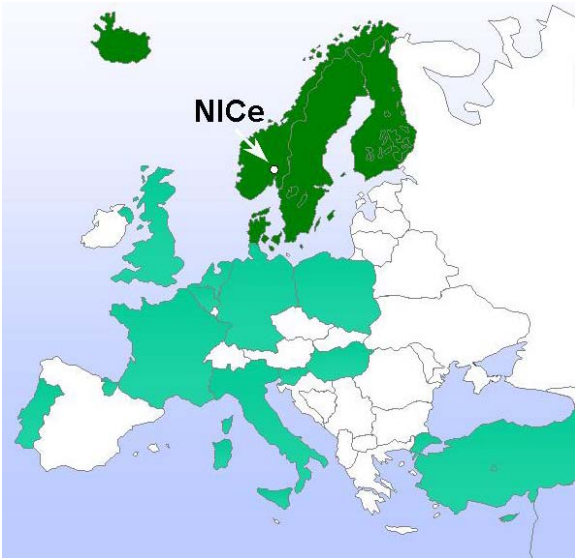
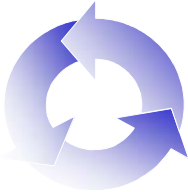


Final Activity Report				
Reporting period n°	2	Number of reporting periods	2	
From (dd/mm/yyyy)	01/10/2003	To (dd/mm/yyyy)	30/09/2004	
Date of issue of this report (dd/mm/yyyy)		10/11/2004		
				
Type of Instrument	<input checked="" type="checkbox"/>	<i>Specific Support Action (SSA)</i>	<input type="checkbox"/> <i>Coordination Action (CA)</i>	
Contract Number	510175	Project Acronym	PROFORSAFE	
Project Full Title	Processing for Food Safety – Forming the sound basis for the expansion of a Nordic Research Area Net to a European Research Area Net			
Project Starting Date	01/10/2003	Project Duration (in months)	12	
Contractors' List	1	The Nordic Innovation Centre	1	NI (NICE)
	2	The Research Council of Norway	2	RCN
	3	The Nordic Council of Ministers	3	NCM
	4	The National Technology Agency of Finland	4	Tekes
	5	The Swedish Agency for Innovation Systems	5	VINNOVA
	6	The Icelandic Centre for Research	6	Rannis
	7	The Danish Ministry of Science, Technology and Innovation	7	VTU
		<p>Project funded by the European Community under the “ERA-NET Scheme” of the Sixth Framework Programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002-2006).</p>		

SIXTH FRAMEWORK PROGRAMME



SPECIFIC SUPPORT ACTION

Project full title: Processing for Food Safety – Forming the sound basis for the expansion of a Nordic Research Area Net to a European Research Area Net

Project acronym: PROFORSAFE

Contract no.: 510175

Deliverable D8b: A final activity report

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1. Executive Summary

A Coordinated Action ERA-NET proposal “SAFEFOODERA” was submitted to the Commission in March 2004. The proposal obtained a high score, 27 of a maximum of 30 points, and was selected for contract negotiations. The SAFEFOODERA proposal was the final result of the specific support action project “PROFORSAFE”, Processing for Food Safety – Forming the sound basis for the expansion of a Nordic Research Area Net to a European Research Area Net. SAFEFOODERA became an active project coordinated by Nordic InnovationCentre (NICE) from August 1st 2004. In PROFORSAFE a European platform was established aiming to improve the protection of consumers against health risks from the consumption of food. The platform (Figure 1 (page 4), Table 1 (page 5)) consists of 21 participants from 15 Member States, 3 Associated Countries and 3 regional organisations representing 450 million European citizens. From each organisation, one representative from a public body responsible for financing or managing research activities on food safety issues carried out at national or regional level has been selected to the steering committee (Table 2, page 6).



Figure 1. The SAFEFOODERA platform

The platform was established by sending an invitation to all the National Contact Points (NCP's) for the thematic priority Food Quality and Safety in Member States, Candidate Countries and Associated Countries. The invitation resulted in an overwhelming response, and The Nordic Research Area Net was presented to interested parties between October 2003 and January 2004 through face-to-face meetings with programme managers and programme makers representing ministries or funding agencies which managed/planned public research programmes in the country in question. The face-to-face meetings turned out to be the key to create the required mutual understanding and trust in the forthcoming workshop.

The potential new partners were invited to a preparatory workshop in Copenhagen on January 29-30th 2004 to start the process of bringing national authorities closer together, and to build mutual understanding and trust by exchanging information on the national/regional research

infrastructure on a common template, emphasising Food Safety (Appendix 6, page 27). During the meeting the Nordic Ad hoc Group was enlarged to a European Ad hoc Group, and a methodology to be used to draft a Coordinated Action ERA-NET proposal was developed. The developed methodology was subsequently used to form one large European ERA-NET consortium in food safety by merging the SAFEFOODERA initiative with the specific support action ERA-NET “PERIAPT”. The merger resulted in the ”SAFEFOODERA“ proposal and the final European Consortium as shown in Table 1, page 5.

Table 1. The European Consortium

Partic. Role¹	Partic. No.	Participant name	Participant short name	Country
CO	1	The Nordic Innovation Centre	NICE	Norway
CR	2	The Nordic Council of Ministers	NCM	Denmark
CR	3	The Research Council of Norway	RCN	Norway
CR	4	The National Technology Agency of Finland	Tekes	Finland
CR	5	The Swedish Agency for Innovation Systems	VINNOVA	Sweden
CR	6	The Icelandic Centre for Research	Rannis	Iceland
CR	7	The Danish Ministry of Science, Technology and Innovation	VTU	Denmark
CR	8	The Food Standards Agency, United Kingdom	FSA UK	United Kingdom
CR	9	Ministry of Agriculture, Nature and Food Quality, The Netherlands	LNV	Netherlands
CR	10	The Italian National Institute for Public Health, Istituto Superiore di Sanità (ISS)	ISS	Italy
CR	11	The French Ministry of Research and New Technologies	MNRT	France
CR	12	Bundesamt für Verbraucherschutz und Lebensmittelsicherheit/ Bundesinstitute fuer Risikobewertung	BVL/BfR	Germany
CR	13	The Scientific and Technical Research Council of Turkey	TUBITAK	Turkey
CR	14	Nemzeti Kutatási és Technológiai Hivatal (National Office of Research and Technology), Hungary	NKTH	Hungary
CR	15	The Portuguese Foundation for Science and Technology Research	FCT	Portugal
CR	16	Republic of Slovenia Ministry of Education, Science and Sport	MESS	Slovenia
CR	17	The Research Promotion Foundation of Cyprus	RPF	Cyprus
CR	18	The Dutch Food and Consumer Product Safety Authority	VWA	Netherlands
CR	19	Federaal Agentschap voor de Veiligheid van de Voedselketen, Belgium	FASFC	Belgium
CR	20	Dirección de Investigación Agropesquera y Alimentaria del Departamento de Agricultura y Pesca del Gobierno Vasco,	DAP	Basque Country
CR	21	Instytut Zywnosci i Zywienia, Poland	IZZ	Poland

¹ CO = Coordinator, CR = Contractor

Table 2. The European Ad hoc Group (EahG)

Partic. Role ²	Partic. No.	Participant name and email address	Organisation short name	Country
CO	1	Oddur Már Gunnarsson, o.gunnarsson@nordicinnovation.net	NICe	Norway
CR	2	Bente Stærk, bs@norden.org	NCM	Denmark
CR	3	Johs Kjosbakken, jkj@rcn.no	RCN	Norway
CR	4	Liisa Rosi, liisa.rosi@tekes.fi	Tekes	Finland
CR	5	Margareta Danielsson, margareta.danielsson@vinnova.se	VINNOVA	Sweden
CR	6	Hans Kristjan Gudmundsson, hans@rannis.is	Rannis	Iceland
CR	7	Kåre Nordahl Jacobsen, knj@vtu.dk	VTU	Denmark
CR	8	Alisdair Wotherspoon, alisdair.wotherspoon@foodstandards.gsi.gov.uk	FSA UK	United Kingdom
CR	9	Jos A. Cornelese, j.a.cornelese@minlnv.nl	LNV	Netherlands
CR	10	Agostino Macri, a.macri@iss.it	ISS	Italy
CR	11	Philippe Verger, philippe.verger@inapg.inra.fr	MNRT	France
CR	12	Hartmut Waldner, hartmut.waldner@bvl.bund.de Christel Zimmermann, c.zimmermann@bfr.bund.de	BVL/BfR	Germany
CR	13	Güner Özay, guner.ozay@mam.gov.tr	TUBITAK	Turkey
CR	14	Artur Wieland, artur.wieland@nkth.gov.hu	NKTH	Hungary
CR	15	Jose Empis, JM.Empis@iniap.min-agricultura.pt	FCT	Portugal
CR	16	Livija Tusar, livija.tusar@gov.si	MESS	Slovenia
CR	17	Marcia Trillidou, trillidou@research.org.cy	RPF	Cyprus
CR	18	Hubert P.J.M. Noteborn, hub.noteborn@vwa.nl	VWA	Netherlands
CR	19	Karen Vereecken, karen.vereecken@favv.be	FASFC	Belgium
CR	20	Monica de Prado, mdeprado@elika.net	DAP	Basque Country
CR	21	Lucjan Szponar, L.Szponar@izz.waw.pl	IZZ	Poland

The merger with PERIAPT introduced **Emerging risk** - A potential food or feed borne or diet-related hazard that may become a risk for human health in the (near) future, as one of the strategic topics. However, the workshop in Copenhagen confirmed the importance of the Nordic strategic topics **Risk analysis in food safety** – Methodologies in protecting the consumers against health risks and misleading information, including crisis management, consumer perception and risk/benefit analysis, **Process induced risk** - Health risks from chemical pollution formed during processing of foods, **Traceability** - Documented and harmonised routines for recall of food products from the value chain - Development of reliable traceability methods and systems. It was further suggested that the Nordic strategic topic **Campylobacter** should be generalized to **Pathogens** - Pathogen free production systems - From reactive to preventive and

² CO = Coordinator, CR = Contractor

predictive actions, and to introduce a new strategic topic **Contaminants** - Health risks from natural- and environmental contaminants in the food chain.

During the preparatory workshop in Copenhagen on January 29-30th 2004 the need for a European Expert group was questioned. The enlarged European Ad hoc Group suggested that the discussions about this activity should be postponed until the Coordination Action ERA-NET was established. The enlarged European Ad hoc Group also suggested that the questionnaires for the exchange of management programmes and evaluation practices should first be tested within the Nordic group. The experiences from the Nordic test could later be used to define the questionnaires to be used in the Coordination Action ERA-NET. To complete the 6 project objectives and 8 deliverables, the scientific and industrial challenges were discussed using a Nordic Expert Group and a questionnaire was developed and tested among the Nordic partners.

The questionnaire included 25 questions dealing with project applications and the decision making process. The answers and a summary for each question are presented in Appendix 4 (page 27). On many key topics there are rather similar systems in use in the Nordic Countries, however there are also differences among the partners. Before being used in the Coordination Action ERA-NET, the questionnaire must be further clarified to avoid misunderstanding and to enhance the preparation of future exchange of management programmes and evaluation practices on a European scale.

2. Project objectives and achievements

2.1 The primary objective and achievements

The primary objective of the present project was to establish a sound foundation for a future ERA-NET of Programme Managers and Programme Makers from the Ministries and Research Councils in Member States, Candidate Countries and Associated Countries using the established Nordic Research Area Net (NRA-NET) in Processing for Food Safety as a model.

The primary achievement is the establishment of a European platform of 21 participants from 15 Member States, 3 Associated Countries and 3 regional organisations representing 450 million European citizens (Table 1, page 5). From each organisation one representative from a public body responsible for financing or managing research activities on food safety issues carried out at national or regional level has been appointed to the Steering Committee which will have overall responsibility for directing the work of a future ERA-NET (Table 2, page 6).

2.2 The tasks objectives and achievements

2.2.1 The first task objective was to identify Member States or Candidate Countries that were interested in coordinating the Food Safety aspects of their ongoing national/regional programmes with the ongoing NRA-NET in Processing for Food Safety.

The task achievement was the identification of 26 organisations from 21 European Countries that were interested in coordinating the Food Safety aspects of their ongoing national/regional programmes with the ongoing NRA-NET in Processing for Food Safety.

- 2.2.2 The second task objective was to enlarge the present Nordic Ad hoc Group to a European Ad hoc Group (EAhG) with Programme Managers or Programme makers from Ministries, Research Councils or other National Funding Agencies in Member States, Candidate Countries and Associated Countries.

The task achievement was the established European Ad hoc Group presented in Table 2, page 6.

- 2.2.3 The third task objective was to define joint strategic topics from ongoing national/regional research programmes and to identify a European Expert Group (EUEG).

The task achievement was the confirmation of the importance of the Nordic strategic topics **Risk analysis in food safety, Process induced risk, Traceability and Campylobacter**. However, it was suggested that **Campylobacter** should be generalized to **Pathogens** and that **Contaminants** and **Emerging risk** should be introduced as new strategic topics. The enlarged European Ad hoc Group suggested that the identification of a European Expert group should be postponed until the Coordination Action ERA-NET was established.

- 2.2.4 The fourth task objective was to agree on the methodology to be used to implement a sustainable future ERA-NET in Processing for Food Safety.

The task achievement was the agreed methodology used to prepare the Coordinated Action ERA-NET proposal “SAFEFOODERA” (Appendix 1, page 27). On subsequent evaluation the proposal obtained a high score, 27 of a maximum of 30 points, and was selected for contract negotiations.

- 2.2.5 The fifth task objective was to define the scientific and industrial challenges within the selected strategic topics and to define new opportunities and gaps in the existing programmes with the help of EUEG.

The scientific and industrial challenges, including new opportunities and gaps, was defined within the Nordic strategic topics using a Nordic Expert Group (NEG).

- 2.2.6 The sixth task objective was to exchange management programmes and evaluation practices to enhance the preparation of future agreements/arrangements aiming at sustained cooperation.

A questionnaire was developed and tested among the Nordic partners to enhance the preparation of future exchange of management programmes and evaluation practices on a European scale (Appendix 4, page 27)

3. Workpackages activities

Table 3 shows the planned and realised involvement in person month of the consortium in the workpackages activities. The details are described in the workpackage descriptions.

Table 3. Involvement in person-month of the consortium per WP and tasks.

	NI	RCN	NMR	TEKES	VINNOVA	RANNIS	VTU	TOTAL ACTIVITIES
Activities specific for the Support Action								
WP1 / Information exchange								
Planned	3,0	0,5	0,1	0,1	0,1	0,1	0,1	4,0
Realised	5,2	0,3	0,1	0,1	0,1	0,1	0,1	6,0
Difference	+2,2	-0,2	0,0	0,0	0,0	0,0	0,0	0,0
WP2 / Strategic activities								
Planned	3,8	0,2	0,2	0,2	0,2	0,2	0,2	5,0
Realised	3,8	0,2	0,2	0,2	0,2	0,2	0,2	5,0
WP3 / Joint activities								
Planned	0,9	0,1	0,1	0,1	0,1	0,1	0,1	1,5
Realised	0,9	0,1	0,1	0,1	0,1	0,1	0,1	1,5
WP4/ Transnational activities								
Planned	0,8	0,2	0,1	0,1	0,1	0,1	0,1	1,5
Realised	0,8	0,2	0,1	0,1	0,1	0,1	0,1	1,5
Total "specific activities"								
Planned	8,5	1,0	0,5	0,5	0,5	0,5	0,5	12
Realised	10,7	0,8	0,5	0,5	0,5	0,5	0,5	12
Difference	+2,2	-0,2	0,0	0,0	0,0	0,0	0,0	0,0
Consortium management								
WP5 / Project management								
Planned	1,5	0,5	-	-	-	-	-	2,0
Realised	1,5	0,5	-	-	-	-	-	2,0
Total "management"								
Planned	1,5	0,5	-	-	-	-	-	2,0
Realised	1,5	0,5	-	-	-	-	-	2,0
TOTAL per PARTICIPANT								
Planned	10,0	1,5	0,5	0,5	0,5	0,5	0,5	14
Realised	12,2	1,3	0,5	0,5	0,5	0,5	0,5	16
Difference	+2,2	-0,2	0,0	0,0	0,0	0,0	0,0	+2,0
Overall TOTAL EFFORTS								16

3.1 Management of the consortium

Workpackage number	5	Start date or starting event:						0
Activity Type - Management activity								
Participant id	NI	RCN	NCM	Tekes	VINNOVA	RANNIS	VTU	
Person-months per participant	1,5	0,5	0	0	0	0	0	
<p>Objectives</p> <p>Overall follow up of the networking activities. Financial control. Public relation issues. Report to the European Commission according to the Specific Support Action contract.</p>								
<p>Technical progress</p> <p>The networking activities were executed according to the project plan, including 2 joint meetings in the Nordic consortium (01.11.03 and 19.12.03) and 1 meeting between potential members of a European consortium (29-30.01.2004).</p> <p>The management of the consortium delivered as planned a short periodic activity report to the European Commission on July 7th 2004 (Appendix 5, page 27). The Commission approved the periodic report.</p> <p>The present activity report is a part of the final report covering all the work, objectives, results, conclusions and the distribution of the Community financial contribution between contractors.</p>								
<p>Deviation from the project workprogramme</p> <p>One of the objectives was to identify 5 new partners. However, the overwhelming response from the majority of the European countries made it necessary to reduce the number of joint meetings due to budget constraints from the two originally planned to one meeting. The final result was a consortium of 21 organisations from 18 countries compared to the 11 organisations from 10 countries originally planned (Table 1, page 5).</p>								

3.2 Information exchange

Workpackage number	1	Start date or starting event:						0
Activity Type - Specific activity								
Participant id	NI	RCN	NCM	Tekes	VINNOVA	RANNIS	VTU	
Person-months per participant	5,2	0,3	0,1	0,1	0,1	0,1	0,1	
<p>Objectives</p> <p>To identify Member States or Candidate Countries interested in coordinating the Food Safety aspects of their ongoing national/regional programmes with the ongoing Nordic Research Area Net (NRA-NET) in Processing for Food Safety.</p> <p>To enlarge the present Nordic Ad hoc Group to a European Ad hoc Group with Programme Managers or Programme makers from Ministries, Research Councils or other National Funding Agencies in Member States, Candidate Countries and the Associated Countries Norway and Iceland.</p>								
<p>Technical progress</p> <p>1. The invitation</p> <p>The following invitation was sent on August 20th 2003 to all the National Contact Points (NCP's) for the thematic priority Food Quality and Safety in Member States, Candidate Countries and Associated Countries:</p> <p><u>INVITATION TO PARTICIPATE IN AN ERA-NET Project within Food Safety</u></p> <p>Nordic Industrial Fund submitted an ERA-NET application for a 12 months Specific Support Action project titled Processing for Food Safety (PROFORSAFE) in June 2003. The application received 23,5 out of 25 points in the evaluation process, and the Nordic Industrial Fund is now in contract negotiations with the Commission. Hopefully, these negotiations will be completed with a positive result within the next 3-4 weeks.</p> <p>The SSA-project is based on a long lasting collaboration in food research between the five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) through the Nordic Industrial Fund. In Processing for Food Safety our strategic focus are on challenges in protecting the consumers against health risks and misleading information, health risks from chemical pollution formed during processing of foods, reliable traceability methods and systems for recall of food products from the value chain, and the development of Campylobacter free production systems.</p> <p>The participants in an ERA-NET project are Programme Managers or Programme makers from the Ministry, Research Councils or other National Funding Agencies in Member States, Candidate Countries or Associated Countries. The main goal of our ERA-NET project will be to recruit at least five countries in addition to the Nordic countries as partners for establishing the basis for a sustainable network between the financing bodies in food safety research throughout Europe.</p>								

We consider the NCP's for Food Quality and Safety within the 6th Framework programme of EU as an important source for potential partners. Enclosed you will find 9 slides describing an ERA-NET in general and 7 slides describing our project. If you believe your country will be interested in joining our ERA-NET on food safety, please respond by email before September 15th to *o.gunnarsson@nordicinnovation.net* with the name of a relevant contact person in your country, and we will get back to you with further details about the project.

Please, do not hesitate to contact us if you have any comments or questions.

Yours sincerely,

Johs. Kjosbakken
Coordinator/NCP

Oddur Mar Gunnarsson
Task manager

Enclosed: Power Point presentation “ERA-NET-PROFORSAFE – 22.08.03”

2. The response

The invitation resulted in positive responses from the NCP's of Bulgaria, United Kingdom, France, The Netherlands, Israel, Cyprus, Latvia, Lithuania, Portugal, Slovenia, Czech Republic, Turkey and Hungary.

3. The follow up

The Nordic Research Area Net was presented to interested parties through face-to-face meetings with programme managers and programme makers representing the entity (ministry or the funding agencies) which managed/planned public research programmes in the country in question (Table 1, page 5). The face-to-face meetings were carried out between October 2003 and January 2004 by Oddur Mar Gunnarsson and Ola Eide from the Nordic Industrial Fund (now the Nordic InnovationCentre) during the following roundtrips:

1. Roundtrip (2003)

- 12.10 Oslo - Nicosia (Cyprus) – meeting with RPF in Nicosia 13.10 at 8.30
- 13.10 Nicosia - Lisabon (Portugal) – meeting with FCT in Lisabon 14.10 at 0900
- 14.10 Lisabon - Sophia (Bulgaria) – meeting with Ministry of Agriculture and Forestry in Sophia 15.10 at 10.00
- 15.10 Sophia - Ljubljana (Slovenia) – meeting with MESS in Ljubljana 16.10 at 09.00
- 16.10 Ljubljana - Oslo

2. Roundtrip (2003)

- 21.10 Oslo - Riga (Latvia) - meeting with University of Jelgava 22.10 at 10.00
- 22.10 Riga - Vilnius (Lithuania) – meeting with University of Kaunas 23.10 at 10.30
- 23.10 Vilnus - Den Haag (The Netherlands) – meeting with VWA in Den Haag 24.10 at 11.30
- 24.10 Den Haag - Oslo

3. Roundtrip (2003)

26.10 Oslo - London (England) – meeting with FSA in London 27.10 at 10.30
 27.10 London - Ankara (Turkey) – meeting with TUBITAK in Ankara 28.10 at 10.00
 28.10 Ankara - Budapest (Hungary) – meeting with NKTH in Budapest 29.10 at 10.00
 29.10 Budapest - Pragh (Czech Republic) – meeting with Ministry of Agriculture in Pragh
 30.10 at 10.00
 30.10 Pragh – Oslo

After consulting with the Commission and a status discussion in the Nordic consortium on November 1st it was decided to send special invitations to Germany and Estonia. Face-to-face meetings followed the invitations.

4. Roundtrip (2003)

02.12 Oslo – Tallin (Esthonia) – meeting with Ministry of Agriculture in Tallin
 03.12 at 10.00
 03.12 Tallin - Berlin (Germany) – meeting with BfR in Berlin 04.12 at 10.30
 04.12 Berlin – Oslo

After consulting with Harmen Hofstra at the SAFE Consortium and a follow up discussion in the Nordic consortium on December 19th, it was decided to send special invitations also to The Netherlands, France and Italy. Face-to-face meetings followed the invitations.

5. Roundtrip (2004)

05.01. Oslo – Den Haag (The Netherlands) – meeting with LNV in Den Haag 05.01 at 11.30
 05.01 Den Haag – Paris (France) – meeting with MNRT in Paris 07.01 at 12.00
 07.01 Paris - Roma (Italy) – meeting with ISS in Roma 09.01 at 10.00
 09.01 Roma – Oslo

4. The workshop

Potential new partners were invited to a preparatory workshop in Copenhagen on January 29-30th 2004 to start the process of bringing national authorities closer together, and to building mutual understanding and trust by exchanging information on the national/regional research infrastructure, emphasising Food Safety. During the meeting the Nordic Ad hoc Group was enlarged to a European Ad hoc Group with Programme Managers or Programme makers from Ministries, Research Councils or other National Funding Agencies as shown in Table 1, page 5.

5. The European consortium

In Workpackage 3 “Joint Activities” (page 20) the workshop in Copenhagen on January 29-30th 2004 was used to develop methodology for the drafting of a Coordinated Action ERA-NET proposal “SAFEFOODERA”. The developed methodology was subsequently used to form one large European ERA-NET in food safety by merging the SAFEFOODERA initiative with the specific support action ERA-NET “**PERIAPT**” into one larger consortium. The merger brought Basque Country, Belgium and Poland into the final European Consortium as shown in Table 1, page 5.

Deviation from the project workprogramme

The project workprogramme was completed as planned. However, the number of face-to-face meetings was increased due to the overwhelming response from the majority of the European countries.

3.3 Strategic activities

Workpackage number	2	Start date or starting event:						2
Activity Type - Specific activity								
Participant id	NI	RCN	NCM	Tekes	VINNOVA	RANNIS	VTU	
Person-months per participant	3,8	0,2	0,2	0,2	0,2	0,2	0,2	
<p>Objectives</p> <p>To define joint strategic topics from ongoing national/regional research programmes and to identify a European Expert Group (EUEG).</p> <p>To define the scientific and industrial challenges within the selected strategic topics and to define new opportunities and gaps in the existing programmes with the help of EUEG</p>								
<p>Technical progress</p> <p>The Nordic Ad hoc Group (NAhG) organized a workshop to obtain an analysis of the national/regional research infrastructure, with the emphasis on Food Safety. Complementarities between Food programmes were identified from ongoing national and regional programmes. All publicly funded programmes, ongoing or ended in the year 2002 was reviewed and described briefly with respect to topics, goals, funding, activity period, the experts and the research institutions involved. The national representatives in the Nordic Ad hoc group presented the ongoing national programmes and the important experts/institutions. Joint strategic topics and the relevant expertise was identified and selected from the ongoing national/regional research programmes based on transnational relevance and scientific excellence. The following strategic topics were selected:</p> <ol style="list-style-type: none"> 1. Risk analysis in food safety – Methodologies in protecting the consumers against health risks and misleading information, including crisis management, consumer perception and risk/benefit analysis. <u>Nordic expert:</u> Professor Riitta Maijala, Finland 2. Process induced risk – Health risks from chemical pollution formed during processing of foods. <u>Nordic expert:</u> Dr. Elisabeth Borch, Sweden 3. Traceability - Documented and harmonised routines for recall of food products from the value chain - Development of reliable traceability methods and systems. <u>Nordic expert:</u> Dr. Petter Olsen, Norway 4. Campylobacter - Campylobacter free production systems - From reactive to preventive and predictive actions. <u>Nordic expert:</u> Professor Franklin Georgsson, Iceland 								

During the preparation of the Coordinated Action “SAFEFOODERA” the merger with PERIAPT introduced **Emerging risk** - A potential food or feed borne or diet-related hazard that may become a risk for human health in the (near) future, as one of the strategic topics. In an analysis done by Dr. Wirtanen and Dr. Hofstra of the SAFE Consortium from information presented at the Copenhagen workshop (Appendix 2, page 27) it was further suggested that the Nordic strategic topic **Campylobacter** should be generalized to **Pathogens** - Pathogen free production systems - From reactive to preventive and predictive actions, and to introduce a new strategic topic **Contaminants** - Health risks from natural- and environmental contaminants in the food chain.

The Nordic Ad hoc Group (NAhG) select the Nordic Expert Group (NEG) from the identified expertise to aid the consortium in the studies and the analysis of the research Programmes. The NAhG and the NEG coordinated the information through an expert workshop. The expert group presented the scientific and industrial challenges for each of the selected topics.

In the following a summary of the Nordic Expert Group’s (NEG) presentations of the scientific and industrial challenges for each of the selected topics are presented:

1. Risk analysis in food safety by professor Riitta Maijala, Finland

Risk management from farm to fork is the key to “Processing for Safety”, and to protect the consumers against health risks and misleading information. It is the decision makers in industry and authorities that daily assess risks in practice using HACCP, own-checking systems and resource allocation. The use of risk assessment will help decision making in the various steps of the production chain, assess health hazards in a more transparent way, and help defining Food Safety Objectives (FSO), including acceptable level of protection, economics, social aspects, political aspects and culture. The use of traceability will help decision makers to effectively recall products from the market when a microbial, chemical or nutritional health risk has been identified. The legislation “*Product Safety Directive*”, January 2003 (*proposal*) requires “Producer must have documented routines for recall of all products to consumer”. The “*Hygiene of Foodstuffs Directive*”, 2004 (*proposal*) requires documented traceability for all links in the food chain, and applies to all producers of foodstuffs.

The aim of **risk assessment** is to help decision makers to make good risk estimates through hazard identification, hazard characterization and exposure assessment, including level of contamination and level of consumption. The challenges in risk assessment in food safety are lack of data or poor quality data, and lack of expertise to evaluate the data for the purpose of risk management, legislation, standards and control. Quantitative risk assessment could pose a powerful tool in the control of human Campylobacteriosis as soon as necessary data are available. The nordic countries should co-operate in exchange of data and necessary research for this purpose. The use of scientific risk assessment will increase both at the international level (FAO/WHO, EU, Codex, OIE), at the national level, and at the industry level.

It is recommended that the Nordic research in risk assessment should focus on special hazards with multidiscipline programmes in microbiology, chemistry, nutrition, food technology, consumption, mathematics and economics. It is a special need for exposure assessment, from production chain up to the consumption, including the effects of management options. Predictive microbial modelling, toxicological models etc for

company-level risk assessments should be developed in order to improve management of risks.

2. Process induced risk by Dr. Elisabeth Borch, Sweden

The topic “Process induced risks” should only include chemical hazards. Some of the major food scandals have been of chemical origin. Allergenic compounds, antibiotics, mycotoxins, dioxins, PCB, PAH, brominated flame retardants, heavy metals, hormones, radioactive compounds, food additives and process-induced compounds like acrylamide are all well known chemical challenges. It covers the total food chain from the environment, through the raw materials, processing and final products. In a wide sense it includes many factors where the food industry itself has limited possibilities for influence. A possible narrowing of a huge topic would be to focus on the chemical hazards which the industry may influence directly. Such topics might be chemical hazards being formed during processing and possible hazards due to the use of various food additives in the food industry.

3. Traceability by Dr. Petter Olsen, Norway

Traceability is defined as “*Ability to trace the history, application or location of an entity by means of recorded identifications*”. It is two types of traceability, Internal traceability, your own data interfaced with production management systems, and Chain traceability, the data you get and give between companies and/or between countries. The traceability control mechanisms is defined as methods and instruments used for authentication and testing that we receive what the documentation claims. A product is defined by the origin, its properties and processing. A lot of this information is recorded, but subsequently lost in the production chain. Our goal must be to eliminate or at least significantly reduce this information loss, so that everyone has potential access to relevant, timely and unambiguous data about the food/product. Keeping track of production date and batch identifier doesn't help if the producer cannot relate the production batch to input batches. The production batch must be of limited size, it must be related to a finite set of input batches, and this relation (“transformation”) must be explicitly documented. With increasing information demands from buyers and consumers of food products, it is no longer practical to transmit all the relevant data physically along with the product. A more sensible approach is to label each package with a unique identifier, and then transmit or extract all the relevant information electronically. The objective is to increase consumer confidence in the food supply by strengthening the scientific and technological basis for ensuring complete traceability along the entire food chain including animal feed. It will ensure that products can be linked to their source while also protecting products of declared origin (both geographical and production system). It will also assure traceability of genetically modified organisms, and other products based on recent biotechnology developments, from raw material origin to purchased food products”.

In December 2002 the EU Commission called representatives from all their food-traceability related projects to the meeting “*European Research on Traceability Processes along the Food Chain*” in Brussels. The purpose was to point out the mismatch between research area and topic for food traceability, and express dissatisfaction with the number and maturity of the ‘Expressions of Interest’ submitted. The Commission wanted to give higher priority to this field, and encouraged the projects and researchers to work together,

and indicated the possibility for an additional topic in the Work programme for 2004.

Projects suitable for Nordic cooperation could be 1) Non-proprietary pilot implementation projects in and between chains, 2) Building the traceability infrastructure for pilot food products, study what effects it has on the industry and on the consumer, 3) Develop feedback loops to the earlier links in the production chain, study effects of new information, 4) Consumer requirements and response, privacy and access in normal and exceptional circumstances, 5) Overall design of traceability infrastructure, Standardisation of request/response scheme (XML), 6) Non-proprietary implementation projects within chains, 7) Re-engineering of processes to maintain traceability, costs and benefits, 8) Standardisation of which values measured and method of measurement, 9) Threshold levels for measured values, and 10) Integration projects between chains, definition of maximum batch size, granularity requirements for batch identification, choice of number series and carriers for batch ID (bar codes, RF-tags).

4. Microbial challenges and *Campylobacter* by Dr. Elisabeth Borch, Sweden and Professor Franklin Georgsson, Iceland

Recent and future emerging foodborne pathogenic microorganisms are a significant health problem. The total number of man years lost in Europe due to deaths or illness could be as high as 3 million each year, with a cost of 3,500 - 7,300 million € per year. The problem is increasing and changing over time. In the period 1993 – 1998 the reported incidence of food borne infections in Europe increased by 46%. Emerging pathogens are infectious or toxin producing agents that during the last 20 years have caused a dramatic increase in human disease, or may do so in the future.

In the Nordic region *Campylobacter* has shown increase in registered cases in all Nordic countries from 1990. It is identified as one major cause of diarrhoea illness, and is more frequent than *Salmonella* in many countries. The symptoms are just as severe as in most *Salmonella* cases. Human cases are mostly sporadic, but also outbreaks occur. Infections follow consumption of poultry, raw milk, and water or after direct contact with animals. Young people are at higher risk, and incidences seem to be both area-dependent and seasonal-dependent. *Campylobacter* is of major concern for the chicken industry. The contamination rates of chicken flocks in the Nordic countries is high, Denmark 20-80%, Finland 1-8%, Iceland 44%, Norway 4% and Sweden 10%. Research is needed on contamination in poultry flocks during transport and slaughter, cross-contamination during transport, spread of contamination during slaughtering, scalding, de-feathering, evisceration, washing, chilling, portioning, de-boning and packaging. The *Campylobacter* problem may be reduced by freezing, but the consumer requires fresh chicken, and other solutions will be required.

A Nordic strategy "From reactive to preventive and predictive actions" should be developed. Actions there are effective in preventing the occurrence of food borne pathogens, as well as methods to predict the occurrence of new emerging pathogens. The main objective should be to reduce the prevalence of newly emerging food borne pathogens causing illness by determining the factors which enable pathogens to establish themselves in certain environments, and to develop or acquire and express virulence traits. The strategy should result in recommendations that will influence critical environments in

such a way that pathogens are not established, and the development of new innovative technology for methods of eliminating microorganisms in the food production chain. Modelling tools should be developed to predict the emergence of new pathogens by identifying the underlying cause and problem to emerging pathogens; social, industrial, technological, demographic, human behavioural, environmental, spreading, growth/survival, virulence, present in raw material, establishment in process environment, survival processing and storage and post processing growth.

Deviation from the project workprogramme

During the preparatory workshop in Copenhagen on January 29-30th 2004 the need for a European Expert group was questioned. The enlarged European Ad hoc Group suggested that the decision on this activity should be postponed until the Coordination Action ERA-NET was established. For this reasons the scientific and industrial challenges, including new opportunities and gaps, within the Nordic strategic topics was discussed using a Nordic Expert Group.

3.4 Joint activities

Workpackage number	3	Start date or starting event:						3
Activity Type - Specific activity								
Participant id	NI	RCN	NCM	Tekes	VINNOVA	RANNIS	VTU	
Person-months per participant	0,9	0,1	0,1	0,1	0,1	0,1	0,1	
<p>Objectives</p> <p>To agree on the methodology to be used to implement a sustainable future ERA-NET in Processing for Food Safety through a coordinated action.</p>								
<p>Technical progress</p> <p>During the Copenhagen workshop the established European Ad hoc Group (EahG) discussed the methodology, the instruments and the roadmap to be used to implement a sustainable future ERA-NET in Processing for Food Safety. The basic idea was to establish trust and mutual understanding by focusing on information exchange and strategic activities, and to build sustained cooperation through joint and transnational activities.</p> <p>The developed methodology was subsequently written into a Coordinated Action ERA-NET proposal “SAFEFOODERA”. The developed methodology was further used to form one large European ERA-NET in food safety by merging the SAFEFOODERA initiative with the specific support action ERA-NET “PERIAPT” into one larger consortium.</p> <p>The developed methodology was presented to the Commission through a Coordinated Action ERA-NET proposal “SAFEFOODERA” in March 2004. The proposal got a high score, 27 of a maximum of 30 points, and was selected for contract negotiations.</p>								
<p>Deviation from the project workprogramme</p> <p>An agreed methodology, instruments and a roadmap to be used to implement a sustainable future ERA-NET in Processing for Safety were developed according to the workprogramme. However, the overwhelming response from the majority of the European countries resulted in a consortium of 21 organisations from 18 countries (Table 1, page 5) compared to the 11 organisations from 10 countries originally planned.</p>								

3.5 Transnational activities

Workpackage number	4			Start date or starting event:			6	
Activity Type - Specific activity								
Participant id	NI	RCN	NCM	Tekes	VINNOVA	RANNIS	VTU	
Person-months per participant	0,8	0,2	0,1	0,1	0,1	0,1	0,1	
<p>Objectives</p> <p>To exchange management programmes and evaluation practices to enhance the preparation of future agreements/arrangements aimed at sustained cooperation.</p>								
<p>Technical progress</p> <p>The Nordic Consortium developed the following questionnaire to compare routines in executing key programme activities within food safety research. The questionnaire covers the tasks from a project application is received to a decision (funding or not funding) has been made. In its present form it does not cover how to plan new programme initiatives and how to follow up ongoing projects (progress reports, final reports, communication with media, etc.):</p> <p>The questionnaire was tested by the Nordic Ad hoc Group by answering the questions individually. See Appendix 4, page 27 for the responses from the partners. In summary the questionnaire has given valuable information on how various aspects of programme management are performed among different partners in the Nordic countries. There are many differences among the partners, but on many key topics there are rather similar systems in use. The questionnaire was a pilot model for a questionnaire to be used in SAFEFOODERA. It will need to be refined, and some of the questions have to be clarified to avoid misunderstanding. The questionnaires and an executive summary for each of the questions are presented below:</p> <ol style="list-style-type: none"> 1. Short description (maximum half a page) of the research activity <ul style="list-style-type: none"> <u>Summary</u> <i>All partners have strong research activities on food safety. The organisation varies considerably. NICE has a separate programme on food safety, while the other Nordic partners have organized food safety research as a part of a national food research programme, part of several programmes or as specific projects which are not formally organized in a programme.</i> 2. Do you have a one step or a two steps application procedure? If you have a two step application procedure: <ol style="list-style-type: none"> a. How do the two steps differ from each other? b. Describe the requirements (application form, project description, etc) for each of the steps <ul style="list-style-type: none"> <u>Summary</u> <i>NICE and Sweden have a two step application procedure. The other partners have a one step procedure.</i> 								

3. How do you publish an opening for application (Work programme, invited applicants, etc.)

Summary

All partners have a call which is published and which is open to all applicants. For NICE the applicants for the second step are selected from the applications of the first step.

4. Do you have one or several types of applications (basic research, applied research, industrial oriented research)?

Summary

The types of application vary between the partners . All partners (except NCM) have industrial oriented applications. Some of the partners have more basic oriented research activities in addition.

5. Do you have one or several deadlines for applications each year?

Summary

Most partners have one or two deadlines for applications each year. In Finland applications for industrial oriented projects have no specific deadline.

6. Which language (national or English) do you require for the applications?

Summary

Different partners have somewhat different rules. For most partners the applicants may choose whether they write their applications in English or in a national language.

7. Which type of applications do you use (paper, electronic, etc.)?

Summary

All partners except Denmark have the possibility for an electronic application form. Some of the partners, however, require that a signed application is submitted by mail.

8. How do you communicate/consult with the applicants in the period from the reception of the application and until the formal decision has been made?

Summary

The procedures are different with each partner, and the procedure may differ with each partner for more basic research and for more industrial oriented research. For industrial oriented research in Finland and Norway and for projects at NCM the applicants are invited to present additional information and clarify certain issues in the applications.

9. Do you require an external scientific evaluation for all applications?

Summary

All partners require scientific evaluation which are performed either by independent experts or experts on elected boards.

10. Give a short description of the scientific evaluation system you are using?

Summary

Some of the partners have a detailed set of criteria which are used by the evaluators. Other partners do not have detailed criteria, but scientific excellence and relevance according to the call are of key importance.

11. Do you use national or international experts in the evaluation of the applications?

Summary

Most partners use international experts, but Finland, Norway, Iceland and Sweden use national experts for more industrial oriented applications.

12. Which criteria do the evaluators use in their evaluation?

Summary

See executive summary for question no 10.

13. Do the evaluation include both a quantitative (points) and a qualitative part?

Summary

It is difficult to draw clear conclusions based on the answers from the partners. Seemingly all partners use an evaluation report based on qualitative criteria, but most partners seem to include a more quantitative evaluation system in addition.

14. Describe briefly the importance of the scientific evaluation compared to other necessary criteria (for example relevance) for the final decision

Summary

The scientific evaluation is important for all partners, but all partners include other important criteria such as relevance.

15. Who is making the final decision on the applications (administration, advisory groups, elected boards, etc.)?

Summary

Most partners have elected boards which either have the authority to decide on the applications or they give advice to other elected boards. Finland and Sweden have a system of administrative decisions for industrial oriented research.

16. If you use administrative decisions, describe briefly how it is done?

Summary

In Finland and Sweden the level of administrative decisions are based on specified budgetary limits.

17. If you use elected boards, do they have other duties in addition to decision making on applications?

Summary

Several partners report that elected boards have various strategic duties in addition to decision making on applications.

18. Describe briefly how you take care of possible conflict of interest within your elected boards

Summary

Denmark has presented a detailed review of their rules. Most of the other partners state that they have regulations, but detailed description is lacking.

19. What is the normal time period between deadline for application and final decision?

Summary

The time needed to decide on applications varies from one to six months.

20. Do the Ministries financing the programme influence the decision process in any way?

Summary

The ministries have no direct influence on the decisions with any of the partners. The ministries, however, may influence the topics to be financed in their annual budget processes.

21. How do you communicate a rejection of an application to an applicant (description of the reasons for rejection or not)?

Summary

For all partners a written rejection is sent to all applicants. For most of the partners the main reasons for the rejection are included in the letter.

22. Do you have a system where an applicant may challenge the decision?

Summary

Norway has a system where all applicants may challenge a decision on an application. In Finland a company, but not a university or a research institute may challenge the decision. For all other partners the applicants have no formal ways for challenging a rejection.

23. If yes, can you briefly describe how the system is organized?

Summary

Norway has an elected committee (which is independent of the elected board of the programme) which deals with all questions from the applicants. In Finland a request from an applicant is dealt with in the administration.

24. Do you use a system for contract negotiations?

Summary

Most partners have no or a very limited system for contract negotiations.

25. If yes, can you give a brief description?

Summary

The question is to a large extent irrelevant since none of the partners clearly state that they have a system for contract negotiations.

Deviation from the project workprogramme

During the preparatory workshop in Copenhagen on January 29-30th 2004 the enlarged European Ad hoc Group suggested that the questionnaire for the exchange of management programmes and evaluation practices should first be tested within the Nordic group. The experiences from the Nordic test could later be used to define the questionnaire to be used in the Coordination Action ERA-NET. For this reasons a questionnaire was developed and tested among the Nordic partners to enhance the preparation of future exchange of management programmes and evaluation practices on a European scale.

4. Deliverables

The list of project deliverables and delivery dates is presented in table 4. The details are described below.

Table 4. List of project deliverables

Deliverable number	Title of the deliverable	Workpackage number concerned	Date due according to Annex I to the contract month	Date submitted month
D1	A platform of interested Member states or Candidate countries	WP1	2	4
D2	An established European Ad hoc Group (EAhG)	WP1	3	4
D3	Joint strategic topics from ongoing national/regional research programmes	WP2	4	6
D4	Identified European Expert Group (EUEG)	WP2	5	not completed*
D5	Methodology, instruments and a roadmap to implement a sustainable future ERA-NET in Processing for Food Safety	WP3	6	6
D6	Scientific and industrial challenges within the selected strategic topics, and defined new opportunities and gaps	WP2	9	9
D7	Reviewed programme managements and evaluation practices	WP4	12	12
D8a	A short periodic activity report (Appendix 5, page 27)	WP5	6	6
D8b	A final report covering all the work, objectives, results and conclusions, including an audited economic report from each partner	WP5	12	12

* see chapter 4.4, page 26

4.1 D1 - A platform of interested Member states or Associated countries

The platform is presented in Table 1, page 5.

4.2 D2 - An established European Ad hoc Group (EAhG)

The European Ad hoc Group is presented in Table 2, page 6.

4.3 D3 - Joint strategic topics from ongoing national/regional research programmes

The joint strategic topics selected to further discussions in SAFEFOODERA are: **Risk analysis in food safety, Process induced risk, Traceability, Campylobacter/Pathogens, Contaminants and Emerging risk**. A more detailed review is presented in chapter 3.3 in this report.

4.4 D4 - Identified European Expert Group (EUEG)

During the preparatory workshop in Copenhagen on January 29-30th 2004 the need for a European Expert group was questioned. The enlarged European Ad hoc Group suggested that the decision about this activity should be postponed until the Coordination Action ERA-NET was established. A Nordic Expert Group (NEG) was identified and used in the project.

4.5 D5 - Methodology, instruments and a roadmap to implement a sustainable future ERA-NET in Processing for Food Safety

The developed methodology was presented to the Commission through a Coordinated Action ERA-NET proposal “SAFEFOODERA” in March 2004 (Appendix 1, page 27). The proposal got a high score, 27 of a maximum of 30 points, and was selected for contract negotiations.

4.6 D6 - Scientific and industrial challenges within the selected strategic topics, and defined new opportunities and gaps

The scientific and industrial challenges, including new opportunities and gaps, within the Nordic strategic topics was discussed using a Nordic Expert Group. For more details, see chapter 3.3.

4.7 D7 - Reviewed programme managements and evaluation practices

A questionnaire was developed and tested among the Nordic partners to enhance the preparation of future exchange of management programmes and evaluation practices on a European scale. For more details, see chapter 3.5.

5. Special reports

The European Ad hoc Group presented in Table 2, page 6 consist of 9 females (43%) and 12 males (57%).

APPENDIX

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