

# The SAFE FOODS Risk Analysis Framework: Progress and outlook

### Lisbon, 3 October 2007

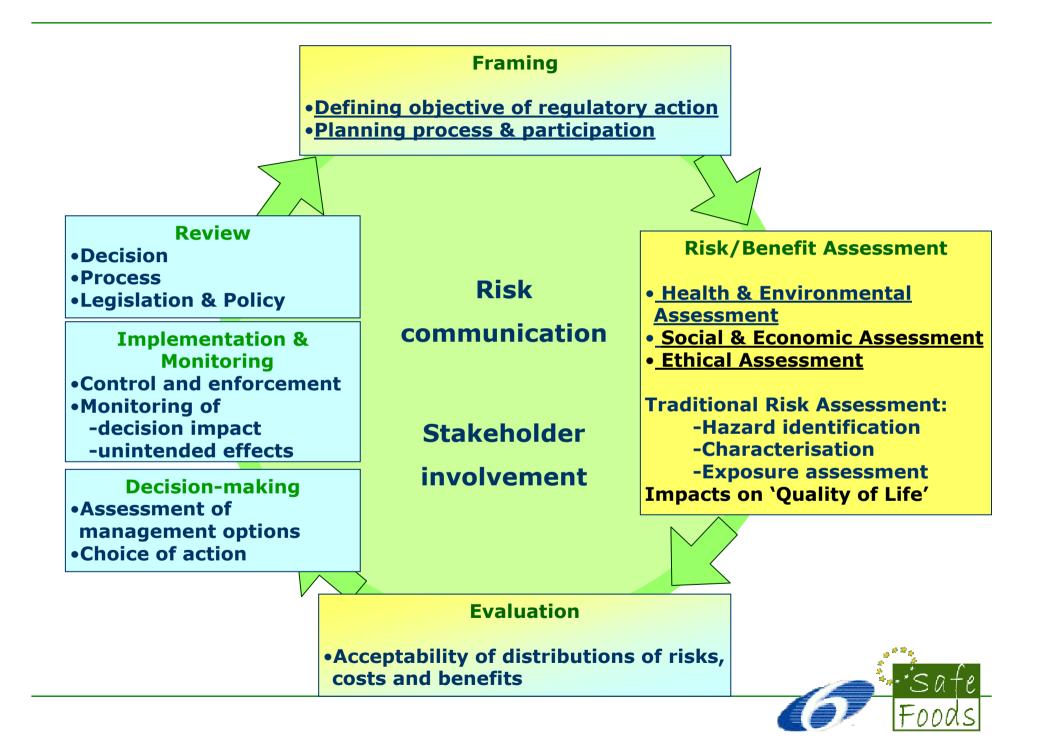
Meike Wentholt, Gene Rowe, Lynn Frewer, Marion Dreyer, Ortwin Renn, EUFIC, and others



## **Overview Presentation**

- Overview on the SAFE FOODS risk analysis framework
- Key issues raised by our stakeholders
  - The Delphi surveys (Meike Wentholt et al.)
  - WP5 workshops (Marion Dreyer et al.)
  - Two SAFE FOODS stakeholder workshops (WP6 & EUFIC)
- What are we doing to address these issues?
  - Considering ethics in risk analysis
  - More detailed legal and institutional analysis
- Open questions and next steps





# Delphi survey: Feedback on key issues

•EU round 1: 33 respondents; 2nd round: 21
•Non-EU round 1: 19 respondents; 2nd round: 12

#### International

# Collection of risk & benefit data at the assessment stage

Agreement: health data

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- Fair agreement: environmental
- Lack of consensus: social; economic; ethical
- Minority views should be taken into account and reported
- Transparency achieved by publication of reports/ opinions; peer review; clear/ short messages to public

- Collection of risk & benefit data at the assessment stage
  - Agreement: health
  - Lack of consensus: environmental; social; economic; ethical
- Minority views should be taken into account and reported (case-bycase basis)
- Transparency achieved by publication on the Internet; only the necessary/clear messages to public



## Assess stakeholder views using the Delphi technique key results

### •Who should be involved..?

(50% majority cut-off)

Stakeholders should have	Framing	)	Risk/benefit assessment		Evaluation		Risk management	
input (%)	EU	Int	EU	Int	EU	Int	EU	Int
Regulator, institutions	75	100	61	75	75	88	82	94
Scientist scientific institutions	68	81	82	94	64	75	53	69
Consumer associations	89	75	46	31	68	50	50	81
Environmental organisations	79	63	54	25	71	44	57	56
Industry	78	75	57	44	64	50	50	75
Farmers (organisation)	68	75	36	25	50	50	43	75
Retailers, trade organisation	75	63	43	25	64	44	43	81
General public	71	56	25	12	46	31	39	75

## Assess stakeholder views using the Delphi technique key results

## •Who should be involved..?

(60% majority cut-off)

Stakeholders should have	Framing	)	Risk/benefit assessment		Evaluation		Risk management	
input (%)	EU	Int	EU	Int	EU	Int	EU	Int
Regulator, institutions	75	100	61	75	75	88	82	94
Scientist scientific institutions	68	81	82	94	64	75	53	69
Consumer associations	89	75	46	31	68	50	50	81
Environmental organisations	79	63	54	25	71	44	57	56
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## Assess stakeholder views using the Delphi technique key results

## •Who should be involved..?

(70% majority cut-off)

Stakeholders should have	Framing	J	Risk/benefit assessment		Evaluation		Risk management	
input (%)	EU	Int	EU	Int	EU	Int	EU	Int
Regulator, institutions	75	100	61	75	75	88	82	94
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WP5: Provisions for Stakeholder and Public Involvement: **'Food Safety Interface Institutions'** 

- Interface Committee (to deal with framing and evaluation)
- Internet Forum (to deal with all four stages)

<u>General objective:</u> to facilitate as deliberation platforms throughout the governance process the coordination between:

- assessors
- managers, and
- corporate and civil society actors



## Interface Gammittee or advises on ToP) and evaluation (advice on tolerability/acceptability judgement)

- Provides framing and evaluation with a formal footing
- Involves managers, assessors and key stakeholders
- By this means allows for the hybrid character of framing and evaluation
- Advises also on the need for employing additional participatory tools in a given case
- Is likely to provoke questions of representativeness, power, and fairness



# Internet Forum

- Organised in four platforms relating to the main Framing, Assessment, Evaluation, Management
- Here documentation of the major elements underlying governance outcomes incl. referral details, screening results, ToR, assessment results, evaluation conclusions, selection of management measures
- Open public access: subjects the reasons of decisionmaking to public scrutiny
- Allows for consultation and deliberation processes
- Provides platform also for Member States (multi-level governance)
- Can act as both an entry point of a diversity of viewpoints and as a signal for highly controversial issues



### WP5: A Structured Approach to Participation

Governance stage	Style of discourse	Purpose As a contribution to:	Institutionalised participation	Additional participatory processes	
Framing	Design	Drawing up the terms of reference	Via the <i>Internet</i> <i>Forum</i> throughout the governance cycle	<b>Procedurally</b> , context dependent, and specified at the	
Assessment	Epistemic	Gathering of knowledge and information	At the stages of	stages of framing and evaluation	
Evaluation	Reflective	Value-based judgements on tolerability or acceptability	framing and evaluation: via stakeholder representation on the <i>Interface Committee</i>	Prima facie default, high levels of scientific uncertainty and/or socio-political ambiguity require	
Management	Practical	Selection of appropriate measures		extended participation	
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				<b>()</b> <b>F</b> 000	

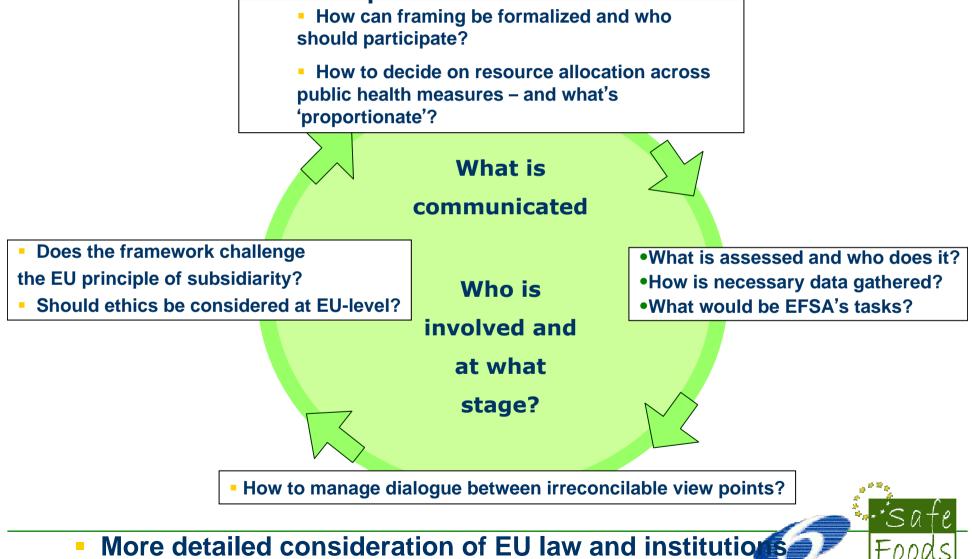
# Stakeholder feedback:

- In particular at the stages of 'framing' and 'evaluation' there is room for improving the assessment/management interaction.
- The proposed 'interface committee' should only deal with the challenging cases to avoid bureaucratic overload and undue delay in the governance process.
- It is essential that such a committee would have a clear mandate and is not overburdened.
- Be aware that the involvement of a few stakeholders in the committee includes major issues of power and inclusiveness.



# WP6 workshops: some issues raised

#### Do not loose focus on public health!



# What are we doing to address these issues?

Commissioning/drafting papers on the different strands of the assessments	Health: ?/(Harry Kuiper) Environment: ?/(Harry Kuiper) Social aspects: Marion Dreyer et al. Economics: Bruce Traill Ethics: Matthias Kaiser & Ariane König	Circulated 1 <sup>st</sup> draft IN PROGRESS DONE – Circulated 1 <sup>st</sup> draft for discussion
Case studies	Acrylamide: Leif Busk GMOs: Harry Kuiper & Howard Davies Microbiology: ?/(Harry)	Outline
Background paper on BSE and the need of an improved risk analysis framework	Gérard Pascal	IN PROGRESS
Paper on implications for the EU institutions	Ariane König et al.	IN PROGRESS
Paper on overview on WP work	Ariane König et al.	IN PROGRESS (updated draft by January)
Paper on methodology for development of SAFE FOODS framework – and stakeholder input	Lynn Frewer & Marion Dreyer et al.	. # *
Elaboration on stages of implementation, monitoring and review (and implications for our model)	Ib Knudsen	IN PROGRES SAFE Foods

### **Considering ethics in risk analysis**

- Ethics can be seen as the theory of how moral values guide judgments and beliefs on a 'good life'. Ethics concerns values and value conflicts.
- For some issues there are diverse interpretations of what a 'good; course of regulatory actions is depending on underlying sets of values. On those issues it helps to make ethics and underlying values of different parties explicit.
- The Ethical Matrix is a tool that may help. It was developed in the mid-1990's by Prof. Ben Mepham (University of Nottingham).
- Prof. Matthias Kaiser (National Committee for Research Ethics, Norway) has further developed it and proposes an adapted version for SAFE FOODS.

## **The Ethical Matrix**

- The ethical matrix juxtaposes a set of ethical principles against all affected parties.
- The ethical matrix can be used in a 3 step process:
- <u>Value matrix</u>: Define what each ethical principle means for each party
- <u>Consequence matrix</u>: investigate impacts on each party (use of scientific assessment methods)
- <u>Evaluation matrix</u>: determine what is ethically acceptable from each perspective – all groups assign weights to all cells.



## Providing an overall ethical assessment: the ethical matrix

#### Based on B.Mepham (Nottingham) & NENT's further development:

- A simplified ethical matrix was constructed;
- Four principles, similar to the ones in medical ethics, define the principal ethical considerations

 Stakeholder groups specify the aspect of the principles that one has to consider

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	Ethical matrix	Do not do any	Do try to do	Dignity /	Justice /
	for gm-salmon	harm	some good	autonomy	fairness
			_	-	
	Small	Dependencie	Adequate	Freedom to	Fair
	producers	s on nature	income and	adopt or not	treatment in
		and	work security	to adopt	trade
		corporations			
	Consumers	Safe food	Nutritional	Consumer	Affordability
			quality	choice	of product
	Treated fish	Proper	Improved	Behavioural	Living out
		animal	disease	freedom	natural
		welfare	resistance		capacities
	Biota	No pollution	Increasing	Maintenance	No additional
		or strain on	sustainability	of	strain on
		natural	-	biodiversity	regional
		resources	Conservation	, , , , , , , , , , , , , , , , , , ,	resources

THIS SLIDE WAS PROVIDED BY MATTHIAS KAISER

## The ethical matrix can structure the scientific assessment

•	Using scientific results to order the assumed consequences	Consequence matrix for gm- salmon	Do not do any harm (reduce risks)	Do try to do some good (provide benefit)	Dignity / autonomy	Justice / fairness
1	The + implies an improvement, the – implies worsening, and the 0 implies no	Small producers	<ul> <li>+ less</li> <li>dependency</li> <li>on seasons</li> <li>- Some costs</li> <li>for control</li> </ul>	+ fast production + less use of resources	+ Can choose to adopt or not	+ able to compete globally
•	change One can see that advantages and disadvantages are	Consumers	0 without health risk - assumedly	- no change in nutritional quality	(+ can choose, if labelled)	+ somewhat reduced price + available in weak markets
	unequally distributed among the stakeholders = ethically affected groups	Treated fish	-Some deformities ? - more prone to diseases	- No advantage	0 No change	-Less adaptive to stress - Behavioural changes ?
•	One may note that the situation would have been different if the gm-salmon was sterile!	Biota	-Potential loss of wild stocks - more disease	- No benefit	- Danger of reduced biodiversity	- Needs more protective arrangements to isolate from the wild
	THIS SL	<del>DE WAS PR</del>	transmission	MATTHIAS K		Foods

## **Conclusion: the Ethical Matrix can help**

#### In framing

- To structure framing activities by single officials or decide on use of interface committee, internet forum or other participatory process
- To identify ethical impacts (positive and negative)
- In assessment
  - To guide defining the terms for assessors and data requirements
  - To clarify relationship between scientific claims and their ethical dimension
- In evaluation
  - To assist in the weighting of impacts
  - To structure participatory evaluation processes
- In decision-making
  - To increase transparency on how diverse perspectives accounted for in decisions
  - To facilitate finding an ethical course of action in the face of uncertainties
- In communication
  - To communicate how values underlying diverse perspectives are taken into account
  - To contribute to public understanding

A working draft paper will be placed on web please send any comments to Matthias Kaiser and Ariane König by November 1<sup>st</sup>.

### More guidance from EU law, institutions and practice

**Current research on related policies and laws:** 

- The General Food Law clarifies that Health Assessment by EFSA can only address the probability and severity of health impacts as part of health assessment. Risk-benefit comparison or trade-off analysis requires health utility or monetary measures which all under social or economic assessment.
- Regulation 1925/2006 on food additives specifies a new procedure
  - Art. 3: obligatory consultation of interested parties
  - Art. 14: Commission has to rely on assistance of the new Advisory Committee on the Food Chain. Some guidance on cost-benefit analysis apparently exists.
- REACH implementation guidelines on assessing impacts of regulatory action for chemicals
- Advice from practitioners: consider distinguishing between natural hazards and industrial products



## **Open questions and next steps**

- Require better links to work unde rall WPs, also through comments on manuscript by Work Package members and leaders:
  - Better link to WP1 work on new methods for risk assessment
  - Better link to WP2 work on emerging risk identification and mgt
  - Better link to WP3 work on models for probabilistic assessment of health impacts and exposure
  - Better link to WP4 work on risk communication
- How to decide when to do public consultation in addition to stakeholder consultation and how?
- How to choose stakeholders and to involve organised civil society and also address how to engage the unengaged (distribution of voices across MSs and capacity building required for more organised civil society in states where there is less organised civil society)?
- How to better link consideration of single issues to consideration of resource allocation across public health measures?
- How will reframing for policy and legislation be triggered? (Draw on BSE case for this)
- How and where to address uncertainty and precautionary principle? (Draw on the BSE case and the ethical matrix paper to address this).

Any comments and suggestions are welcome. An improved draft report on the risk analysis framework will be circulated based on discussions at this meeting and outstanding papers.