All these actors need to address the ethical aspects of the introduction and application of new (bio)technologies in agriculture and food production. Their need for ethical advice, however, diverges with their respective roles and responsibilities.

The project addresses the various needs of the different actors by combining ethical (bio)technology assessment tools with the most pressing needs for ethical advice in agriculture and food production. The project thus identifies three sub-objectives in the development of ethical (bio)technology assessment tools. The developed tools should facilitate 1) ethical decision-making by governmental regulators; 2) ethical opinion-formation by the general public; and 3) ethical decision-making by economic actors in the food chain.

The project has selected three tools that are deemed useful for addressing the aforementioned various needs. The tools that the project shall consider and study with regard to the three sub-objectives are 1) ethical decision-making frameworks; 2) consensus conferences; and 3) benchmarking. These tools have been selected for further development in the three substantial work packages that constitute the main body of the project: WP1 - Ethical Decision-Making Frameworks; WP2 - Consensus Conferences; and WP3 - Benchmarking.

These three substantial work packages WP1, WP2 and WP3 are in turn sub-divided into four progressive tasks: A) Description; B) Evaluation; C) Development; and D) Application. This first interim extensively describes the respective tools 'ethical decision-making frameworks' (chapter 2), 'consensus conferences' (chapter 3 and 'benchmarking' (chapter 4).

Tools
It might be relevant at this stage to clarify a few key terms in this report. First, tools are understood to be means towards ends. This implies that the project always needs to have a focus on being instrumental. Second, ethical tools are means towards value-laden ends. This implies that the project always needs to focus on addressing values. Third, ethical bio-TA tools are means towards value-laden ends in agri-food biotechnology. This implies that the project always needs to focus on agri-food biotechnology.

Next to these unifying threads in the project, it also relevant to emphasise diversifying threads between the different work packages. WP1 focuses on ethical frameworks and aims to develop ethical bio-TA tools to facilitate value-laden decision-making by govern-

mental regulators. WP2, on the other hand, focuses on participatory arrangements and aims to develop ethical bio-TA tools to facilitate value-laden opinion-formation by the general public. WP3, finally, focuses on benchmarking and aims to develop ethical bio-TA tools to facilitate value-laden communication through food chains.

Two other distinctions among the ethical bio-TA tools described in this interim report cut across the three work packages. All three work packages distinguish between procedural and substantive tools and need to compare the pros and cons of these respective types of tools in the next evaluative task of the project. All three work packages also distinguish between already practiced tools and tools that are still under construction and they present an overview of these stages of development in this interim report.

This first interim report suggests that some major challenges for the next evaluative tasks in the respective work packages. WP1 (Ethical Decision-Making Frameworks) needs to focus on the application and specification of academic frameworks in practical contexts. WP2 (Consensus Conferences), on the other hand, needs to focus on the integration of ethics in participatory arrangements. WP3 (Benchmarking), finally, needs to focus on cross-breeding of food chain management and ethics.

8

2 Ethical Decision-Making Frameworks (WP1)

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2.1 Introduction

The over-arching objective of Work Package (WP) 1 is to map and characterise the current use of decision-making frameworks applied to biotechnologies, in order to further develop a number of these frameworks to assist public and private decision-makers map and consider the ethical dimensions of animal and plant biotechnologies. This WP is specifically focused on a small number of frameworks that are being developed to facilitate ethical reflection and dialogue between key stakeholder groups.

The work activities of each of the three work packages of the project are sub-divided into four tasks: A) Description; B) Evaluation; C) Development; and D) Application. This report constitutes the descriptive stage of WP1 activities.

The overall aim of this stage is to identify frameworks currently being used by key decision-makers. Decision-makers who apply, or wish to apply, these frameworks do so to ensure that the ethical dimensions of biotechnology use are characterised, assessed and considered in their decision-making processes, at both statutory and non-statutory levels. The second evaluative stage (Task B) of the WP activities will review the efficacy and value of these frameworks in achieving their claimed goals.

Before detailing the data collection methods used to map the frameworks, we propose a number of conceptual definitions for the terms 'ethical tools' and 'ethical frameworks' (see Section 2.2). By exploring the conceptual meanings of these terms, particularly in relation to how they will be used in this deliverable, we hope to further clarify the nature of the various frameworks, highlighting the value and limitations of each in the different stages of the decision-making process.

In this initial description stage (Task A) for WP1, three approaches have been adopted to characterise the different types of framework:

- characterising the theoretical basis of frameworks that are currently being used and/or are under development. This is the theoretical description (see Section 2.3)
- characterising the use of these and other methods by key decision-makers to map their practices as set out in their formal documentation and, for those appropriate

bodies, as part of their statutory responsibilities (e.g. legal requirements). This is the case study description (see Section 2.4)

- characterising the use of methods by surveying practitioners that apply these key frameworks. This involves mapping their individual assessment of the value of the framework and their expectations of prospective frameworks. This is the practitioner description also referred to as 'practitioner survey' (see Section 2.5).

Although, overall, WP1 will characterise the key types of framework that are being applied across Europe, for this initial stage we have focused mainly on two countries, viz the UK and Norway.

The innovative objective of WP1 is primarily directed to public decision-makers, typically from within governmental authorities, but it is suggested that the application of these frameworks may also apply to some extent to private decision-makers in organizations of a size that implies a larger social responsibility. Consequently, in order to develop a comprehensive map of the frameworks used by all decision-makers in the agri-food sector, the methods employed by decision-makers in certain larger corporate organizations have also been included in the WP1 data set.

As a result of the three data collection approaches, a number of notable findings have emerged. Section 2.6 discusses these findings and also identifies several information and knowledge gaps. Section 2.7 discusses how the WP1 research group will build on the Task A data sets in the second evaluation (Task B) phase. A number of areas where the WP research group will continue to improve the 'map' of theoretical, case study and practitioner descriptions are also proposed.

2.2   Ethical Tools and Frameworks

This project is about ethical tools, and more specifically this particular work package is about ethical frameworks. By way of introduction we shall first provide some conceptual clarifications. We shall then proceed to indicate the basic structure of biotechnology development and how it interacts with advisory bodies and other groups that influence the intended applications.

Both the term 'tool' and the term 'framework' are subject to various interpretations and meanings and therefore need to be defined in order for us to specify how we intend to use them.. We first present a graphical representation of how we view the relationship between these terms and then indicate some corresponding examples that facilitate, or are meant to facilitate, ethical advice.
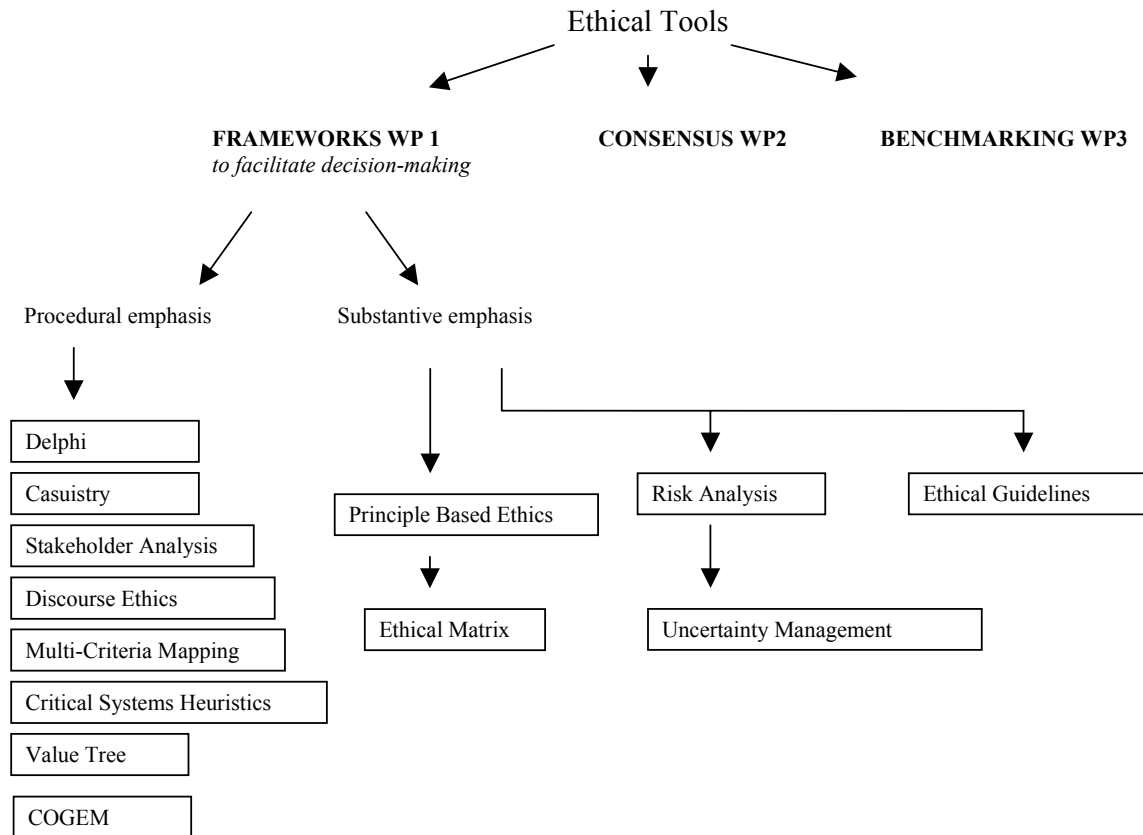
Ethical Tools

FRAMEWORKS WP 1
to facilitate decision-making

CONSENSUS WP2

BENCHMARKING WP3

Procedural emphasis

Substantive emphasis

Delphi

Casuistry

Stakeholder Analysis

Discourse Ethics

Multi-Criteria Mapping

Critical Systems Heuristics

Value Tree

COGEM

Principle Based Ethics

Ethical Matrix

Risk Analysis

Uncertainty Management

Ethical Guidelines

Figure 1   Defining Ethical Tools: Draft Characterisation of the Types of Tools and Frameworks Used in Ethical Biotechnology Assessment

Philosophical reflections on ethical tools and frameworks
The most general characterisation of a tool is that it is a means to reach an end. Although tools are always instrumental, each may be used to reach very different ends. For instance, a hammer can be used to drive a nail into a wooden plank, but it can also be used to re-move bricks from a wall. Similarly, a given end can be achieved by using different tools. The effectiveness of any tool is always dependent on the skills and judgement of the practi-tioner. Thus tools become an integral part of human practice, forming assets for skilful practice and quality work. A well-equipped toolbox and skilful, well-trained personnel are hallmarks of professional services. Quality assurance of a practice typically implies as-sessment of the tools brought to the task and the skills of the personnel performing it. Good tool design always depends on good theoretical understanding of structural features of the issues and tasks to which they may be applied.

In referring to ethical tools, it is important to emphasise what they are not. Ethical tools are certainly never designed as algorithms, the use of which prescribes an outcome; nor are they calculating machines that produce predefined and standardised outputs. Ethi-cal tools are never de-humanized, but always presuppose integration into a human practice.

Figure 1 shows that ethical frameworks are defined as a sub-set of ethical tools. In our terminology, frameworks are designed to be instrumental in decision-making by a public or private body. A characteristic of a framework is that it has properties that facilitate the generation and / or collection of useful information. Clearly, ethical frameworks are not material objects; rather, they are conceptual or procedural devices, which are designed to facilitate sound and explicit ethical decision-making.

In that frameworks are designed to facilitate, but not prescribe, decision-making, they can all be said to have a procedural objective. But it is apparent that some frameworks place more emphasis on the process of reaching a decision and are thus placed under the heading 'Procedural emphasis', while others appeal more explicitly to ethical theory, often in the form of principles or specifications, and are thus placed under the heading 'Substantive emphasis'. Some frameworks might be difficult to place under one such heading as they contain both a procedural and a substantive emphasis. Notwithstanding the overlap between them, it is useful to characterise the extremes of the spectrum.

-       A framework with a procedural emphasis is based on a pre-specified sequence of actions or on rules / norms for the interaction between actors in order to reach agreement or adjudicate disputes. It provides much leeway in regard to content and relies on the conditions under which participants generate content. Procedural frameworks are typically participatory for a selected group of concerned individuals. Democracy is a large framework with procedural emphasis. A philosophical basis for different kinds of democratic theories might be found in the chapter 3.
-       A framework with a substantive emphasis, on the other hand, works through the use of pre-specified propositions or terms that are applied to an issue. When working with a substantive emphasis one seeks to develop the understanding of propositions and / or terms to the extent that they eventually apply to a given issue.

In section 2.3 we shall list some of the ethical frameworks that we find most relevant. For example, in order to illustrate the preceding points, it is suggested that the Delphi process exemplifies a framework, which emphasises procedural approaches, in that it aims to generate information for decision-makers by applying a procedure by which a group of individuals eventually generate statements relevant to the issue in hand. On the other hand, a substantive framework, such as a theoretical risk-cost-benefit analysis, works through concepts. These entail the assembly of data, from which, by performing necessary calculations, one derives a combined value for a specific decision-option, given all the relevant circumstances.

Two further points are important. First, substantive frameworks for ethical decision-making may be sub-divided into those that operate from the high ground of fully fledged theory (top-down approaches), like risk-cost-benefit analysis, and those (often labelled 'principlist') that seek a middle-ground through selected parts and components of various theories. Second, some frameworks combine both procedural and substantive objectives. For example, the ethical matrix can be specified in such a way that it emerges as a combination of both types of frameworks, i.e. procedural on the one hand, and substantive through its relation to principlism on the other.

12

It is unnecessary here to pursue this conceptual clarification of the characterisation of the frameworks too far or to enter deeper points of semantics. For current purposes it is important to have good working definitions that are not open to grave misunderstandings. In technical terms, we are seeking normative nominal definitions, not descriptive nominal definitions or definitions of essence. We do not aspire to mirror the actual use of these terms in a given language community.

With these terminological remarks in place, we may now proceed to briefly describe the various points of contact of biotechnological research and product development with ethical advice stemming from various sources. The ethical advice will relate to various points of decision-making that influence further development. Schematically one may view the process as follows:

-   As a consequence of scientific advances in a field and/or a problem-oriented theorising, a certain scientific project is conceived, e.g. the insertion of a gene for cold-resistance into the DNA of strawberries. This can take place in a purely scientific environment, in an environment where scientific interests are coupled to economic incentives, or in an industrial laboratory setting. Typically it is difficult to sort out the scientific from the commercial interests nowadays, since they are closely intertwined. Likewise, pure and applied research is difficult to differentiate in modern biotechnological research (if these terms make sense at all). It should be noted that the conception of a number of research projects are largely driven by a national or European research agenda. A few of the national bodies conduct an ethical review as part of their internal processes for setting strategic research agendas.
-   After the conception of a project idea, the research group will at some point need to apply for funds for further research. In principle, they will either apply for funds from public sources, from private sources (e.g. from their own company), or from a combination of both. The potential funder will need to make a decision whether or not to support the planned research.
-   At this point, some potential funders will utilise ethical advice. This is more typically true of public funders than of private funders. For instance, the European Commission under FP 6 will subject research with GMO to an ethical assessment of the project. An ethical review panel will assess the project with regard to the ethical issues it raises.
-   Assuming that the project achieves its scientific goals, the next step is typically the industrial development of the product. The decision to pursue the research for commercial exploitation will normally be based on an assessment of its market potential.
-   As soon as the product has reached a satisfactory degree of maturation, the next step is to apply for field trials. In Europe and in most other industrialised countries such field trials are subject to legal regulations (EC Directive 2001/18/EC). An application for permission to perform these field trials will need to be written, containing all the relevant data for a risk assessment, and then be submitted to the authorities.
-   The decision to grant permission for field trials is for the most part based on risk assessment. Only if no significant risks to health or the environment are envisaged, will permission be given. However, in many countries such a decision will also be subjected to a public hearing. Because EC Directive 2001/18/EC demands such a public consultation, this opens up the process for an additional ethical assessment. In
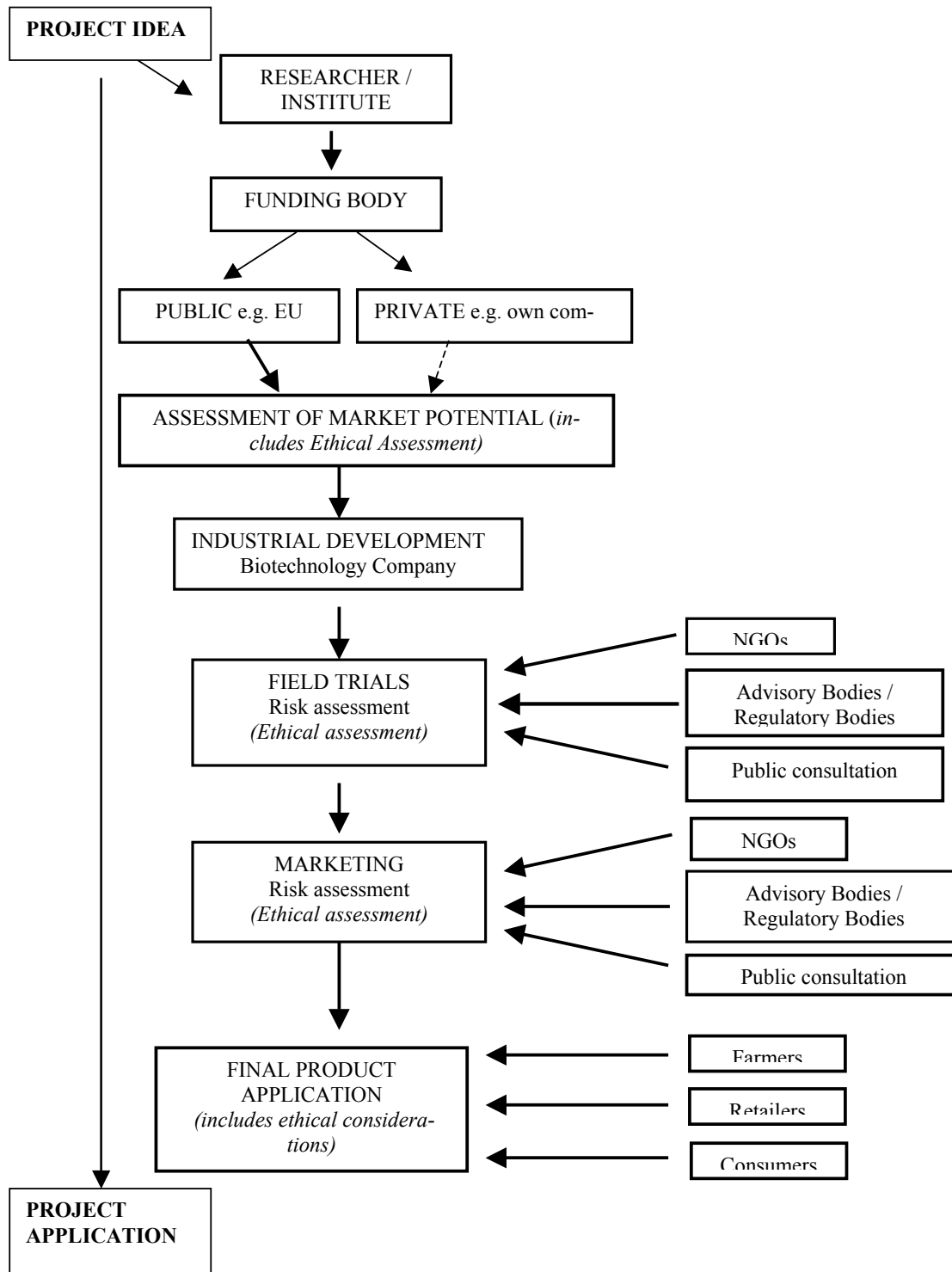
consultation, this opens up the process for an additional ethical assessment. In some countries, e.g. Norway, the ethical assessment is part of the legally prescribed process. In others, NGO's or other bodies (e.g. national or regional ethics committees) may participate by submitting their own ethical assessments.

- When field trials have been satisfactorily performed, the preparations for actual marketing may ensue. Companies have to provide detailed product information and data from field trials, and they have then again to apply to the same authorities.

- At this point, a similar assessment procedure as for field trials takes place. Again it is the risk assessment that accounts for most of the regulatory demands on the applicant. However, before a final decision is taken, a public consultation / hearing will take place, at which NGO's and ethical bodies may or may not be involved. Sometimes the authorities explicitly demand an ethical assessment by a national ethics committee.

- After a positive decision for marketing a GMO-product, further decisions will need to be made, e.g. by farmers to use the new product in production, by retailers to distribute the product, and by consumers to buy the product. All of these decisions may be heavily influenced by ethical considerations and deep-seated value commitments. However, they are decisions of the market, regarding the specific choices and actions of the involved individuals and / or companies. They are no longer principled policy decisions.

In our project, we differentiate between 1) ethical tools directed towards policy makers (frameworks, WP1), 2) ethical tools directed towards consensus formation of the larger public (consensus, WP2), and 3) ethical tools directed towards industrial internal assessments (benchmarks, WP3). Tools of the first kind enter the process when research funders set agendas, when funding is decided, when field trials, and finally marketing is granted. Tools of the second kind enter the process more or less directly at all points, e.g. through the public hearings and they are typically voiced by NGOs, or through market reactions. In some sense they may supplement, or even compete with, the ethical assessments of specially appointed ethics bodies. Tools of the third kind are most salient when industry seeks market approval of its products as they influence industry standards, but they may also play a role in product design.

   With these introductory remarks on ethical tools and frameworks and their role in the decision making process in place, we now proceed, in section 2.3, to more detailed characteristics of specific frameworks.

14

BIOTECHNOLOGY DEVELOPMENT AND APPLICATION FLOWCHART

PROJECT IDEA

RESEARCHER / INSTITUTE

FUNDING BODY

PUBLIC e.g. EU   PRIVATE e.g. own com-

ASSESSMENT OF MARKET POTENTIAL (*includes Ethical Assessment*)

INDUSTRIAL DEVELOPMENT
Biotechnology Company

FIELD TRIALS
Risk assessment
(Ethical assessment)

NGOs

Advisory Bodies / Regulatory Bodies

Public consultation

MARKETING
Risk assessment
(Ethical assessment)

NGOs

Advisory Bodies / Regulatory Bodies

Public consultation

FINAL PRODUCT APPLICATION
(includes ethical considerations)

Farmers

Retailers

Consumers

PROJECT APPLICATION

2.3   Characterising Existing Ethical Tools and Frameworks

Impact assessment tools have been used to evaluate the impact of biotechnologies since the 1980s, when the first techniques began to emerge from the research community. In the early years of biotechnology innovation, the majority of the assessment process focused on safety control and efficacy assessment. However, as the potential opportunities and risks of the new technologies became increasingly apparent, wider questions relating to a number of ethical dimensions, including socio-economic issues were raised. Consequently, a number of ethics committees were set up to explore and pronounce on the ethical impacts of these biotechnologies. Some of these committees used decision-making, or other guiding frameworks to facilitate the decision-making processes.

Traditional biotechnology assessment has focused on risk analysis and the use of advisory committees to provide ethical judgements. More recently, particularly as a result of an increasing demand for the inclusion of ethical criteria, a number of new methods have been proposed, and in some cases are being used routinely.

This section characterises and describes the various ethical frameworks currently in use. The thirteen methods described are the major methods used by key actors in biotechnology decision-making. The categorisation of the methods relates to section 2.2, which sets out our definition of 'ethical frameworks'.

A number of the methods incorporate numerous different, and often specific, uses of the tool. However, each of the descriptions acts as a generic characterisation of the method. This list of methods will be expanded and updated throughout the project.

2.3.1 Tools with a substantive emphasis

Principle Based Ethics
The purpose of these frameworks is to facilitate ethical problem solving and policy making in biomedical ethics. Principles of Biomedical Ethics by Tom Beauchamp and James Childress is the classic work in this area and their four principled approach has been established as fundamental in this field, namely: respect for autonomy, beneficence, non-maleficence, and justice. The principle based method consists of four steps: a) Defining the ethical principles b) Interpreting the principles c) Specifying the principles and d) Balancing the specifications.

Ethical Matrix
The purpose of the Ethical Matrix is to facilitate ethical decision-making on agricultural and food biotechnologies. It is a principles-based methodology, which aims to guide rational decision-making by appealing to principles based in both deontological, and consequentialist ethical theories, which are perceived to be components of the 'common morality'. As a development of the 'four principles' approach introduced by medical ethicists T L Beauchamp and J F Childress, it assigns prima facie moral status not only to different human interest groups but also to certain non-human groups.

Risk (cost/benefit) Analysis

The purpose of the risk analysis framework is to minimise the likelihood or probability of 'injury' (of which there are many types) through the characterisation, evaluation and management of risks. The need to develop methods for measuring the relevant probabilities has led to the scientific field of risk analysis. There are numerous translations of the concept of risk analysis into practical analysis tools and decision-making instruments, for example in environmental management, civil engineering transport, pharmaceutical assessment, animal experimentation, employee health and safety.

Risk analysis is an ethical framework as it has a number of ethical assumptions and values embedded in the decision-making process. Ethical values are presupposed in risk assessment, even though they need not be explicitly articulated in the process itself. The different uses and presuppositions within risk analysis will be analysed further in WP1 Task B.

Uncertainty Management (Precautionary Principle)

The purpose of the Precautionary Principle is to allow for decision-making that is commensurate to high scientific uncertainty and high stakes. It is a framework for risk management based on a value commitment to err on the side of human health and the environment. It was first used and referred to in the various versions of the North Sea Treaty (1984, 1987, 1990, 1995), and became prominent with its inclusion in principle 15 of the Rio Declaration. Since then it has been widely discussed in academia, politics and government. There is no universal definition of the principle; rather it functions as a general norm or principle that needs to be interpreted and operationalised for each new application. The PP is widely recognized within the EU, whereas the USA denies it the status of principle and views it as unscientific

Ethical Codes / Guidelines

The purpose of Ethical Guidelines is to provide a set of rules to regulate behaviour and inform problem-solving. Guidelines or codes of ethics pertain to organisations, professional groups or professional roles where there are clear roles, like doctors, nurses, scientists, engineers, etc. They are non-legal rules regulating conduct, often referring to ethical principles like beneficence, non-maleficence, honesty, justice, etc. They may include prescriptions and aspirations of the role. They often consist of general principles, as well as more specific rules or recommendations.

2.3.2 Tools with a procedural emphasis

Delphi Method

The Delphi method is based on facilitated group communication among a panel of pre-selected experts that are geographically dispersed. Typically a series of questionnaires is sent by e-mail to the expert panel. The experts are asked to state their views on the issue, and then given the opportunity to refine their view in the light of received input. Thus it is based on iterative responses. All members of the expert panel are anonymous, i.e. all comments, forecasts and views are presented to the panel without mentioning their originator. The key elements are therefore:

- structuring the information flow,
- feedback to participants, and
- anonymity of the responses and panel.

The Delphi method is typically used to facilitate decision-making when scientific expertise is uncertain or divergent, and when one wants to explore ideas and long-range trends in science and technology.

Casuistry
Casuistry consists of comparing a new case with earlier cases that have been solved satisfactorily. These earlier examples are normative guides for solving similar new cases. By mapping relevant similarities and differences one can use the former solutions as norms for the new case. The cases are often solved by reference to common morality maxims (like 'better safe than sorry') and if the former case is similar to the present problem, one can likely apply the same maxims. In this way one will not get a guarantee for finding the 'right' ethical solution, but in casuistry the goal is acceptable and reasonable solutions, rather than a presumed moral truth.

Stakeholder Analysis
Stakeholder dialogue is considered an important way to determine the interests and values of the stakeholder groups, and to determine possible ways in which the organisation may affect these interests positively or negatively. It is an important way to bring mutual understanding, and may enhance acceptability of projects. This is revealed in the twofold definition of stakeholder: 'any group or individual who can affect, or is affected by, the achievement of a corporation's purpose'.

Discourse Ethics (Committee processes)
Discourse ethics accepts certain morally acceptable solutions to given problems if they have come about through institutional arrangements that satisfy the constraints of discourse ethics for deliberative discourses, or that, at least, would have come about if such a process was followed. In recent years the popularity of discourse ethics has increased in many circles, and references are made frequently to it when value- or ethical issues are deliberated in committees or other panels of varied participation. A discourse ethical framework can be applied both as a prescriptive means for designing a process, and as a framework for criticising existing solutions, strategies or decisions.

Multi-Criteria Mapping
Multi-Criteria Mapping is a procedural approach to map differences in values and judgements in debates about policies. The participants were asked to note both optimistic and pessimistic scoring values for different criteria, to capture any scientific slack or context-dependent variation within a given field. In this way they were able to use uncertainty intervals instead of a linear point system. The weighting is done as simple numerical weighting and this reflects how important the differences in performance of the individual criteria are in relation to the overall judgement.

18

An Excel computer spreadsheet with a simple linear-additive multi-criterion procedure demonstrates graphically the participants' relative ranking of the individual strategy options. The participants then have the opportunity to modify the result until he or she felt that the results reflects their personal attitude and professional judgement.

Critical Systems Heuristics

The scope of Critical Systems Heuristics is to bring to light implicit and taken-for-granted assumptions in people that focus on certain aspects but ignore others, and thus to improve information input in decision-making. Critical Systems Heuristics, is closely related to so-called soft systems methodology or theory. Both approaches are variants of the larger school of systems thinking and practice. In complex and uncertain decision-making, people differ in where the boundary is placed between the system of interest and its environment, i.e. what is focused on and what is ignored. Challenging implicit boundaries can reveal a decision-maker's implicit assumptions and values. It can also help to improve the input in decision-making. On this basis a list of 12 questions has been developed that can help to explore boundary judgements and possibly change them.

Value Tree Analysis

Value tree analysis is a decision analysis tool under value theory. Its aim is to rank a set of values and alternatives. It is a systematic way of mapping values, policy goals and criteria and aims through multiple criteria decision analysis and problem-structuring to create a better understanding of a problem.

COGEM framework

The COGEM (Commissie Genetische Modificatie – Dutch Commission on Genetic Modification) method consists of five-steps that constitute the ethical assessment in a larger decision-making framework. The first two steps consist of preparing the case and making sure it has not been subjected to prior assessment. The third step is to list the affected values, while the fourth is to list the aims of the research project. The last step consists of a balancing of values and aims.

In order to highlight the descriptive frameworks we have included two examples, one substantive (Ethical Matrix) and one procedural (Multi-Criteria Mapping).

ETHICAL FRAMEWORKS: THE ETHICAL MATRIX
Title: The Ethical Matrix
1. Purpose of framework To facilitate ethical decision making on agricultural and food biotechnologies
2. Type of framework The Matrix encompasses both procedural and substantive forms of ethical framework
3. Theoretical basis of the framework The matrix is a principles-based methodology, which aims to guide rational decision-making by appealing to principles based in both deontological, and consequentialist ethical theories, which are perceived to be components of the 'common morality'. As a development of the 'four principles' approach introduced by medical ethicists T L Beauchamp and J F Childress, it assigns prima facie moral status not only to different human interest groups but also to certain non-human groups.

4. Description of the method

The matrix aims to clarify and make explicit the range of ethical issues raised by the application of new biotechnologies in agriculture and food. There are several ways in which the matrix can be used, for example:
- To raise awareness of ethical issues by identifying (often previously unrecognised) values
- As a semi-quantitative (but non-prescriptive) ethical scoring tool
- In public participation exercises, e.g. involving stakeholders
- To structure the deliberations of ethical committees
- As an educational tool
- As in interactive web-based exercise

Users are required to specify abstract ethical principles (such as 'respect for autonomy') in concrete terms relevant to the different interest groups, e.g. with respect to the principle cited, as 'consumer choice' for citizens and as 'behavioural freedom' for farmed animals. Respect for, or infringement of, specified principles depends on examination of claimed 'evidence' (e.g. scientific data), taking account of factors such as: uncertainty, precaution, economic forecasting and possible bias, in the light of the value claims specified in the matrix. Weighing of ethical impacts (which are conveniently recorded in the separate 'cells' of a customised matrix) is critical in reaching an ethical judgement.

5. Application of the framework (key examples) and users (key examples)
- The Food Ethics Council (an NGO in UK): ethical analyses of food and farming (5 reports) (1998-2003)
- National Committee for Research Ethics in Science and Technology (NENT), Oslo, Norway: ethical analysis of fisheries (2000)
- Europaische Akademie (Germany): ethical analysis of functional foods (2003)
- BBSRC (Major UK government research council): Ethical aspects of bioremediation technologies; public participation exercises (2003)
- European Association for Animal Production (Rome): report 'After BSE: a future for the European livestock sector'(2003)
- Compassion in World Farming (UK animal welfare NGO) Interactive web-based matrix exercise (2003)

6. Key references

- Beauchamp, T L & Childress, J F (1979, 1983, 1989, 1994, 2001) Principles of Biomedical Ethics. Oxford University Press, Oxford
- Mepham T B (1996) Ethical analysis of food biotechnologies: an evaluative framework. In Food Ethics, ed Mepham T B, Routledge, London, pp. 101-119
- Mepham, T B (1996) Ethical impacts of biotechnology in dairying. In Progress in Dairy Science, ed Phillips CJ, CAB International, Wallingford
- Mepham T B, Moore C J & Crilly R E (1996) An ethical analysis of the use of xenografts in human transplant surgery. Bulletin of Medical Ethics 116, 13-18
- Mepham T B (2000) Farming Animals for Food: Towards a Moral Menu. Food Ethics Council, Southwell, 48pp.
- Mepham T B (2000) A framework for the ethical analysis of novel foods: the ethical matrix. Journal of Agricultural and Environmental Ethics 12, 165-176
- Kaiser, M. & Forsberg E-M (2000) Assessing fisheries – Using an ethical matrix in a participatory process. Journal of Agricultural and Environmental Ethics 14, 91-200
- Mepham T B (2000) The role of food ethics in food policy. Proceedings of the Nutrition Society 59, 609-618
- Mepham T B (2001) After FMD: Aiming for a Values-Driven Agriculture. Food Ethics Council, Southwell, 40pp
- Mepham T B (2001) Novel foods. In The Encyclopedia of Ethics of New Technologies, ed. Chadwick R F. Academic Press, San Diego. pp. 299-313

- Schroeder D and Palmer C (2003) Technology assessment and the ethical matrix. Poiesis and Praxis 1, 295-307
ETHICAL FRAMEWORKS: MULTI -CRITERIA MAPPING
Title: Multi-Criteria Mapping
1. Purpose of framework A systematic and transparent way of comparing policy options.
2. Type of framework A procedural approach to map differences in values and judgements in debates about policies.
3. Theoretical basis of the framework Andrew Stirling at the Science and Technology Policy Research Unit, University of Sussex developed the framework, in 1997 as an alternative to consensus-oriented deliberative methods and economic models for environmental valuation and risk-cost-benefit assessments. It was further developed and tested in practice by Sue Mayer (GeneWatch) and Andrew Stirling in a pilot study in 1998-99, with financial support from Unilever.
4. Description of the method A group of twelve key people, from different areas and groups, with an interest in the potential problems of GMOs were invited to join a pilot study on the issues of genetically modified crops in agricultural systems the UK. During a 2-3 hour one-to-one interview they were presented with 6 previously-defined alternative strategies concerning the use (or non-use) of GMO in agriculture. In the interview the participants under-took the following process: (i) identifying possible additional strategy options; (ii) defining the evaluation criteria to be applied to every strategy option; (iii) determining how well or badly every option scores on every criterion; and (iv) weighting every criterion according to its relative importance. The participants were asked to note both optimistic and pessimistic scoring values for every criterion, to capture any scientific slack or context-dependent variation. In this way they were able to use uncertainty intervals instead of a linear point system. The weighting was done as simple numerical weighting and this reflected how important the differences in performance of the individual criteria are in relation to the over-all judgement. An Excel computer spreadsheet with a simple linear-additive multi-criterion procedure demonstrated graphically the participants' relative ranking of the individual strategy options. The partici-pant then had the opportunity to modify the result until he or she felt that the results reflected their personal attitude and professional judgement. In an extension of the process, the participants were contacted again and asked to consider two more concerns: to reach an evaluation shielded from the principle of uncertainty and ignorance (i.e. consider a precautionary strategy), and to try and attain robust solutions in light of the variations on socio-political value foundations (i.e. consider pluralism in values). Using a simple diversity index from mathematical ecology and information theory did this. In this way, any potential trade-offs be-tween the significance of individual criteria of performance for different options were weighed up against the significance of diversity in a mixture of alternatives. These evaluations amounted to the departure point for an evaluation of the relative significance of uncertainty and pluralism. The participants were also con-fronted with a detailed sensitivity analysis of their own set of weightings. In a concluding workshop the results were confirmed in a dialogical situation with all participants. Mayer and Stirling claim that the method is suited for issues where ethics is one of the overruling concerns of the actors. Animal welfare and responsibility for good environmental management were among the central concerns revealed in the pilot study. At the same time it was claimed that these concerns were not treated as absolutes, but were compa-rable to other concerns, although perhaps with a higher weighting. Mayer and Stirling also claim that the method fulfils certain basic requirements for adequate management of the precautionary principle and of risk, as they are expressed in European Commission statements about the precautionary principle. The method provides a potential tool for a whole range of bioethical problems and for problems requiring a sys-tematic ethical evaluation where stakeholders are consulted. At the same time the concrete ethical evaluation has a common sense-approach that is unconstrained with regard to the ethical evaluation that

cannot be modified by the participant. There are no theoretical frames concerning completeness or the character of different ethical concerns.
5. Application of the framework (key examples) and users (key examples) - The method was first used in a pilot study on the issue of gene modified crops in agricultural systems in the UK. See the report Rethinking Risk.
6. Key references - Mayer S & Stirling, A (2002) Finding a precautionary approach to technological developments - lessons for the evaluation of GM crops. Journal of Environmental and Agricultural Ethics 15, 57-71 - Stirling A & Mayer S (2002) Confronting Risk and Precaution: a Multi-Criteria Mapping of a GM Crop. In Developing Alternatives for Valuing Nature, ed Gletzner M. Edward Elgar - Stirling A & Mayer, S (2001) A novel approach to the appraisal of technological risk: a multi-criteria mapping pilot study of a genetically modified crop in the UK. Environment and Planning C Government and Policy 19, 529-555 - Stirling A (2001) Inclusive deliberation and scientific expertise: precaution, diversity and transparency in the governance of risk. PLA Notes (40), 66-71 - Stirling A (2000) Rethinking risk: application of a novel technique to GM crops. Technology, Innovation & Society 18, 21-23 - Stirling A & Mayer S (2000) Precautionary approaches to the appraisal of risk: a case study of a GM crop. International Journal of Occupational and Environmental Health 6, 342-357 - Stirling A & Mayer S (2000) A precautionary approach to technology appraisal?: a multi-criteria mapping of genetic modification in UK agriculture. TA-Datenbank-Nachrichten, 3, 39-50 - Stirling A & Mayer S (1999) Rethinking Risk. A Pilot Multi-Criteria Mapping of a Genetically Modified Crop in Agriculture in the UK. SPRU, University of Sussex, Brighton - Stirling A (1999) On Science and Precaution in the Management of Technological Risk, EUR 19056 EN Volume 1. Institute for Prospective Technological Studies (IPTS), Seville - Stirling A (1999) On Precautionary and Science-Based Approaches to Risk Assessment and Environmental Appraisal, EUR 19056 EN Volume I1. Institute for Prospective Technological Studies (IPTS), Seville - Stirling A (1997) Multi Criteria Mapping: mitigating the problems of environmental evaluation? In Valuing Nature? Economics, Ethics and Environment ed Foster J. Routledge, London, 186-210

The quality of the descriptions will be further developed in the Evaluation Task B and will form part of our final report.

2.4 Mapping the Use of Frameworks – Reviewing Case Studies

This section intends to characterise the use of ethical frameworks by key decision-makers, by mapping their practices as set out in their formal documentation and for those appropriate bodies set out in their statutory responsibilities (e.g. legal requirements). This is the 'Case Study' description.

As defined in the Work Plan for WP1, the research group has focused on mapping key Case Studies from the UK and Norway. In order to appropriately evaluate the current approaches and specific frameworks used by key decision-makers, a limited number of case studies from across Europe have also been identified, these will be further developed in the Evaluative Task B. The Case Studies have been collected according to organisational type, these are: NGOs; government statutory; government non-statutory; biotechnology companies and funding bodies. For the UK, key actors in the biotechnology assessment

22

life-cycle have been identified. The methods and explicit ethical frameworks that they apply have been mapped. As part of this case study method, the use of rhetoric in terms of claimed ethical approaches used by these organisations has been compared to the actual tools that are identified in their literature.

As an overall evaluation, the Case Study summaries (current available data) collected indicate that only general information relating to business Codes of Practice is available. Few explicit tools are used and when frameworks are used, most organisations apply committee processes and codes of conduct.

The following Case Studies have been chosen to illustrate the type of approaches used by key actors, highlighting what may be characterised as good and bad practice.

UK Government bodies:
CS1: Advisory Committee on Genetic Modification (ACGM) CS2: Advisory Committee for Novel Food and Processes (ACNFP); CS3: Advisory Committee on Releases to the Environment (ACRE); CS4: Animal Procedures Committee (APC); CS5: Animal Welfare Advisory Committee (AWAC); CS6: Farm Animal Welfare Council (FAWC); CS7: Food Standards Agency (FSA); CS8: Sustainable Development Commission (SDC); CS9: Veterinary Medicines Directorate (VMD); CS10: Veterinary Products Committee (VPC)

Biotechnology companies:
CS11: AstraZeneca; CS12: Monsanto; CS13: Novo Nordisk; CS14: Novartis; CS15: Pfizer

Funding bodies:
CS16: The Biotechnology and Biological Sciences Research Council (BBSRC); CS17: Medical Research Council (MRC); CS18: Natural Environment Research Council (NERC); CS19: Nuffield Council on Bioethics; CS20: WellcomeTrust

NGOs:
CS21: Consumers Association (CA); CS22: GeneWatch UK; CS23: International Fund for Animal Welfare (IFAW); CS24: Royal Society for the Prevention of Cruelty to Animals (RSPCA)

European organisations:
CS25: Austrian Bioethics Commission; CS26: Danish Council of Ethics; CS27: European Commission; CS28: European Group on Ethics in Science and New Technologies (EGE); CS29: Finnish National Advisory Board on Research Ethics (TENK); CS30: French National Consultative Ethics Committee for Health and Life Sciences (CCNE); CS31: German National Ethics Council; CS32: Hellenic National Bioethics Commission; CS33: Irish Council for Bioethics: CS34: Italian National Bioethics Committee; CS35: The Netherlands Commission on Genetic Modification (COGEM); CS36: Norwegian Biotechnology Advisory Board; CS37: National Committees for Research Ethics in Norway (NEM, NENT and NESH The Norwegian Model); CS38: Swiss Ethics Committee Non-human Gene Technology (ECNH); CS39: Research Station for Viticulture, Romania; CS40: Research Institute for Animal Production, Slovakia; CS41: Latvian Food Center, CS42: 6th Framework Programme, Food Safety, European Commission

The value of using the case study method as part of our 3-method approach is, it helps to characterise the level at which ethical frameworks are currently applied and the influence they have over the decision-making process, from technology conception to application. This significantly assists the WP1 group when evaluating whether ethical frameworks can be generically applied, or should be generically applied across their technology life-cycle.

The above case studies exemplify the types of approaches that are used by statutory and non-statutory bodies to deal with the ethical implications of the technologies that they are developing or assessing.

A number of bodies such as Advisory Committee for Novel Food and Processes (ACNFP) are applying traditional risk analysis approaches in their decision-making. Ethical advice is included through associated ethical advisors or ethical committees. Although a number of the bodies are using procedural methods that have ethical components, the majority of these bodies are not explicitly applying substantive approaches. However there are exceptions, the Sustainable Development Commission uses operational principles and these are derived from a principled-based approach. Full details of a selection of Case Studies are reproduced in the Background Document, below we give details of two southern European organisations.

In order to highlight the type of data that has been collected for each Case Study, two southern European Case Studies have been included below, viz. Italian National Bioethics Committee (CNB) and Hellenic National Bioethics Commission. In each of these cases, no formal bioethical framework is used as part of their decision-making processes. A committee process is used, supported by ethical codes or guidelines.

Italian National Bioethics Committee
The Italian National Bioethics Committee (CNB) was established by decree on 28 March 1990. It is a consultative body of the Presidency of the Council of Ministers and members of the Government, Parliament, research centers, local ethics committees, academics, members of the public etc, can contact the Committee for information regarding bioethics. The Committee has the following objectives:

- To make outline summaries of programmes, objectives and results of research and experimentation in the field of life sciences and human health;
- To address ethical and legal problems that may emerge as a result of the progress of research, taking into account safeguarding of fundamental human rights and human dignity;
- To propose solutions for control over production of biological material and protection from risk of all patients treated;
- To promote codes of conduct for practitioners and inform public opinion.

CNB members are experts in different disciplines in accordance with the interdisciplinary nature of bioethics. The President of the CNB is Professor Francesco D'Agostino. The Technical Administrative Coordinator is Emira Aloe Spiriti and Scientific Experts include: Dr. Stephane Bauzon, Grazia Maria De Maria, Gabriella Gambino and MariangelaTopa,

24

One of the CNB's tasks is to express opinions and suggest solutions. For the purpose of preparing legislative acts it also addresses the ethical and legal problems that may emerge as a result of the progress of research and the emergence of possible new applications of clinical interest, taking into account the safeguarding of fundamental human rights and human dignity, and the other values as expressed in the Constitutional Charter and in the international instruments supported by Italy.

Areas of interest include: psychiatry and mental health; therapeutic use of stem cells; protection of the human embryo and foetus; patenting human embryo cells; genetic testing; xenotransplantation etc. Recent publications include:

i)   *Psychiatry and Mental Health : Bioethical Guidelines (November 2000)*
ii) *Opinion of The National Bioethics Committee on the Therapeutic Use of Stem Cells (October 2000)*
iii) *Protection of the Human Embryo and Foetus. The Italian National Bioethics Committee Statement Concerning the Preliminary Draft Protocol of The Bioethics Committee of the Council of Europe (March 2000)*
iv) *Bioethical Guidelines for Genetic Testing (November 1999)*

Hellenic National Bioethics Commission

The Hellenic National Bioethics Commission is an independent advisory body of experts established by law in 1998. It is composed of nine members, all academics, appointed by the Prime Minister for a term of five years and supported by 2 scientific assistants. The current Chairman of the Commission is Professor George Koumantos, Emeritus Professor of Civil Law, University of Athens.

Its mission is to explore ethical, social and legal impacts of applications of biological sciences. More specifically it a) investigates the ethical, social and legal aspects that arise from scientific advances in biology, biotechnology, medicine and genetics, b) outlines, in collaboration with the respective ministries, proposals of general policy and provides specific recommendations on related issues, c) collaborates with international organisations and related bodies and represents Greece to international fora, d) informs the public on issues related to biotechnological advances and the impact of their applications and e) orientates and coordinates related governmental advisory bodies in the field of bioethics.

After the adoption of the new EU legislative framework concerning the deliberate release of GMOs into the environment (Directive 2001/18) on 22nd July 2003, the Commission published guidelines for the development of strategies and best practices in order to ensure the coexistence of GM crops with conventional and organic farming, while avoiding the unintended presence of GMOs in other products.

Under the auspices of the Greek Presidency, the Hellenic National Bioethics Commission, in collaboration with the Research Directorate of the European Commission, organised the first forum of the National Bioethics Councils of the 15 EU member states and of the 10 accession countries, on 24th June 2003 in Athens. The Forum discussion focused on the current challenges of National Ethics Councils in accession countries with regard to: a) institutional links, b) needs and possibilities of exchange or support and c) relevant actual issues of ethics in research and technology development. A session was de-

voted to the presentation of the opinions published by national ethics bodies in Europe followed by a discussion regarding the methods of information of the National Ethics Councils. The meeting closed with the establishment of a provisional agenda for future meetings, which are supposed to take place twice a year.

Recent recommendations:
In each case the Commission met on invitation by the President in order to consider the ethical and social issues within its jurisdiction, with regard to the subject and to draft a related proposal.

- Genetically engineered (GE) plants (via recombinant DNA technology) and their products.
- Use of genetic fingerprints in criminal procedure (2001)
- Use of stem cells in biomedicine and clinical medicine (2001)
- Assisted reproduction draft bill (2002)
- Collection and use of genetic data (2002)
- Human reproductive cloning (2003)
- The Commission is also discussing the issue of patents in biotechnology

It is important to note that this collection of case studies constitutes a description of the methods that decision-makers (private and public) claim to use when addressing ethical dimensions. In terms of the application of the frameworks (e.g. protocols, best practice checklists and non-statutory guidelines), at this stage in the project and from the case study data set, the research group is unable to qualify how rigorously the bodies apply these approaches.

Caution should in particular be taken when examining the tools or frameworks described by a number of commercial companies. It has been claimed by a number of commentators that these merely represent a 'means to an end'. These approaches aim to create confidence in commercial processes rather than being used as a decision-making end in itself, i.e. to improve the validity of their methods, to improve the ethical rationalisation of their objectives, and to improve their internal decision-making processes.

Crucial in this respect is a company's policy on transparency. It is therefore interesting to note what principles and procedures companies feel they need to adhere to in order to be in harmony with external expectations, and this also applies to governmental decision-making bodies. Thus this information is useful regardless of whether or not they mirror actual company policies. The research group is aware that companies sometimes use such principles as some kind of public relations approach while in reality decision-making may look very different.

This highlights the importance of not only devising novel frameworks, but also the need to look at their application, their value in the decision-making process, and the outcomes of their use. The evaluation of the frameworks will take place as part of the evaluative stage of WP1, this stage will also include an assessment of the actual application of the framework as well as a review of outcomes, both verifiable and perceived.

26

2.5   Survey of Practitioners to Map Tools Used and Perceived Needs

The questionnaire is the final of the three approaches used to characterize the use of methods, which was described in Section 2.1. The aim was to survey practitioners to see whether they apply key frameworks. This involved mapping their individual assessment of the value of a framework and their expectations of prospective frameworks. The WP1 research group designed a questionnaire to map the processes, which led to decisions in the field of biotechnology, with a special focus on ethical issues in the Agrifood sector. The questionnaire was designed to meet the practitioners' own experiences and their way of reasoning when dealing with making priorities.

Method
Over a period of one month NENT and the Centre for Applied Bioethics, University of Nottingham exchanged different versions and different approaches to the questionnaire. During this period NENT was responsible, with significant support from the Centre for Applied Bioethics, for identifying possible respondents from all over Europe.

Results
We received 88 replies to the questionnaire, which gave a reply rate of 14,9% of individuals and 17,7% of organisations. Many of the replies were rather summary. The main two groups that responded were government agencies and universities / research institutes. Of the replies there were 33 that completed the returned questionnaire. This is not a very large number and the causes for such a low response rate were discussed by the WP1 group. We concluded that the holiday period, lack of perceived relevance, heavy workload and problems in communicating with practitioners in English, could all be factors contributing to the low response number. However, many of those responding without filling in the questionnaire did not consider that they were involved in 'ethical aspects'.

Main findings
In reporting the results from the survey there are two options:
1.   reporting the total replies to each questions, and
2.   reporting interesting correlations

Although we will report some of the total replies, we feel that many of these results can only be understood correctly when compared to other variables. Related to the topic of Ethical Biotechnology Assessment Tools the following variables are of particular importance:
-   the use of tools
-   the use of ethical expertise[1]
-   having consensus as an objective
-   being interested in improving tools

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[1] It should be noted, however, that some respondents seem to consider the use of expertise as use of a tool. Thus there is a possible ambiguity in the distinction of these two groups. Still, this is in coherence with what is our main conclusion from this survey.

This means that the results of other questions will be related to these variables. We will report what seem to be salient results, that is, only correlations that we consider reveal information that can be used for further reflection and work.[1]

Preliminary conclusions

Although no general trends can be detected, the comparisons performed above reveal tentative correlations of organisations using ethical tools and having ethical expertise, to objectives like consensus, dialogue and having impact and legitimacy. The analysis of the results will take place in the next phase of the project but some reflections are appropriate. Biotechnology in the Agri-food sector is inherently related to ethical issues. Nevertheless, in responses relating to non-completion of the questionnaire (twice as many as the number of completed questionnaires), many civil servants and researchers did not view themselves to be engaged in ethical issues. Even if institutions performing assessments do not have ethical issues as their explicit mandate, they cannot avoid dealing with these issues. From the point of view of Ethical Biotechnology Assessment Tools the results from the survey reveal important gaps in the ethical consciousness of organisations. The lack of concern about the legitimacy of the assessments might indicate a democratic deficiency. The reciprocal relation between ethical tools and ethical expertise, and legitimacy and impact points to a large potential for learning in the organisations performing biotechnology evaluations. Even if the findings must be read with great caution due to low the response rate, we cannot but conclude that there are several means that could be used to improve both the quality of the assessments - both viewed procedurally and functionally - and the legitimacy of scientific action.

2.6   Summary of State of the Art and Available Tools

The three data sets presented in this deliverable collectively, have produced an initial map of the use of ethical frameworks applied in biotechnology assessment procedures. This deliverable forms the initial building blocks that allows the project group to evaluate existing methods and further propose improvements, as well as developing novel approaches for improving the inclusion of ethical evaluation within these processes.

As highlighted in Section 2.2, it important that we are clear about the definition of the terms 'framework' and 'tool' from the outset so that we know what we mean when we are talking about ethical frameworks. We have therefore proposed the definitions and categorisation as highlighted in the 'Defining Ethical Tools' diagram.

Sections 2.4 and 2.5 describing the case studies and the data collected through the survey of practitioners have initially defined the 'State of the Art' regarding ethical frameworks.

It has been claimed that there is limited information on ethical procedures used by the numerous actors and committees involved in this area and this appears to be confirmed by the data collected in this first stage of the project. It has also been claimed that there are a limited number of explicit frameworks used, although a number of frameworks are avail-

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[1] For the full results please contact the authors.

able to decision-makers. Of these frameworks very few are actually used in any formal process. This thesis again appears to be confirmed by our initial findings.

It seems to emerge from the data set that bodies that already have some ethical expertise represented in their decision-making processes, are more open and positive to the suggestion of improving ethical tools, than those bodies where ethics is not represented. This might indicate that non-ethicists or groups of decision-makers that have no training in this area often feel that the ethical issues do not demand any special kind of competence and/or framework to be dealt with satisfactorily. This possibly further exemplifies that the whole issue of ethics in the agri-food sector needs a proactive approach and basic input in order to move away from possible prejudice and the current ad hoc approaches. Another issue is that guidelines, codes and general principles seem to be the most favoured approach among those bodies that describe themselves as utilising some sort of ethical framework (in addition to risk analysis). This would indicate the need to discuss the pros and cons of such a tool at a later stage in the project.

In phase 2 of Task B, the evaluation of these frameworks, the thesis proposed above will be further tested through semi-structured interviews and by further improving the current data set.

2.7   2nd Phase Work Plan and Objectives

As a result of the findings in this description stage of WP1, the research group has elaborated on the original work plan and set out a detailed work plan and timetable for the 2nd phase of the WP.

The original project plan identifies the comprehensive analysis of the findings of Task A, combined with a systematic study of user expectations and outcome assessment, as the main focus of Task B. Thus, the revised work plan of WP1 Task B consists basically of 2 phases: in phase 1, a set of different investigations and data collections will be carried out in order to strengthen and deepen the results of Task A; in phase 2 the group will identify and define evaluation criteria for the findings of phase 1 and previous research with regard to practical utility and user expectations. Phase 1 is conveniently broken down into 4 different sub-tasks. The first sub-task ('uses') concerns a thorough investigation into the applications of the diverse frameworks / ethical tools. From these applications one can expect an improvement of the framework descriptions as they are presented so far. The second sub-task ('influences') consists mainly of research into how outcomes of the diverse applications can be assessed, and is thus mainly focussed on methodology. Sociological studies will be consulted and interviews with practitioners will be conducted. The third sub-task ('expectations') looks closely at user expectations of outcomes and effectiveness. Circulation of a revised version of the survey and several interviews will provide useful data. The fourth sub-task ('soundness') of phase 1 takes a closer look at the current philosophical discussions relevant to the frameworks presented here. The soundness of the frameworks will be analysed from a theoretical point of view and on the basis of a literature study.

Results from phase 1, and in particular the second sub-task, will then be utilised in phase 2 in an attempt to provide an overall assessment of the different frameworks when in

practical use. This will be done by focussing on a number of selected cases / examples. User expectations, user constraints and documentations of achievement and impact will be central to this task.

It is expected that this stage of the work will be crucial for the developing of flexible and adaptive regulatory frameworks later in the project.

3 Consensus Conferences (WP2)

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3.1 Recent Research into Participatory Arrangements - Concepts and Definitions

In its broadest sense, a participatory arrangement[1] can be defined as a method or activity that involves the general public in the processes of decision-making in society in a way that affects, or goes beyond, mere participation in the voting procedures of representative democracy. Historically participatory arrangements have been made since the 1930s within a number of sectors and in connection with societal issues - issues arising in the fields of development, planning, domestic politics and science and technology. Depending on the specific method being used, these arrangements may involve experts from the humanities, social science, economics and the technical and natural sciences (for reviews see e.g. Marjolein & Rijkens-Klomp, 2002; Rowe & Frewer, 2000).

Participatory arrangements are generally justified by two main lines of thought: ideal or democratic arguments stress the desirability of such arrangements since they are seen as unmistakable features of a democracy. On the other hand pragmatic arguments stress the need of participatory arrangements as (necessary) means to solve anticipated or existing social problems. (see e.g. Klüver et al, 2000; Rowe & Frewer, 2000; Marjolein & Rijkens-Klomp, 2002). Although these different justifications may both be present in most practical applications of participatory arrangements, not many types of arrangements can be characterised as ideal in the sense that the process is a goal in itself. Thus, in a review of participatory methods, Marjolein & Rijkens-Klomp (2002) treat only one method, participatory planning,[2] in this way. Other methods are treated primarily as means of handling social problems.

Within this latter group, the methods can be further subdivided according to the role they play in the decision-making process - mainly as educational arrangements or as arrangements actively involving the public in the decision-making process. See the inserted table for an overview of some of the most common arrangements applied in the field cov-

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[1] Our use of the term 'participatory arrangements' is equal to the term 'participatory technology assessment arrangements' (or 'pTA-arrangements') as applied in the EUROPTA project (Bellucci et al, 2002). Hence we want to stress that a participatory arrangement is a practical execution of ideas of public participation.

[2] Participatory planning is '*a process through which stakeholders and citizen influence and share control over development initiatives and the decisions and the resources which affect them*' Marjolein & Rijkens-Klomp, 2002.

ered by the present project; i.e. the use of participatory arrangements as means of helping to resolve conflicts between a scientific and technological constituency on the one side and the general public on the other. As such they are largely found within (and sometimes emerge as reactions to) a specific technology assessment (TA) tradition that in the words of Hennen '…'puts politics in command', that is, expands the political possibilities of action vis-á-vis the growing dynamics of scientific and technological development' (Hennen, 1999).

The laissez-faire approach to science and technology largely neglects members of the public, except insofar as they are voters. Soon after the limitations of this approach had been realised, initiatives within a simplistic 'public understanding of science' (PUS) tradition were made. These incorporated the lowest level of public involvement in decisions over science and technology and remained outside the TA tradition referred to above. They were also technocratic: they left decisions about science and technology to the expert level and assumed that the 'problem of the public' was one of 'scientific illiteracy' or 'knowledge deficit' (see. e.g. Hill & Michael, 1998). In this model, involving the public means enlightening non-specialists through methods such as popularisation of science and technology, information campaigns or public meetings.

An overview of some of the most common participatory arrangements

Arrangement	Description
Consensus Conference	Consensus conferences in the shape of the so-called Danish model is a further development of ideas conceived in the US in the 1970s. The basic idea of a consensus conference is to give lay people a voice in the political processes by selecting a panel of lay people (12-15 persons) who is given the power to set the agenda in a pending (often techno-scientific) controversy; that is to formulate the questions that need to be answered before decisions are made. At the end of the conference the lay panel produces a document presenting their consensus on the issue at hand. For more on consensus conferences see Joss & Durant (1995a).
PubliForum	A Swiss development of the Danish consensus conference format. Compared to the Danish-style consensus conference consensus as a specific aim is scaled down.
Citizen Forum	A German development of the Danish consensus conference format. In the Citizen Forum approximately 25 lay people are conveyed information about the issue by selected experts. On this basis lay people discuss the issue in plenum as well as in smaller groups aiming at the attainment of an agreement. In case of disagreement, minority expressions are allowed in the assessment report. (See e.g. Gloede & Hennen, 2002.)
Future Workshop	A workshop form developed by Jungk & Norbert to facilitate (local) action. Participants are guided through a structured debate in three phases. In the first phase participants are allowed to criticise anything related to the issue, without being contradicted. In the second phase visions about the issue in question are formulated without paying respect to barriers and in the third phase strategies to realise the visions are discussed. (See e.g. Jungk & Müllert, 1990.)
Scenario Workshop	Like the future workshop, a short (two-day) structured discussion, with three phases (critique, vision, realisation). Here, however, participants are presented with different scenarios for the issue at stake. Participants are recruited representing various actor groups (stakeholders) and discussions depart in a social issue/ problem.

Delphi Studies/ Technology Foresight	Methods where a large number of stakeholder representatives (>1-2000) are invited to, through a survey, give their opinion about the future. Panels with representatives from user groups are appointed and meet at a number of workshops and finally all gather to draw conclusions and formulate recommendations. (See e.g. Grabner et al, 2002.)
Focus Groups	A qualitative interview format where a small group (typically 5-12) are gathered and guided through a structured discussion. The interviews are analysed by social scientists. (See e.g. Morgan, 1988.)
Surveys	A quantitative method where respondents are contacted by phone, mail, internet or personally and asked to fill in a questionnaire. The data are subsequently analysed by social scientists/ statisticians.
Public Consultation	A widespread and common means of participation, where the public is invited to participate in the decision-making process, either at public meetings or through a call for (written) comments.
Referendum	A vote on a specific issue, including all affected citizens in a region or nation. Particularly used in Switzerland.

As a reaction to this early PUS approach, in which technological development was looked upon in largely deterministic terms, more constructivist approaches were developed[1] (see e.g. Joss & Durant, 1995). The latter recognised that technology needs not be considered as something God-given, but can instead be seen as the result of a process of social construction in which all interests have a say. Within these approaches, unlike in the simple PUS tradition, participation is thought of, not as a one-way, top-down process, but rather as an interaction between decision-makers and the general public (and any other interested party).

Varieties of the constructivist, interactive approach can be placed on a scale of degree of involvement. At one end of this scale are methods characterised as 'advocacy research' (Fischer, 2000, p37ff). Here (social scientific) experts gather information about public concerns, interests or needs using qualitative or quantitative research methods (e.g. focus group interviews or surveys). At the other end of the scale are methods in which participation is more genuinely a two-way process. Here decision-makers and the general public are engaged in a dialogue with the potential to affect both parties. At this end of the scale we find methods like consensus conferences and citizen juries. Definitions of participatory processes at this end of the scale often refer to the notion of deliberation among the affected parties, as in this definition of a participatory process suggested by Fisher: '…deliberation on the pressing issues of concern to those affected by the decisions at issue' (Fischer, 2000, p.32).

In the present project, we adopt the interactive approach in trying to develop an improved understanding of participatory arrangements. Hence, we exclude simple one-way, top-down methods and include methods that facilitate at least some interaction between the decision-makers and the general public. We also limit ourselves to arrangements in which the participation of the general public (or representatives thereof) is addressed. Note, then, that we are not concerned with the broader notion of participation according to which the involvement of any kind of social actor counts (see e.g. Joss & Bellucci, 2002). Finally, we restrict ourselves to methods that are applied or institutionalised by public bodies (e.g. pub-

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[1] For an introduction to the constructivist approaches, see. e.g. MacKenzie & Wajcman (eds) (1999).

lic authorities, the government or bodies appointed by one of these). We therefore exclude arrangements operating in the business sector. This restriction excludes stakeholder dialogues as Novo Nordisk and others have developed them. More importantly, it rules out arrangements in the constructive technology assessment (CTA) tradition addressing technological development at the level of (industrial) production - although we recognise that these are arrangements which have been developed to meet some of the problems identified within the participatory methods we do consider (see e.g. Schot, 2001).

3.2 Public Participatory Procedures and Different Notions of Democratic Legitimacy

It is widely believed that conflicts over controversial technologies should be dealt with democratically through some sort of public participatory process. Consensus conferences and similar arrangements can be seen as institutional attempts to respond to this belief. The underlying assumption here is that participatory arrangements somehow add to the democratic legitimacy of a decision. However, there are various notions of democratic legitimacy, and these notions give rise to different interpretations and assessments of one and the same participatory procedure. Since different stakeholders in the debate may be wedded to different notions of legitimacy, it may be difficult to achieve consensus about the role or importance of a participatory procedure.

Roughly speaking , four conceptions of democratic legitimacy can be distinguished: (1) a procedural notion, according to which legitimacy is connected with political equality as expressed in the votes of fairly elected representatives; (2) a constitutional notion, according to which the legitimacy of democratic procedures is restricted by fundamental requirements of justice; (3) a communitarian notion, according to which legitimacy is determined by the community's basic values; and (4) a deliberative notion, according to which legitimacy is created simply through the operation of a deliberative procedure as such.

Public participatory arrangements have a role to play in all four conceptions. All four notions support the idea that members of the public should be educated and informed; all support public debate; and all support the position that affected parties ought to have an opportunity to voice their concerns. Participatory events may be seen as ends in themselves, in that the public becomes better informed and is engaged in public matters, and in that everybody gets a better opportunity to express a view to others. They may also be seen as instrumental in informing the political process.

There appears also to be widespread approval of a free and open public deliberation among equal citizens. Indeed, such deliberation is an integral part of both the communitarian and the deliberative notions of legitimacy. (Note, however, that for communitarians, the deliberation is an interpretation of what the community's basic values imply for the moral conflict in question rather than an open discussion whose outcome must be respected, whatever its result.) On the procedural and the constitutional notions, however, deliberative procedures do not affect the legitimacy of the decision process: deliberation can inform the decision-making process in various ways, but the legitimacy of any final

34

decision depends on it being made by elected politicians (procedural notion) or on it respecting the basic requirements of justice (constitutional notion).

Deliberation seems to require a certain political culture - a culture that can perhaps be initiated by certain institutions. But when a deliberative procedure is institutionalised, the different notions of legitimacy will pull the purpose, and consequently the requirements on participants, in different directions. On the procedural notion, deliberation should, first and foremost, take place in a chamber of elected representatives of the public, such as a parliament. Institutionalised deliberative arrangements should be designed to support this - for example, by confronting politicians with different points of view and various arguments. On the constitutional notion, a further purpose could be to clarify the requirements of justice in a particular case. However, no kind of group deliberation will have democratic or moral authority in itself, and an outcome that conflicts with representative democracy or basic rights will be illegitimate.

On the communitarian and deliberative notions, the participation of lay people in the decision process is central. This is because the deliberation of a group of laypersons is believed to have some democratic and moral authority, provided it fulfils certain requirements. The communitarian notion depends on ordinary citizens engaging in sustaining the basic values of the community. However, attempts to oppose or overturn basic values are illegitimate as such. On the deliberative notion, the deliberation of a group of laypersons (as directly affected parties) is an indication of whether or not a political decision is legitimate. The challenge is here to strike a balance between public deliberation and the procedural and constitutional requirements of democracy.

3.3   Participation and Bio-Politics in the Three Case Countries

Three countries were chosen as case studies illustrating the way in which different cultural, material and political contexts affect the implementation of participatory arrangements: Norway, France and Denmark. In the following subsections we shall briefly describe the contrasting cultural, material and political contexts of food biotechnology in these countries.

Denmark
With a tradition of applying traditional biotechnology, Denmark was, in the mid-1980s, among the first countries to apply gene technology to large-scale production within the pharmaceutical industries. Following this, agri-industrial actors engaged in the research and development of GM plants in the late 1980s. In the political arena, Denmark was also an early mover in Europe, as a national GM regulation was set up in 1986 - that is, five years before EU adoption of regulation in 1990/91. Denmark's R&D activities, together with its relatively proactive GM regulation, sparked off the first round of public debate in the 1980s.

Controversy at societal level and intensive R&D in the biotechnological sector during the 1980s was followed by five years of relatively subdued controversy in the first half of the nineties. But in 1996, the first large-scale introduction of GM produce in the shape of modified soya beans from the US marked a reopening of the controversy and associated

political processes. So far, in the political process, GM foods had been dealt with primarily as products presenting risks to the environment and to human safety. After the reopening of the controversy it became clear, however, that the public's concerns extended beyond these risks and included distinctively ethical worries. Consequently initiatives were taken to reflect ethical concerns in the regulation of GM foods, although so far these initiatives have not resulted in any mandatory obligation to include ethics in risk assessment or more generally in decision-making about GM foods.

The public authorities were quick to initiate broader technology assessments of the new biotechnologies in a number of initiatives from the beginning of the 1980s. This development was encouraged by serious controversy over the environment and nuclear energy in the 1980s, which led to raised awareness of TA. Although many of the assessments were traditional, expert-based TA initiatives, a significant development in participatory initiatives took place in the mid-1980s. With the establishment of the Danish Board of Technology Assessment in 1986, technology assessment and indeed participatory arrangements were institutionalised. An array of participatory methods was then developed in the following years. The most important involved the refinement of the consensus conferences of the US Office of Technology Assessment (OTA) into what later became known as 'the Danish model'.

As indicated, one important reason for the development of participatory arrangements in Denmark was the pragmatic wish to avoid controversy over gene technology of a kind similar to that which erupted over energy and the environment in the 1970s. The openness, and the desire to support the participatory methods (even the more radical kinds, like consensus conferences) must also, however, be seen in the light of a specifically Danish tradition of deliberation with roots in a particular interpretation of enlightenment. In this tradition, the importance of consensus or at least respect for others' opinions is stressed. Having said this, it is an open question to what extent the participatory arrangements in fact resulted in adjustments of public policy.

France

In France, biotechnologies were identified as an R&D target area in the 1970s. They were then prioritised in the following decades, and in particular during the 1980s. This meant that biotechnology was added to two other essential areas of R&D: aeronautics and nuclear power. A number of biotech companies were set up in the pharmaceutical and agri-food sectors during the 1980s, although the French sector never attained the size and economic importance of the US biotech industry. Indeed they failed to secure the 10% of the world market that was identified as the national target. In the course of the 1990s, however, biotechnology R&D declined in France.

French politicians have not been proactive in introducing regulation. A special regulatory framework was not set up until the EU directives needed to be implemented in 1990/91, and until then biotechnology was covered by older regulation. This relaxed attitude to biotechnology was also to be found among the French public, as biotechnology did not become a focus of social conflict until the mid-1990s. In 1996/97, however, controversy arose. It was triggered by such issues as the cloned sheep, Dolly, and GM maize. Perhaps reflecting this, a U-turn appeared to be made at the political level in the second half of the 1990s. At this time the traditional positive attitude of the government was re-

36

placed by a much more restrictive approach to GM foods and crops — an approach that was clearly demonstrated when France led calls for a de facto moratorium on GM crops within the EU in 1999.

There is a long tradition of TA in France, dating back to the early 1970s. On the other hand, the assessments have generally been carried out as expert-based initiatives and have seldom been developed further to include public participation. Hence there is, in general, no developed tradition of lay participation in decisions on science and technology - this goes also for the biotechnological issues. Rather France must be characterised as an elite-oriented political system in which a variant of the advocacy model prevails. The political decision-making process is open principally to persons with specific expertise on the issue at hand.

Where lay people are involved in political decisions over science and technology in France, their role is to widen the range of concerns included in the assessments and decisions - not to deliberate as such. Thus, as generally happens in a representative democracy, participation is ensured indirectly through formal processes. The strong French adherence to the procedural notion of democracy, was well demonstrated when the Committee for Sustainable Development stated that the (second) citizen conference was not a '…question of replacing parliamentary debates with citizens conference'.

The use, since the late 1990s, of participatory processes to help resolve controversies resulting from infrastructural planning is an exception to this general technocratic picture. Exceptions like this must, however, be seen in the light of the rising distrust of public authorities that has resulted from (among much else) the HIV/AIDS scandal. This context of distrust emphasises the pragmatic justification for participatory arrangements. It also accounts, in part, for the (admittedly few) participatory processes that have been undertaken in the field of biotechnology.

Norway
Norway is a country rich in natural resources. Wild fishing and, since the 1970s, aquaculture and the exploitation of oil deposits have become important pillars of the Norwegian economy. The availability of these raw materials has helped to ensure that Norway remains chiefly a resource economy. Relatively little attention has been paid to the manufacture of goods from extracted resources. Connectedly, perhaps, Norwegian interest in technologies such as biotechnology, IT or nuclear power is, in European terms, quite limited. Early attempts to develop a nuclear sector failed. Governmental support for biotechnology in the 1980s failed to stimulate the biotech sector. Indeed the sector has never been as important as it is in other Scandinavian countries, where there is a longer tradition of biotechnology and greater emphasis on R&D in the agri-food and pharmaceutical sectors.

Some regulatory initiatives were undertaken in Norway during the late 1980s, but it was not until 1993/94 that the regulation was in place. In some ways, this regulation was stricter that the EU directives it was designed to implement: ethical issues, such as the requirement that approvals for deliberate release should be contingent on social utility and sustainable development, went beyond the narrow, risk-orientated focus of the directives. The existence of ethical concerns was recognised institutionally in 1989 when three ethical committees - covering ethics in medicine, science and technology, and social sciences and humanities - were set up.

Reflecting its marginal economic role and relatively low level of R&D, biotechnology did not become an especially contested issue until the years after the adoption of regulation in 1993/94.

Although some initiatives were undertaken in the 1980s, TA has never developed into a discipline of real importance in Norway. This is partly because the issues that might have been handled with TA arose in the economically crucial, and for many Norwegians untouchable, oil sector. TA activities that were carried out despite this were of the expert-oriented type. They were coordinated and carried out by researchers or public administrators, and as a general rule they did not involve the public. With this relatively low level of activity, TA was not formally institutionalised until 1999, at which point an agency resembling the Danish Board of Technology was established.

Interestingly, biotechnology is an important exception to the late institutionalisation of TA in Norway. The board Bioteknologinemnda was established in 1991 to service ministers and promote public debate. Participatory arrangements, such as open conferences and consensus conferences, were then set up in the following years.

Although the development and application of participatory arrangements in Norway has been largely pragmatic and driven by the desire to handle potential social controversies, the Norwegian democratic tradition is not as top-down and elitist as it is in (say) France. In Norway the political class has traditionally been receptive to public views and has incorporated these views in science and technology policy. At any rate, public concerns are allowed to penetrate public administrative bodies.

3.4   Participation and Biopolitics in Poland and Portugal

As we have shown in the preceding section the three case countries, Denmark, Norway and France, have different histories of (bio)technological development and openness towards public participation in decisions over science and technology. Hence they also vary in terms to what extent the public has been invited to participate in the political processes related to biotechnology, and we have the contours of three different national cultures in this respect. The three case countries do, however, also share common features, namely that all have a long and relatively stable political history as autonomous nations and a mode of governance based on the ideas of representative democracy. Finally they all – albeit to different extent – have practical experiences with consensus conferences and other participatory arrangements within the biotechnological issue. In the following we will briefly present the history of participation and biopolitics in Poland and Portugal, offering a contrast to the three case countries. Thus Poland and Portugal share a relatively short history of democracy; lack of a tradition for public participation and have no or only few experiences with engaging the public in decisions over biotechnology.

38

Poland[1]

Poland's history is marked by its geographical position between the two regional powers: Russia/ the Soviet Union to the east and Germany/Prussia to the west. As a consequence Poland has, throughout the 20th century, shifted from being controlled by these two powers. The termination of the First World War also marked the end of almost 200 years of occupation of the Polish state by Austria, Prussia and Russia. Independence came, however, soon to an end as Nazi Germany conquered Poland in 1939, and following the end of the Second World War the German control was taken over by the Soviet Union. Throughout the periods of foreign control the Church has been an important institution securing partly a space for critique and maintenance of the vision of a free and united Poland. This was in particular demonstrated during the 1970s and 1980s as an informal alliance between the Church and the labour union 'Solidarnosc' paved the way for the peaceful liberation from the Sovjet control in 1989.

Poland is thus in many ways still a young democracy, and one of the major challenges to be met since 1989 has on the one hand been the establishment of institutions necessary for a functioning democracy, and on the other hand the creation of a legislative framework adapted to a free market economy rather than the preceding plan economy. This extensive restructuring of economic, political and social life can also be seen in the area of biotechnology: the modern biotechnologies were relatively late developed and apart from a policy review in 1987, no real Polish biotechnology policy can be detected until the early 1990s. As a result of this (late) bio-policy process an act on biotechnology largely mirroring the two EU directives from 1991 was adopted in 1997. A number of smaller surveys were carried out between 1995 and 1997, indicating an optimistic attitude towards modern biotechnology among the Poles – a picture that was confirmed by the first nationwide survey in 1999, showing that Poles were as pro-biotechnology as the Americans. Hence approx. two thirds were willing to accept GM foods provided strict regulatory supervision. This general positive attitude can partly be explained by an overall positive approach to western science and technology, following the westernisation of Poland in the 1990s. (Przestalski et al, 2001 & Przestalski et al, 1998)

Portugal[2]

Portugal's recent history is dominated by the fascist regime under Estado Novo (the New State) lasting from 1926 till 1974. Although Portugal was a de facto dictatorship, it was (unlike Spain) not an ally of Nazi Germany. Hence Portugal was also (partly) accepted by US and its allies in the post war period - demonstrated by its role as co-founder of NATO and early member of the UN. The years 1974 and 1975 marked a dramatic shift in Portuguese political history: Firstly the Estado Nuevo was overthrown in a coup d'état in 1974 and, after a short period of radical socialism, replaced by a move towards a representative democracy and the erection of democratic institutions. Secondly the liberation of the last Portuguese colony, Angola, in 1975 marked the end of Portugal as a colonial power – first of all having the impact that the Portuguese economy could no longer be based on exploi-

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[1] The descriptive parts of the characterisation of Polish history and political culture are based on Szajkowski (1997)

[2] The descriptive parts of the characterisation of Portuguese history and political culture are based on Pinto & Nuñes (1997)

tation of the colonies. An important part of the economic restructuring process was the membership of EC in 1986, which was followed by a period of economic growth and establishment of foreign industries in Portugal.

During the dictatorship in the Estato Novo Portugal experienced a brain drain, following the victimisation of university academics opposed to the regime. Hence the state of science and technology in Portugal was, by the end of the regime, rather poor and still remains low compared to the EU average. This general picture is also valid for the biotechnological sector that can be characterised as under average compared to EU standards. Despite the fact that Portugal has signed most international treaties on biotechnology and as a EU member is supposed to have adopted EU directives, it has been judged that this has not happened - an omission that has led to the removal of biotechnology as a publicly discussed issue in Portugal. This is part of a general trend in Portuguese science and techno political culture, where science and technology issues neither form parts of the governmental or parliamentary agendas and consequently nor that of the broader public (Jesuino, 2001).

Perhaps as a partial reflection of the low level of public debate over biotechnology in Portugal, the Eurobarometer surveys since 1991 show a public opinion towards biotechnology that is stable and optimistic. This supportive image is also true for the public attitude to GM foods, where 55% of the Portuguese in 1999 are found to be supportive, only exceeded by four of the 17 surveyed European countries (Gaskell et al. 2001).

3.5   Public participation in perspective

Compared to the three case countries, this brief description of Poland and Portugal points to some important differences that may explain the absence of consensus conferences and other participatory arrangements.

Firstly Poland and Portugal share a place among the countries with a not very developed biotechnological sector. Secondly both countries have a public that is generally optimistic towards biotechnology and relatively supportive of GM foods. Hence two important ingredients in the making of a social controversy seem to be absent in both countries: public concern and national relevance. The absence of these two factors can largely explain why GM foods and biotechnology in general has not ranked high on the public agenda. Thirdly the bio political processes seem to have been rather quiet in both countries, as they have not had a policy process departing in (national) problems, but more or less have adopted existing regulatory frameworks (the EU directives). The combination of these three conditions together with and absent tradition for involving the public in political decisions owing to the totalitarian regimes that have dominated politics in the 20th century, can explain the absence of participatory arrangements. There has simply been a lack of tradition (and hence probably also competent institutions) and no pressure to engage the public in these decisions.

References chapter 3

Bellucci, S et al (2002): Analytical framework. In: Joss & Bellucci (eds): Participatory technology assessment. European perspective. Centre for the Study of Democracy. London. P.24-48

Fischer, F (2000): Citizens, experts, and the environment. The politics of local knowledge. Duke.

Gaskell, G et al. (2001): In the public eye: representations of biotechnology in Europe. In Gaskell & Bauer (eds): Biotechnology 1996-2000 – the years of controversy. Science Museum, London. p.53-79.

Gloede, Fritz & Hennen, Leonhard, Germany: a difference that makes a difference? In: Joss & Bellucci (eds), Participatory technology assessment. European Perspectives, University of Westminster, Gateshead, 2002. p.93-107.

Grabner, Petra, Peissl, Walter & Torgersen, Helge, Austria: Methodological innovations from a latecomer. In: Joss & Bellucci (eds), Participatory technology assessment. European Perspectives, University of Westminster, Gateshead, 2002. p.61-74.

Hennen L (1999): Participatory technology assessment: a response to technical modernity? Science and Public Policy Vol.26(5). p.303-312.

Hill A & Michael M (1998): Engineering acceptance: Representations of 'The Public' in debates on biotechnology. In: Wheale et al. (eds.): The Social Management of Genetic Engineering. Ashgate. p.201-17.

Jesuino, JC et al (2001): Representations of biotechnology in Portugal. In Gaskell & Bauer (eds): Biotechnology 1996-2000 – the years of controversy. Science Museum, London. p.258-66.

Joss S & Bellucci S (2002) Participatory technology assessment in Europe: Introducing the EUROPTA research project. In Joss & Bellucci (eds.) Participatory Technology Assessment. European Perspectives. Centre for the Study of Democracy. LondonUniversity of Westminster. p.3-11.

Joss S & Durant J (1995b): Introduction. In: Joss & Durant (eds.): Public Participation in Science. Science Museum, London. p.9-13.

Joss S & Durant J (eds) (1995a): Public Participation in Science. Science Museum, London. p.9-13.

Jungk, R & Müllert, NR (1990): Zukunftswerkstätten : mit Phantasie gegen Routine und Resignation. Verlag Volk und Velt.

Klüver et al, (2000): EUROPTA. European Participatory Technology Assessment. The Danish Board of Technology.

MacKenzie & Wajcman, eds. (1999): The social shaping of technology. Open University Press.

Marjolein BAvA & Rijkens-Klomp N (2002): A look in the mirror: reflection on participation in Integrated Assessment from a methodological perspective. Global Environmental Change Vol.12. p.167-184.

Morgan, DL (1988): Focus groups as qualitative research. Sage.

Pinto, CO & Nuñes, XM (1997): Portugal and Spain In: Eatwell (ed): European political cultures . Conflict or convergence? Routledge, London. p.172-92.

Przestalski, A. et al (2001): Poland arrival of the gene law. In Gaskell & Bauer (eds): Biotechnology 1996-2000 – the years of controversy. Science Museum, London. p.251-7.

Rowe G & Frewer L (2000) Public participation methods: A framework for evaluation. Science Technology and Human Values Vol. 25(1), 3-29.

Schot J (2001): Towards new forms of participatory technology development. Technology Analysis and Strategic Management. Vol.13(1). p.39-52.

Szajkowski, B (1997): Poland. In: Eatwell (ed): European political cultures . Conflict or convergence? Routledge, London. p.157-71.

4. Benchmarking (WP3)

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4.1 Introduction

In this interim report we present the results of the first task of Workpackage 3 (WP3) of the EU-financed project 'The Development of Ethical Bio-Technology Assessment Tools for Agriculture and Food Production' (QLG6-CT-2002-02594) The purpose of WP3 is to explore ethical benchmarking in order to develop a set of tools that can help to integrate ethics in food chain management. The focus of the tools is to facilitate moral communication between economic actors in the food chain and between these food chain actors and consumers in order to gain trustworthiness.

In this task we describe stepping-stones and existing tools that will help us to evaluate, develop and apply our tools. Therefore, we elaborate in section 4.2 of this report on the contents of our task. In that section we answer the questions:

- Why is moral communication in the food chain necessary?
- What is moral communication?
- What kind of tools do we need?

This section learns us that three stages in moral communication need to be distinguished: 1) expression and exchange of values of those involved, 2) serious attempt to understand the other's positions and perspectives, and 3) communication itself.

Based upon this analysis of moral communication, we describe in section 4.3 the stepping-stones that are meant to provide ingredients for these different tools. In the remainder of the report we will not describe these stepping-stones one by one, but we will try to synthesise them in four sections:

- A section on language and metaphors (4.4);
- A section on the food system as co-operative practice and as competitive market (4.5);
- A chapter on existing tools and stakeholder theory (4.6).

During our research project we have come to realise how difficult it is to get good case descriptions. In-depth interviews and discussion with the responsible people in the cases to be studied, and the discussion at the third consortium meeting in Utrecht, taught us that we have to change our plans. Instead of two in-depth case studies it is better – based upon this inventory - to interview several possible tool users with regard to their needs. We expect that this will lead to a much better practical fit between our stepping-stones and the reality of the food chain.

4.2   Moral Communication in the Food Chain. Why and How?

We start this section with a short description of the problems in the food sector that raise the need for enhancing moral communication in the food chain. After this description, we shortly elaborate on the idea of moral communication. Based upon these two introductory sections we sketch an outline of the contents of our tools for facilitating moral communication. We end this section with conclusions about the general focus of our work package.

The problem at hand
During the last decades governmental policy in the field of agriculture and food in Western countries aimed at providing enough and safe food. That emphasis has reached a point where a tension appeared between striving for more efficiency in food production on the one hand and satisfying the concerns about food quality and sustainability on the other hand. At the same time - and as a result of growing agricultural efficiency and urbanisation - the physical and mental distance between food production and consumption has grown. Consumers have - generally spoken - a romantic picture of food production that is often re-enforced by food marketing. When - mostly in situations of food crises - they are confronted with the reality of food production, they will feel alienated. This situation leads to problems such as distrust. The technological, economic and scientific approach to food and food safety seems out of touch with the role of food in people's life world. The problems with consumer concerns and political resistance against the introduction of biotechnology in agriculture and food production in Europe can be placed against this background.

The problematic discussions about food biotechnology therefore show a larger problem with regard to the relation between the food sector and society. A mental gap has risen that asks for more than the management of public and consumer relations. It is widely acknowledged that in order to bridge this gap it is necessary that the food sector opens up; transparency and traceability are keywords in the food sector at the moment.

Transparency, however, is in itself not enough. It is clear a) that just showing what you do in itself does not solve the problem, and b) that you cannot show everything to everybody. The same holds true for traceability. Which properties of food production should be traceable? Origin, production method, environmental consequences of the production, and/or labour circumstances? Transparency and traceability presuppose clarity about the importance of what has to be shown and what has to be traceable. Possible answers to these questions depend - of course - partly upon what is practically feasible. Answering these questions depends also upon value decisions. It is clear that in practice the discussions about feasibility and values are intertwined. The more important you think something

44

is, the more effort you will be prepared to invest in it and, therefore, the more feasible it becomes. The values involved in these discussions about transparency and traceability are embedded in broader systems.

It is not self-evident that different actors in the food chain have a shared system of values. It is also not self-evident that such a shared system is feasible. In order to find out whether it is desirable and possible to develop a shared system, communication about these values is necessary. Communication about these values, their importance and their consequences for practical matters in the food chain, however, is not without problems. It seems that businesses (corporations/firms) have limited experience with value communication. Instruments to facilitate this communication are needed. It is the purpose of this work package to develop tools that can facilitate this communication.

Moral communication
In this project we would like to integrate ethics in food chain management by facilitating moral communication between the different stakeholders in the food chain. In order to identify the different stepping-stones to be used and to make a further inventory of tools in use, it is important to have a grip on the idea of 'moral communication'. This concept has been elaborated in the discussion about education with regard to values and morals in a pluralistic society. One of the influential authors in this field is Van der Ven. In his book on the Formation of the Moral Self he defines (1998, 31) 'moral communication as the ongoing process of moral exchange and understanding in the search of truth'.

He elaborates on the three keywords of this definition: moral exchange, understanding and truth as follows:

- 'Moral exchange means mutually expressing moral beliefs, principles, values, and norms, while also seeking to clarify, explain, and justify them'. From this we learn that moral communication does not only involve expressing moral points of view but also involves seeking to justify them. We not only express, e.g., that we think that animal welfare is an important value in our livestock production but we also give reasons why we think so.
- 'Moral understanding is the adopting of another's perspective and heeding another's clarifications, explanations, and justifications. It involves adopting, at least temporarily, and taking into account the individual and social history out of which these emerge'. In moral communication we are not only in the business of expressing and justifying a certain value but we also try to understand the other and his or her point of view. For instance, if someone expresses doubts about the importance of a certain environment-friendly production system, we would need to understand the background (e.g. an economic perspective and the importance of job security) of this view.
- 'This moral exchange and understanding is part of the search for truth, the search for what is good and just so that one may act with wisdom in all of life's situations'. We not only exchange views and try to understand each other because we would like to reach practical agreements, but also because we think that - although we accept all difficulties with regard to the criteria - certain behaviour is morally right and other is definitely wrong. Nowadays, an easy example would be the use of slavery in agricul-

tural practice. When we agree that one is justified in calling certain working circumstances slavery, we not only agree that these situations are unacceptable but also think that we agree rightly so.

With this definition the problem of understanding moral communication is not solved but only introduced as a topic of discussion. Especially 'truth' as the goal of moral communication raises several questions. An analysis of these questions is - for the development of practical tools - not very helpful. For our project it is of importance to see that moral communication is not solely directed at understanding each other's position but also at mutual amelioration of the values at hand. Moral communication can entail critical scrutiny of one another's values. For this it is important to distinguish between two different levels of moral communication: a first order moral communication that is characterised by plausibility, and a second order communication that is characterised by justification. In first order communication the 'perceptions, experiences, images, metaphors, symbols, stories, convictions, principles, values, and norms that are dealt with and exchanged (…) are taken as self-evident, reasonable, understandable. They need not to be discussed or proved' (Van der Ven 1999, 32). In first order communication the values, norms and metaphors are accepted as plausible. They have two important features: their core contents are taken to be self-evident and their guidance is not contested. People act upon them and they take direction, inspiration and guidance from them. In first order communication not the values, principles, etc. as such are at stake but questions with regard to their applicability in certain practical situations.

'Second-order communication also is characterized by narration and argument, but the stories that are told and the arguments that are used, are intended to evoke discussion, to break through the boundaries, the walls, of the common life-world. Questions are not meant to elicit further clarification and enrichment or deeper understanding, but to call into question the traditional rules, values and norms' (Van der Ven 1999, 33v). Second-order moral communication is about moral conflicts. Practises, norms or ideals that were accepted once are challenged now. In the food chain, second order communication often starts when generally accepted practices within the food chain are questioned and challenged by NGOs and when significant numbers of consumers support these questions by raising 'consumer concerns'.

From this short analysis we learn three things that are important for the development of our tools:

- Moral communication entails the expression and exchange of values of those involved;
- Moral communication entails serious attempts to understand the other's position and perspective;
- It is important to distinguish between moral communication about a) plausible and therefore shared perspectives and b) divergent and therefore challenged perspectives.

Developing a tool

The objective of our work package is to link food chain management and ethics in order to enable the stakeholders to deal adequately with ethical issues in the food chain. For that purpose we will develop a set of tools that can be instrumental for critical reflection. The typical tool will not be a checklist for companies to inspect their values, nor will it simply be a recipe for satisfactorily answering complaints from environmental, consumer or animal welfare groups. The tools, instead, will be of three kinds:

- Tools for value clarification (within firms). Clarifying one's own values is a first step towards moral communication and a first phase of the communication itself. For the first tool one can think of lists of interconnected questions with building blocks for possible answers. These building blocks enable organisations in the food production system to formulate positions and clarify the value decisions they routinely make.
- Tools for improving the understanding of the positions of others (other firms, consumers and NGOs). Answers of individual actors within the food chain, however, are not enough. Firstly, the interdependence within the food chain extends into the field of value judgements: decisions made in one place in the food chain limit the decisional space of others. In order to provide transparency and traceability in the food chain with regard to these value judgements moral communication within the chain is necessary. It is therefore necessary to provide tools that help to understand the position and perspective of the other actors in the chain. Secondly, providing transparency and traceability presupposes an understanding of towards whom a firm would like to be transparent. Therefore, the tool should also improve the understanding of the positions of the citizen-consumer and NGOs. Here we think of a typology of systematic positions in which different value judgements are merged into more or less systematised pictures. This overview of ideal-types helps to understand the possible positions of others.
- Tools to characterise differences of opinion and suitable communication strategies with regard to these differences. The third kind of tool is needed to help actors to distinguish between 'a) plausible and therefore shared perspectives and b) different and therefore challenged perspectives'. Here we think of a tool that consists of a characterisation of different moral conflicts and suitable coping systems. For this we think of process-oriented tools that create and structure discussion arenas.

Thus the work package will deliver instruments that enable actors in the food chain to a) formulate their own answers to the relevant questions, b) understand the answers of others, and c) start communication that is in line with the kind of emergent problem.

Conclusions

The main conclusions that we draw from this analysis of moral communication and its context is that for facilitating moral communication in the food chain:

- the emphasis should not be on a possible result, like trust or trustworthiness, but on the processes of moral communication;

- it is important to distinguish different stages of moral communication (self-clarification, understanding the other, comparison and communication), because from each stage follow different requirements for the tools;
- it is important to recognise that communication is not only build upon conceptual skills but that social skills are equally important and that we need to address the importance of these social skills.

4.3   A Systematic Presentation of the Stepping-Stones in the Report

The stepping-stones analysed in this report are meant to provide ingredients for different tools. They consist of different elements that might be helpful for their further development of our toolbox. Some of these stepping-stones already have a direct link with the issues at hand in moral communication within the food chain. Other stepping-stones, however, have a much more distant relation to the issue of moral communication. According to us, a wide variety of possible stepping-stones is needed, since the problem at hand is relatively new. We hope to benefit from a broad inventory of possible inputs from diverse discussions and backgrounds.

For the selection of stepping-stones we have distinguished four different leading questions with regard to the food chain. The answers to these questions were used to cluster groups of items that might function as stepping-stones. In this interim report we limit ourselves to the description of these items. In the next task we will decide what possible stepping-stones do really help us in developing our tools.

Which concepts help us to understand the relation identity-communication in the food chain?
- Description and analysis of discussions about the use of images and metaphors and their importance for conceptualising and managing ethical issues in food chain and/or business contexts, including images and descriptions of ethically ideal chains.
- A brief analysis of theories about identity with special attention for the concept of narrative identity. Application of these theories to the identity of organisations (e.g. firms).

From these stepping-stones we expect to gain insight in the (symbolic) representation in and of the chain and the relevance of these (symbolic) representations for real life communication.

What is the context in which the tools have to function?
- Here we think of three kinds of stepping-stones that might be relevant:
- Description and analysis of discussions with regard to the concept of 'practice' and of practice-inherent moral norms and values, with a special emphasis on the relations between different practices in a pluralistic society.
- Description and analysis of (descriptive and normative) stakeholder theories with regard to the role of implicit and explicit negotiations with stakeholders and the justifying role that stakeholder consultation can and cannot fulfil.

48

- Analysis of the relation between citizens and consumers, the relation between civil society and market.

From these stepping stones we expect a) insight in the societal and economic contexts in which the food chain has to operate, b) an overview of the discussions about the way responsibilities are assigned in these contexts, and c) material to evaluate existing tools from the perspective of the consequences of these contexts for the application of the tools.

Which moral concepts already play an important role in food-chain-debates?
- Analysis of the concept of trust, especially of the difference between anticipatory and responsive trust and the relation of trust with traceability, transparency and responsibility
- Analysis of the concept of responsibility, especially of responsibility for the vulnerable entrusted to us and of the distinction between minimal and ideal responsibility.
- Analysis of the concept of care and its role for relations, departing from the discussions within the ethics of care.

From these stepping-stones we expect to gain insight in why, where and how ethics can be introduced in food chain management.

Which tools are already in place in business and business ethics?
- Description and analysis of benchmarking (A systematic process for securing continuous improvement through comparison with relevant and achievable internal norms or standards). Benchmarking is a management tool already in use in both public and private sector organisations and it is all about change, moving from one position to a better position.
- Description and analysis of standards and protocols for ethics and values in businesses. Literature on business ethics and corporate social performance in general, with special attention to a) the development and evaluation of standards and codes, and b) process-oriented approaches.

From these steppingstones we expect an inventory of possible processes of standardization of non-quantifiable elements of production, explicit reflection on strengths and weaknesses of standardization and an overview of 'ethical standards' already in use.

Describing these stepping stones
In the remainder of the report we will not describe these stepping-stones one by one but we will try to synthesise them in four chapters. In the next section (4.4) we will focus on the ways in which identity, image and metaphors play a role in the first two stages of moral communication (self-clarification and understanding the others). Organizations cannot always 'just' make a list of the values they hold. Their values are often held implicitly and are embedded in the way that they express their identity. Also the perceived values of other organizations can sometimes be traced through the indirect way of analysing metaphors used to describe these organizations.

For facilitating moral communication in the food sector it is important to distinguish between 1) the food sector as a co-operative practice in which different parties work together, and 2) the food sector as a competitive market in which companies operate as rivals. In section 4.5 we explore these differences and we learn that both create different opportunities and challenges for moral communication in the food chain. In the first context moral communication can build on existing co-operation, in the second it needs to acknowledge the possibility of 'ethics' being used as a strategic devise. Trademarks, ethical labels and the like can be seen as instruments of companies for responding to consumer concerns in the market and function- at least partly - as tools to gain larger or specific lucrative markets.

The focus of our tools is to facilitate moral communication between economic actors in the food chain and between the food chain and the consumers in order to gain trustworthiness. For our work package it is therefore important to have a more precise understanding of the different ideas and concepts that are related to trust and trustworthiness. In section 4.6 we analyse trust, trustworthiness, responsibility and care. This analysis will give us insights that are important for the evaluation of the tools that are already available.

In the last section (4.7) we give a systematic presentation of eleven tools that are in use. We think that these eleven tools, together with some of the tools described in WP1 (like the ethical matrix), will help us in completing our set of tools. Each of these tools is described in more detail in the annex. The tools that we found can be grouped under five headings. We found tools for: 1) ethical exploration, 2) ethical decision-making, 3) ethical identity expression, 4) management of change, and 5) stakeholder dialogue. Stakeholder dialogue seems for our project a very important tool. Therefore, we give special attention to stakeholder theory as its background. We focus on the unsolved problems within this theory, not to discredit stakeholder dialogue but to show which problems we need to tackle in the next - evaluative - task.

4.4   Values Embedded in Identity, Imago and Metaphors

In the first two stages of moral communication (self-clarification and understanding the others) one cannot always 'just' make a list of the values one holds. The values organisations hold implicitly are often embedded in the way that they express their identity, and the perceived values of other organisations can sometimes be traced through the indirect way of analysing metaphors used to describe these organisations.

Identity and Imago
One can understand 'corporate identity' as the sum of it's values. Corporate identity is intertwined but not identical with corporate image. The latter refers to how firms are perceived, while the former refers to how or who a firm was, is and would like to be. Nevertheless, reflection on identity is often stimulated by reflection on image.

Image is important for companies. It has - as a marketing issue - gained enormous importance in the 1980s in conjunction with the idea that successful corporations should not primarily produce things or products but brands. What a company produces in the first

50

place came to be seen as images: brand image was what counted. Consequently, image management became an issue of the highest corporate relevance. Image includes not only visual aspects of brands, such as logos, but also the values, lifestyles and emotions associated with the brand. The aspirations of brand imaging, however, have been expanded. Brands came to be sources of meaning and identity, acquired spiritual dimensions.

Focusing solely on brand image becomes problematic, when an image is not linked with reality any longer, e.g. unpleasant realities about production circumstances. The problem for firms is that this gap will inevitably backfire. Image management, therefore, cannot easily be separated from corporate identity.

A way to understand human identity is to consider it as narrative identity. Narrative identity is an attempt to grasp reality in a comprehensive way. Living amidst potential chaos, people create unity, meaning, purpose and direction through narrative devices in an essentially historical, story-like way. Johnson (in his book Moral Imagination) takes narratives in a broad and metaphorical sense. Narrative is not only linguistic storytelling. Life itself is lived in a narrative way, i.e. people live their lives in a story-like way, with the help of narrative explanations that construct unity as well as direction. Narrative identity relates persons to their past and future as well as to their social and material environment. It is therefore not only a historical but also an ecological concept. Understanding these narratives, in turn, leads us to frames, plots, metaphors and other imaginative devices. We are thus directed to the importance of metaphors for corporate identity in two ways:

- Thoughts about companies are (sometimes, often, always?) metaphorical. Companies can be seen as persons but one can also think about companies in terms of machines or biological organisms;
- Contemporary thinking about identity stresses its narrative character and metaphor is a crucial element in understanding narrative. When we would like to understand the values embedded in a company's identity, deconstructing its narratives – its metaphors - might help to express these values.

Metaphors

According to Lakoff and Johnson (1999) the embodied character of the mind explains why conceptual thought is largely metaphorical. As children, we learn to think in specific situations, in which we equate affection with warmth, importance with bigness, etc. Growing up, these associations turn into what the authors call 'primary metaphors', which are gradually combined to form the complex metaphorical structures in which mature conceptual thought takes place. The mechanism is always a movement to understand the unfamiliar with the help of the familiar.

Schön (1979) argues that while designing social policy is often seen as a problem solving activity, the setting of the problem is in fact more important. Problem setting can be clarified by listening to stories that people tell about situations. Because stories are specific, they preserve more of the richness of situations than theory (they are comprehensive devices to deal with reality). The framing of stories is often based on underlying metaphors, which Schön calls generative metaphors because they generate explanations, observations and problem solutions. He emphasises that many conflicts cannot be solved through the collection of new data, because they are caused by different metaphorical framings that give relevance to different kinds of data. This shows the importance of un-

derstanding the metaphorical structure of discourse in order to be able to understand the positions of those with whom one would like to communicate.

In business management the ideas about the role of images, metaphors have been elaborated by Morgan (Images of Organization, 1986 & Imaginization, 1997). He expresses the idea that all theory, including theory about organisation and management, is based on metaphors. In Images of Organization he presented six different metaphors of organisations, including machines and organisms. Each of these metaphors highlights as well as hides its own specific aspects of organisations. Managers should avoid superficial management fads by using the different metaphors wisely and creatively. In Imaginization he uses metaphors as creative devices in order to start reflection about organisational identity. According to him managers should become skilled in the art of using metaphors to find 'new ways of seeing, understanding, and shaping their actions.'

Awareness of metaphors clearly can be put to different uses. Metaphors generate frames of thought, and elucidating them therefore elucidates our thoughts about an issue. Metaphors guide the search for solutions to problems. But awareness of the metaphors organising our thought also implies awareness of possible alternatives. When we look for fresh alternatives through the pursuit of new metaphors, they become devices to facilitate creative processes. In short, on the basis of an awareness of metaphors different tools can be constructed, which are not mutually exclusive: tools to clarify frames of thought, to look for alternatives, to guide the exploration of an issue. For the present work package, their usefulness for thinking about corporate identity in relation to corporate ethics is the criterion.

Conclusion
With regard to the different tools that we would like to develop we can conclude from this analysis of identity, imago and metaphors that for self-clarification and understanding the others:
- The role of real and perceived identities is important. The work package needs tools to construct and deconstruct identity and imago;
- The role of language and the way positions are framed are important. The work package needs tools to disclose the role of metaphors and frames in shaping identities.

4.5 The Food Chain as Co-operative Practice and Competitive Market

For facilitating moral communication in the food sector its structure and the way different actors relate to each other are important. In this perspective the food sector has two different faces that require different tools for moral communication. On the one hand, different parties work together in the food sector. They have common standards and common goals (like food safety). For facilitating moral communication one should take these common practices as point of departure. An analysis of the food sector as a 'practice' could therefore provide us with stepping-stones for our work package. On the other hand, the food sector is a market in which companies operate as rivals. Ethics is in this market used as a strategic device. Trademarks, ethical labels and the like are instruments of companies for respond-

ing to consumer concerns in the market and function - at least partly - as tools to gain larger or specific lucrative markets. For facilitating ethical communication in the food sector it is therefore also important to have a good insight in market positions in the food market and of the role of consumer concerns on this market. For facilitating moral communication we need to have more insight in the role that ethics plays on the market. An analysis of food as not just a commodity and of consumer concerns will therefore also provide us with stepping-stones for our work package.

Practices in a Pluralist Context
In order to improve our understanding of the co-operative activities in the food chain it might be helpful to use the concept of practice. The central idea is that human activities take place in a social context. There is a difference between cutting someone with a knife in a medical context and in a fight. The 'same' action is different, because of the differences in context. One way of understanding this difference is by focusing at the organisational principles that form the basis of the contexts in which these activities take place. The underlying principles of fighting are different from the underlying principles of medicine. In order to get a better grip on these organisational principles the concept of practice has been used.

Being embedded in different practices makes the 'same' action different. In order to get a better grip on this concept of 'practice' we start with a definition of practice by Alisdair MacIntyre. His definition seems helpful for elaborating on the different problems in trying to understand the food sector as a practice.[1] In After Virtue (1984, 187) MacIntyre defines a practice as follows: 'By a 'practice' I am going to mean any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence, and human conceptions of the ends and goods involved, are systematically extended. Tic-tac-toe is not an example of a practice in this sense, nor is throwing a football with skill; but the game of football is and so is chess.' In the definition of MacIntyre we find three important elements:

- He describes a practice as a coherent and complex form of socially established cooperative human activity. The problem created with this part of the definition is to distinguish one practice from an other. The question is which activities we take together as a coherent and complex form, which level of abstraction we want and where we draw the line between activities that belong to one form and to an other.
- Their internal goods characterise practices. For science as a practice he proposes truth as an internal good and for medicine human health. One could defend that food safety and food security are the internal goods of the food practice. In the interviews with the different stakeholders in the next task we have to find out whether this is really the case. These internal goods are distinguished from external goods. External goods are necessary means in order to keep the practice going (like money, jobs and buildings) and in that sense very important. However, they are not relevant for un-

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[1] Different ways of defining a practice prevail. For our workpackage it does not seem to be necessary to dwell into these different definitions. We use the definition of MacIntyre in order to elaborate on some of the tensions intrinsic to the use of the concept of practice.

derstanding what the practice is all about. They are of course important because they shape the context of the practice. An important characteristic of the internal goods of a practice is that they are necessarily contested. Some discussion about the character and relation between the different internal goods of a practice always exists (What is truth, health or food safety? What is the relation between consumers' risk perceptions and scientific risks? Do countries need an own agriculture to establish food security or is food security a global good?).

- From the internal goods of a practice follow standards of excellence in order to assess the adequacy of different activities. Since practices are oriented at internal goods, they are necessarily normative in the sense that different activities are better or worse directed at these internal goods. In order to assess the different activities standards of excellence are available. In a well-functioning practice performance according to these standards of excellence is a dominant denominator for the distribution of the external goods. A practice functions well when the performance according to the standards of excellence plays a dominant role in the distribution of, e.g., money and jobs.

A question to be addressed in the following tasks of our work package is in what way the concept of practice is helpful in understanding the food sector. On the one hand, one can see food safety and food security as internal goods of the food sector. On the other hand, it is clear that the links in the food chain are – not yet – integrated in a way that enables them to be understood as a coherent and complex form of socially established, co-operative human activity. Coherence and co-operation between the different links seems primarily organised through external goods (money) and not through common standards of excellence. A lot of money is involved in the food sector, it operates on a huge market. According to the Worldbank (Diaz-Bonilla & Thomas 2003: 233) the top 20 of food exporters together export for 80.26 billion US$ a year.

Food: Not Just a Commodity
Because food is an important economic commodity our tools need to acknowledge this market reality. However, one of the specific aspects of the food market is that we cannot regard food purchasing as just an economic activity. Among the stepping-stones for our tools we need elements that address the issue that food is not just a commodity.

Food is special because it is important for maintaining our lives, without food we die. This is of relevance because up until recently in affluent countries and still in great parts of the world food is scarce. Food chain ethics cannot neglect the fact that massive under nourishment prevails across the globe. FAO estimates at this moment that some 800 million people are undernourished.

Food is also special because it is strongly linked with our cultural and individual value systems. What we think of acceptable food products - the distinction between the edible and the inedible - is strongly related to our religious and cultural worldviews. The distinction is not just based on what our bodies can digest - think of eating insects, cats, dogs or horses - nor do we treat food as just getting sufficient nutrients. The social and cultural meanings of food preparation, of sharing food and of the way that food is part of our

communication patrons, is a study in itself. The consumption of food plays a role in our collective and personal identity building.

The fact that food is special has direct consequences for the way that ethics relates to food markets. Consumers formulate certain 'moral concerns' with regard to food production and one of the ways that food companies respond to these concerns is by labelling certain products as animal friendly, organic, natural, etc.

In our work package we need to elaborate on the relation between consumer concerns and ethical labelling. Therefore, we analyse in this task the concept of consumer concerns. The complexity of this concept will become clear, if we take a closer look at the different concerns that consumers voice on the food market:

- *Concerns that matter to all consumers*. Certain consumer concerns matter equally to everybody in their role as consumers. Food safety is a key issue in this field. Food safety is important to all consumers and it is clear that food safety issues ask for a governmental response. It is beyond the possibilities of individual consumers to assess these questions (Rippe, 1999). Here we see that a certain consumer concern calls for activities of citizens in order to handle their concerns.

- *Concerns that matter to specific groups of consumers.* Other consumer concerns matter to special groups of consumers, because of the way they want to live their lives. It is important for citizens to be able to live according to their own life plan. Respect for their autonomy implies that they have the prima facie right to live their life according to their own value system. Their right to live according to their own life plan implies that they ought to have the choice for products that fit in with their view of life. Vegetarians, for instance, can only live according to their own value system when they know whether or not their food contains animal products. In so far as vegetarianism is a lifestyle we see that personal values enter the market. If vegetarianism transcends lifestyle and is a moral choice that appeals to others, it will go beyond consumer concerns.

- *Concerns that go beyond consumer concerns*. Finally, concerns are articulated on the market that find their origin in the role people have as citizens. These concerns are related to ideas about a good society. These concerns are not 'consumer concerns' in a technical sense; they are public concerns. People are concerned about certain products because of the wider impact of these products on their society and the world. Take, as an example, meat that is produced by crated calves. People are against this way of producing meat, not just because they do not want to eat meat produced by crated calves but also because they think that the way crated calves are treated is immoral and should be banned. Crating calves is problematic because it is not compatible with a good society. Here we see how civic values enter the market.

In developing our tools we need to take into account the distinction between consumers and citizens and the link between both roles as shown in the analysis of consumer concerns. We also need to look at how food companies respond to these concerns, e.g. in so-called ethical labelling.

Conclusion

With regard to the different tools that we would like to develop we can conclude from this analysis of the food chain as a co-operative practice and of food as a special commodity in a competitive market that for facilitating moral communication:

- The co-operation of actors in the food chain as a common practice with more or less shared standards on food safety and food security is an important point of departure for developing communicative ethical tools;
- The role of ethical standards, labels and trademarks as answers to consumer concerns and as competitive instruments calls for tools that facilitate a process of fair comparison of different standards in competitive markets.

4.6   Trust, Responsibility and Care

The focus of our tools is to facilitate moral communication between economic actors in the food chain and between the food chain and consumers in order to gain trustworthiness. We concluded at the end of section 4.2 that the emphasis of our work package should not be on a possible result of moral communication, like trust or trustworthiness, but on its processes. Nevertheless, it could be helpful for designing our communicative tools to have a more specific understanding of the different ideas and concepts that are related to trust and trustworthiness. The analysis of these concepts does not directly contribute to description of our tools but it will give us some insights that might be important in the evaluation of the tools that are already available.

Trust[1]

In trying to define the concept of trust the diversity of definitions is striking. Like Hardin (1993, 2000) we can define trust as embedded interest in the sense that you will trust someone, if you have sufficient reason to believe that it is in that person's interest to be trustworthy. Trust is embedded in one's judgement of the interests of the trusted. The basic premises of this rational choice approach are that both the trustier and the trustee are rational agents and that trust is a form of rational calculation based upon available information. Since trust becomes crucial in situations of risk or uncertainty, trust is seen in this approach as rational risk calculation. In this process of rational calculation both the trustier and the trustee aim to maximise their interests.

But is trust always a matter of rational considerations and interests? Lahno (2001) convincingly argues that genuine trust has an emotional character that goes beyond the direct control of reason. He states that a focus on rationality does not suffice for enlightening the concept of trust. Trust is more than accepting a certain risk, in the sense that we decide to trust after having weighed all risks and benefits. This does not imply that trust is a completely intangible concept that lacks any relation to reflective deliberation and reason. Yet, it means that trust is not merely influenced by the risks and benefits in the surrounding world around. Trust itself colours our perception of that world. Trusting has a double direc-

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tion: although rational analysis of risk and uncertainty plays an important role in the process of trusting, trust is not something that is decided with a calculator on our desk. Understanding trust as an emotional attitude elucidates that trust colours the information we get about risks and uncertainties. Our perception of the information that we receive is highly influenced by the presence or absence of trust, e.g. someone who trusts the food sector will probably perceive a large-scale recall of a product by a food company as a confirmation of his trust. On the other hand, someone who lacks such trust in the sector will presumably have the idea just to have escaped from another food crisis.

In short, speaking about trust implies speaking about relations. Trust is never a kind of static noun that can be separated from trust relations. Further, in speaking about trust we cannot ignore the emotional character of trust. Knowledge and control are both issues that are important with respect to trusting relations. However, by reducing trust to a problem of knowledge and control or power we tend to eliminate trust (Becker, 1996). Trust is not only a matter of risk reducing, it enables us to deal with risks and uncertainty.

To prevent that trust becomes a catch-all concept that will be next to meaningless, it is wise to differentiate between different types of trust (see: Sztompka 1999; Hollis 1998). We may distinguish at least two general types of trust: anticipatory trust and responsive trust[1].

Anticipatory trust. Anticipatory trust is the kind of trust in which one trusts the other since one expects him or her to act routinely. It is the normal pattern of behaviour that forms both the starting point and the ground for trust. The main element in the (implicit) decision to trust is the analogy between this case and former cases in which the other has acted in a trustworthy way. Precondition for this type of trust is that a kind of predictive pattern exists. This might also be based upon the sum of different events and different actors with a same result. When I have never bought decayed food in a supermarket, I will also buy food in a supermarket that I do not know at all. In that case I will trust that the food quality in this supermarket is like everywhere else.

Responsive trust. In many situations in the agro-food sector the normal pattern does not suffice as ground for trusting relations or a normal pattern is absent. With the introduction of a new technology in food production, for instance, we have to trust others that the products of that technology are safe and meet certain standards of quality. However, in such a situation we cannot rely on the usual way of dealing with these products, since no normal pattern concerning this new technology is established. In such cases we may better speak about responsive trust. With responsive trust we do not expect the other to act along the normal pattern but we expect the other to be responsible in his or her acting with respect to the object entrusted to him or her. The other should not merely do the usual but should do what is right, i.e. should do what may be expected of him or her in moral terms. This implies some extra responsibility. Shared values and shared moral understandings - and the expectation that the other will act in accordance with them - are the ground of this kind trust.

Anticipatory trust presupposes predictability, responsive trust presupposes shared values. For anticipatory trust transparency and traceability seem to be enough. Responsive

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[1] Sztompka (1999; 27-29) also speaks about evocative trust. This type is, however, not very illuminating in the field of agriculture and food. See also Hollis (1998, 10-11), who distinguishes predictive trust (trust the other to do the same as usual) and normative trust (trust the other to do what is right).

trust, however, remains problematic and vulnerable as long as it is not clear what the implications of the shared values are. Therefore, responsive trust is not only a matter of transparency concerning the values at stake but also implies a discussion on how these shared values are applied in relation to the object of trust. Responsive trust asks for moral communication.

For the food chain this means, among other things, that giving information does not necessarily generate trust, since the presence or absence of trust partly determines how information is conceived. Traceability might be important for the 'rational choice' aspect of trust but it does not say much without being linked to values. Transparency should also include transparency of aims and values and how these values are translated into norms. The best way to make trust in others possible is by becoming trustworthy. In order to be trustworthy it is necessary to know and communicate about one's responsibilities.

Moral responsibility
Responsibility is a frequently used concept in daily language. Hundreds of books and articles have been written about responsibility and the concept appears in political, societal and even personal discussions on a daily basis. Whether it is about the responsibility of the physician or government, the responsibility for safe food or healthy nutrition, or responsibility as an educational aim, the public has a general understanding of how the concept of responsibility is used in a given context. While discussions usually address the content of responsibility in a specific situation, the concept itself is rarely defined. Despite our frequent use and understanding of the concept, it is not an easy task to define it in an abstract way.[1]

Let us therefore start by exploring the contrasting concepts of 'being responsible'. Someone is 'not responsible' when he is (as yet) lacking the capability for being responsible, e.g. an infant. Someone is also 'not responsible' when he is not in the situation to influence what is happening. Then, someone else might take the responsibility. 'Being responsible' can also be contrasted with 'being irresponsible'. In that case, someone is capable of responsibility and is, up to a certain degree, able to influence a situation but does not (rightly)do so and he is blamed for that (De Beaufort 1992). Responsibility and the contrasting concepts refer to moral responsibility. Moral responsibility can be assigned to people (by themselves or others) having the necessary capabilities. It means that a responsible person is morally accountable for his choices and can pro- or retrospectively give good reasons for them. Responsibility comes is related to power and vulnerability: a choice between different actions is available and this choice matters to others.

Moral responsibility is linked with one's behavioural choices. This holds in two different ways. First, from the perspective of reactive responsibility the point of departure is a certain (mostly undesirable) state of affairs. Then the question is asked what a certain actor (P) has done in order to determine whether that actor can be held morally responsible (and thus blamed) for what has happened. Second, from the perspective of prospective responsibility the point of departure is the actor (P) feeling responsible for bringing about something. That felt responsibility determines the actor's behaviour, which in turn results in a certain state of affairs. The concepts of retro- and prospective responsibility differ in

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[1] We will not dwell into the philosophical discussion about responsibility and free will.

58

point of departure (from the actor or from a situation), direction (responsibility ascribed after something happened or responsibility taken to strive for something) and perspective (responsibility ascribed from the outside or by the actor himself). While these distinctions are theoretically illuminating, in practice both concepts are intertwined. What one accepts as one's prospective responsibility might be linked to one's calculation of whether one will be blamed or not.

Responsibility is not only a question of perspective but also of standards. This is of specific importance for our tools. Standards of responsibility probably differ among actors in the food chain. On the one hand, some scholars defend that actors only need to take their minimal responsibility. With minimal responsibility acting responsibly means sticking to the minimal standards that are set by some social environment, e.g. the government. One does what minimally can be expected from the outside and is accountable in case of not living up to these standards. Taking one's minimal responsibility is a necessary (first) step in being a trustworthy partner in social (or business) life. However, taking up one's minimal responsibility only generates predictability of one's behaviour - one can be expected to do what accepted standards proscribe - and therefore only generates anticipatory trust. The problem, however, in a changing food chain is that in order to be trustworthy one needs not only to be predictable but also responsive.

Being responsive might be understood as taking up more than minimal responsibility. In this context the idea of ideal responsibility might be helpful. Taking up ideal responsibility implies that one takes some (explicit or implicit) ideals as a compass for making specific behavioural choices. In ideal responsibility an actor acknowledges his own influence on a future state of affairs and determines and holds on to his own moral values concerning the issue at stake. Questions like 'In which world do we want to live?' and 'How do we want to treat animals and nature?' might be relevant in this context.

One might ask questions about the limits of moral responsibility. Some critics might be sceptical about what was described as ideal responsibility and conceive it as an 'unrealistic ideal'. One of the objects of moral communication between the different stakeholders in the food chain is to gain insight in each other's ideas about taking responsibility and - if possible - to develop common standards and ideals. Such an endeavour, however, faces some interesting problems. First, no shared operational definition of moral responsibility exists. Second, it is clear that companies - in a competitive market - are restricted in their possibilities. Third, the relation between self-regulation and government intervention is obscure.

Care

One of the important features of trust, trustworthiness and responsibility is that focus is not only on actors and their behaviour but also on relations and interdependencies between different actors. The importance of relations and interdependencies has been a central focus of the ethics of care. The ethics of care draws special attention to unequal relations, vulnerability and dependency. The ethics of care might help us in developing our tools because communication within the food chain is communication between actors that are interdependent and between actors that are (sometimes) vulnerable.

According to proponents of care ethics dependency, vulnerability and interdependence are important facts of life (Verkerk 2003). In contrast to the ideal that informs many

moral and political theories, people are not always equal and autonomous. Therefore, the moral question of an ethics of care is not 'What, if anything, do I (we) owe to others?' but rather 'How can I (we) best meet my (our) caring responsibilities?' (Tronto, 1993; 137). This leads to the following elements of a moral relation:

- *Attentiveness.* This means that we should recognise the needs and concerns of others - others matter. Attentiveness requires that we know the needs of others and how those needs are affected by our own behaviour. Tronto says (1993; 128): 'evil can arise out of ignorance, either wilful or established habits of ignorance'. While Tronto describes attentiveness as 'other-directed', she acknowledges the prerequisite that one's own needs have to be sufficiently met before one is able to notice the needs of others at all. From this follows that attentiveness should also be self-directed. Caring for oneself is not the same as being selfish.
- *Responsibility.* Meeting one's own caring responsibilities is crucial in care ethics. The big questions are what one's responsibilities are and what to do in case of conflicting responsibilities. Questions of responsibility can become political, i.e. they can become matters of public debate. Discussion about and distribution of responsibility is crucial for care ethics.
- *Competence.* Recognising a need and feeling responsible is not enough. In the end it is important that needs are met. Therefore, competence of giving care is important as well.
- *Responsiveness.* As conditions of inequality and vulnerability exist and people are not all the same, it is important to practice empathy. One should be able to envision the other's frame of reference but not simply by presuming that the other is exactly like the self.

In ethical tools for moral communication these elements might function as process values.

Conclusion
With regard to the focus of the different tools that we would like to develop we can conclude from this analysis of trust, responsibility and care that:

- The analysis of trust and trustworthiness supports the conclusion of chapter 1 that in order to facilitate moral processes in the food chain the emphasis should not be on a possible result, like trust or trustworthiness, but on the processes of moral communication;
- Since responsibility in the food chain is often obscure and object of differences in opinion that lead to tensions and conflicts, tools are needed to clarify responsibilities and facilitate communication about how responsibilities are taken;
- For facilitating moral communication in the food chain we should not only focus on distinct communicating actors but also on relations and interdependencies between these actors.

4.7 Existing Tools and Stakeholder Theory

Our project does not need to start from scratch. Some tools are already used in practical contexts and may help us. This section describes eleven tools that seem to have potential relevance for facilitating moral communication in the food chain. We think that these tools can help us to develop tools for facilitating moral communication in the food chain. Next to these eleven tools, some of the tools described by WP1 are also relevant for us, i.e. the ethical matrix. We will include these tools in our evaluative task.

The tools that we found can be grouped under five headings. We found tools for: 1) ethical exploration, 2) ethical decision-making, 3) ethical identity expression, 4) management of change, and 5) stakeholder dialogue. Since one could easily get the impression that we only need to adapt the last tool in the remainder of our work package, we will give special attention to the problems that stakeholder theory faces. The reason for this is not that we mean to discredit stakeholder dialogue but to show which problems need to be tackled in the next - evaluative - task.

Ethical exploration
The first two tools that we selected are intended to facilitate ethical exploration:

- *Weston's Toolbox.* The toolbox is meant to offer wider practical skills than in traditional ethics in order to get ethical thinking 'unstuck'. The intended outcome is to find new and better solutions to moral conflicts, which do justice to all or most of the underlying values.
- *Value Clarification.* A method to clarify and develop individual values. It also promotes the development of a consistent set of values through a valuing process.

These tools are meant to open up ethical thinking and they could function in the first two phases of moral communication: self-clarification and understanding the others.

Ethical decision-making
The next two ethical tools are about ethical decision-making:

- *Ethical Accounting (for Livestock Farms).* This tool is a decision support system/management tool for individual farmers, involving value-based planning.
- *Stepwise Dilemma Solving.* This method addresses and solves moral problems in a structured and stepwise way, which facilitates discussion and decision-making.

These tools focus at deliberation within an organisation or a group that has to take a common decision. These tools structure the different options and the different values and they provide organisations with elements for responsiveness with regard to decision-making.

Ethical identity-expression
The next three tools are used by organisations in the food chain in order to express and justify their position on certain moral issues. For our research project the introduction of new

values or changing existing values is also an important way to change the organisation. Value clarification in companies is an element of what Swanson (1999) calls a value-attuning culture that looks for ways to clarify values, expand and connect them and act upon them:

- *Normative Standards*. This is a method used to co-ordinate normative behaviour. Many normative standards are developed by organisations. We will present the Fair Trade movement as an example, because it is an organisation that is trying to convince other organisations to use a set of normative standards in conducting their business.
- *Ethical Codes*. Many organisations have formalised their standards of conduct in an ethical code. We will present the example of Unilever, a large food company, to illustrate this tool. In the next task of our research project we will use the ethical codes of more organisations in the food production chain like Nutreco and Nestlé.
- *Ethical Audits*. In this method companies ask (external) auditors to check whether they performed according to their self-proclaimed standards and ethical codes. The purpose of this can be a) keeping their standards up-to-date, b) stimulating ethical awareness, accounting or checking compliance within their organisations, or c) creating a firm ground for stakeholder communication.

These tools focus at explicating and creating openness in how a company handles ethical problems. By doing so, companies make explicit how that they take up their social and moral responsibility.

Management of change
The following tools are not uses as 'ethical tools' but they are related to the way organisations in the food production chain change over time. This usually means continuous improvement. It is impossible to stay competitive without inventing new ways to produce better and cheaper. All kinds of ways to change an organisation exist: hire new people, develop new products, change business processes, etc. The next three tools are standard methods to enhance quality in organisations:

- *Total Quality Management*. A method to improve the quality of the internal processes of an organisation. It is all about the insurance of continuous improvement.
- *ISO method*. The adoption of external standards, like the ISO 9000 series, in an organisation.
- *Benchmarking*. This method actively looks for best practices in the environment of the organisation. Benchmarking offers an external perspective in the quest for service quality.

These tools are meant to help companies to keep up with their environment. They help companies to become dynamic entities. Moral communication can be seen as a form of keeping up with the environment. Therefore, these tools might be of help for developing our communicative tools.

62

Stakeholder dialogue

Stakeholder dialogue represents a relatively new approach to decision-making and problem-solving. Firms used to be rather closed to their environments, independently developing their policies. Their main partners were shareholders and clients. By using stakeholder dialogues they try to open up to other groups that have something at stake in the activities of a company:

- *Stakeholder dialogues.* This tools aims to increase transparency and trust in the relation between organisations and their stakeholders, and to organise more interactive forms of decision-making.

Companies that would like to employ stakeholder dialogue, however, need to answer the basic questions 'who is a stakeholder?' and 'what do we owe them?'. Stakeholder theory might help companies to answer these questions.

Stakeholder theory

Stakeholder theory is about the relation between a corporation and others, the so-called 'stakeholders'. A common feature is the assumption that stakeholders include more than a firm's shareholders alone. The first question that a firm needs to ask in applying stakeholder theory is: 'Who are my stakeholders?'. Freeman (1984) defines stakeholder as 'any group or individual who can affect, or is affected by, the achievement of a corporation's purpose'. This already poses the problem that those who can affect and are affected are not necessarily the same. Furthermore, it is not clear whether or not a group or individual needs to be affected directly in order to qualify as a stakeholder. Would it also count as 'being affected', if one cares about what a corporation does and how it affects others?

It is argued that stakeholders need not be actively involved. Being vulnerable with respect to the issue at stake is said to be enough to qualify as a stakeholder: When is one vulnerable? Does one need to take an interest in the situation or is it enough that one has an interest in it? Thus, the question is: can entities such as animals or the environment be seen as stakeholders? Does the same hold true, e.g., for children or sick persons not able to act on their own behalf? These questions show that it is not at all clear how a firm should determine who are its stakeholders. It is helpful to distinguish three different ways in which stakeholder theories can look for an answer. They can consider the above questions as 'descriptive', 'instrumental' or 'normative' (Donaldson and Preston, 1995):

- Descriptive theories describe and sometimes explain the operations of companies in relation to affected parties. In order to answer the above-mentioned questions firms could, in a descriptive way, simply make an inventory of individuals and groups with whom they actually deal.
- When the stakeholder approach is used as a tool for efficient management, one may speak of instrumental theories. A central insight of (that kind of) stakeholder theory is that maintaining good communication with stakeholders is crucial for the efficient implementation of strategies. Stakeholders are those who might intervene with the implementation of a business decision or policy. In order to implement the decision or policy as smoothly as possible those parties have to be engaged one way or the

other. The instrumental understanding of the concept implies that only agents can be stakeholders. Stakeholders must be able to act upon the company or public decision-maker in question, otherwise the company or decision-maker does not need to worry about them: they are not considered stakeholders.

- When stakeholder theory is used normatively, it says what the relation of companies to affected parties should be and who or what should be counted as a stakeholder. Sometimes normative theories also say what moral and philosophical guidelines a company should follow.

For our purpose of enhancing moral communication in the food chain and between the food chain and consumers, it is obvious that the normative approach is needed. We do not merely wish to describe how things are. Our tools are meant for mutual amelioration of the values at hand. Thus, we are not so much interested in the responsibilities that people happen to take at a certain moment in time but rather in a process to improve the way that they take their responsibilities. Of course, in order to elaborate on this, it is important to know something about the values that people adhere to and about their situation. Before searching for normative guidelines, it is important to understand the situation of, e.g., the company. In that sense of knowing the context, descriptive stakeholder theory might be useful to answer the question of with whom company deals and how. Indirectly, instrumental stakeholder theory might also be relevant, because existing relations might be determined by a firm's strategic and instrumental considerations. This empirical information is, however, not an end in itself for our work package but instrumental in developing ameliorative communicative tools.

In order to generate a basis for a 'real' stakeholder dialogue the question is not whether a company sees its relation with a stakeholder as an instrumental device in order to perform well. The 'real' question is (Kaler, 2003) whether a company can accept role-specific responsibilities towards non-shareholders that are crucial to corporate identity. This means that living up to these responsibilities is an ultimate objective of corporate activity and not merely a strategic device or by-product of striving after other objectives. Also stockholder theory acknowledges role-specific duties towards non-shareholders, such as the requirement to pay employees their wages, provide customers with products, pay suppliers for their products, and contribute to the tax revenues of local communities. Only if one transcends these strategic uses of stakeholders, one will transcend stockholder theory. This seems a necessary precondition for a non-strategic stakeholder dialogue.

From this Kaler (2003) draws the conclusion that fulfilment of responsibilities towards stakeholders is the ultimate objective of corporate activity according to a stakeholder theory that aims at achieving a more equitable distribution of benefits among shareholders en non-shareholders. Serving the interests of stakeholders is what these responsibilities amount to. It is important to note that one can see serving interests as a 'task' rather than an 'achievement'; it is not a matter of 'yes or no' but of 'more or less'. As such, the aim is completely fulfilled only in so far as it is attuned to the maximum degree possible under the prevailing conditions. This is important because it opens up the possibility of dialogue about how to work on the task. It generates room for process-oriented approaches.

It is important for the following tasks of our work package to disclose the black box of stakeholder theory - and stakeholder approaches of companies - to normative investiga-

tion, comparison and enhancement. This is important because stakeholder approaches seem to play an important role in what companies describe as their engagement with ethical issues.

Conclusion

With respect to the way that we can develop tools in this work package, we can conclude from the description of eleven practical tools and the more in-depth analysis of stakeholder theory that:

- An important task in the evaluation of the practical use of existing instruments (like stakeholder dialogues, standardisation and auditing) will be to clarify the normative basis of decisions about the scope (e.g. stakeholder identification, auditing standards) and the goals (creating support, informing those involved, understanding opposition and showing openness) of their application.
- An important part of the evaluation is to clarify the relation between structure and contents of ethical processes. It is clear that certain instruments focus specifically on procedural values, while others focus on substantive values. For facilitating moral communication both are necessary and therefore we need both kinds of tools.

4.8   Conclusion

The work plan of WP3 stated: 'A trustworthy food chain is of vital importance for consumers' confidence in their daily food. The maintenance of this consumer trust is - in turn - of vital importance for primary producers, retailers and regulators in agriculture and food production'. Communication about the values involved in food production, their importance and their consequences for practical matters in the food chain, is necessary for gaining and keeping this trustworthiness. Value communication, however, is not without problems. It seems that corporations/firms have limited experience with this kind of moral communication and that tools to facilitate this communication are needed.

In this first task we have made a description of several existing tools and other stepping-stones that might be helpful in developing tools for improving this value communication. From this first descriptive task we have learned several things that will guide us in the next - evaluative - task of this work package.

The main conclusions that we draw from the descriptive task concern the central objective of the work package, facilitating moral communication in the food chain. With regard to this central objective we draw four conclusions:

- In order to facilitate moral processes in the food chain the emphasis should not be on a possible result, like trust or trustworthiness, but on the processes of moral communication;
- It is important to distinguish different stages of moral communication (self-clarification, understanding the other, comparison and communication), because each stage requires different tools;

- Communication is not only build on conceptual skills; social skills are equally important and we need to address their importance;
- The tools for facilitating moral communication in the food chain should not only focus on distinct stakeholders but also on their relations and interdependencies.

With regard to the different tools that we would like to develop in this work package, we draw five conclusions from the descriptive task:

- For self-clarification and understanding the others the role of real and perceived identities is important: tools are needed to construct and deconstruct identity and imago;
- For self-clarification and understanding the others the role of language and the way positions are framed are important: tools are needed to disclose the role of metaphors and frames in shaping identities;
- Actors in the food chain co-operate in a common food practice with more or less shared standards for food safety and food quality: communicative ethical tools need to build on initiatives to organise the food practice on the basis of common interests and responsibilities;
- Actors in the food chain also operate also as rivals in a competitive market. In these markets ethical standards, labels and trademarks function as competitive instruments: ethical tools need to allow a process of fair comparison of different standards in this competitive market;
- Responsibility in the food chain is often obscure and value differences lead to tensions and conflicts: tools are needed to clarify responsibilities and facilitate communication about the way responsibilities are taken.

With regard to the way that we can develop tools in this work package, we draw two conclusions from the descriptive task:

- It is an important part of the evaluation of the practical use of existing instruments (like stakeholder dialogues, standardization and auditing) to clarify the normative basis of decisions about the scope (e.g. stakeholder identification, auditing standards) and the goals (creating support, informing those involved, understanding opposition and showing openness) of their application.
- It is an important part of the evaluation to clarify the relation between structure and contents of ethical processes. It is clear that certain tools focus specifically on procedural values, while others focus on substantive values. For facilitating moral communication both are necessary and therefore we need both kinds of tools.

In section 4.2 of this report we defended that three kinds of tools need to be developed to facilitate the different phases of moral communication:

- Instruments that enable actors in the food chain to formulate their own answers to relevant questions;

- Instruments that enable actors in the food chain to understand the answers of others; and
- Instruments that enable actors in the food chain to start communication about emergent conflicts.

In the following tasks of this project we will have to a) clarify the character of our tools, b) design our different tools, and c) test them in practice.

References chapter 4

Bank, J. (1992): The Essence of Total Quality Management, Prentice Hall, New York.

Beaufort, I.D. de (1992): Lieve deugd, dure plicht, voorbeeldig ideaal – over eigen verantwoordelijkheid, inaugural speech.

Becker, L.C. (1996): 'Trust as noncognitive security about motives', in: Ethics, 107, 43-61.

Beekman, J. (1996): ISO 9000 en Certificatie, Kluwer Bedrijfsinformatie, Deventer.

Beld, A. van der (1982): Filosofie van het menselijk handelen – een inleiding, Van Gorcum, Assen.

Bolt, L.L.E., Verweij, M.F., Delden, J.J.M. van (2003): Ethiek in Praktijk, Van Gorcum, Assen.

Camp, R.C. (1992): Benchmarking, Kluwer, Deventer.

Camp, P., Erens, F. (2003): De Gekookte Kikker. Vier honderd dierenmetaforen voor Organisatieverandering. Contact, Amsterdam.

Cook, S. (1995): Practical Benchmarking. A manager's guide to creating a competitive advantage, Kogan Page, London.

Corporate Identity and Corporate Branding Centre: A study of Corporate Image and Trustworthiness, http://corporate-branding.com/index.htm.

Deming, W.E. (1986): Out of the Crises, Cambridge University Press, Cambridge.

Donaldson, T., Preston, L.E. (1995): 'Stakeholder theory of the corporation: Concepts, evidence and implications', in: Academy of Management Review, 20 (1), 65-91.

Frederick, R.E. (ed.) (1999): A Companion to Business Ethics. Blackwell, Malden (Mass.).

Freeman, R.E. (1984): Strategic Management: A Stakeholder Approach, Pitman, Marshfield.

Gilmore, J.H., Pine II, B. J. (1999): The Experience Economy. Harvard Bus. School Press, Cambridge (Mass.).

Hardin, R. (1996): 'Trustworthiness', in: Ethics, 107, 26-42.

Hollis, M. (1998): Trust within reason, Cambridge UP, Cambridge.

Howard, S.B. (2001): 'Corporate Ethics, Corporate Culture and Corporate Image. Today's Key Managerial Issues'. At: http://www.howardmarketing.com/resource/article13.html.

Lahno, B. (2001): 'On the emotional character of trust', in: Ethical Theory and Moral Practice, 4, 171-189.

Jeurissen, R. (2002): De Onderneming als Wereldburger. Intreerede, Nijenrode University Press, Breukelen.

Johnson, M. (1993): Moral Imagination; Implications of Cognitive Science for Ethics. Chicago U.P., Chicago.

Kaler, J. (2003): 'Differentiating stakeholder theories', in: Journal of Business Ethics, 46, 71-83.

Kaptein, M., Wempe, J. (1998): 'Twelve Gordian Knots When Developing an Organizational Code of Ethics', Journal of Business Ethics, 17: 853-869.

Klein, N. (1999): No Logo. Picador, New York.

Lakoff, G., Johnson, M., (1980): Metaphors We Live By. University of Chicago Press, Chicago.

Lakoff, G., Johnson, M., (1999): Philosophy in the Flesh; The Embodied Mind and its Challenge to Western Thought. Basic Books.

Morgan, G. (1986/1996): Images of Organization. Sage Publications, Thousand Oaks/ London.

Morgan, G. (1997): Imaginization. Sage Publications, Thousand Oaks/ London.

Vlieger, J.J. de et al. (2001), Performance benchmarking van ketennetwerken. Een opzet voor een gecombineerde aanpak van economische, sociale en technologische criteria, LEI, rapport nr. 5.01.03, Den Haag.

MacIntyre, A. (1984). After Virtue: a study in moral theory, University of Notre Dame Press. Notre Dame, Indiana.

Rippe, K.P. (1999): Angewandte Ethik in der pluralistischen Gesellschaft, Universiteitsverlag Freiburg, Schweiz, Freiburg.

Schön, D. A. (1979): Generative Metaphor: A Perspective on Problem-Setting in Social Policy. In: Ortony, A (ed.): Metaphor and Thought. Cambridge U.P., Cambridge.

Schön, D. A., Rein, M. (1994): Frame Reflection. Toward the Resolution of Intractable Policy Controversies. Basic Books, New York.

Swanson, D. L. (1999): 'Toward an Integrative Theory of Business and Society: A Research Strategy for Corporate Social Performance', Academy of Management Review, 24: 506-521.

Sztompka, P. (1999): Trust: a sociological theory, Cambridge UP, Cambridge.

Thoreau, H.D. (1986): Walden and Civil Disobedience, Penguin Classics, USA.

Tronto, J.C. (1993): Moral Boundaries, A political argument for an ethics of care, Routledge, New York.

Ven, J.A. van der (1998), Formation of the moral self. Grand Rapids, Michigan: P Eerdmans.

Verkerk, M. (2003): speech during International Conference on Ethics and Public Policy, NWO, Utrecht.

Wartick, S.L, Wood, D.J. (1997): International Business and Society. Blackwell, Oxford.

Weston, A. (2001): A 21st Century Ethical Toolbox. Oxford U.P., Oxford & New York.