SIXTH FRAMEWORK PROGRAMME PRIORITY 5 Food Quality and Safety



Contract for:

NETWORK OF EXCELLENCE

Annex I - "Description of Work"

Project acronym: EuroFIR

Project full title: European Food Information Resource Network

Proposal/Contract no.: FP6-513944
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European Food Information Resource Network *EuroFIR* - 513944

Research Activities 121

List of Abbreviations

Partners:

IFR Institute of Food Research
GUT Graz University of Technology

RUG Ghent University (acronym in CPF is UGent)

NUBEL Nutrienten Belgie vzw (full acronym in CPF is NUBEL vzw; will participate jointly with RUG above)
IRMM Institute of Reference Materials and Measurements (full acronym in cpf is EC-JRC-IRMM)

NCPHP National Centre of Public Health Protection
DFVF Danish Institute for Food and Veterinary Research

KTL National Public Health Institute

UHEL University of Helsinki

AFSSA Agence Française de Sécurité Sanitaire des Aliments

BFE Federal Research Centre for Nutrition IceTec Technological Institute of Iceland

TTZ Verein zur Förderung Technologietransfers an der Hochschule Bremerhaven e.V.

ILSI International Life Sciences Institute – European Branch

NKUA National and Kapodistrian University of Athens

AUA Agricultural University of Athens

UCC University College Cork

BGU Ben-Gurion University of the Negev

INRAN National Institute for Food and Nutrition Research CSPO Centro per lo Studio e la Prevenzione Oncologia

WU Wageningen University UiO University of Oslo

NFNI National Food and Nutrition Institute

INSA National Institute of Health

UVi University of Vienna (two departments will participate: Institute of Analytical Chemistry, ANC in cpf & Institute of

Nutritional Sciences, IFEW in cpf)

CESNID Centre for Superior Studies on Nutrition & Dietetics (acronym in cpf is CESNID-UB)

UGR Institute of Nutrition and Food Technology, University of Granada

FRI Food Research Institute (full acronym in cpf is FRI-SK)

NFA Swedish National Food Administration
SLU Swedish University of Agricultural Sciences
TUBITAK Tubitak Marmara Research Centre (FSTRI)

BNF British Nutrition Foundation

EBI European Molecular Biology Laboratory, Hinxton - European Bioinformatics Institute (full acronym in cpf is

EMBL-EBI)

CSL Central Science Laboratory

UL University of Leeds (acronym in CPF is UNIVLEEDS)
US University of Surrey (acronym in cpf is UniS)

BAG Baigent Ltd (acronym in cpf is Baigent)
RIKILT RIKILT – Institute of Food Safety

POLYTEC Polytec

IDUFIC Ian D Unwin Food Information Consultancy

NNC National Nutrition Centre

ETHZ ETH Zurich

IMR Institute of Medical Research, University of Belgrade FVS SC Food Centre of Food and Veterinary Service of Latvia

DFI Danish Food Information

TNO/NEVO Dutch Nutrient Database (NEVO in JPA)

Others:

AFROFOODS African Section, INFOODS

BASIS Bioactive Substances in Food Plants Information System

BSC Balance Score Card CA Concerted Action

CAP Common Agricultural Policy
C/E Central/Eastern European countries

CEECFOODS Central Europe Section, INFOODS
CEN European Committee for Standardisation
CIQUAL French food composition databank

CI Citation Index for peer-reviewed publications

CO Co-ordinator

CODEX FAO/WHO Foods Standard Programme

CONDOR EU FP5 project Consumer Decision Making on Organic Products

COST 99 EU Funded Collaborative Research Project "Food Consumption and Composition Data"

CPC Consumers' Protection Centre (KEPKSA) (GR)

CSM Centres Skills and Infrastructure Inventory Management Database

CVD Cardiovascular disease DAFNE Data Food Networking

DEC Dissemination and Exploitation Committee

DM Document management

DTI Department of Trade and Industry (UK)

EC European Commission

EFCOSUM European Food Consumption Survey Method

EFFoST European Federation of Food Science and Technology

EFG Eurofood Groups

EFSA European Food Safety Authority

EPIC European Prospective into Cancer and Nutrition
ENDB pan-European Nutrient DataBase project (EPIC)
ENLP European Nutrition Leadership Programme

EOI Expression of Interest ERA European Research Authority

ESA Early stage training in Marie Curie Fellowships

EU European Union

EUROFOODS European section, INFOODS FAIP Food Allergy Information Platform

FAPAS Food Analysis Performance Assessment Scheme

FCDM Food composition database management

FCT Portuguese Foundation for Science and Technology

FECS Federation of European Cancer Societies
FENS Federation of European Nutritional Societies

FEPAS Food Examination Performance Assessment Scheme (microbiological examination)

FOODANUTR EU project on Food data networking for nutritional surveillance FOSIE EU FP5 project "Risk assessment of chemicals in food and diet"

FSA Food Standards Agency (UK)

GA₂LEN EU FP6 project on "Asthma and Allergy Network"

GC Governing Council

GEMMA Genetically modified organisms proficiency testing scheme

GEMS Global Environmental Monitoring System

GEMS/

FOOD_EURO Gems Food Europe – compiling data on food contaminants and human exposure

GMO Genetically modified organism

HP Horizontal Platform
HPL Horizontal Platform Leader
IA Integration activities

ICC International Cereal Corporation

INFOODS Food and Agricultural Organization of the United Nations's Network of Food Data Systems

INFORMALL EU FP5 project on allergen data

INITIATION Interpretation and implementation of new standard ISO 17025 by national metrology

Institutes in Europe

IF Impact Factor for peer-reviewed publications

IP Intellectual Property
IPR Intellectual Property Rights

ISO International Organisation for Standardisation

IT Information Technology
ITC International Trade Centre
JPA Joint Programme of Activities

KM Knowledge Management

KNIFE Knowledge Needs of Investment and Finance for Entrepreneurs

KPI Key performance indicator

Langual An international descriptive language for foods

LIPGENE EU FP6 project "Diet, genomics and the metabolic syndrome: an integrated nutrition, agro-

food, social and economic analysis"

M Month

MA Management activities

M/F Male/female

MRC Medical Research Council Human Nutrition Research (UK)

N/A not applicable

NDL Nutrient Data Laboratory (USA)

NeoDiet Nutritional Enhancement of Plant Derived Foods

NETTOX Network on Toxicants
NGO Non-government organisation
NOE Network of Excellence

NOFORISK EU FP6 project on "Probabilistic exposure analysis of novel and genetically modified food

risks"

NORFOODS Nordic project group on food data and food consumption databanks

NOTIS Naturally Occurring Toxicants Information System

NuGO EU FP6 project "European Nutrogenomics Organisation Network"

OBAGE EU FP5 project on "Obesity and Disease in Ageing"

OCEANIA- Oceania Section, INFOODS

FOODS

OJEC Official Journal of the European Communities

OPOCE Office for Official Publications of the European Community

OPTIFORD EU FP5 project on vitamin D fortification

PANEL Providing Access and Networks of Entrepreneurial Links

PASSCLAIM EU FP5 project on Process for the Assessment of Scientific Support for Claims on Foods

PAXIS Pilot Action of Excellence on Innovative Start-Ups

PEKH Pre-existing Know-How

PHYTOS EU FP5 project "The prevention of osteoporosis by nutritional phytoestrogens"

PIQS Project Information and Quality System

PMO Project Management Office
PT Proficiency Scheme
QA Quality Assurance
QC Quality Control
QS Quality Systems

QUID Quantitative Ingredient Declarations

RA Research activities

ResNet Women researchers network at the Norwich Research Park

R&D Research and Development

RIVM National Institute for Public Health and the Environment (NL)

RT Real time

SA Spreading of excellence activities

SAFEFOODS EU FP6 project on "Promoting Food Safety through a New Integrated Risk Analysis

Approach for Foods" Scientific Cooperation

SCOOP SEAFOOD

-PLUS EU FP6 project on "Seafood for Consumer Health and Well-being"

SMB Scientific and Network Management Board

SME Small and medium enterprise
S&T Science and Technology
SRM Standard reference Material
SSA Specific Support Actions

TIFS Trends in Food Science and Technology
TRANSFAIR EU FP5 project on trans-fatty acids
UAG Users and Advisory Committee

UNECA Unified Model for Network of Excellence Consortium Agreements

UNU United Nations University

US FDA United States Food and Drug Administration
USDA United States Department of Agriculture
USDA-NCC USDA National Computer Centre

VENUS EU FP4 project on "Effect of phytoestrogens on bone health"

WHO World Health Organisation

WP Workpackage
WPL Workpackage Leader
WTO World Trade Organisation

^{*} the full acronyms refer to the official 'organisation short name' as included in the CPF and the Consortium Agreement

1. Project summary

EuroFIR will form a world-leading collaboration on the development and application of a unified, reliable and accessible European Food Information Resource and comprise 110 researchers and 50 postgraduate students from 21 European countries. The principal objective is to build and disseminate a comprehensive, coherent and validated databank providing a single, authoritative source of food composition data in Europe for nutrients, and newly emerging bioactive compounds with putative health benefits. This objective is of fundamental importance to the Food Quality and Safety priority, and is an essential underpinning component of all food and health research in Europe. The activities aim at durable integration of efforts and the Joint Programme of Activities (JPA) is divided into four horizontal platforms: (1) Integration Activities (3 WPs); (2) Joint Research Activities (4 WPs); (3) Spreading of Excellence Activities (4 WPs), and (4) Network Management (1 WP). The JPA activities promote continuous cross-communication and stimulation and are grouped under 15 individual WPs but have numerous interactions. EuroFIR will be underpinned by a robust and well-established web-based software platform tool both to support interactive working between the teams involved and in the spreading of excellence internally and externally. A series of targeted formats (e.g. web-based interface, scientific publications, popular press and media) and communication channels will be used to deliver and disseminate findings, and transfer of knowledge to a variety of targeted audiences beyond the network. Training of researchers (assuring equal opportunities) and other key staff is indispensable to the development and sustainability of European excellence and will include: specialist workshops, exchange training visits, and a range of courses (including e-learning).

2. Project objectives

The proposed Network of Excellence (NOE) will provide the first comprehensive pan-European food information resource, using state-of-the-art database linking, to allow effective management, updating, extending and comparability. This is of fundamental importance to the Food Quality and Safety Priority and is an essential underpinning component of all food and health research in Europe. The network has FIVE strategic objectives:

- Strengthen scientific and technological excellence in food composition databank systems by integrating at the European level the critical mass of resources and expertise needed to provide European leadership in this field and establish itself as a world force in this area.
- 2. Identify and provide new information for missing data for nutrients and biologically active compounds with putative health effects, and covering all food groups including traditional, Ethnic minority, novel, high-added value and prepared foods.
- 3. Spread excellence and enhance the impact of the network in food composition databanks and public health nutrition beyond the boundaries of the partnership through training, and sharing of methods and facilities.
- 4. Communicate with, and enter into dialogue with all user and stakeholder groups, in order to establish and deliver user and stakeholder requirements for sustainable and durable food databank systems.
- 5. Disseminate and exploit new scientific and technological knowledge in order to strengthen the competitiveness of the European food industry, including SMEs, aiming to help the European food and nutrition industry to grow into knowledge–based industry, targeted at evidence based healthier food production.

Specific Objectives of EuroFIR

In achieving its principal objectives, EuroFIR will operate along four Horizontal Platforms: Integration (IA), Joint Research (RA), Spreading of Excellence (SA) and Management (MA), each with a number of activities grouped under workpackages (WPs). The specific objectives are designed in a measurable and verifiable form and will be met though the Joint programme of Activities (JPA) as set out in the following table:

Table 1.a Overview of Integration Activities

Table 1.a Overview of Integration Activities			
Strategic Objectives	Activities	Deliverables/Milestones 1,2	Potential risks/contingency plans
Strategic Objectives Strategic Objective 1: Strengthen scientific and technological excellence in food composition databank systems by integrating at the European level the critical mass of resources and expertise needed to provide European leadership in this field and establish itself as a world force in this area Specific objective 1.1: Establish NOE IT web-based communication platform and IT systems	Activities IA1.1: 1. Co-ordinating research, both within and across platforms leading to knowledge & its management. 2. Supporting integration, project management and communications. 3. Organising the network management through process management. 4. Translating and spreading the research results through communication management. 5. Providing access to the partners, public, policy makers and industry through IT web-based platform.	WP1.1: Deliverables: → Helpdesk operational (M3) → Report on audit (M12) → Release IT systems manual (M12) → Release updated IT manual (M18) Milestones: → Hold inaugural meeting and launch (M1) → Establish Helpdesk operation (M6) → Implement changes from audit (M9) → Complete publication of IT manual (M12) → Update/publish IT manual (M18 & M18+)	Potential risks/contingency plans IT web-based platform not ready in time for project start Prototype system operational by September 2004 for evaluation and testing prior to start of the project
Specific objective 1.2. Establish an open platform for joint activities	IA1.2: 1. Monitor cross-platform co-ordination and communication of activities within the network. 2. Establish specific criteria to monitor and report the degree of integration, and provide annual updates. 3. Identify and recruit new partners for specific activities or tasks through competitive calls and advise on IPR. 4. To identify and advise on new funding possibilities for network activities	► Implement facility sharing (M18+) WP1.2:	Insufficient integration. Establish specific criteria (reviewed every 6 months by SMB) for monitoring degree integration among partners and implement corrective actions as required.
Specific objective 1.3. To ensure a common understanding of quality management systems and	<u>IA1.3:</u> 1. Develop a dialogue with all partners to ensure	<u>WP1.3:</u> <u>Deliverables:</u>	Plans not widely adopted by laboratories acr member States.

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
establish a sound and coherent leadership approach of the relationships between quality, food science and databank systems	global consensus. 2. Implement a quality system for all participating centres. 3. Establish bench mark standards for addressing linkage between quality and databank systems. 4. Promoting an integrated approach including auditing and PT schemes	 Report on implementation of QS and scheduling of action plans and further workshops (M3). Questionnaire on QA (M7) Report on benchmark standards & traceability (M12) Report on QA (M13) QA criteria (M16) Draft quality manual for food laboratories (M18). Milestones: Hold inaugural meeting and launch (M1) Establish and disseminate QS and plan (M7) Establish and disseminate standards and traceability links (M14) Initiate audits and PT schemes (M18) Initiate submission of funding bids to national bodies (M18) 	Open dialogue with national quality bodies and link to new CEN requirements
Specific objective 1.4: Harmonise documentation and standardisation of European national databases in accord with EuroFIR recommendations, including foods and components for deployment in EuroFIR databank.	IA1.4: 1. Providing insights on the actual level of documentation and harmonisation of national databases and other related methodological issues using the ENDB project as an advanced prototype for 10 European countries as part of an initial review of current Internet developments. 2. Specify composition data to be deployed as national and specialised sets, their integration as a coherent resource of food composition information, and the data retrieval facilities required. 3. Plan, specify and implement the identification, development and deployment of existing and new resources of supporting information, assisting with content preparation as necessary. 4. Specify, develop, deploy and support the EuroFIR databank, its software and its information resources. 5. Develop, monitor and assess procedures for quality assurance of all documents, deliverables prior to release on the EuroFIR databank system. 6. Make recommendations for the continuation of the website and its resources after the end of the Community financial contribution (Link to IA3.3).	bodies (M18) WP1.4: Deliverables: Report on data collection & protection (M6). List of 6 expert names for EU (M6) Installation of hardware & software components (M9) Prototype EuroFIR databank system developed (M12- Final procedures for QA monitoring & data retriction facilities delivered (M18) 1st external report on progress available (M18+) 2nd external report on progress available (M18+) Milestones: Hold inaugural meeting and launch (M1) Databank steering group established (M3) General structure of databank system established (M18) Consensus on rules for QC & data format/retrieval (in operation with WP 1.3; M15) Data exchange tools available (M18) Complete plan for databank enhancement (M18) "GO/NO GO" decision (M18+) EuroFIR functions as core databank systems of European food composition databases (M18+)	Insufficient input from national database manag and key users leads to recommendations not be widely accepted across Member States. Early establishment of working group of national database compilers and key users ensures their acceptance recommendations + establishment of CEN working group (M18) helps to "s recommendations to all member states."
Specific objective 1.5: To identify food components to	<u>IA1.5:</u>	<u>WP1.5:</u>	Insufficient input from national database manag

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
be included in	1. To identify nutrients to be included in the core	<u>Deliverables</u> :	and key users leads to recommendations not b
be included in the databank, and define standard representations for compositional data, necessary documentation and quality criteria for their comparison and evaluation.	To identify nutrients to be included in the core datasets including those of increasing nutritional importance for which data is scarce or unreliable. Define sampling and analytical requirements for the latter. Establish national compiler network for Identifying foods to be prioritized in EuroFIR. To define standard representations for compositional data, necessary documentation and quality criteria for their comparison and evaluation. Definition of procedures for the calculation and expression of values for derived components, such as energy & vitamin, total activities both in databases and for output. Providing recommendations on the current strengths, gaps and priorities for harmonizing nutrient databases in EuroFIR	 Deliverables: Report on interchange guidelines & data structure (M4 EuroFIR workshop & report from workshops including inventory of component coverage and level of documentation in existing databases (M9) EuroFIR workshop on nutrients to be included in core data sets and nutrients for future analysis (M12) Report on plan for food-derived contaminants (M12) EuroFIR workshop and report on existing documentar & procedures in databases and compiler requirements (M18+) Report on food prioritisation (M15) A prototype food data standard focusing on identification, expression, calculation and documentation of food component data (M18) Protocols for testing the standards for various component collections and report for testing recommendations and compiler support and training needs (M18) Plans for 18-60 months of network (M18+) 	widely accepted across Member States. Early establishment of working group of national database compilers and key users ensures their acceptance of recommendations and key practices.
		 Milestones: Hold inaugural meeting to create management team and launch (M1) Establish national compiler networks (M3) Complete review on food-derived contaminants (M12) Establish CEN working group for description, documentation and management of food composition databases (M18) Establish plan for food-derived contaminants (M18+) New work topics added to JPA (M18+) 	
Specific objective 1.6: Harmonise existing food classification systems for use in food databank systems in order to conform European dietary habits and needs in intake assessments	IA1.6: 1. Develop prototype food classification and description support facilities, and link to existing national and international systems. 2. Determine levels of aggregation of food composition data in order to accommodate analytical results on individual food products. 3. Develop interoperable food composition data by	WP1.6: Deliverables: ➤ Inventory of European food composition databases a tables (M6). ➤ Report on current classification & description systems & mechanisms for linking foods (M9). ➤ Report on food record retrieval using	Insufficient input from national database compi and key users leads to recommendations and practices not been widely accepted across Member States. Early establishment of working group of national database compilers and key users ensures their acceptance of recommendation

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
	establishing mechanisms for linking foods reported in consumption studies (such as EFCOSUM) with available food composition data including procedures for food aggregation (link to IA1.4). 4. Develop EuroFIR resources for supporting the use of the food classification and description systems in database compilation and information retrieval.	existing systems (M12). Draft recommendations for standard food classification & description systems (M15). Report on prototype food classification & description support facilities (M18). Milestones: Hold inaugural meeting and launch (M1) Publish proposals for linking foods through existing for classification systems (M9). Publish recommendations for food record retrieval (M1) Publish recommendations for classification & description systems (M15). Establish prototype food classification & description support facilities (M18).	and key practices. No consensus can be made on a food classifica system to be used at the European food composi databases. Create mapping systems between major existing Classification systems.
Strategic objective 2. To identify and provide new information for missing data for nutrients and biologically active compounds with putative health effects, and covering all food groups including traditional, Ethnic, novel, high-added value and prepared foods. Specific objective 2.1. To establish user and stakeholder requirements for using food composition data in Europe.	RA2.1: 1. Determine the extent to, and format in, which food composition data is used by various user and stakeholder groups in Europe. 2. Determine the appropriateness of, potential acceptability of, and format in which food composition data can be presented to users and stakeholders using the Internet. 3. Test user and stakeholders' acceptability and comprehension of information gained from an Internet-based food composition databank system	 WP2.1: Deliverables: ➤ Report on 1st workshop with users and stakeholders (M6). ➤ Report on 2nd workshop with users and stakeholders (M12). ➤ Report on 3rd workshop with users and stakeholders (M18). Milestones: ➤ Hold inaugural meeting and launch (M1) ➤ Agree programme for 1st workshop (M3). ➤ Organize 1st workshop in UK and deliver report (M6). ➤ Organize 2nd workshop and deliver report (M12). ➤ Organize 3rd workshop and deliver report (M18). ➤ Deliver initial recommendations from first three workshops (M18). ➤ Establish intensive contact with key users and stakeholders (M18+) ➤ Formal, measurable outreach work underway with stakeholder groups (M18+). 	Difficulties in identifying suitable users and stakeholders for each of the workshops. This WP will work closely with the PMO, WP3.2 (Dissemination and Communication), WP3.3 (Commercialisation & Durability) and the UAG to identify appropriate users and stakeholder groups to contact. The format for the workshops will initially be based on a successful consultation that was recently conducted in the UK but will be adapted for the other countries. Failure to engage with stakeholders so as to identify missing data and foods. One of the primary purposes of the workshops will be to identify missing data and foods.
Specific objective 2.2. Establish guidelines and procedures for the effective incorporation of industry data in the EuroFIR databank.	RA2.2: 1. Establish standard procedures for calculating the composition of prepared and composite foods. 2. Review current yield & nutrient retention factors and establish standard set of factors to be used in	WP2.2: Deliverables: ➤ Report on rules and factors for imputing data for composition of composite processed foods (M6). ➤ Report on guidelines on the Incorporation	Limited involvement of food industry. Close contact with WP 3.2 (dissemination and communications) and the UAC a priority and will identify suitable industrial contacts. The inclusion of ILSI and other

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
	the calculation of composite and processed foods.	of food industry data (M15).	industrial bodies/associations will also be
	3. Define rules for the imputation of data for foods	 Report on initial food industry requirements (M18) 	undertaken to ensure industry wide participation
	reported as consumed but not represented in present		in EuroFIR.
	datasets.	Milestones:	
	Investigate the general availability of compositional data for foods and possible delivery	 Hold inaugural meeting to create management team and launch (M3) 	Unwillingness of industrial companies
	methods from production and retail organisations of	Collect information on national trends and	and organisations to deliver any part of brand
	compositional data and up-to-date information on	databases of composite foods and industrial	information.
	trends in processed and novel foods.	ingredients in each partner (M6)	mornadon.
	5. Develop a framework for collecting, incorporating	> Preliminary description of European food brand	Early involvement of industry and trade
	and updating compositional information on brand	databases (M12)	associations to establish dialogue and
	name foods in EuroFIR databank and definition of a	> Establish and disseminate improved methods and	agreement of approaches to be used
	basis for interrelating brand name foods with generic	protocols on imputing data for composite dishes	for gathering food industry data on
	food items.	together with WP 2.1 (M18)	foods and brands.
	6. Exploit food industry requirements for the EuroFIR	> Establish plans for network with food industry	LIAC will be use a wide name of industry
	databank including its use for labelling and calculation of the composition of composite food	organisations for data change experiments (M18) Initiate the development and submission of funding t	UAG will have a wide range of industry stakeholders and trade associations.
	products.	to national bodies (M18+)	Stakerioluers and trade associations.
	products.	Establish intensive contact with European	
		food and nutrition industries (M18+).	
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Specific objective 2.3a. To provide new data on the nutritional composition of traditional foods for	RA2.3.1: 1. To define the term "traditional" and determine the	WP2.3.1 - Deliverables: ➤ Report on definition of "traditional", evidence-based	Insufficient funds available from EuroFIR to cover all analytes and for all traditional and
inclusion in national food databases with	recipes or foods to be classified under this food	records and initial list of traditional foods/recipes of	ethnic foods.
representative raw ingredients and recipes.	group	each participating country (M12)	ennic roods.
Toprocontative rail ingreations and recipee.	2. To establish a common methodology for the	 Protocol for recipe recording, collection and 	Important to prioritize analytes and foods and
	systematic investigation of traditional foods across	preparation of samples (M12)	seek additional funding from national and other
	Europe	➤ List of nutrients and bioactive compounds, methods	bodies
	To provide new data on the nutritional composition	and list of central laboratories for analysis (M18)	
	of traditional foods for inclusion in national food	> Detailed written description of traditional recipes	
	composition tables with representative raw	investigated (M18)	
	ingredients and recipes.	> Agree plan of work for 18-36 months (M18)	
		WP2.3.1 - Milestones:	
		> 1st workshop. Establish network for traditional foods	
		across Europe (M3)	
		> 2 nd workshop on documentation of traditional foods	
		and selection of at least two traditional recipes for	
		the pilot study in each country (M12)	
		Start recipe recording and sample collection (M13)	
		ldentify core partners for analysis (M18)	
	<u> </u>	New research topics added to JPA	

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
		 (M18+) Intensive contact with European food and nutrition industries (M18+) Measurable awareness of food composition and public health issues raised amongst stakeholder groups (M18+). 	
Specific objective 2.3b. To provide new data on the composition of foods consumed by both ethnic and mainstream populations for inclusion in national food databases.	RA2.3.2: 1. Gathering information on ethnic populations and general dietary habits in Europe, and using these to set priorities for the collection and analysis of specific foodstuffs. 2. Providing new and reliable data on the composition of foods consumed by both ethnic and mainstream populations for inclusion in national food composition databases. 3. Transfer of scientific and technological knowledge to consumers [ethnic and mainstream populations] and industry; promoting knowledge of ethnic foods thereby increasing consumer choice and market opportunities	 WP2.3.2 - Deliverables: Report on 1st workshop (M3) Critical review of composition of ethnic foods including information on methods of domestic food preparation and eating practices (M12) Report on 2nd workshop on identification and prioritisation of "ethnic" foodstuffs for analysis and detailed protocol for the collection and storage of samples for analysis (M12) Report on 3rd workshop (M16) Agree plan of work for 18-36 months (M18) WP2.3.2 - Milestones: Hold inaugural meeting to create management team and launch (M1) Establish networks for ethnic minority foods across Europe including SMEs (M6) Identify core partners for analysis of foods (M15) Start collection for ethnic foods (M18) Initiate the development and submission of funding bids to national bodies (M18+). New research topics added to JPA (M18+) Intensive contact with European food and nutrition industries (M18+) Measurable awareness of food composition and public health issues raised amongst stakeholder groups (M18+). 	
Specific objective 2.4. To update and further include additional critically assessed biological and compositional data on bioactive compounds in the BASIS database and deploy it in the EuroFIR databank system.	IA2.4: 1. To ensure compatibility of the BASIS database to conform to the standard specifications adopted for EuroFIR. 2. To update and further include additional critically assessed data for bioactive compounds. 3. To identify both exotic and health food plants in the database.	WP2.4: Deliverables: ➤ 1st EuroFIR workshop & report covering organisation of work, allocation of tasks and establishment of WP teams (M3) ➤ 1st Users Group Meeting and recommendations (M9) ➤ 2nd EuroFIR workshop & report covering lists for	Insufficient funds available from EuroFIR to cover all bioactive compounds and for all foods. Important to prioritize compounds and foods with the help of users group, and seek additional funding from national and other bodies.

Strategic Objectives	Activities	Deliverables/Milestones 1,2	Potential risks/contingency plans
	4. To update the plant and plant part lists in different European languages. 5. To deploy the BASIS database in the EuroFIR databank system in order for maximum use by endusers 4. To update the plant and plant part lists in different European languages. 5. To deploy the BASIS database in the EuroFIR databank system in order for maximum use by endusers.	selected health & exotic food plants, status of data assessment/entry and specifications (M15) 2nd Users Group Meeting and future recommendations for work & additional funding (M15) Report covering final food plant lists, final specifications for database deployment and data entry status (M18) Future plan for activities including plant source materials for food flavourings (M18) Milestones: Hold inaugural meeting and launch (M1) Establish WP networks and agree criteria for data evaluation and assessment (M6) Publish initial lists for health & exotic food plants (M12) Publish the agreed and final food plant lists and database specifications (M18) Agree future plan and initiate new funding bids (M18). Establish intensive contact with European food and nutrition industries (M18+) EuroFIR functions as core databank Systems European food composition databases (M18+)	
Strategic objective 3: Spread excellence and enhance the impact of the network in food composition databanks and public health nutrition beyond the boundaries of the partnership through training, and sharing of methods and facilities. Specific objective 3.1: To promote knowledge, skills development and vision in food composition research within EuroFIR, and across Europe through a coherent set of closely inter-related training, education and gender activities.	SA3.1: 1. Organising a series of specialised workshops covering a range of topics already identified in several of the WPs. 2. Optimisation of existing and new Marie curie training sites (linked to IA1.4 on training). 3. Organising the training exchange programme including PhD awards. 4. Other training including attendance at conferences and non-scientific aspects. 5. Design and implementation of e-learning courses and information exchanges. These will initially cover nutritional epidemiology, production and use of food composition data and entrepreneurship in agrobusiness. 6. Coordinate information on specialised research facilities and training opportunities at all network partners & additional collaborators (link to IA1.1).	WP3.1: Deliverables: ➤ Report of specialist workshops & training courses driven by WPs (M3) ➤ Policy paper on optimisation of existing Marie Curie actions discussed and agree upon by partners (new actions to be prepared by partners outside NOE) (M6) ➤ Workplan for implementation of exchange training visits & PhD awards programme (M6) ➤ Design and implement e-learning courses (M12) ➤ Consensus report on effectiveness of training activities & recommendations (M18+) Milestones: ➤ Hold inaugural meeting to create management team	Insufficient interest shown (especially by students and young researchers) in the training capacities of the network. This WP will work closely with WP3.2 to widely advertise and promote the training courses and workshops. In addition, lists of potential trainees will be sought from the individual WPs making use of their extensive contacts among national compilers and key users.

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
	7. Co-ordinate and optimise training exchange programmes for the whole network and collaborating centres (links to SAs 3.2, 3.3 & 3.4).	and launch (M1) Start exchange visits/PhD awards programme (M6) Implementation of e-learning courses (M18) Agree future plan and seek additional funding (M18+) Integration of independent e-learning modules into e-learning course (M18+) Establish extensive PhD-programmes among partners (M18+) Establish joint PhD programmes & appointments among partners (M18+) Establish the full exchange of Staff (M18+) Recognize the EuroFIR cascade as lead information and training source for all aspects of food composition information in Europe (M18+).	
Specific Objective 3.2a: Transfer activity outcomes into active use by users/stakeholders, at appropriate stages and using concepts and approaches tightly	SA3.2: 1. Addressing issues of national sensitivities, restrictions of partner language fluency, data	WP3.2: Deliverables: ➤ Secure web-based communication platform for	Key opinion formers won't respond to invitations to attend meetings.
targeted to user/stakeholder requirements.	protection, disabilities, IT literacy and speed/availability of electronic connectivity, and	EuroFIR partners (with WP 1.1) (M3) Web Bulletin Board interface for stakeholders world-	Send summaries of key events through colleagues, professional bodies and trade
Specific Objective 3.2b: Encourage EuroFIR partners to share knowledge and expertise, and externally to user and	perceived requirements for information within EuroFIR. 2. Achieving a branding and style guide for EuroFIR	wide respecting language, expertise levels, gender, ethnicity, disability, data protection and ethical issues (M6).	organisations.
interest groupings to maximise the speed of impact of the advances in understanding of food composition databank systems through the network.	that can be implemented by all partners. 3. Setting up links with communication experts within EuroFIR partner organisations to coordinate	 Planned programme of information dissemination to suit users/stakeholders including one-pagers, syntheses, monthly web features and congress 	Not reaching those who don't use the internet or don't speak English.
Specific Objective 3.2c: The long-term goal is to	activities. 4. Assisting in the developing, testing and launching	proceedings & resources (M0-18) Meetings, conferences and congresses of	The internet is not the only communication route but by working with organisations such as
increase not only awareness among target user/stakeholder groups of the impact of the application of the databank systems to improve diet/health research, well-being and industrial	a public website for EuroFIR communications and linking the EuroFIR site to all relevant sites (Link to IA1.1). 5. Establishing a mechanism based on achievement	stakeholders and of EuroFIR partners (M0-18) Report on raising public participation & awareness including audits of dissemination "reach and effectiveness" (M18)	AlphaGalileo we can use the national press agencies and journalists to reach European citizens with information in their own language via their national newspapers, magazines and
competitiveness, but the confidence with which users/stakeholders can apply knowledge-base in their own fields.	of a given quality threshold to underpin message promulgation to EuroFIR members for onward translation to their stakeholders.	Report on plan for using & disseminating knowledge (M18)	other media (e.g. radio).
	Establishing a cascade system to ensure that communication messages are rapidly shared. Using, and developing further, links with	Milestones: ➤ Establish steering group to advise on dissemination; provide outline style-guide to underpin	Not attracting international mainstream & technical print & broadcast media.
	communication streams of other communication intermediates such as other FP6 IPs and NOEs, health professionals and consumer groups, policy makers (EU, DG SANCO, EFSA, WHO, FAO and	dissemination strategy; baseline awareness audit; 1st publicity push with users/stakeholders (M1) Formalise EuroFIR peer-review process for dissemination (M2)	By making use of AlphaGalileo, communication experts with EuroFIR partner organisations and annual media campaigns and by linking with other FP6 dissemination packages.
	national representatives), opinion leaders, educators, researchers and funding agencies.	 Start providing non-expert material on food composition & databank system issues for use by 	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
	8. Specific activities, including the use of specialist communication streams, targeted at SMEs, and the annual media campaign. 9. Planning and delivering innovative communication approaches to citizens for whom the Internet is the NOT the key information provider. 10. Supplying information to attract international mainstream and technical print and broadcast media including bulletin board, one-pagers, quarterly synthesis reports, monthly website features, congress proceedings and other resources and video footage. 11. Coaching members (including students) in communication skills.	partners (M3) Launch populated public pages and links; sought initial feedback (M6) Hold 1st Science and Society meeting (M12) 1st Research dissemination meeting; WP report to SMB (M18) Complete 1st External audit of dissemination effectiveness and awareness (M18) Establish intensive contact with European Food and Nutrition Industry (M18+) Shape open science & society around core EuroFIR activities (M18+) Establish extensive public website linked to major stakeholders, & communicator intermediaries using major European languages (M18+) Contribute at national science meetings in partner countries spun off and undertake without the need for central co-ordination (M18+) Annual EuroFIR is a continuing global key event (M18+) Recognize EuroFIR cascade as lead information source for all aspects of food composition information (M18+). Measured awareness of food composition and public health issues raised especially among stakeholder audiences (M18+)	
Strategic Objective 4: Communicate with, and enter into dialogue with all user and stakeholder groups, in order to establish and deliver user and stakeholder requirements for sustainable and durable food databank systems. Specific objectives 4.1: To identify the ability of EuroFIR Databank system to sustain and survive independently in financial terms after the initial Community funding and the necessary actions to ensure this. Specific objective 4.2: To develop a business plan for the databank system after the end of Community funding including a business and marketing plan, which will seek to commercialize both the databank	SA3.3: 1. Consultations with other subgroups, committees and existing EU entrepreneurial networks in order consolidate and crystallize the work to be carried out in the other WPs into meaningful business and marketing plans. 2. The review of comparable service offerings and organisations in Europe and outside Europe in order to identify best practices and exemplars. Lessons learnt, potential opportunities and threats will be collated with a view to proposing the legal status of the entity that will offer the best databank system service. 3. The drafting of business plan including value proposition, mission, vision, objectives, activities, marketing position, legal constitution, cost structure,	 <u>WP3.3:</u> Deliverables: ➤ List of key users and stakeholders in each country (M6) ➤ EuroFIR workshop & report and action list to develop a long-term strategy for commercialisation of the output of the network (M12) ➤ Update list of users and stakeholders and action plan for next 18 months (M18) <u>Milestones:</u> ➤ Establish WP task force (M1) ➤ Organise workshop for network technology transfer 	Insufficient funds are available from national and international bodies to sustain the network after the end of Community funding. Alternate sources of funding will be investigated including a membership scheme for so organisations (e.g. food industry).

Strategic Objectives	Activities	Deliverables/Milestones 1, 2	Potential risks/contingency plans
system technology and the network's training programme.	governance and management structure, deployment plan and marketing strategy. 4. The promotion and sustainability of the databank system-based service involving the development of viable marketing plan for dissemination of the databank system across Europe and other continents, identifying incubators, new venture creation support and entrepreneurship training of food scientists	managers and existing EU entrepreneurial programmes (M6) Identify pertinent incubators, new venture creation support and entrepreneurship training (M18) Complete market research report (M18+) Prepare restricted & confidential report of tentative business plan (M18+) Arrange meeting of WP task force to review business plan, the conflict/consensus report and marketing plan for dissemination of the databank system (M18+) Plan for sustainability published for consultation (M18+) EuroFIR is independent of EU grant (M18+)	
Strategic Objective 5: Disseminate and exploit new scientific and technological knowledge in order to strengthen the competitiveness of the European food industry, including SMEs, aiming to help the European food and nutrition industry to grow into knowledge – based industry, targeted at evidence based healthier food production.	Contributes to SA3.3 & WP3.3	Contributes to SA3.3 & WP3.3	See above.
Specific objective 5.1: To link the dissemination of information and knowledge with regards EuroFIR to the needs of the marketing and business plans in order to fulfil the network's sustainability and financial survivability.			
Specific objective 5.2: Audit the gender balance within the project with a particular emphasis on women's roles, and establish/enhance equal opportunity			
networks that meet the needs of women in the project.	SA3.4: 1.Gender information audit will be carried out in order to develop an action plan. 2. Collation and promotion of information on good practing gender mainstreaming will be undertaken. 3. Objectives will be set for equality and integration developing methodologies	WP3.4: Deliverables: ➤ Methodological framework for auditing the current state of gender balance and sensitivity (M4) ➤ Establish an e-network for mutual peer support and mentoring (M6) ➤ Develop an information resource of the relevant	Appropriate mentors not identified. Use partner contacts and contacts from other f projects. Lack of uptake of peer support/mentoring.

Strategic Objectives	Activities	Deliverables/Milestones 1,2	Potential risks/contingency plans
onategic objectives	for monitoring and evaluation. 4. Events will be planned and organised to raise awareness within the network and in the wider public arena making use of existing e-networks and appropriate web-based discussion groups	national and European networks of women scientists (M9) An audit report mapping the initial gender composition and distribution of research teams, for circulation to managers and decision-makers in the project (M12) Generally applicable guidelines for the dissemination of good practice in gender issues (M15) Produce documentation of the gender-related obstacles and opportunities experienced by researchers (M18) Report on gender action plan (M18) Milestones: Inception workshop that outlines the background to gender-watching, introduces the first stage of the gender audit, and scopes the gender issues relating to the dissemination and exploitation of the project (M1) Development of gender questionnaire for initial gender audit (M6) On-going updates at gender fora associated with each project meeting (M12 & M18+) A web and email-based forum for dialogue and sharing of good practice (M12) Annual assessment of success in meeting gender- informed objectives (M12) Participatory discussion to set objectives for gender mainstreaming, and selection of indicators and criteria for monitoring gender mainstreaming in the network (M18)	Targeted information to researchers and others within the network; partners asked to identify appropriate people within their organisations. Lack of response from network partners. Make WP-Ls responsible for collecting information on gender from their organisations. Unable to establish dialogue on forum. Proactive discussion points to be raised by members of WP3.4.
Strategic objectives 1-5	MA4: 1. Establish EuroFIR organisational	<u>WP4:</u>	Management process fails/insufficiently flexible.
Specific Objective 6: Install flexible and adequate network management for the first critical 18 months of EuroFIR Specific objective 7: Fulfil the general co-ordinator's responsibilities including the elaboration of the JPA for months 13-30. Specific Objective 8: Organise the open	structure and its bodies and network management operating procedures. 2. Organisation of the start-up meeting of all core partn including establishing WP teams and training sessions IT web-based communication platform and financial management. 3. Organisation of other network meetings in a flexible way. 4. Prepare technical and financial reports to the EC.	Deliverables: ➤ Consortium agreement agreed (M-1) ➤ 1st start-up meeting of SMB & WP-L (M1) ➤ 1st version of manual with SOPs including formats for technical and financial report distributed for discussion and agreement (M3) ➤ 1st Annual (start-up) meeting of SMB, GC and all partners – JPA and budget agreed; minutes prepare & circulated (M3).	Continuous review of network management by SMB; refocus as required annually.

order to initiate concrete links with several WPs in dissemination, training & commercialisation, and relationships withkey users/stakeholders. 6. Develop and operate a flexible and optimal internal communication system throughout the network as a	organisations (M3)	
work programme and contract negotiations with the EC on behalf of the consortium 7. Encourage the involvement of SMEs at all levels of the network with an overall target of 15% (or higher) of total budget. 8. Create an atmosphere to encourage full partner commitment including visits to all core partners and rotation of network meetings to all Regions of Europe. 9. Interact with various national and international bodies in order to promote the network and exploit its potential Miles Miles	 2nd Meeting of SMB with WP-L; minutes prepare & circulated (M6). Project presentation leaflet & poster presentation available; updated (M6, M30 & M48) 3rd meeting of SMB with WP-L; minutes prepare & circulated (M9). 2nd Annual meeting/Network Congress; Proposal for admission of new partners from 2006; proceedings prepared & circulated (M12) Update of JPA for 2006 (M14/15). 4th Meeting of SMB; minutes prepare & circulated (M15). Update for JPA 2006 and foresight of priorities for 2007 (M18). Milestones: Verification of procedures, JPA for M1-18 and budget by GC in their first meeting (M3) Proposal of members of UAG & DEC top GC (M3) Open call for new partners published (M6) Confirmation of all partners to proper auditing procedures (M6) JPA for 2nd year agreed (M9) Agreement with new partners to be enrolled by 2006 (M12) Self-auditing process in place for all partners (M15) Overall project budgeting system in operation (M18) Agreement of JPA and budget for 2007-08 (M18+) Annual review meetings (M18+) Preparatory work for 2nd mid-term review started (M18 	

 $^{^1\!}M\!$ on ths 13-30 for both Deliverables and Milestones; 18-60 months for milestones only $^2\!S\!$ ee pages 89-122 for full description

3. Participants list

Particip. Role	Partic. Number	Participant name	Participant short name	Country	Date enter project	Date exit project
СО	1	Institute of Food Research	IFR	UK	1	60+
CR	2	Graz University of Technology	GUT	AT	1	60+
CR	3	Ghent University	RUG	BE	1	60+
CR	4	Nutrienten Belgie vzw	NUBEL	BE	1	60+
CR	5	Institute of Reference Materials and Measurements	IRMM	BE	1	60+
CR	6	National Centre of Hygiene	NCPHP	BG	1	60+
CR	7	Danish Institute for Food and Veterinary Research	DFVF	DK	1	60+
CR	8	National Public Health Institute	KTL	FI	1	60+
CR	9	University of Helsinki	UHEL	FI	1	60+
CR	10	Agence Française de Sécurité Sanitaire des Aliments	AFSSA	FR	1	60+
CR	11	Technological Institute of Iceland	IceTec	IS	1	60+
CR	12	Federal Research Centre for Nutrition	BfEL	DE	1	60+
CR	13	International Life Sciences Institute – European Branch	ILSI	BE	1	60+
CR	14	Verein zur Förderung Technologietransfers an der Hochschule Bremerhaven e.V	ттz	DE	1	60+
CR	15	National and Kapodistrian University of Athens	NKUA	GR	1	60+
CR	16	Agricultural University of Athens	AUA	GR	1	60+
CR	17	University College Cork	UCC	IE	1	60+
CR	18	Ben-Gurion University of the Negev	BGU	IL	1	60+
CR	19	National Institute for Food and Nutrition Research	INRAN	IT	1	60+
CR	20	Centro per lo Studio e la Prevenzione Oncologia	CSPO	IT	1	60+
CR	21	Wageningen University	WU	NL	1	60+
CR	22	University of Oslo	UiO	NO	1	60+
CR	23	National Food and Nutrition Institute	NFNI	PL	1	60+

CR	24	National Institute of Health	INSA	PT	1	60+
CR	25	University of Vienna	UVI	AT	1	60+
CR	26	Centre for Superior Studies on Nutrition & Dietetics	CESNID-UB	ES	1	60+
CR	27	Institute of Nutrition and Food Technology, University of Granada	INYTA	ES	1	60+
CR	28	Food Research Institute	FRI	SK	1	60+
CR	29	Swedish National Food Administration	NFA	SW	1	60+
CR	30	Swedish University of Agricultural Sciences	SLU	SW	1	60+
CR	31	Tubitak Marmara Research Centre, Food Science and Technology Research Institute	TUBITAK	TR	1	60+
CR	32	British Nutrition Foundation	BNF	UK	1	60+
CR	33	European Molecular Biology Laboratory – European Bioinformatics Institute	EMBL-EBI	DE	1	60+
CR	34	Central Science Laboratory	CSL	UK	1	60+
CR	35	University of Leeds	UL	UK	1	60+
CR	36	University of Surrey	US	UK	1	36
CR	37	Baigent Ltd	BAG	UK	1	36
CR	38	RIKILT – Institute of Food Safety	RIKILT	NL	1	60+
CR	39	Polytec	Polytec	DK	1	60
CR	40	Food Information Consultancy	IDUFIC	UK	1	60
CR	41	National Nutrition Centre	NNC	LT	19	60
CR	42	ETH Zurich	ETHZ	СН	19	60
CR	43	Institute of Medical Research, University of Belgrade	IMR	YU	19	60
CR	44	Food Centre of Food and Veterinary Service of Latvia	FVS FC	LV	19	60
CR	45	Danish Food Information	DFI	DK	20	60
CR	46	TNO Quality of Life**for Dutch Nutrient Database	NEVO/TNO	NL	20	60

^{*}CO = Coordinator & CR = Contractor

Co-ordinator's name: Mr Paul M Finglas
Co-ordinator organisation name: Institute of Food Research
Co-ordinator's email: paul.finglas@bbsrc.ac.uk

Co-ordinator's Telephone: +44.1603.255318 (personal), +44.1603-255365 (secretariat)

^{**}Representing NEVO Foundation, the Dutch nutrient database.

4. Relevance to the objectives of the specific programmes and/or thematic priorities

Europe urgently needs a *unified, reliable and accessible food composition information resource* for two main reasons: (1) the <u>scientific validation and exploitation of relationships</u> between dietary habits, reduced burden of diet-related chronic disease and, thus, <u>reduced health and social costs</u>, and (2) <u>full interpretation and exploitation of research findings</u> from pan-European studies and effective dissemination to various stakeholders such as consumers, food industry, European policy bodies and health professionals.

Although over the last two decades, several initiatives from the European Commission (COST, FLAIR) and INFOODS have led to greater collaboration between European countries and beyond, there still exists a **lack of permanent structures** to support the type of work and **relatively poor links** between the various <u>national database compilers</u>, <u>end-users of the data (e.g. industry, public health nutritionists and European consumers)</u>, <u>and policy makers</u>.

By creating a European NOE to address food composition databases, we will further build on the successes to create **permanent structures** that will <u>maximise the scientific contribution</u> of Europe to this area; create a <u>clear link between the needs of the endusers and policy makers and the research agenda</u>; accelerate the application of research results to <u>policy and health developments</u>, as well as develop <u>partnerships with the private sector</u>.

Overall Goals

EuroFIR has FIVE main overall goals that address the *scientific*, *technical*, *wider societal* and *policy objectives* of the Food Safety and Quality Priority in a number of ways as follows. Firstly, the objectives are of fundamental importance to the thematic priority area *Food Quality and Safety* (1.1.5) and in particular, research priorities on "Epidemiology of food-related diseases and allergies", "Impact of food on health" and "Safer and environmentally friendly production methods and healthier foodstuffs". It is an essential *underpinning* component of all *food*, *nutrition and health research in Europe*.

Improving the health and well-being of European citizens through a higher quality of their food (Scientific, Technical and Policy objectives):

Further work on the <u>harmonisation and standardisation of food composition data</u>, including biologically active constituents, in Europe is vital in order to fulfil the decision number 1400/97/EC of the European Parliament and of the Council to adopt a programme of community action on <u>health monitoring</u> within the framework for action in <u>public health</u>. The report "Health and Human Nutrition: Elements for European Action" (July 2000) states that to establish a common European nutrition policy, it is essential to establish an effective food and nutrition monitoring system at the EU level. The major action proposed is the monitoring of food consumption, and intakes of nutrients and other bioactive food constituents, which requires the <u>standardisation of data collection methods</u>, food <u>composition tables and analytical methods</u> (chapter 6.1). In addition, CAP encompasses the provision of consumers with a wide range of healthy and nutritious foods at an affordable price, through production methods that take account of environmental protection and animal welfare requirements and with adequate information about food composition and hygiene levels.

Strengthening the competitiveness of the European food and biotechnology sectors (Socio-economic & Policy):

In the rapidly changing marketplace of food products, it is particularly important that new or reformulated products and new trends in production or consumption are reflected in up-to-date food composition data. Food composition data are essential for the European Food Safety Authority (EFSA), and the tasks mentioned in the White Paper on Food Safety 2000 regarding an Action Plan for Nutrition and European Dietary Guidelines. In the new programme on Community action in the field of public health, data on food consumption and intake of nutrients and other components are vitally important as such data are essential for tackling food-related health determinants. The main conclusions of the Lisbon European Council meeting (March 2000), notably "The strategic goal is to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion" [p.5], "Strengthen co-operation between Member States by exchanging experiences and best practice" [p. 31], and "develop priority actions addressed to specific target groups [e.g. minority groups...]" [p. 33]. The trade of food within and from outside the EU is increasing. This means that foods not commonly consumed in various regions become more commonly consumed. The need for easily accessible food composition data across the EU is thereby increasing. For the food industry, EuroFIR will provide rapid and convenient access to relevant authoritative information for use in the formulation and nutrition labelling of food products.

This is especially critical for food SMEs, including those serving ethnic communities that do not have the resources and knowledge available to larger food companies. One of the aims of this network will be to generate new data on ethnic and traditional foods. This

addresses one of the conclusions of the **Göteborg European Council** meeting (June 2001), notably "<u>Contribute to achieving sustainable development by increasing its emphasis on encouraging healthy, high quality products, environmentally-sustainable production methods..." [p.31].</u>

Interdisciplinary approach and durability of integration:

For the first time in Europe, EuroFIR will bring together a consortium of leading European teams in the field of food composition research in original and unique research integration, based on multi-centre and multidisciplinary programmes. The NOE will include centres with a variety of skills in food science, food informatics, analytical chemistry, nutrition, and epidemiology. In some instances these researchers are already working together in multidisciplinary groups. In others, they are working with some of the components only. The work programme of the NOE will also be open to other collaborating centres as full members, and this participation will be actively encouraged. The NOE places special emphasis on the needs of small and medium size enterprises (SMEs) and including partners from several new Member Sates (Poland, Bulgaria, & Slovakia), other candidate countries (Turkey) and associated states (e.g. Israel & Norway).

SMEs will be involved at various levels within EuroFIR:

Five core partners (BNF, Baigent, Polytec & IDUFIC & DFI) are SMEs and others have been identified covering a range of activities and tasks:

- Performing specific subtasks for the network (e.g. related to database construction, web-based communications, auditing, training and dissemination) – WPs 1.7, 3.1 & 3.2.
- Collaboration with specific food bioinformatics related technologies (e.g. software development) WPs 1.8, 2.2 & 2.4.
- Dissemination & communication WP 3.2
- Collaboration on exploitation of knowledge WP 3.3.
- Spin-off activities of EuroFIR, where SME activities can be created in order to generate income and exploit IP (e.g. development of novel or functional foods, or foods with specific bioactive compounds) WPs 2.2 & 2.4
- Through the Commercialisation and Sustainability activity of the network, where SME activities can be created in order to generate income and exploit IP – WP3.3.

<u>The links with policy makers, consumer organisations and professional bodies</u> (e.g. IRMM, FAO, BEUC, EUFIC, CIAA, ILSI, DGSANCO & EFSA) built in to the design of the NOE will facilitate early dissemination and implementation of research findings to a wide range of stakeholders. The durability of integration will be guaranteed by:

- <u>The added value of collaboration to both the scientists and the funders:</u> This will be demonstrated by the engagement of the scientists within the NOE, the ability of the NOE to raise local funding for the JPA and the willingness of other funding bodies (either in the Public Sector or in Industry) to support the activities and infrastructure of the partnership.
- <u>The technical support gained from the development of new methods of electronic communication, databanks and common databases:</u> New facilities for electronic communication will be an early priority for the NOE; the other facilities will be established during the first 18 months of the NOE.

5. Potential impact

(a) Demonstrate the extent to which Europe has an existing need to strengthen or reinforce S&T on the topic

"Knowledge of the chemical composition of foods is the first essential in the dietary treatment of disease, or any quantitative study of human nutrition"¹

The <u>lack of up-to-date information</u> on food composition, and <u>poor comparability between European countries</u>, confounds fundamental research in international multi-centre nutritional epidemiology, significantly <u>reduces the scientific validity of any findings</u> of an association between the dietary intake of a food component, and a health outcome, and prevents the food industry from understanding and exploiting their products in the market-place. This includes both nutrient information as well as information on other biologically active constituents in foods. In addition, <u>this will also limit and hamper intake and risk assessment at the European</u>

¹ McCance, R.A. & Widdowson, E.M. (1940). The chemical composition of foods. Medical Research Council Special Report Series No. 235. London: Her Majesty's Stationery Office.

<u>level necessary as a tool for implementing decisions on food legislation, dietary advice and other actions for the protection of the consumer.</u>

Food composition information systems in Europe are <u>incomplete and partially outdated</u> [reports by EPIC (Deharveng G., Charrondiere U.R., Slimani N., Southgate D.A.T., Riboli E. (1999). *Eur J Clin Nutr.* **53**, 60

79) & EFCOSUM (Eur J Clin Nutr 2002: 56)], even in those regions where there has been a long and scholarly effort to produce national tables of food composition. These food composition tables are used extensively by dietitians and medical practitioners, agri-food companies, researchers and students, and directly by citizens themselves. Furthermore, the <u>comparability of food composition data between existing European national databases is poor; many other data sources are equally incompatible and less generally available.</u>

The INFOODS network provides a global framework utilising regional groupings. Within Europe, Eurofoods activity was until the end of 1999 supported through the FLAIR Eurofoods-Enfant and COST Action 99 projects. The latter produced several reports covering food consumption and composition issues, e.g. recommendations for food composition database management and data interchange. These are currently being used in the initial documentation of national food composition datasets with <u>limited funding</u> and on <u>an ad-hoc basis</u>. However, this initial <u>prototype set of recommendations needs to be further tested and extended</u> to provide a basis for the comparison of compositional values in the various European national food composition databases and their <u>integration into a consistent, readily available information resource</u>.

Minority ethnic groups in Europe (such as South-Asian, Chinese, African-Caribbean, North African, Turkish & Pakistani) comprise 6% of the total European population (2000 data; ca 20m citizens) and are susceptible to similar diet-related health problems that affect the general population but their dietary patterns are comparatively much less well understood. Research in this area is very limited due to a lack of dietary information from these groups. The biggest problems, common to all ethnic groups, are associated with <u>lack of information about culture-specific foods, uncertainty over the amounts consumed, the lack of recipe information and the absence of detailed food composition data.</u>

(b) How the network will achieve this restructuring and shaping

EuroFIR will strengthen S&T excellence in food composition research by consolidating past achievement into a formal and enduring structure and extending the achievements to other areas. This partnership will in addition be able to:

- Form a single link between the research community studying food composition research and the community of end-users and policy makers;
- Harmonise research, training and management (production, management and use) of food composition databases, which is essential for more effective policies in public health nutrition;
- Provide a mechanism for the more rapid completion of new data, and wider coverage of new foods, thus helping industry to improve competitiveness in this area;
- Provide a mechanism for the timely implementation of new knowledge and skills into policy and research practice in Europe;
- Promote interaction with the SMEs and other industrial partners.

(c) Achievements of the objectives by EuroFIR

The core partner organisations will provide the overall governance of the NOE, which will organise its work into defined work streams. These will be flexibly organised so the network can focus on its research priorities and develop the enduring infrastructure that will continue to support the updating and use of the databank system after the end of the EU funding. The NOE will develop some institutional structures to support the JPA. These will include IT information and communication structures to link the centres (both core partners and collaborating centres), as well as the databank system, and various information repositories (covering methods, skills, publications) (see WPs 1.7 & 1.8). Focus on areas identified in the JPA of major importance and suited to the skills represented in the NOE will be used to develop the initial momentum of the NOE. The funding of the NOE will be used to create the infrastructure and to build up the initial momentum required to create confidence that such a NOE can increase the output of the partner institutions and create value for money for research funders. In particular, EuroFIR will:

- Harmonise European food information systems for nutrients, phytoprotectants and other bioactive compounds;
- Extend the information system to include newly emerging food components with putative biological activity;
- Establish a European Standard for food data of the highest quality and traceability;
- **Develop, prototype and validate** a framework for the management and dissemination of European food composition data, based on critically evaluated data sets documented to the European Standard;

 Create a common foundation for data in European food composition databases to provide a much-improved basis for nutritional guidance and education, and for establishing nutrition and food-based recommendations for European consumers.

(d) Plan for spreading excellence beyond the network, disseminating knowledge and exploiting results

The integration of geographically dispersed agro-food research capacities in Europe and the effective spreading of excellence, both within the network and outside the network, to an extended European and international audience, require powerful web-based electronic e-community software to provide the common platform of the network (see WP1.7). This platform should support and facilitate communication and interactive working between the partners, and manage the flow of knowledge within the network and to teams external to the network. EuroFIR will spread excellence through:

- Training, education and vision of young scientists;
- Dissemination of research results to the Public, scientists and policy makers;
- Promotion of interaction between the core partners and SMEs and other industrial partners;
- Create a visible promotion of the European Union in the field of food composition and public health nutrition.

EuroFIR will therefore be underpinned by a robust and well established web-based e-community software platform provided by an SME partner (Baigent). This is a powerful tool both to support interactive working between the teams involved in the spreading of excellence via dissemination, communication and networking activities, both within the network, and to teams external to the network. Furthermore, this platform enables members to connect with existing relevant pan-European food research and information networks.

EuroFIR will use a series of targeted formats (e.g. web-based interface via a dedicated portal above, peer-reviewed scientific publication, popular press and media) and communication channels (see WP 3.2: Dissemination & Communication) to deliver and disseminate findings, and transfer of knowledge to a variety of targeted audiences beyond the consortium including: Policy makers (EU, DG SANCO, EFSA, WHO, FAO & national representatives); opinion leaders; health professionals & consumer groups; food scientists & educators; food & agricultural industry especially SMEs, and researchers & funding agencies. In order to do this a dedicated communications network will be established utilising existing and new national, EU and international networks. These various channels will be used to provide a facility to subscribe to one of the dissemination networks via the dedicated website portal above. Feedback from the various users and stakeholders (SA3.2, 6.5 & 6.7) will measured in a number of ways and closely monitored by the SMB (see 6.5 for further details).

EuroFIR will create a virtual centre of excellence for a comprehensive training programme for young researchers both within and outside the NOE (see WP 3.1). Whilst the training programme will begin by training young researchers within the network, it is planned that an e-learning programme will be developed and made available world-wide. Thus, the training and dissemination programme will be of value to groups outside the consortium, who lack expertise and/or technology in food components. (nutrient and non-nutrient bioactive compounds with putative health benefits)

(e) How will the network have a durable structuring impact on European research after the ending of Commission Funding?

All the network activities (Section 6) are designed to guarantee a very high level of durable integration for a long-term NOE structure continuing far beyond the period of Community support. The durability of integration will be guaranteed by:

- The added value of the collaboration to both the scientists and the funders: This will be demonstrated by the engagement of the scientists within the JPA of the NOE, the ability of the NOE to raise local funding for the work programme and willingness of other funding bodies (either in the Public Sector or in industry) to support the infrastructure of the Partnership over the longer term. The Partnership is aware of the need to make a persuasive case to other funders that this collaboration will offer value for money in the long run.
- The technical support gained from the development of new methods of electronic communication, databank system and common repositories: New facilities for electronic communication will be an early priority for the NOE; the other facilities will be added as they are needed for the JPA (see WP1.7). The EU funding of the NOE will facilitate building up the necessary infrastructure for integration activities and will provide Europe with a competitive edge in this area.
- The membership within the NOE of EBI, a non-profit academic organisation with expertise in bioinformatics and the management of biological databases; WU, a leading European university with an enduring record in training and education, and BNF & CESNID, SMEs with enduring records of dissemination, guarantees some level of durability: All these institutions have already made commitments to continue with the NOE's activities beyond the period of EU funding by agreeing to the

Consortium Agreement. The early introduction of an IT and enhanced educational, training and dissemination programmes relevant to the NOE will demonstrate this commitment;

- <u>EuroFIR will strive to link and anchor to other integrated projects and networks</u>: links have already been made to QualityLowInputFood, SAFEFOODS, and SEAFOODPLUS with the co-ordinator and other core partners being invited to advisory roles within the management of these new FP projects. Several core partners are already involved in these consortia and EuroFIR will actively seek to collaborate in technology platform sharing, research and training. One of the tasks of the co-ordinator and research platform leaders is to actively facilitate collaboration and teaming to these other consortia in order that firm foundations are built with other research networks and teams.
- <u>EuroFIR will create the basis for long-term joint research initiatives to be sustained after the ending of Community funding</u>: The
 Commercialisation and Durability workpackage (WP 3.3) will hold regular open-forum meetings with various national and
 international funding bodies, and other interested parties, to review progress and identify opportunities for future funding
 opportunities. In particular, the technology transfer experts in EuroFIR will draw on existing EU entrepreneurial networks to
 develop a viable market research strategy to generate long-term income for the network.
- <u>EuroFIR will seek to establish itself as a legal entity</u> so that it can assume ownership of all network deliverables and outputs, such as training courses. Up to this time point, all deliverables will be owned by the relevant partners in the network and full details are given in the Consortium Agreement.

5.1 Contributions to standards

The NOE by enhancing the links between research, education and policy and by linking these activities across Europe will further contribute to robust standards in several areas:

- Development of a European food data standard (e.g. CEN standard): This will be produced covering the mandatory and recommended documentation for nutrients and bioactive compounds in the database, the mode of expression for numeric values, and basic principles for the collection and management of data. Compatibility with international guidelines will be maintained through liaison and collaboration with the FAO/UNU INFOODS secretariat based in Rome. The inclusion of a food data CEN standard will require close co-operation and the establishment of an expert working group of both users and national compilers (largely drawn from this NoE).
- EU standards in training and for young researchers and post-graduates in food composition and public health nutrition: Harmonisation training will be developed (see WP 3.1) through several initiatives including the Food Composition Database Course in Wageningen and the European Nutrition Leadership Programme (ENLP) to all regions of Europe.
- Information for consumers: With increasing emphasis on healthy eating, clear and up-to-date information on nutritional composition of foods for the public is essential. Links between BEUC (The European Consumers Organisation) and the NOE will ensure that the Public's perceived needs for information are addressed, and the results of any information will be made available to the Public at the earliest opportunity (See WP 2.1), and Science in Society (WP 3.2).

5.2 Contribution to policy developments

Support to the development of policies for food labelling and public health nutrition: The consortium seek to ensure that the presence of policy makers such as EFSA and national bodies on the Advisory Board and the Governing Council will ensure that the JPA is sensitive to their needs and that the information from the JPA is made available to the policy makers in the Commission and in Member States in whatever way is most appropriate for their needs.

6. Joint Programme of Activities (JPA) - for the full duration of the project

6.A Activities

6.0 Structure of the JPA

The proposed JPA consists of FOUR main lines of activity, named "Horizontal Platforms" as follows:

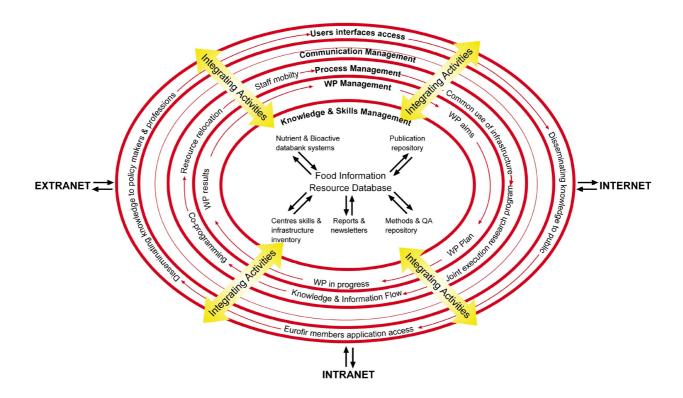
- 1) Integration activities platform (IA) These eight activities are shaped to form a robust and innovative technology basis in a tailored fashion to support databank system research and development:
 - Integrated organisation of knowledge and information flow (IA1.1) (until M18 & then continued in WP1.7 below)
 - Provision of open platform for joint activities and additional of new partners (IA1.2) (until M18 & then continue in WP1.7 below)
 - Development of a pan-European quality framework for food composition data (IA1.3)
 - Internet development and deployment of databank systems (IA1.4) (until M18 & then continued in WP1.8)
 - Standards development and deployment (IA1.5) (until M18 & then continued in WP1.8 below)
 - Food description and identification (IA1.6) (until M18 & then continued in WP1.8 below)
 - Integrating knowledge, information flow and joint research activities (IA1.7; from M18)
 - Compiler network and supporting task forces (IA1.8; from M18)
- 2) Joint research activities platform (RA) These four activities are as follows:
 - Users, stakeholders and sustainability planning (RA2.1)
 - Composite, processed and novel foods (RA2.2)
 - Traditional (RA 2.3.1) and "Ethnic" foods (RA 2.3.2)
 - Bioactive compounds (RA2.4)
- 3) Spreading of excellence activities platform (SA) EuroFIR not only unifies the European expertise in food databank systems, the network is dedicated to spread its expertise throughout Europe and beyond Four main WPs are defined to fulfil this objective:
 - Training and education of postgraduates and young scientists (SA3.1)
 - Dissemination and communication (SA3.2)
 - Commercialisation and durability (SA3.3)
 - Enhancing the gender dimension (SA3.4)
- **4) Network management and coordination activities platform (MA)** A dedicated management team is implemented as a separate activity to oversee the above three platforms in order to foster the development of a vital network by a continuous guidance, by adjustments and corrections (if necessary), and by providing a formal environment of greatest flexibility for research and integration. All activities will be closely and multi-dimensionally inter-linked with numerous interdependencies. This allows a continuous cross-talk, a stimulatory research scene and an immediate transfer of technologies and competence throughout the network and beyond.
 - Network management and coordination (MA1).

6.1 Integrating activities (IA)

6.1.1 <u>Integrated organisation of knowledge and information flow (IA1.1)</u>

The integrating activities of the network are based on several approaches using state-of-the-art and electronic communication systems. The scheme for knowledge management and information flow, both within and outside the network, is given in the following figure:

Scheme for knowledge management and information flow:



The integrated organisation of knowledge and information flow will make it possible to:

- Coordinate research using WPs both within and between platforms leading to knowledge and its management;
- Support the integration activity including project management;
- Organise the management of EuroFIR through process management;
- Translate and spread the research results through communication management;
- Provide access to the partners, public, policy makers and industry through internet technology.

All these activities will be carried out in a controlled manner in order to track and monitor their integration progress over the lifetime of the project and beyond as described in Section 7. The **management of knowledge**, **projects** and **processes** will be used to monitor the key performance indicators measuring the integration processes of the network and are summarised as follows:

6.1.1.1 Knowledge Management

The centre of the network is the existing knowledge on food composition research and public health nutrition acquired through the co-ordinated EuroFIR research. Thus, the IT software communication platform (see below) will be articulated around this knowledge. Several parts can be identified:

• The inventory of each EuroFIR member: skills, expertise, tools, infrastructures, material, and capabilities to conduct research will be stored in the Centres Skills & Infrastructure Inventory Database;

- The publications repository: the research results and findings will be stored in a Documents Database.
- The methods and QA repository: the methods used to generate food composition data, together with the QA used to demonstrate data quality and consistency.
- The Nutrient and Bioactive Compound Databank.

6.1.1.2 Project Management

All the EuroFIR activities will be managed by a project management approach and will follow a process with several steps (see Figure 1):

- The project aim;
- The project plan;
- The project in progress;
- The project results and findings.

The projects will be conducted under a series of interconnecting workpackages. In order to support this approach, a project management methodology will be applied to EuroFIR, the Project Information and Quality System (PIQS) as described below.

6.1.1.3 Process Management

The process management must describe in detail how operations operate in a formal manner (see Figure 2). This formalisation is generally conducted through a description of the organisation and its processes supporting the services to their stakeholders. EuroFIR will include such process support based on workflow management. The main processes assisting the integration are:

- Common use of infrastructure;
- Joint execution of research program;
- Co-programming;
- Resources relocations;
- Staff mobility;
- Knowledge dissemination.

Other processes related to the internal working of the NOE will be included: budget allocation, auditing, committee selection and various communications to the researchers, private sector, professions, consumer, policy makers and other NGOs.

6.1.1.4 Communication management and internet technology

The integration of the IT communication software platform into the network is a key activity that will take place within the first 3 months of the commencement of the project. Around the operating system, the database and the communication system are the essential components of the EuroFIR system architecture. EuroFIR will be underpinned by a robust and well-established webbased e-community software platform.

This software will provide a common shared platform, which will facilitate the co-ordination and implementation of the programming and adaptation of the partners' activities. Critically, the software will reinforce the electronic information and communication networks to *support interactive working* between the teams involved and in the spreading of excellence via dissemination, communication and networking activities both within the network and to teams external to the network. In addition, the software will support the mobility of researchers within the network by alerting members of the researcher positions open within the network organisations. Furthermore, it will enable members to connect with existing relevant pan-European food research and information networks. An online newsletter will be included, being updated regularly (monthly) to highlight additions and changes to the site content.

The network's IT operating system will support the generic applications: Knowledge Management (KM), Document Management (including publications and methods repositories, reports and publications; DM); Centres Skills & Infrastructure Inventory Management (CSM) and the Food Composition Database Management (FCDM). Other tools such as video conferencing and elearning applications will also be available. The network will be central for the provision of services to a wide range of users and therefore needs interconnection with other FP6 IPs and NOEs.

The proposed integrating activities will allow for the reinforcement of electronic information and communication networks to support interactive working between the various centres and teams and this will be carefully monitored to assess confidentiality and accuracy of the information. They include:

- The general public will have access to information about EuroFIR through a website (www.eurofir.net). The development of this website will follow recommendations of the documents "Europe 2002: Quality Criteria for Health related Websites" issued by the European Commission COM (2002) 667 final.
- The research community constituted by all the EuroFIR members will have access to their data and applications; Knowledge, Document & Data Management Systems; the Nutrient and Bioactive Databank, and other integrating activities. However, restricted access to some parts of the system will be foreseen in order to protect IPR. This will be accessible with an Intranet.
- A limited selection of organisations beyond the EuroFIR members (policy makers, industry, professionals and other NGOs) will have access to EuroFIR knowledge and applications via an **Extranet**.
- E-learning tools will provide educational and training procedures for disseminating knowledge both within the EuroFIR NOE and towards the academic community (e.g. food and health scientists), agro-food industry, retail sector, regulatory authorities, and consumers.
- A video conferencing system will be established through the EuroFIR Co-ordinating Centre.

<u>IA1.1</u>: Integrated organisation of knowledge and information flow

Responsible: IFR, Management Office, DFVF, NKUA, AUA, UiO, BNF & Baigent.

Duration and tasks: M1-18

- 1.1.1 IT strategy, services design and process specification: M2-M4
- 1.1.2 Knowledge management and hardware/software selection: M2-M4
- 1.1.3 IT platform release 1: Basic Office Automation; Web Site, Communication Tools: M3-M6
- 1.1.4 IT platform release 2: Databases, Knowledge, Processes & Projects Management: M6-M12
- 1.1.5 IT platform release 3: Validation, Evaluation & Correction: M18-M36
- 1.1.6 IT platform operations: Content Management, Support, Training, Maintenance & Evolutions: M6-M60.

Dependencies: Management structure established and handbook released.

<u>Deliverables</u>: IT strategy approved (1), system acceptance certificates (2-5), users satisfaction survey (6)

Indicators: Website availability, volume of website users and hit rate and/or usage.

Resources needed: Budget for management office, knowledge partner, additional IT sub-contractors (SMEs) as required by Management Office, and help desk.

6.1.2 <u>Provision of an open platform for joint activities (IA1.2)</u>

The establishment of an open platform for the JPA is essential for the network in order to achieve the integration of the research goals. Two members of the SMB will manage the four platforms (Integration activities, joint research, spreading of excellence activities, and network management) in order to ensure cross-platform, and within-platform, coordination of joint research activities and co-programming of projects.

The co-ordinator and management office, together with the network platform leaders will ensure that all the facilities of the network are effectively used and these activities will be reviewed every six months. The facilities will include some common features of the network including common databases; skills inventory; publications, reports and newsletters; methods repositories and the nutrient and bioactive compound databank systems. They will also provide search facilities and network knowledge in order to identify potential new research partners for all the network platforms. In particular annual calls will be initiated for the duration of the network (see Appendix A.4 and Consortium Agreement for further details). They will also assist in IPR issues and advice especially in case of conflict between network partners. For the latter, there will be a signed Consortium Agreement covering any conflicts or disputes over IP issues.

In addition, an important aspect of this activity will be to seek additional funding initiatives for joint research work linked to the JPA. This will be reviewed every 6 months and targets set for additional income for the various research activities.

IA1.2: Integrating research activities and addition of new partners

Responsible: IFR, Management Office, IRMM, DFVF, UHEL, NKUA, UCC, UiO & UL.

Duration: M1-18

Dependencies: Co-operation of all core partners.

Deliverables: Partners' report tools and data needed for databanks; establish portals for link to sub-platforms.

Indicators: Establishment of data and databanks; number of joint programmes, number of joint publications (IF & CI) and number

of partners involved.

Resources needed: Budget for management office & network platform leaders.

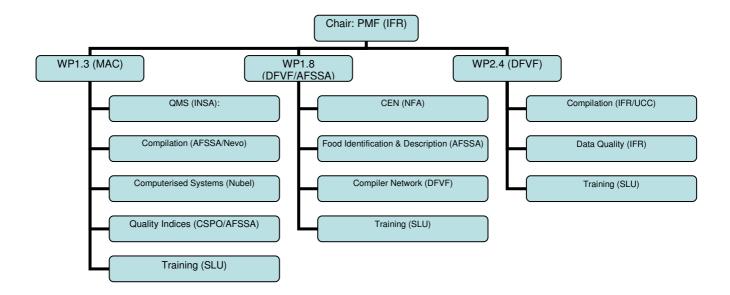
6.1.3 Development of a pan-European quality framework management for food composition data (IA1.3)

This area provides the <u>vital</u> Quality infrastructure necessary for the long- term viability of the EuroFIR network. It will be undertaken by a team consisting of INSA, NMi (a sub-contractor; until M18), CSL, IRMM, IFR, NUBEL, TUBITAK, UHEL-and, SLU, DFVF/DFI, AFSSA, CSPO, NEVO & FVS-FC. Four tasks are planned to be executed in a logical sequence taking into account interdependencies and thereby creating a firm basis for the Quality Assurance (QA) preparation, implementation, audit cycle and Proficiency Testing (PT)-schemes that need to be implemented from Month 18 until the end of the project. The milestones and intermediate results will function as a guideline for the adequate completion of the project after Month 18.

A primary aim in the quality management system of the network is to ensure a common understanding among the network partners of the requirements of quality assurance, by analysts, compilers and users of food composition databank systems. As part of this objective, all new data to be generated on both nutrients and bioactive compounds will be critically-assessed for quality prior to acceptance. This will involve an assessment of the methods used, comparison to previously published data for similar foods and the QA (including participating in appropriate external proficiency schemes) used by the laboratory to generate the data. The secondary aim will be to develop a sound and coherent leadership approach of the relationship between quality, food science and food composition databank systems. Four tasks are planned:

- (1) <u>Developing a dialogue with all partners</u> to ensure that there is consensus on a fit for purpose reference quality system arising from management and technical requirements from cross-references according to ISO 9001/9002 and ISO 17025. This process will be significantly catalysed by taking advantage of the progress made, criteria and systematic approach developed within the EU INITIATION project (<u>Interpretation and implementation of the new standard ISO 17025 by national metrology institutes in Europe; Competitive and Sustainable Growth Programme, FP5; GTC1-1999-2001</u>). INSA will coordinate the activities. NMi will contribute expertise gained as Coordinator of the INITIATION project. The other partners will provide support and input.
- (2) <u>Establishing the quality criteria for all participating centres.</u> This will be achieved through an information gathering process (e.g. network workshops) and processing the feedback. Discussion, evaluation and future action plans for improvements and harmonisation will be considered.
- (3) To develop a quality index and confidence code that considers the linkage between quality and data generation for food composition databank systems. This will include <u>traceability through the entire chain</u> of food analysis to food composition databanks. Traceability in this respect means "back to all relevant documents" and "back to SI units" (as defined by ISO).
- (4) <u>Promoting an integrated approach to QA</u> for laboratories producing data, or compiling databases, by providing guidance for QA implementation, Quality System (QS) presentations, audits and PT schemes. This task will be elaborated in cooperation with research activities within EuroFIR. This will be the core activity throughout the full duration of the project involving the relevant laboratories.

IA1.3 will operate through the Quality Task Force (QTF) in order to ensure the integration of quality across the network:



<u>IA1.3</u>: Certified Quality System for the development, management and use of food composition databases in Europe <u>Responsible</u>: INSA, IFR, Management Office, RUG/NUBEL, IRMM, DFVF/DFI, UHEL, SLU, TUBITAK, CSL, AFSSA, NEVO, CSPO, FVS-FC & NMI (sub-contractor; until M18)

Duration and tasks: M1-60

- 1.3.1 Establish a task force to develop a consensus of management and technical requirements for the quality system (M1-M6):
- 1.3.2 Implementation of quality system and scheduling of workshops and action plans (M6-M16);
- 1.3.3 Establish traceability links through the food chain (M18);
- 1.3.4 Initiation of quality audits and PT schemes (M18-M60).
- 1.3.5 1st Quality Task Force Meeting (M21)
- 1.3.6 Training programme for quality formulated & commenced (M27-M60)
- 1.3.7 1st QMS Manual available (M30)

<u>Dependencies</u>: Co-operation of all core partners; collaborating centre for development and implementation of quality system, audit and PT schemes.

Deliverables and indicators: Number of quality system reports, number of audits, PT schemes and traceability targets.

Resources needed: Budget for management office; to employ a quality manager; to appoint a collaborating centre for coordination, development and research of quality system; for workshops, audit and PT schemes.

6.1.4 Internet development and deployment (IA1.4)

The main EuroFIR website will be developed jointly by DFVF/DFI, EBI and IFR either as an extension of the web-based e-community software platform above, or directly linked to it as a separate website. Initially a basic site will be designed and prepared, consisting of working documents such as the existing data management recommendations. The working group will review Internet technologies to determine the storage and display formats, and search facilities available for EuroFIR resources. The review and specifications will present a detailed plan for the development of the website and its information content. A detailed investigation will report in month 18 the options for continuing operation and technical development after the end of the project, giving time to implement the arrangements.

The first task for this activity will be an in-depth evaluation by IARC (a sub-contractor) of existing databases and main methodological and practical issues related to data documentation and harmonisation using the EPIC Nutrient Database Project (ENDB) as the prototype. In the absence of an already existing

reference European nutrient database, the ENDB has been designed as a first attempt to harmonise nutrient databases across the ten Western European countries participating in the Prospective Investigation into Cancer and Nutrition (EPIC). The main objectives of EPIC were:

- The development of methodological concepts to standardise the foods, nutrients and nutrient values;
- The documentation and compilation of each of the 10 national databases for the 600 to 1500 foods reported by the study subjects (depending on the country);
- Provide comparable values for about 30 nutrients (energy, macro-nutrients and a selection of vitamins and minerals) considered as first priority according to their availability, comparability and completeness across countries.

Although the ENDB <u>did NOT cover all participating EU member states participating in EuroFIR</u>, this project will constitute a unique source of qualitative and quantitative information to evaluate the main methodological strengths and current limitations for standardising nutrient databases across Europe (e.g. level of completeness and comparability of foods, nutrients, nutrient values and documentation across Europe. Furthermore, it will help to better define the needs and priorities in the EuroFIR network, particularly for countries not initially involved in the EPIC project.

The ENDB project will be used as a prototype from which first insights on the actual level of documentation and harmonisation of national databases across the 10 participating countries will be evaluated. In addition, the reference guidelines or tools developed (or adapted) for documenting and standardising nutrient databases, including recipe calculation, interchange guidelines and database management system, will serve as a starting point for elaborating the strategies for harmonising nutrient databases in EuroFIR. This task will be carried out in close collaboration with IA1.5 & IA1.6.

The group will recommend datasets suitable for harmonisation and EuroFIR deployment from existing EuroFIR participating countries (21 countries). This activity will also collect suitable validated datasets from additional countries where there is no participant in the consortium using the Call for New Partners (especially national compilers) (see Appendix A.4; e.g. Croatia, Czech Republic, Hungary, Estonia, Latvia, Lithuania, Slovenia and Switzerland) and existing EuroFoods (to be co-ordinated by EuroFIR via Paul Finglas from 2005) and CEECFOODS networks. The latter contains national compilers from Croatia, Czech Republic, Hungary, Lithuania and Slovenia as full members, and Romania and Russia as observer status.

In addition, the group will investigate the suitability of other specialised data sources for incorporation into EuroFIR, including, for example, fatty acid data compiled in the EU TRANSFAIR project; bioactive compound data critically assessed in the EU BASIS project and phytoprotectant data from the EU VENUS project. Further candidate data sources will be identified and reviewed covering other important nutrients (e.g. phytate, folates, carotenoids, heme and non-heme iron, carotenoids) and bioactive compounds with putative health benefit (e.g. polyphenols, phytosterols, phytoestrogens and lignans). In addition, possible allergen data from an ongoing FP5 project "InformALL" and also contaminants will be considered.

Specification of the resources will include the EuroFIR food composition data sets for both nutrients and bioactive compounds and the processing, mechanisms or structures necessary to integrate these sets as underlying authoritative data in the EuroFIR framework. The data retrieval facilities will allow users to specify foods and components, return relevant data, and provide quality measures of the retrieved data matrix. The development plan will identify resources to support the composition data, planning their preparation and EuroFIR implementation. The resources will facilitate the retrieval and use of information on foods, food components, calculation parameters, analytical methods, source references and other food-related topics identified by the project. Resources will be designed for the full range of potential users from consumers to national compilers.

This activity will be to assess all documents and deliverables of the project before they are released. It will monitor the quality and user acceptability of all resources when they are released, or upgraded, or during use. Its work will ensure the quality and timeliness of the resources and other project deliverables and provide a mechanism for identifying possible improvements and/or enhancements that the resource originator might action. It will work closely with all other activities especially SA3.1 (Training & Education), SA3.2 (Dissemination and Communication) and SA3.3 (Commercialisation & Durability).

The options for creating quality measures for food-component matrix output based on the underlying data and derivations of missing values will also be investigated and appropriate procedures developed and tested. Parameters used may include proportions of analytical, calculated and imputed data, data source and method information and uncertainties for analytical values, and the derivation methods used for missing values.

The network will make available the initial databank system and tools for an external review by a team of experts at months 18-22. This team will be selected by the Commission from a list of suitable expert names submitted to the Commission at Month 6 (see Deliverable D1.5.2). The experts will include IT specialists, national compilers, and key users in food epidemiology and public health nutrition, and will be from Europe and beyond and will be independent to the consortium. The results of this review will form the basis of the Commission's decision on "GO/NO GO" at month 24.

The main tasks will be:

- 1. Establish an electronic information and communication network to support interactive working between the various working groups involved in EuroFIR (to be used for all aspects of the network's management and co-ordination activities).
- 2. Review current Internet developments and select those appropriate for EuroFIR development and deployment.
- 3. Specify composition data to be deployed as national and specialised sets, their integration as a coherent resource of food composition information, and the data retrieval facilities required.
- 4. Plan, specify and implement the identification, development and deployment of existing and new resources of supporting information, assisting with content preparation as necessary.
- 5. Specify, develop, deploy and support the EuroFIR website, its software and its information resources.
- 6. Develop, monitor and assess procedures for quality assurance of all documents and deliverables prior to release on the EuroFIR website.
- 7. Make recommendations for the continuation of the website and its resources after the financial contribution of the EU finishes.

IA1.4: Internet development & deployment

Responsible: DFVF, IFR, EBI, RUG/NUBEL, NCPHP, KTL, AFSSA, BFE, UCC, BGU, INRAN, UiO, NFNI, CESNID, Polytec, INVESTIGATION OF THE PROPERTY OF

IDUFIC & IARC (subcontractor until M18; UAG member)

Duration: M1-18

<u>Deliverables</u>: E-community software platform established, newsletters, linked datasets identified & deployed, reports & papers. <u>Indicators:</u> Availability of IT platform & datasets, completed workshops, peer reviewed papers, users feedback & additional

external funds

Resources needed: Budget for workshops, preparation of reports and other documents, prototype development.

6.1.5 <u>Standards Development and Specifications (IA1.5)</u>

This sub-network platform will be led by NFA with input from DFVF, AFSSA & IDUFIC. It will prepare standards for food database compilation covering issues relating to food components and the measurement and critical assessment of their compositional values in foods. Components may include nutrients, newly emerging bioactive compounds with putative biological activity and a range of phytoprotectants. A major output of this group will be to provide the foundation for a proposed European Food Data Standard (e.g. CEN Standard) for food composition databases.

Five main tasks are planned:

Task 1: Assessment of existing documentation guidelines and tools (led by IDUFIC/NFA)

This sub-task will aim to extend the documentation and harmonisation of data in the national food composition databases, including documentation of data sets widely used in Europe as authoritative data sources for further dissemination in a validated, standardised and harmonised form in the common environment developed by EuroFIR. This work will build on existing developed guidelines prepared by INFOODS, EUROFOODS and NORFOODS on management of food composition databases, data exchange and their adaptation to the current EuroFIR network. Furthermore, this activity will benefit from the experience of the ongoing ENDB, which is coordinated by IARC and a full evaluation has been included in IA1.4.

Task 2: Identification of the nutrients and other food components to be included in EuroFIR (led by NFA)

This work has already been partly undertaken in the ENDB project and will help to identify foods and nutrients to be preferably prioritised in EuroFIR according to their actual availability and comparability across European countries. In order to cover a wide

range of food components, this task will be carried out in close collaboration with IA1.4, IA1.6 & RA2.4, in identifying suitable datasets for evaluation and deployment. Harmonised sets of critically evaluated data will be added to the EuroFIR databank collection as they become available, with priority given those data that will contribute to the prototype EuroFIR databank.

InformAll fits very nicely into the overall aims of EuroFIR as this project sets out to define the communication issues relevant to the food allergy area, and to develop recommendations and strategies for communication of food allergy information. In addition, InformAll is developing a web-based Food Allergy Information Platform (FAIP) incorporating a collated, credible electronic database of information on allergenic food materials of plant and animal origin. Based on a database developed through a previous CA, Protall, the database aims to link information regarding the clinical reactivity of foods in allergic (Type I IgE-mediated hypersensitivity) disease with information on the properties and nature of the components (allergens) which trigger the sensitivities. A top layer of freely available information in the form of lay summaries regarding the allergenic properties of major foods will be included and, through the support of the allergic patient groups, will be made available across Europe through a series of web gateways in various European languages. At the end of the project a business plan for the long-term support of the database will be developed. The database core structure is being designed in such a way as to ensure its compatibility with the outputs of other NoEs such as EuroFIR.

Task 3: Identification of the foods to be included in the EuroFIR (led by AFSSA)

The main objective is to identify foods important in the European diet with the aim of prioritising and ranking foods in the generation, management and dissemination of food composition data. This task will be based on intake data derived from national food consumption surveys and major pan-European multi-centre epidemiological studies (e.g. EPIC, SENECA, MONICA), as well as food availability/purchase data from harmonised household budget surveys (e.g. DAFNE) and food industries and other sources on information on foods available on the market. The task demands a close collaboration with IA1.6 (Food Identification and Description) in the development of linking mechanisms between foods with available composition information and foods reported in food consumption studies, applying them to real data, and application of standard food classification and description.

Task 4: Document and standardise the national nutrient databases (led by DFVF)

The participating national compilers will compare documents and standardise their databases according to the initial recommendations prepared by IA1.4 above. Collaboration between the national database compilers for the collection and critical assessment of data to provide cost-effective compilation and added-value in data evaluation will be developed especially the identification of relevant training needs (e.g. workshops on data evaluation and selection) in close collaboration with SA3.2 (Training). Appropriate compilation working sub-groups will be established and suitable workshops organised during plenary network meetings to achieve these objectives. Exchange visits will be identified at an early stage in order to maximise international collaboration between EU countries. The revised content and structure of the latest USDA database release will be assessed, as well as the implications for the proposed standard and for the use of the data in Europe. The main tasks will be:

- Assess the compatibility of specialised collections of food composition data and their suitability for inclusion in national databases.
- 2. Identify foods of importance in the European diet.
- 3. Progress the documentation and standardisation of European national databases in accordance with the initial recommendations, including foods and components for prototype EuroFIR deployment.
- 4. Test and refine the initial draft data management recommendations and the support required by national compilers from these and other information resources on the EuroFIR website.
- 5. Identify areas of collaboration including training to maximise the benefit and minimise the cost of national database compilation and data evaluation.

Task 5: Initial review of other food-derived contaminants (led by RIKILT)

Some discussion of the possible future inclusion of other food-derived contaminants and residues will also be considered and an initial plan will be made during the first 12 months. There are a number of possible contaminant compounds that could be included here and consensus will need to be reached on the exact definition of "food-derived contaminants." Close collaboration with SAFEFOODs will be sought to agree common areas for future work.

The proposed work plan for 13-18 months will focus on the harmonisation and evaluation of existing national food composition databases (18-30 months) and recommendations from this exercise will be used to modify the prototype standard developed above into the draft CEN standard (by month 36). Based on this standard, validated national databases will be made available for use in WP6 (Internet Development & Deployment). Plans for additional sampling and analytical requirements for specific components will be prepared (by month 30).

The key deliverables will be:

- 1. Recommendations from workshops with database managers and key users on components to be included in core data sets and components for future analysis and rules for imputation of food composition from ingredients and recipes.
- 2. A prototype standard for description, documentation and management of food composition data;
- 3. Recommendations on yield and nutrient retention factors to be used (in collaboration with WP2.2).
- 4. A prototype standard developed into CEN draft standard on food description, documentation and management of food compositional data.

IA1.5: Standards development and specifications

Responsible: NFA, AFSSA, DFVF, IDUFIC, IFR, RUG/NUBEL, NCPHP, KTL, NKUA, BFE, UCC, BGU, INRAN, UiO, NFNI &

CESNID

Duration: M1-18

<u>Deliverables</u>: Reports, draft CEN standard, papers. <u>Indicators</u>: Number of peer reviewed papers

Resources needed: Budget for workshops, preparation of reports and other documents.

6.1.6 <u>Food Identification and Description (IA1.6)</u>

This sub-platform network will be led jointly by AFSSA and DFVF. The preparation of reliable data on food requires precise nomenclature and detailed description of foods. Even data of good quality can be a source of error if they are derived from foods that are not clearly defined. Moreover, it is difficult to exchange data on foods, or to understand and compare nutritional status for different countries or individuals, without a coherent description of foods in databases. The WP will be working in close collaboration with IA1.4 and IA1.5.

The need for an international food language became apparent when databases on foods were created in different countries and when data interchange was attempted. Data collection and processing by single, small institutions are costly, troublesome and time-wasting activities and this is one of the major benefits of the NOE. This recognition demands sharing of work by international co-operation, and especially the utilisation of collected and generated data for wider use.

A first breakthrough in international food identification has been the clear recognition of the advantages of using a multifaceted approach for identifying foods in databases. A second breakthrough has been the recognition of the need to include alternate identification/description systems. Criteria for such a combined system were laid down by the US FDA "International Interface Standard" and by the EU COST Action 99 Recommendations. Food description should incorporate standardised thesaurus (e.g. LanguaL, ISO), different national languages and already existing international standards (e.g. CODEX). Food identification should be detailed, structured, flexible and suitable for use in numeric databases.

A major goal of the WP would be the adoption of a common food categorisation and description system for managing data on nutrients, bioactive substances in the European database. It would thus be possible to establish risk-benefit using both "negative" and "positive" components. An important challenge for the network would be to establish an architecture which takes into account precise analytical results but including also the same results aggregated by larger categories at a level compatible for all components. The EU EFCOSUM project has recommended harmonisation of individual dietary survey derived food intake data at the ingredient level rather than at the "as consumed" food level. It proposed to use a common food categorization system, Eurofood groups (EFG) identification. The WP will address the need to harmonize the food categorisation and description systems used for managing food intake data with those used for managing food composition data, at different levels of aggregation.

The main tasks will be:

1. Provide the foundation for a revision of existing food identification systems for use in food composition (nutrients, bioactive substances, and food consumption databases, in order to harmonise the use of food identification and to conform to European dietary habits and needs in European intake and exposure assessments.

- 2. Examine the use of existing food identification and description systems and propose modifications of these systems if found necessary.
- 3. Recommend a standard food identification and description system for use in European food composition (nutrients, bioactive substances, databases. This food identification system will become part of the European standard for food composition databases and be used in the future European information resource.
- 4. Develop prototype food identification and description support facilities, such as a concordance of terminology, linking to existing national and international systems (e.g. CODEX Alimentarius).
- Recommend levels of aggregation of food composition data in order to accommodate analytical results on individual food products, while at the same time allowing these results to be aggregated to wider food categories at a level compatible for all components.
- 6. Make European food consumption and food composition data interoperable, by developing mechanisms for linking foods reported in food consumption studies with available food composition data, including procedures for food aggregation (in collaboration with WP1.7).
- 7. Develop EuroFIR resources for supporting the use of the food identification and description systems in database compilation and information retrieval.

The planned activities and key deliverables are:

- Inventory of European food composition databases and tables
- Yearly workshops to measure progress on food classification and description
- Linking mechanisms to foods in consumption surveys (with WP 1.5)
- Update food description thesaurus
- Translations of thesaurus terms to national languages
- Prototype food classification and description support facilities
- Tests of prototype food classification and description support
- Update food classification and description support
- Two training session in food classification and description (with WP 3.1)
- Indexation of foods in national food composition databases
- Prototype information retrieval support using food classification and description
- Tests of prototype information retrieval support, report to WP 1.4

IA1.6: Food Identification and Description

Responsible: AFSSA, IFR, GUT, RUG/NUBEL, NCPHP, DFVF, KTL, BFE, NKUA, UCC, BGU, INRAN, CSPO, WU/NEVO, UiO, NFNI, INSA, UVI, CESNID, UGR, FRI, NFA, IceTec, TUBITAK & Polytec

Duration: M1-18

<u>Deliverables</u>: Prototype food classification & description system, inventory of European food databases and tables, reports & papers.

Indicators: Established prototype & number of peer review articles.

Resources needed: Budget for workshops, training in use of food classification and description systems (2-3 days, all countries), development of Internet prototype, preparation of reports and other documents.

6.1.7 Integrating knowledge, information flow and joint research activities (IA1.7)

This platform with be led by IFR and will continue the activities of IA1.1 & IA1.2. There are six main objectives as follows:

1. To maintain and further develop the network's IT web-based communication platform and tools to enable the integrated organisation of knowledge and information flow.

- 2. To establish an open platform for the JPA activities and support EuroFIR with a high level intranet facility to enable efficient communication and efficient project management.
- 3. To ensure an integrated and cross-platform coordination and communication of joint research activities; co-programming of research projects and training within the network and to identify new collaborative projects.
- 4. To identify and obtain new funding for joint research activities linked to the JPA.
- 5. To optimise network integration measures and provide annual updates on degree of individual partner integration.
- 6. To identify and recruit new network partners for specific activities or tasks, and advise on IPR issues (link to WP 4).

These objectives are divided into four main tasks:

Task 1: Integrated organisation of knowledge and information flow

The integrating activities of the network are based on several approaches using state-of-the-art and electronic communication systems. The integrated organisation of knowledge and information flow will make it possible to:

- Coordinate research using WPs both within and between platforms leading to knowledge and its management;
- Support the integration activity including project management;
- Organise the management of EuroFIR through <u>process management;</u>
- Translate and spread the research results through <u>communication management;</u>
- Provide access to the partners, public, policy makers and industry through internet technology.

All these activities will be carried out in a controlled manner in order to track and monitor their integration progress over the lifetime of the project and beyond as described in Section 7. The **management of knowledge**, **projects** and **processes** will be used to monitor the key performance indicators measuring the integration processes of the network and are summarised as follows:

Knowledge Management

The centre of the network is the existing knowledge on food composition research and public health nutrition acquired through the co-ordinated EuroFIR research. Thus, the IT software communication platform (see below) will be articulated around this knowledge. Several parts can be identified:

- The inventory of each EuroFIR member: skills, expertise, tools, infrastructures, material, and capabilities to conduct research will be stored in the Centres Skills & Infrastructure Inventory Database;
- o The publications repository: the research results and findings will be stored in a Documents Database.
- The methods and QA repository: the methods used to generate food composition data, together with the QA used to demonstrate data quality and consistency.
- The Nutrient and Bioactive Compound Databank.

Project Management

All the EuroFIR activities will be managed by a project management approach and will follow a process with several steps (see Figure 1):

- The project aim;
- The project plan;
- The project in progress;
- The project results and findings.

The projects will be conducted under a series of interconnecting workpackages. In order to support this approach, a project management methodology will be applied to EuroFIR, the Project Information and Quality System (PIQS) as described below.

Process Management

The process management must describe in detail how operations operate in a formal manner (see Figure 2). This formalisation is generally conducted through a description of the organisation and its processes supporting the services to their stakeholders. EuroFIR will include such process support based on workflow management. The main processes assisting the integration are:

- Common use of infrastructure;
- Joint execution of research program;
- Co-programming;
- Resources relocations;
- Staff mobility;
- Knowledge dissemination.

Other processes related to the internal working of the NOE will be included: budget allocation, auditing, committee selection and various communications to the researchers, private sector, professions, consumer, policy makers and other NGOs.

Communication management and internet technology

The integration of the IT communication software platform into the network is a key activity that will take place within the first 3 months of the communication of the project. Around the operating system, the database and the communication system are the essential components of the EuroFIR system architecture. EuroFIR will be underpinned by a robust and well-established web-based e-community software platform.

This software will provide a common shared platform, which will facilitate the co-ordination and implementation of the programming and adaptation of the partners' activities. Critically, the software will reinforce the electronic information and communication networks to *support interactive working* between the teams involved and in the spreading of excellence via dissemination, communication and networking activities both within the network and to teams external to the network. In addition, the software will support the mobility of researchers within the network by alerting members of the researcher positions open within the network organisations. Furthermore, it will enable members to connect with existing relevant pan-European food research and information networks. An online newsletter will be included, being updated regularly (monthly) to highlight additions and changes to the site content.

The network's IT operating system will support the generic applications: Knowledge Management (KM), Document Management (including publications and methods repositories, reports and publications; DM); Centres Skills & Infrastructure Inventory Management (CSM) and the Food Composition Database Management (FCDM). Other tools such as video conferencing and e-learning applications will also be available. The network will be central for the provision of services to a wide range of users and therefore needs interconnection with other FP6 IPs and NOEs.

The proposed integrating activities will allow for the reinforcement of electronic information and communication networks to support interactive working between the various centres and teams and this will be carefully monitored to assess confidentiality and accuracy of the information. They include:

- The general public will have access to information about EuroFIR through a website (<u>www.eurofir.net</u>). The development of this website will follow recommendations of the documents "Europe 2002: Quality Criteria for Health related Websites" issued by the European Commission COM (2002) 667 final.
- The research community constituted by all the EuroFIR members will have access to their data and applications; Knowledge, Document & Data Management Systems; the Nutrient and Bioactive Databank, and other integrating activities. However, restricted access to some parts of the system will be foreseen in order to protect IPR. This will be accessible with an Intranet.
- A limited selection of organisations beyond the EuroFIR members (policy makers, industry, professionals and other NGOs) will have access to EuroFIR knowledge and applications via an Extranet.
- E-learning tools will provide educational and training procedures for disseminating knowledge both within the EuroFIR NOE and towards the academic community (e.g. food and health scientists), agro-food industry, retail sector, regulatory authorities, and consumers.
- A video conferencing system will be established through the EuroFIR Co-ordinating Centre.

Task 2: Research, training and new funding initiatives

The establishment of an open platform for the JPA is essential for the network in order to achieve the integration of the research goals. The CO and SMB will oversee the four platforms in order to ensure cross-platform, and within-platform, coordination of joint research and training activities and co-programming of projects. The co-ordinator and the WP-Ls will closely in order to ensure that all the facilities of the network are effectively used and these activities will be reviewed every six months. The facilities will

include some common features of the network including common databases; skills inventory; publications, reports and newsletters; methods repositories and the nutrient and bioactive compound databank systems. They will also provide search facilities and network knowledge in order to identify potential new research partners for all the network platforms. In addition, an important aspect of this activity will be to seek additional funding initiatives for joint research work linked to the JPA. This will be reviewed every 6 months and targets set for additional income for the various research activities. The updating of the core training directory will be undertaken regularly in close cooperation with WP3.1 and work closely with RA2.1 to identify and build partnerships with key stakeholders and international compilers both within and outside Europe.

Task 3: Performance indicators and models for integration

The design of an information and communication system where the specific indicators given below (see pages 76-77) can be captured, stored and monitored will be undertaken within this activity. The information will be collected annually as part of the Periodic Reports and used to produce an overall integration status for each year. It will be possible to identify those areas and partners that need to integrate more, and strategies will be developed to assist this process. Close collaboration with other NoEs (especially NuGO, CASCADE & Harmony), and the Commission, is envisaged in order to establish best practice.

Task 4: Network expansion and building partnerships with key stakeholders

Following the first call for new partners in Year 1, future annual calls for new national compilers from non-EuroFIR countries may also be organised (see Appendix A.4 and Consortium Agreement for further details). This task will work closely with RA2.1 & 2.2 to identify key stakeholders and compilers from both within and outside Europe.

<u>IA1.7</u>: Integrating knowledge, information flow and joint research activities <u>Responsible</u>: IFR, DFVF/DFI, UHEL, AUA, UCC, UiO, BNF, UL & Baigent

Duration and Tasks: M18-60

- 1.1.7 IT platform release 3: Validation, Evaluation & Correction: M18-M36
- 1.1.8 IT platform operations: Content Management, Support, Training, Maintenance & Evolutions: M6-M60.
- 1.1.9 Design information and communication systems for performance indicators
- 1.1.10 Design centre skills & infrastructure, and training inventories

<u>Dependencies</u>: Management structure established and handbook released. Co-operation of all core partners.

<u>Deliverables</u>: Updated IT systems manual & facilities including translational; partners' report tools and datasets for databank systems; core partners integration measures; centre skills & infrastructure inventory, and core training directory.

<u>Indicators</u>: Website availability, volume of website users and hit rate and/or usage; number of online databases; number of training grants and exchanges; number of joint publications and new research grants.

Resources needed: Budget for management office, WP-Ls, knowledge partner, additional IT sub-contractors (SMEs) as required by Management Office, and help desk.

6.1.8 Compiler network and supporting task groups (IA1.8)

The objectives of this sub-Platform are:

- 1. Organize and maintain the EuroFIR Compiler Network with focus on training of compilers in food description, value documentation and information technology issues like food composition databases on the internet.
- 2. To set up a working group within CEN for establishment of a standard on food composition data based on above criteria.
- 3. To establish and test a standard food classification and description system for use in European food composition databases.
- 4. Make European food composition data interoperable, by developing mechanisms for linking foods reported in food consumption studies with available food composition data, including procedures for food aggregation.
- 5. Further specify composition data to be deployed as national and specialised sets, their integration as a coherent resource of food composition information, and the data retrieval facilities required.

The three sub-platforms that were in operation up to M18 (IA1.4, IA1.5 and IA1.6) have been merged from M19 in order to form a single sub-platform covering the established Compiler Network, and its three supporting task groups:

- CEN Standards task group (TG1, led by NFA)
- Food identification and description task group (TG2, led by AFSSA/DFVF/DFI)

Systems Development (databank steering group; led by DFVF/IDUFIC)

Compiler Network

This plays a central role in the implementation of the EuroFIR databank system. Based on the input from the three task groups, the compilers will describe the foods and document component values in the regional/national/specialised datasets according to the harmonised and standardised criteria defined by the Food Identification and description and CEN Standard task groups. The Compiler Network will deliver the documented datasets to be included in the EuroFIR databank system.

The ENDB project will be used as a prototype from which first insights on the actual level of documentation and harmonisation of national databases across the 10 participating countries will be evaluated. In addition, the reference guidelines or tools developed (or adapted) for documenting and standardising nutrient databases, including recipe calculation, interchange guidelines and database management system, will serve as a starting point for elaborating the strategies for harmonising nutrient databases in EuroFIR. This task will be carried out in close collaboration with IA1.5 & IA1.6.

The group will recommend datasets suitable for harmonisation and EuroFIR deployment from existing EuroFIR participating countries (24 countries). This activity will also collect suitable validated datasets from additional countries where there is no participant in the consortium using possible "Calls for New Partners" (see Appendix A.4; e.g. Croatia, Czech Republic, Hungary, Estonia & Slovenia) and existing EuroFoods (co-ordinated by EuroFIR via Paul Finglas from 2005) and CEECFOODS networks. The latter contains national compilers from Croatia, Czech Republic, Hungary and Slovenia as full members, and Ukraine, Romania and Russia as observer status.

In addition, the group will investigate the suitability of other specialised data sources for incorporation into EuroFIR, including, for example, fatty acid data compiled in the EU TRANSFAIR project; bioactive compound data critically assessed in the EU BASIS project and phytoprotectant data from the EU VENUS project. Further candidate data sources will be identified and reviewed covering other important nutrients (e.g. phytate, folates, carotenoids, heme and non-heme iron, carotenoids) and bioactive compounds with putative health benefit (e.g. polyphenols, phytosterols, phytoestrogens and lignans). In addition, possible allergen data from an ongoing FP5 project "InformALL" will be considered.

Specification of the resources will include the EuroFIR food composition data sets for both nutrients and bioactive compounds and the processing, mechanisms or structures necessary to integrate these sets as underlying authoritative data in the EuroFIR framework. The data retrieval facilities will allow users to specify foods and components, return relevant data, and provide quality measures of the retrieved data matrix. The development plan will identify resources to support the composition data, planning their preparation and EuroFIR implementation. The resources will facilitate the retrieval and use of information on foods, food components, calculation parameters, analytical methods, source references and other food-related topics identified by the project. Resources will be designed for the full range of potential users from consumers to national compilers.

This activity will be to assess all documents and deliverables of the project before they are released. It will monitor the quality and user acceptability of all resources when they are released, or upgraded, or during use. Its work will ensure the quality and timeliness of the resources and other project deliverables and provide a mechanism for identifying possible improvements and/or enhancements that the resource originator might action. It will work closely with all other activities especially SA3.1 (Training & Education), SA3.2 (Dissemination and Communication) and SA3.3 (Commercialisation & Durability).

The options for creating quality measures for food-component matrix output based on the underlying data and derivations of missing values will also be investigated in conjunction to the Quality TF and appropriate procedures developed and tested. Parameters used may include proportions of analytical, calculated and imputed data, data source and method information and uncertainties for analytical values, and the derivation methods used for missing values.

CEN Standards TG1

This sub-network platform will be led by NFA continue to prepare standards for food database compilation covering issues relating to food components and the measurement and critical assessment of their compositional values in foods. Components may include nutrients, newly emerging bioactive compounds with putative biological activity and a range of phytoprotectants. A major output of this group will be to provide the foundation for a proposed European Food Data Standard (e.g. CEN Standard) for food composition databases. Four main tasks are planned:

Task 1: Assessment of existing documentation guidelines and tools (led by IDUFIC/NFA)

This sub-task will aim to extend the documentation and harmonisation of data in the national food composition databases, including documentation of data sets widely used in Europe as authoritative data sources for further dissemination in a validated, standardised and harmonised form in the common environment developed by EuroFIR. This work will build on existing developed guidelines prepared by INFOODS, EUROFOODS and NORFOODS on management of food composition databases, data exchange and their adaptation to the current EuroFIR network. Furthermore, this activity will benefit from the experience of the ongoing ENDB, which is coordinated by IARC and a full evaluation has been included in IA1.4.

Task 2: Identification of the nutrients and other food components to be included in EuroFIR (led by NFA)

This work has already been partly undertaken in the ENDB project and will help to identify foods and nutrients to be preferably prioritised in EuroFIR according to their actual availability and comparability across European countries. In order to cover a wide range of food components, this task will be carried out in close collaboration with IA1.4, IA1.6 & RA2.4, in identifying suitable datasets for evaluation and deployment. Harmonised sets of critically evaluated data will be added to the EuroFIR databank collection as they become available, with priority given those data that will contribute to the prototype EuroFIR databank.

InformAll fits very nicely into the overall aims of EuroFIR as this project sets out to define the communication issues relevant to the food allergy area, and to develop recommendations and strategies for communication of food allergy information. In addition, InformAll is developing a web-based Food Allergy Information Platform (FAIP) incorporating a collated, credible electronic database of information on allergenic food materials of plant and animal origin. Based on a database developed through a previous CA, Protall, the database aims to link information regarding the clinical reactivity of foods in allergic (Type I IgE-mediated hypersensitivity) disease with information on the properties and nature of the components (allergens) which trigger the sensitivities. A top layer of freely available information in the form of lay summaries regarding the allergenic properties of major foods will be included and, through the support of the allergic patient groups, will be made available across Europe through a series of web gateways in various European languages. At the end of the project a business plan for the long-term support of the database will be developed. The database core structure is being designed in such a way as to ensure its compatibility with the outputs of other NoEs such as EuroFIR.

Task 3: Identification of the foods to be included in the EuroFIR (led by AFSSA)

The main objective is to identify foods important in the European diet with the aim of prioritising and ranking foods in the generation, management and dissemination of food composition data. This task will be based on intake data derived from national food consumption surveys and major pan-European multi-centre epidemiological studies (e.g. EPIC, SENECA, MONICA), as well as food availability/purchase data from harmonised household budget surveys (e.g. DAFNE) and food industries and other sources on information on foods available on the market. The task demands a close collaboration with IA1.6 (Food Identification and Description) in the development of linking mechanisms between foods with available composition information and foods reported in food consumption studies, applying them to real data, and application of standard food classification and description.

Task 4: Document and standardise the national nutrient databases (led by DFVF)

The participating national compilers will compare documents and standardise their databases according to the initial recommendations prepared by the Compiler Network above. Collaboration between the national database compilers for the collection and critical assessment of data to provide cost-effective compilation and added-value in data evaluation will be developed especially the identification of relevant training needs (e.g. workshops on data evaluation and selection) in close collaboration with SA3.2 (Training). Appropriate compilation working sub-groups will be established and suitable workshops organised during plenary network meetings to achieve these objectives. Exchange visits will be identified at an early stage in order to maximise international collaboration between EU countries. The revised content and structure of the latest USDA database release will be assessed, as well as the implications for the proposed standard and for the use of the data in Europe.

Food Identification and Description

This sub-platform network will be led jointly by AFSSA and DFVF. The preparation of reliable data on food requires precise nomenclature and detailed description of foods. Even data of good quality can be a source of error if they are derived from foods that are not clearly defined. Moreover, it is difficult to exchange data on foods, or to understand and compare nutritional status for

different countries or individuals, without a coherent description of foods in databases. The WP will be working in close collaboration with the Compiler network and other TGs.

The need for an international food language became apparent when databases on foods were created in different countries and when data interchange was attempted. Data collection and processing by single, small institutions are costly, troublesome and time-wasting activities and this is one of the major benefits of the NOE. This recognition demands sharing of work by international co-operation, and especially the utilisation of collected and generated data for wider use. A first breakthrough in international food identification has been the clear recognition of the advantages of using a multifaceted approach for identifying foods in databases. A second breakthrough has been the recognition of the need to include alternate identification/description systems. Criteria for such a combined system were laid down by the US FDA "International Interface Standard" and by the EU COST Action 99 Recommendations. Food description should incorporate standardised thesaurus (e.g. LanguaL, ISO), different national languages and already existing international standards (e.g. CODEX). Food identification should be detailed, structured, flexible and suitable for use in numeric databases.

A major goal of the WP would be the adoption of a common food categorisation and description system for managing data on nutrients, bioactive substances in the European database. It would thus be possible to establish risk-benefit using both "negative" and "positive" components. An important challenge for the network would be to establish an architecture which takes into account precise analytical results but including also the same results aggregated by larger categories at a level compatible for all components. The EU EFCOSUM project has recommended harmonisation of individual dietary survey derived food intake data at the ingredient level rather than at the "as consumed" food level. It proposed to use a common food categorization system, Eurofood groups (EFG) identification. The WP will address the need to harmonize the food categorisation and description systems used for managing food intake data with those used for managing food composition data, at different levels of aggregation.

Systems Development (databank steering group)

This sub-platform will set up and implement the EuroFIR Databank System according to the accepted criteria laid down in the specifications delivered by month 18. The data retrieval facilities will allow users to specify foods and components, return relevant data, and provide quality measures of the retrieved data matrix. The development plan will identify resources to support the composition data, planning their preparation and EuroFIR implementation. The resources will facilitate the retrieval and use of information on foods, food components, calculation parameters, analytical methods, source references and other food-related topics identified by the project. Resources will be designed for the full range of potential users from consumers to national compilers. The TG will further plan, specify and implement the prototype development of existing and new resources of supporting information, assisting with content preparation as necessary, as well as provide the necessary training for partners.

The network will make available the initial databank system and tools for an external review by selective members of the UAG at months 18-22. The results of this review will form the basis of the Commission's decision on "GO/NO GO" at month 24.

IA1.8: Compiler network and supporting task forces

Responsible: DFVF, AFSSA, IFR, EBI, RUG/NUBEL, NCPHP, KTL, BfEL, UCC, BGU, INRAN, UiO, NFNI, CESNID, Polytec, IDUFIC, NFA, CSPO, NEVO, INSA, UGR, ICETEC, GUT, FRI, NKUA, Tubitak, ETHZ, NNC, IMR & FVS-FC.

Duration: M13-60

<u>Deliverables</u>: E-community software platform established, newsletters, linked datasets identified & deployed, reports, papers, draft CEN standard, prototype food classification & description system, inventory of European food databases,

<u>Indicators:</u> Number of online databank systems, completed workshops, number of peer reviewed papers, user's feedback, number of standards and additional external funds.

Resources needed: Budget for workshops, preparation of reports and other documents, prototype development.

6.2 Programme for jointly executed research activities (RA)

The programme for jointly executed research facilities is divided into four main sub-platforms covering both the provision of new data for foods, nutrients and bioactive compounds² and identifying requirements of national database compilers and key users across Europe:

- Users, stakeholders and sustainability planning (RA2.1)
- Composite, processed and novel foods (RA2.2)
- Traditional and "Ethnic" foods (RA2.3.1 & RA2.3.2)
- Bioactive compounds (RA2.4)

These jointly executed research activities form a 3-dimensional matrix, which actively promotes continuous <u>cross-communication</u> and <u>stimulation</u>. These activities are functionally grouped under three WPs but have numerous interactions, both within each platform activity, and across the four platforms (See EuroFIR's organisation structure, p75). Researchers from the three main groups of compounds: nutrients and bioactive compounds will participate in several WPs allowing for a <u>highly integrated and interdisciplinary approach</u> to the NOE. In the following sections, details of the workplan and objectives for the months 13-30 of the network are presented, together with longer-term aims.

All new data generated for EuroFIR will be using standard, validated methods by laboratories which are suitably accredited to international standards (e.g. ISO9001). In addition, all new data will be further critically quality-assessed before being accepted into the relevant database.

6.2.1 Users, stakeholders and sustainability planning (RA2.1)

This sub-network platform will be led by University of Surrey (US) with representatives from national stakeholder groups (nutritionists, dieticians, health promoters, medical practitioners, policy makers/government, educators, academic researchers, food industry (e.g. caterers, manufacturers, retailers), media), key informants (many of whom will be members of or associated with the NOE) and representatives from organisations representing consumers. It was considerably modified following results and findings during year 1.

The modified aims of this sub-platform are to enter into a dialogue with all user and stakeholder groups in order to ensure that user and stakeholder requirements are established and considered in the process of building sustainable and durable food databank systems. Recommendations derived from work will serve the network as they will help to accomplish the overarching aims of EuroFIR to create (a) financially self-sufficient structures that link the various national database compilers, end-users of the data and policy makers in Europe with each other, and (b) a Pan-European Food Information Resource by state of the art database linking to allow effective management, updating, extending and comparability for food composition data. The following tasks are planned:

Task 1: Delineate the importance of food composition data in various sectors across Europe

This task aims to demonstrate the importance of food composition data in Europe in the various areas of health, trade regulation and legislation, agriculture, and environmental protection. The results from this activity will demonstrate the magnitude and scope of food composition data in Europe. It will help to identify areas in which and how the EuroFIR network, that has pulled together the critical mass in resources and expertise on a European level, can improve the future with regard to food composition data. By highlighting the principal participants in the food composition data compilation process (e.g. users, stakeholders, compilers) and their interrelations, this activity forms the basis for Task 2, which comprises a detailed analysis of the structure and organization of selected European food composition databases. The areas of health, trade regulation and legislation, agriculture, and environmental protection have been identified. European projects and initiatives demonstrating the importance of food composition data have been identified as relevant through literature review. The findings will be written up in the form of a paper for submission to a peer-reviewed journal.

Task 2: Analysis of selected European food composition database management and organizational structures

²Possible provision will be made to include information on dietary supplements, allergens and food-derived contaminants at a later date but additional resources will be required.

The aims of this task are to explain the current status of various food composition databases by considering the historical development of food composition information in the different European countries, the principal participants in the food composition data compilation process (e.g. users, stakeholders, compilers) will be identified. Management structures will be depicted with the aim to identify current and potential stakeholders. The lines, mechanisms and channels of communication between the user, stakeholder and compilers' community will also be identified.

This activity comprises interviews with selected European national food composition database compilers with the overall aim of revealing the currently existing management and organizational structures. It will focus on the history, management structures, funding sources, and lines of communication with all users & stakeholders. The main aspect of this analysis is to determine what structures exist that enable interaction between stakeholders, users and compilers of food composition data on a national level and whether they are sustainable in the future. Compilers from the CEECFOODS network have been interviewed, thus the next steps are to interview compilers in the Northern and Southern European region. The work includes developing an interview schedule; identifying/recruiting interviewees and conduct interviews; and analysing and interpreting the interview data.

These results will form the basis for the rationale for European cooperation as it determines the extent to which current national activities can or cannot be integrated into European collaborative efforts (e.g. compilation on national level may be replaced by European level compilation whilst data analysis may continue at national level). The viability and sustainability of these efforts will depend on sufficient financial and administrative structures being established, for which future stakeholders need to be identified. These aspects will be especially integrated into WP 3.3 as they form the foundation of the commercialisation and durability plans that are being developed.

Task 3: Building partnerships with key stakeholders within and outside Europe

This task will work closely with WPs 1.7 & 2.2. In the context of sustainability it is imperative to consider the motivation for stakeholders to produce and maintain food composition database systems. In addition, it is important to understand which parts of the data production process do they "own" in terms of providing management, funds or carrying out tasks. EuroFIR will have to engage stakeholders in that what EuroFIR aims to deliver, in order to make it sustainable. Thus, EuroFIR needs to understand what makes stakeholders buy into what it wants to deliver. The aims of this task are to understand European National Food Consumption Survey Managers' wants and needs with regard to food composition data and their relationship with the national food composition databases. Key stakeholders include European national food consumption survey managers, and representatives from FAO INFOODS, WHO, EFSA, DG SANCO and industry. Complexity might be added because some stakeholders are primarily proprietary users of their own data (e.g. organisations that are responsible for food consumption surveys as well as compilers of food composition data). This aspect has implications for the content and quality of data systems. The work includes developing an interview schedule; identifying/recruiting interviewees and conduct interviews; and analysing and interpreting the interview data. A final paper will be prepared for submission to a peer-reviewed journal.

Task 4: Interactive workshops with key food composition data users

This activity aims, through workshops, to obtain the views of key user groups of food composition data from outside of the EuroFIR network about the type of uses, the tools currently used and envisioned to be used in the future to access data, and mechanisms to communicate their requirements to compilers. Members of EuroFIR's User Advisory Group will be wherever possible involved in these events. The activity will also help elicit topics to be included in the generic questionnaire used in Activity 5.

It involves the development of a workshop format that can be used by EuroFIR partners to run interactive workshops with groups of key food composition data users. The aim being to collect and record the results of discussions with users in a systematic way which will allow comparisons between user groups. Events will be identified where it will be possible to meet with these users. Group discussions will focus on what food composition data are being used for in their field, the tools that they are currently using or would like to use in the future to access data, and the mechanisms that they find appropriate and effective to communicate their requirements to data compilers.

Workshops will continue to be organized with user groups that have not yet been consulted. Where possible other EuroFIR partners will be encouraged and supported to run events in their countries following the guidelines developed as a result of the workshops run in the first 12 months. The next identified event is: "6th International Conference on Dietary Assessment Methods (ICDAM6)" on 27-29 April, 2006, Copenhagen.

Task 5: Food composition data users' views of currently used data

This activity aims, through questionanires, to obtain the views of key user groups of food composition data from outside of the EuroFIR network about the type of uses, the tools currently used and envisioned to be used in the future to access data, and mechanisms to communicate their requirements to compilers. Future activities related to this task build upon the results and experiences collected when piloting the questionnaire with representatives from the food industry (see Milestone 2.1.2). The aim of this activity is to develop a generic questionnaire regarding user views about national databases. This will be used in countries where the database managers or others are willing to work with WP 2.1 (e.g. Portugal and Italy have expressed an explicit interest to be included here) to distribute the questionnaire to various food composition data user groups. The questionnaire will cover topics such as the preferred and most appropriate formats to access data, timeliness of making data updates available, quality requirements, pricing and communication related to developments relating to food composition data. The methodology used will include five steps: (1) develop generic questionnaire, (2) establish data collection sites and methods, (3) collect data, (4) analyse and interpret data, and (5) write up findings in the form of a paper for submission to a peer-reviewed journal.

Task 6: Inventory of European nutrition analysis software

The aim of this task is to provide an inventory of nutritional analysis software available in the EuroFIR partner countries with particular reference to functions, target audiences, and pricing. The basis for this activity is the inventory of nutritional analysis software available in the UK compiled by the contractor Susan Church, which is part of WP3.2. This activity relates strongly to Activities 2, the analysis of European food composition database management and organization structures; and 7, which comprises interviews with developers and marketers of nutrition analysis software. The latter activity is being carried out to better understand the wants and needs of developers and marketers, and their relationship with the national food composition database managers and customers (i.e. end-users of food composition data).

The collected information will provide a general overview of the range and type of products currently marketed. A final analysis of this information will highlight the limitations of currently marketed nutrition analysis software and will aid in identifying how the network can add value in the software development process and exploit these potential enhancements financially. Improvements may include:

- Enhancing the technical features of an existing software product,
- Enhancing the features that help the user with their understanding and interpretation of nutrition data,
- Developing a new software product, and
- Providing training to software producers and users of their products.

A checklist, criteria and web-based data collection tool that will be used to describe the selected nutrition analysis software will be developed. Importantly, information about which databases are included in products will be logged. A data collection process will be devised; network partners will be asked to supply information about programmes that they are familiar. It is suggested that official WP 2.1 partners in Italy, Germany, Belgium and Denmark, as well as partners who expressed an interest in participating in WP 2.1 (e.g. Portugal, France and Slovakia) could help compiling this pan-European software inventory. Relevant information will also been collected as part of other RA2.1 activities.

It will be necessary for the people involved in the collection and even more importantly the analysis of this data to have sufficient knowledge and experience of the topic of nutrition analysis. The reviewers will assess the collected information for relevance and quality. The findings will be summarised and written up in the form of a paper for submission to a peer-reviewed journal. A deliverable has been added to update the CO/SMB of progress and recommendations for the continuation of this task at Months 18 & 30.

Task 7: Interviews with developers and marketers of European nutrition analysis software

Interviews with developers/marketers of nutrition analysis software are needed to better understand their wants and needs, and their relationship with the national food composition database managers and customers (i.e. end-users of food composition datab. This study forms an integral part of the analysis of European food composition database management and organization structures in WP2.1 (see Activity 2). EuroFIR needs to decide how the network can add value in the software development process and exploit these potential enhancements financially (e.g. enhancing the technical features of an existing software product, enhancing the features that help the user with their understanding and interpretation of nutrition data, developing a new software product, providing training to software producers and users of their products). In addition, this will form the foundation of the sustainability and durability plans. The work includes developing an interview schedule; identifying/recruiting interviewes and conduct interviews; and analysing and interpreting the interview data. A final paper will be prepared for submission to a peer-reviewed journal. A deliverable has been added to update the CO/SMB of progress and recommendations for the continuation of this task at Months 18 & 30.

Task 8: Study involving usability testing of prototype websites

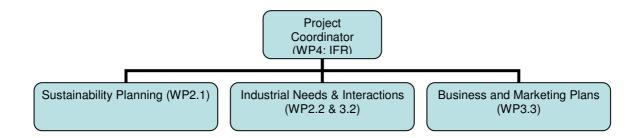
In conjunction with WP1.8 and KTL and through analysis of interfaces of current on-line databases we could do a study involving usability testing of prototype websites. In addition, a "dummy" web-based databank access system could be tested based on information previously presented by WP1.4.

Task 9: Develop and implement a sustainability and durability plan for EuroFIR's outputs

The development of a sustainability concept relates to developing a resource management plan including the following key elements:

- Creating a vision statement
- Building and maintaining collaboration among the network partners
- Identifying stakeholders/advocates
- Finding funding (This includes maximizing existing resources, identifying and pursuing other funding opportunities and creating new funding sources. One option for new funding sources is to make network outputs commercially available, which requires the development of a business plan in order to secure these new revenue generating sources. WP3.3 continues to work on this item)
- Putting a management system / administrative structures in place

The process of developing a sustainability plan will follow steps 1-5 which have been laid out below (see WP2.1 & WP2.2 discussion paper "The process of developing a sustainability and durability plan for EuroFIR's outputs.") The forum for the work could be the Sustainability Workgroup that emerged from the Integration Group that was originally established in Delft. The new Sustainability Task Force was created in Year 2 in order to ensure cross-platform coordination of activities as follows:



The suggested roles and responsibilities that the specific partners play for this activity are as follows:

- WP4 (IFR) will lead the Sustainability Task Force and organise 6-monthly workshops (attached to the SMB meetings).
- WP2.1 (US) has responsibility for developing and guiding the implementation of the plans for sustainability in close collaboration with the other Task Force members.
- WP2.2 (TTZ & ILSI) and WP3.2 (BNF) focus on liaising with and consulting the food industry sector (see their respective detailed plans of activities under WPs 2.2 & 3.2)
- WP3.3 (AUA) focuses on collating the information that the process of developing the business and marketing plan will
 identify with regard to the EuroFIR network outputs that will have the potential to generate income and the elements
 needed to achieve this. The summary should follow a format needed for a business plan.
- UAG (via Susan Church) plays an advisor role and will be asked to comment on the initial sustainability plan.

The process of developing a sustainability plan can be broken down into the following steps:

- Step 1: WP-Ls will identify and describe the final outputs resulting from their activities during the lifespan of the funding by the EU.
- Step 2: For each output the workpackage leaders will provide answers to the following 6 questions:

Q1	Is this output the result from a one-off exercise or should the output be updated, maintained beyond the EU funded period?	
Q2	Who should be the future owner of this output?	
Q3	Who do you see as the future stakeholder(s) ³ of this output?	
Q4	Who do you see as the future user(s) 4 of this output?	
Q5	Where/on which level should this output be sustained (national level, European level, international level (e.g. international organizations (e.g. INFOODS)?	
Q6	What are the necessary actions ⁵ that need to be undertaken in order to ensure that this output of your activity is wanted/needed/sustained in the future?	

- Step 3: The responses from the workpackage leaders with regard to each of their outputs will be analysed and grouped based on yet to be carefully defined criteria (e.g. such as required administrative structures, future ownership including responsibilities (e.g. funding) and rights).
- Step 4: The actual sustainability plan will be developed including a commercial strategy to generate long-term income for the network. This step involves producing a draft business and marketing plan (in WP3.3) covering the definition of the remit and scope of a EuroFIR entity if needed and/or finding other "ownerships" as reuired/feasible/sustainable, and consideration of intellectual property rights.
- Step 5: The necessary actions to implement the sustainability plan will be initiated and executed.

These steps will help identify how the EuroFIR databank system and other outputs can be sustained and what actions are necessary to ensure their long-term durability. The sustainability plan will be updated regularly following network progress and feedback from the SMB, GC, UAG and other appropriate advisory bodies.

³ **Definition of stakeholder:** Stakeholders are those willing to invest resources and accept some responsibility for maintaining the viability of food composition data compilation because of their own interest in the data. Stakeholders may also be "Users" of food composition data.

⁴ **Definition of user:** Those who make use of food composition data; anyone that uses or employs food composition data as a means to fulfil a task. Users may also be "Stakeholders" of food composition data.

⁵ "Actions" in this context are referring to, e.g. setting up management/organisational structures, funding structures.

RA2.1: Users, stakeholders and sustainability planning

Responsible: US, AFSSA, KTL, BfEL, TTZ, AUA, INRAN, INSA, BNF, DFVF/DFI, FRI, NFA, NNC & FVS-FC

Duration: M1-60

Deliverables: Validated questionnaires, reports, papers & polular articles.

Indicators: Completed workshops, peer reviewed papers

Resources needed: Budget for workshops, preparation of reports and other documents.

6.2.2 Composite, processed and novel foods (RA2.2)

The sub-platform network will be led by TTZ from M19 and will have two main tasks:

Task 1: Will define methods for deriving compositional values for foods and components that have not been directly obtained by analysis. Secondly, it will address issues relating to the provision of food industry data for a range of prepared and fortified foods. The first set of issues includes the imputation of missing values, the calculation of composite dishes from their ingredients and the use of yield and retention factors for prepared and processed foods. This will provide the foundation for the harmonisation of European guidelines on the handling of missing values, composite dishes and yield/retention factors. It will also investigate the circumstances in which these derived values should be added to the underlying evaluated dataset and those when they can be applied as part of the EuroFIR databank. This task will be completed in year 2.

Task 2: Will investigate and establish guidelines for the availability of industry data to database compilers and the possible frameworks for the provision of industry data to improve the quality and timeliness of composition data at the EU level. Content specification and confidentiality issues will also be covered. Guidelines will be prepared for the accurate and effective incorporation of industry data into food composition databases or directly into EuroFIR resources, including harmonised procedures for aggregating data on branded products to generic food items. Also, the requirements of the industry, including European food SMEs, and consumers (in consultation with WP 2.1) for food composition data and related information will be reported and, where appropriate, incorporated into the planning of EuroFIR resources. Topics reviewed will include composition data for ingredients and facilities for converting data to the correct representation for nutrition labelling. The main objectives will be to:

- Investigate the general availability of composition data for foods and possible delivery methods from food production and retail organisations of compositional data and up-to-date information on trends in processed foods and novel foods.
- Development of a framework for collecting, incorporating and updating compositional information on brand name foods in the EuroFIR databank systems and definition of a basis for interrelating brand-name foods with generic food items.
- Exploit food industry requirements for the EuroFIR databank including its use for nutritional labelling and calculation of the composition of composite food products.

RA2.2: Composite, processed and novel foods

Responsible: TTZ, KTL, IFR, DFVF, RUG, NUBEL, AFSSA, Icetec, BfEL, ILSI, AUA, INRAN, CSPO, UiO, CESNID, NFA, Tubitak and other industrial collaborators

Duration: M1-60

Deliverables: Linked datasets identified & deployed, reports & papers.

Indicators: Completed workshops, peer reviewed papers, users feedback & additional external funds

Resources needed: Budget for workshops, sampling and analysis, preparation of datasets, reports and other documents.

6.2.3 Traditional and Ethnic Minority Foods (RA2.3)

This sub-network platform will be led by NKUA and UL and sub-divided into two main themes: traditional and Ethnic foods.

Traditional Foods

The key objective is to provide new data on the nutritional composition of traditional foods for inclusion in national food composition tables with representative raw ingredients and recipes. The term "traditional foods" is a user-defined term that includes raw and originally home-prepared foods that have been consumed locally or regionally in Europe for centuries. A common feature is that many of these foods are nowadays seldom available in supermarkets, rather in local food markets or are produced in households or restaurants. In many countries, some traditional foods are today more or less exclusively produced by the food industry.

Presently there is a keen public interest in nutrition and health, with a subsequently high consumer demand for healthy-food products. This interest in healthy eating for the attainment of optimal health has contributed to an increased demand for many traditional products, since traditional products are more often considered healthy.

A prerequisite of minimizing this intentional or unintentional deception is the systematic investigation of traditional foods, including their registration and standardization. Registration permits the strict definition of the food according to its traditional cooking procedure and characteristic properties, whilst standardization assures that manufactured traditional foods maintain the sensory, physicochemical and microbiological properties that characterize it. Quality upgrade and dissemination of traditional foods comprises an improvement to human dietary habits. The key tasks are:

- 1. Provide new data on the nutritional composition of traditional foods for inclusion in national food composition tables with representative raw ingredients and recipes.
- 2. Raising of the food manufacturers' awareness on "traditional" foods and consequently, the production of products presenting stable high quality and conforming to contemporary perceptions on food safety and quality, thus reinforcing the competitiveness of the food industry.
- 3. Transfer of scientific and technological knowledge to all interested parties and promotion of traditional foods into national and international food markets, offering opportunities to SMEs to expand their productive and export activities, extensively benefiting national economies.
- 4. Nutritional analysis for the determination of the nutritional composition of the traditional foods and recipes including establishing protocols for the collection and analysis of samples (months 19-36).
- 5. Investigation of the potential industrial or semi-industrial production of the traditional recipes including technological studies of the traditional foods production and 45 min audiovisual material on the preparation method of selected traditional foods with a particular technological interest (months 24-42).
- 6. Synthesis of evidence-based integrated records that document the traditional identity and characteristics of the foods and recipes under investigation including integrated records of each traditional food under investigation consisting of a) folkloric and historical study, b) preparation method, c) compositional data and d) technological study (months 43-48).
- 7. Pilot production of traditional foods and recipes including report on the industrial or semi-industrial pilot production procedure and preservation tests of each traditional food under investigation (months 43-54)
- 8. Dissemination of nutritional data of the traditional foods and recipes including report on the nutritional composition of each traditional food, consumer informative leaflet in national language and English on the nutritive value of traditional foods of each country, and comparative report on the most frequently consumed traditional foods between countries (months 49-60).

"Ethnic" Foods

The ethnic food market sector comprises two areas: firstly, products aimed at *consumers of primarily of Asian, African, Caribbean and S. American extraction* which reproduce the authentic experience of their homelands and, secondly, products of somewhat different composition [to respond to differing taste and acceptance criteria] aimed at *the mainstream European consumer*. As an example of the difference, "curries" marketed for minority ethnic consumers are frequently less hot and spicy than those aimed at European consumers.

The ethnic food market also includes many products, usually imported, that are the ingredients of individual foods prepared in the home by ethnic populations. For simplicity, products aimed at the minority market will be termed ethnic foods, whilst those aimed at the mainstream, European population will be termed "Ethnic". As an indication of the complexity and mixing of this area, many consumers of second generation ethnic origin will consume both ethnic and mainstream foods [typically domestically and outside the home, respectively] and may even occasionally consume fast food "ethnic" products.

The biggest problem, common to all ethnic groups, is an integration of lack of information on culture-specific foods, uncertainty over the quantities consumed [since families frequently eat together from a common pot], lack of recipe information and absence of detailed food composition data. An important deliverable of this project will be the establishment of a small, targeted network of social and life scientists and industrial representatives to address this situation.

The increased consumption of "ethnic" foods by the mainstream population will obviously affect their dietary intakes of nutrients and naturally-occurring compounds. Knowledge of the levels of such compounds in such foods will be important in determining their intakes. "Chinese", South Asian restaurants, in particular, are found in most large urban centres across Europe and "ethnic" foods are available in supermarkets and other retail outlets. However, there is no information available as to the composition of these products, which are likely to be modified from the authentic original according to national/regional taste and expectation.

Specific objectives to be addressed within this sub-project are:

- 1. Collection of information on common" ethnic" foodstuffs available in different EU member states.
- 2. Gathering information on ethnic populations and general dietary habits in Europe, and using these to set priorities for the collection and analysis of specific foodstuffs.
- 3. Providing new and reliable data on the composition of foods consumed by both ethnic and mainstream populations for inclusion in national food composition databases.
- 4. Transfer of scientific and technological knowledge to consumers [ethnic and mainstream populations] and industry; promoting knowledge of ethnic foods thereby increasing consumer choice and market opportunities.
- 5. Assisting the creation of a website with dietary information and advice directed towards <u>specific ethnic populations</u> including the development of programmes of dietary advice and diet/health information targeted at individual ethnic populations.

The activities and key deliverables are:

- ldentity ethnic and foodstuffs for sampling and analysis in each participating country;
- Prioritising and collecting samples and ingredients from domestic and retail sources, respectively, for analysis;
- Gathering information on recipes and updating website with new information on ethnic foods.
- > Continue sample analysis and critically assessing new data prior to entering into EuroFIR database;
- Identifying additional food samples on the basis of agreed criteria;
- Information gathering on intakes and household practices;
- Updating website with ethnic foods information.
- Continuation of sample and analysis and information inputting;
- ➤ Discussing dissemination of information with relevant SMEs, industries, target population groups and health professionals in each participating country.
- Preliminary considerations of relationships between food consumption, dietary patterns and disease;
- Updating website.
- > Completion of data inputting and information gathering on intakes, household practices;
- Critical review of impact of ethnic foods on health;
- Identifying gaps in knowledge to be the focus for additional research and identification of supplementary funding;
- Communicating results to target audiences (link to WP 3.2)
- Contributing to spreading of excellence activities of overall project especially to Ethnic Minority groups throughout Europe.

RA2.3: Traditional and Ethnic Foods

Responsible: NKUA, UL, IFR, GUT, RUG, NCPHP, DFVF, AFSSA, BfEL, INRAN, CSPO, NFNI, INSA, UVi, UGR, TUBITAK, BGU, WU, CESNID, NNC & other SMEs.

Duration: M1-60

<u>Deliverables</u>: New data, linked datasets identified & deployed, audiovisual material, reports & papers.

Indicators: Completed workshops, availability of videotapes, new foods/recipes, peer reviewed papers & additional external

funds

Resources needed: Budget for workshops, sampling & analysis, preparation of datasets, reports and other documents.

6.2.4 Bioactive Compounds (RA2.4)

This sub-platform network will be led by DFVF with support form IFR and UCC. Their individual responsibilities are shown below under planned activities and key deliverables. The overall objective of this platform is to implement the EU BASIS database on critically assessed and validated data on health protective constituents in more than 300 European food plants to the EuroFIR databank environment. The specific objectives are as follows:

- To establish and populate a web-based database on critically assessed composition data on bioactive constituents in plant and non-plant-based foods (including wine, chocolate & soya products).
- To extend the web-based database system to allow the inclusion of critically assessed biological effects data on bioactive constituents.
- To update the plant and plant part lists to include major European food plants in 15 European languages, and to produce new lists covering exotic food plants, health food plants, and processed plant based foods.
- To deploy the database in an internet environment to facilitate accessibility for stakeholders and end-users including food authorities, researchers, industry and consumers for general diet and health considerations and in order to support the evaluation of genetically modified foods e.g. plant foods.
- To ensure compatibility of the EuroFIR-BASIS database with the standard specifications developed for the EuroFIR databank system.

There is a need for an information system containing critically assessed data on the biological activities of bioactive components (e.g. glucosinolates, isoflavones, lignans, polyphenols and carotenoids) with putative health benefit, present in a form in which it can be made available for health authorities, scientists in food industry and academia, and consumers. The database will serve as a tool to provide basic compositional and biological information on other bioactive food plant constituents, including putative health-protective factors in:

- The evaluation of genetically modified food plants;
- The evaluation of other new food plants and varieties;
- The general evaluation of diet and health considerations of food plants.

It is also an important issue to extend and update the information in the existing BASIS database. The food plants will be selected on the basis of their content of bioactive constituents and their perceived beneficial and possible risk effects, as well as on an assessment of the commercial importance of the crop and its place in the human diet.

The planned activities and key deliverables are:

- Annual workshops to ensure progress, agreement on activities and continuous compatibility with the EuroFir databank (organised by DFVF);
- Preparation of prioritized list of bioactive constituents from the total lists on health and exotic food plants (led by DFVF & UCC):
- Inclusion of bioactive compounds from exotic food plants (led by DFVF);
- Inclusion of bioactive compounds from health food plants (led by DFVF);
- Inclusion of data on biological activities of bioactive food plant constituents (led by UCC);
- Continued entry of compositional data from traditional food plants (led by IFR);
- Preparation of prioritized lists of plant source materials for food flavourings (led by DFVF);
- Continuous attention to relevance and applicability of data entered (led by DFVF, UCC & IFR);
- Preparation for future inclusion of inherent food plant toxicants (led by DFVF);

Seeking additional funding (led by DFVF & IFR).

RA2.4: Bioactive Compounds

Responsible: DFVF, UCC, IFR, GUT, NCPHP, UHEL, AFSSA, BfEL, INRAN, NFNI, UVi, NFA, SLU, TUBITAK, UL, RIKILT &

Polytec.

Duration: M1-60

Deliverables: New validated data, updated food plant list, linked datasets identified & deployed, reports & papers.

Indicators: Completed workshops, new data on exotic foods plants/health food plants, peer reviewed articles & additional

external funds.

Resources needed: Budget for workshops, sampling & analysis, preparation of datasets, reports and other documents.

6.3 Spreading of Excellence Activities (SA)

EuroFIR recognises the value of its future results and its responsibilities to disseminate these to various stakeholders, ranging from colleague scientists and industry R&D to healthcare professionals and the consumer organisations. Therefore, a central part of EuroFIR's mission is to establish an 'open' community of stakeholders who share the vision of European research integration in this field in order to promote pan-European research excellence, and more rapid and far reaching exploitation of research output.

In parallel to the integration and research activities in the network, and from their results, EuroFIR will establish information exchange including a large use of electronic communication through the IT software platform described in IA1.7. The network will bring knowledge and training capabilities to:

- Undergraduates and postgraduates by education and training for the harmonisation for the development, management
 and use of food composition databases to all people in all regions of Europe, whether they are members of the network
 or not
- Scientists and professionals of the network and those outside.
- The public, policy makers and regulatory authorities by increasing awareness of food composition and public health nutrition, and by providing evidence-based advice to consumers. Production and implementation of evidence-based guidelines is essential.
- Agro-food and retail industry throughout Europe in the use and applications of the Food Information Resource.

In particular, training researchers and other key staff, is indispensable to the development and sustainability of European excellence in this field. Thus, training is an essential component of spreading of excellence. The training activities of the network seek to promote knowledge and skills for best practice in the application of food composition data covering nutrients and bioactive compounds in the fields of nutrition and public health throughout Europe. These activities will bring a high level of integration to existing and new training activities in this field.

Specific activities related to the spreading of excellence have been described in four interconnected, flexible WPs, which may change in shape, size and content as the network progresses beyond the first year, depending of the success of the activities encompassed within these WPs and the changing needs of the network:

- Training and education of young scientists and postgraduates (SA3.1)
- Dissemination and communication (SA3.2)
- Income generation and durability (SA3.3)
- Gender activities (SA3.4)

6.3.1 Training, education and vision of postgraduates and young scientists (SA3.1)

The network will devote a substantial proportion of its energies and funding towards the training and education of undergraduates and postgraduate scientists. These activities will be developed for the members of the network but, more importantly, for non-members in order to improve and harmonise education of all people in Europe involved in the field of food composition research and public health nutrition. Applications for training from female researchers/students will be especially encouraged and supported. The overall WP-Ls will be WU and SLU. Activities here will include:

(1) Specialised workshops and training courses (coordinated by WU)

The need for a number of specialised workshops across the three main Horizontal Platforms (Integration, Research & Spreading Excellence) have been already identified as follows:

- Quality management systems IA1.3;
- Building websites IA1.4
- Standards Development and Specifications IA1.5;
- Food classification and description in databases IA1.6.

A number of network training courses have been identified and will be initially supported by EuroFIR:

- Production and use of food composition data in nutrition (2-3 weeks; organised by WU) SA3.1;
- Plant Food Analysis and Data Handing (3-weeks; organised by WU) SA3.1;
- Training and entrepreneurship in agro-business (2-weeks; organised by AUA) WP 3.1;
- Extending the gender dimension SA3.4.

These specialist workshops will mostly consist of sessions ranging from 2-21 days at selected training sites. Other courses and workshops will be developed during the course of the project.

(2) Optimisation of existing Marie Curie Training Sites (coordinated by SLU)

The network will optimise existing bids for the EU Human Resources and Mobility Programme (Marie Curie Actions) but will not prepare any new bids as this will be left to the individual partners involved using non-EuroFIR resources. Several network partners have ongoing FP5 training sites, are hosting individual fellowships and are well equipped and experienced in managing these training activities. The ambition of the consortium is to gear, optimise and promote these ongoing and new Marie Curie actions. Thus, the network will invest in policy for the optimal use of such training actions in FP6 and beyond, and implement strategies for successful submission and execution of these actions.

(3) Exchange training visits (coordinated by SLU)

The exchange training visits serve a number of the objectives as formulated by the network. Foremost they are vital to spreading of excellence within Europe and achieving a high degree of integration of European research efforts. Both short- and longer-term exchange training visits will be available to students, PhDs, junior scientists and other research staff. These will be organised in specific centres to train undergraduates and postgraduates, as well as in countries where no EuroFIR partner exists in order to increase the level of knowledge. Three types of visits are planned:

- Exchange training visits for doctoral students affiliated with the network will be offered the opportunity to visit another laboratory for 1 to 6 months to acquire new skills, use of advanced equipment not available at the "home" laboratory and joint analysis of food samples using standardised methods.
- Exchange training visits for postdoctoral fellows and research staff within the network will be offered the possibility to visit another laboratory for 1 week to 3 months. These visits will allow formulation of standards for the joint research work as executed within the network and design of join protocols and databank systems.
- Training visits for junior scientists not affiliated within the network will be available as above on an individual visit basis.

(4) Other training at symposia and conferences (led by SLU/IFR)

Training for undergraduates, postgraduates and junior scientists will be also be organised in the form of symposia and training courses. They will be held for researchers, health professionals, policy makers and regulatory bodies and the public:

- Every year at the EFFoST conference, a review of all new information gathered by the network will be presented in the form of a post-graduate symposium with the latest information being presented as talks and poster presentations covering all aspects of the NOE.
- Every two years, at the International Food Database Conference, a course will be held.
- Every year, symposia will be proposed to the meetings of health professionals, economists, agro-food and retail industry, consumer bodies and policy makers.
- Undergraduates will be encouraged to present their research results at various meetings and congresses. EuroFIR
 travel grants will be available for young scientists who present accepted papers.

(5) Training in non-scientific aspects (led by IFR/BNF)

The training activities of this network will not be limited to acquisition of purely scientific skills but will extend into areas of expertise where food and biological scientists are increasingly being expected to operate. Training opportunities in science communication, social and consumer sciences, IP management and science management (with special emphasis on gender equality at higher level management) will be available, as follows:

- Science communication (see below)
- Society; societal aspects of the research including bio-ethics
- Management and leadership development; including entrepreneurship

All activities will be designed to provide added value to training programmes that already exist within the core centres and other collaborating centres. The first planned event will be entitled "Science Communication for the Terrified" and will be run during the first year.

This will be a highly-interactive coaching and confidence-building session which aims to equip 1st Post-doc. level researchers with sufficient skills to get started with science communication activity, particularly but not exclusively, in a media context. Delegates will receive an 'information pack' and will have access to mentoring after the course as they attempt their first post-training science communication activity. The programme will be developed based on existing workshops run by IFR. It is intended that future courses might be organised jointly with other Networks such as NuGo.

(6) <u>Design and implementation of e-learning courses and information exchanges for world-wide access</u> (led by WU/BGU)

All e-learning courses will be based on the strategic needs of the network. Special e-learning tools will be designed and developed to provide valuable educational and training procedures for disseminating knowledge across Europe and beyond. The EuroFIR e-learning facility will provide user-friendly access to audiovisual material, questions and evaluations and collection of credits for each candidate and course and any e-learning training facility will be accredited by the partner responsible for its development, e.g. Ben Gurion University, Wageningen University and Athens University of Agricultural. The training courses outlined above will be developed into appropriate e-learning modular courses using funds from the network. These will be interlinked and could be further developed into defined modules for MSc and PhD levels. These e-learning courses will be made available to all members of the network and eventually to the general public. All symposium and training activities will be available through the EuroFIR website.

(7) <u>Inventory of specific training requirements of compilers in non-EuroFIR countries in Europe and specific INCO countries (led by BGU/IMR/NCPHP):</u>

This task links closely to tasks planned in WPs 1.7 & 2.1 (see Task 3) and seeks to establish contacts with national compilers in non-EuroFIR countries in the Balkans, C/E countries, Middle & North Africa, Russia and countries of the former Soviet Union using existing with a particular emphasis on INCO countries and new contacts (e.g. CEECFOODS, FAO INFOODS & WHO) in order to identify their specific training needs and opportunities for collaboration with EuroFIR. These training needs and ideas will be developed into specific training courses, workshops, training exchange visits, in collaboration with EuroFIR. Proposals will be submitted to the CO/SMB for consideration.

(8) Annual Network Meeting/Conference (organised by IFR/BNF in SA3.2)

In addition to the dissemination of new scientific knowledge, the provision of training for scientists and a wide range of user and stakeholder groups is a major objective of the annual network Congress (organised jointly by BNF/IFR). This will be organised in conjunction with the other SMB and GC meetings and is included under SA3.2. Training focused activities at the congress will include:

- Break-out workshops and debates focused on standards and legislation;
- Break-out "demonstration workshops" for training in use of analytical kits for nutrient and bioactive analyses in food, databank systems and software applications;
- Poster reading sessions including short oral presentations on specific posters for younger scientists to provide structured training in science communication and presentation skills.

SA3.1: Training and Education of young scientists and postgraduates

Responsible: WU, SLU, AUA, UHEL, BGU, IFR, IMR, NCPHP & FRI & Management Office.

Duration, deliverables, dependencies, indicators & budget needed: M1-60

1. Specialised workshops and training courses: M1-M60

Deliverables: Number of workshops and courses.

Yearly indicators: Annual number of workshops and courses.

Resources needed: Coordination & management of programme; EuroFIR grants

2. Exchange training visits: M1-M60

Deliverables: EuroFIR grants; number and quality of visits

Yearly indicators: Annual number of EuroFIR mobility grants; number & quality of visits and number of applications

Resources needed: Coordination & management of programme; EuroFIR grants; consumables and bench fees by training centres

3. Symposia and conferences: M6-M60

Deliverables: EuroFIR workshops/symposia in conferences

Yearly indicators: Number & quality of symposia and number of delegates; number & quality of sessions and number of EuroFIR

abstracts.

Resources needed: EuroFIR grants

4. Annual network meeting/conference M12-M60

Deliverables: Annual congress for scientists and stakeholders.

Yearly indicators: Number & quality of delegates; number & quality of sessions and number of EuroFIR poster abstracts.

Resources needed: Budget for congress organisation including EuroFIR grants for young scientists and speakers (included in SA3.2).

5. E-learning activities: M1-M60

Deliverables: Availability of electronic documents for teaching and their translation

Yearly indicators: Number & quality of electronic documents for teaching, and number of annual hits

Resources needed: Budget to establish and develop system

6. Non-science training: M6-M60

Deliverables: Number and quality of visits

Yearly indicators: Number & quality of visits and number of applications

Resources needed: EuroFIR travel grants, consumables and bench fees by training centres.

7. Inventory of specific training requirements of compilers in non-EuroFIR countries in Europe and specific INCO

countries: M13-M30

Deliverables: Number of new contacts and needs of international compilers

Yearly indicators: Number of new training courses and workshops

Resources needed: EuroFIR travel grants, consumables and bench fees by training centres.

6.3.2 <u>Dissemination and Communication (SA3.2)</u>

Overall plan for dissemination activities: This WP will be led by BNF with support form IFR, FRI & AUA. The scheme for the overall dissemination and communication plan from the network is given in Figure 3 below. With respect to spreading of excellence via various <u>Communication Strategies</u>, EuroFIR dissemination recognises that the impact of this network, with respect to stakeholder understanding and involvement, and spreading of excellence in research approach and exploitation, will rely heavily upon its communication strategies.

FRI will be responsible for co-ordinating dissemination activities in Central European countries and the Baltic States. AUA will work with BNF, FRI and IFR to identify key national compilers and other user groups to support the work of the Commercialisation workpackage (WP3.3). IFR will be directly involved in various aspects of the workpackage, including the annual conference and annual media campaign, the Bulletin Board and other web-based features, and in generating the media interface.

The network will tailor information arising from other Horizontal Platforms (and the network as a whole) and selectively disseminate these to various user/stakeholder groups listed below, both within and beyond the consortium. Through these processes it will complement other areas [e.g. SA3.1, SA3.3 & SA3.4 in spreading of excellence platform, IA1.1 in integration activities, and RA2.1-2.4, in publicising the work of the network. The user/stakeholder groups include:

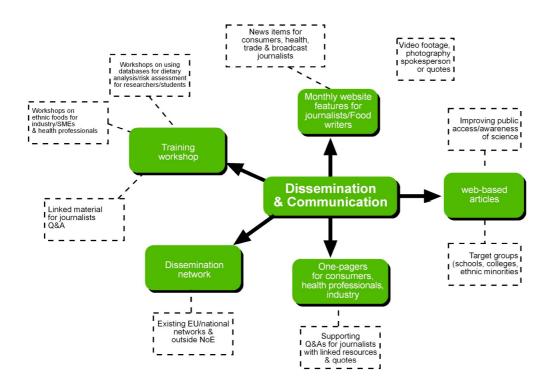
- Research scientists, health professional bodies and associated professionals (e.g. dieticians, public health nutritionists, home economists, GPs and nurses), ENLP;
- The EU agro-food industry and retail groups (e.g. CIAA and individual companies, especially SMEs);
- Policy makers, consumer groups and teachers (e.g. BEUC & EUFIC);
- Food and health journalists, other media professionals and associations such as the Guild of Food Writers.

This <u>multi-stakeholder approach</u> will help ensure that: (i) the stakeholder groups are approached directly with information arising from the network, and (ii) they are targeted via the relevant media and directed to the EuroFIR website as the central focus for information. The WP will comprise the production (researching, writing, checking, designing and publishing) of a series of targeted resources, selectively designed to meet the needs of different user/stakeholder groups. A key theme will be <u>to improve public access to, and awareness of science</u>, in order to improve decision-making.

A <u>dissemination network will be established</u> comprising network partners and members, as well as interested stakeholders outside the network. The main route of dissemination will be electronic, although printed versions of each leaflet/article will be made available for circulation.

The resources will be developed in partnership with the other Platform and WP leaders, and will publicise the work of the network and the outputs of the individual areas, in a targeted manner. For example, for industry/SMEs, information arising from WP 2.3 on traditional and minority ethnic foods will be a focus; for researchers and postgraduate students, information on using the databank systems for dietary intake assessments, and developing skills in related to methodologies such as sampling techniques, will be a focus. For journalists, the resources will take the form of question/answer (Q/A) style information, linked to relevant visual images and quotes from spokespeople. Updates and refreshers will also be provided for health professionals and consideration will be given to practical "how to do it" style manuals for SMEs (using tried and tested methods from other EU-funded dissemination work, in particular FLAIR-FLOW 4).

Scheme for dissemination and communication from the network:



The following types of dissemination will be included:

1. A **bulletin board** (Link to IA1.1) within the website will provide short monthly updates on initiatives, events and forthcoming results and findings. This will be complemented by a network newsletter published twice a year on the website with a limited supply of hard copies will be provided for circulation.

- 2. **One-pagers** an average of 4 one-pagers/year will be produced and distributed electronically via the network, summarising the findings of completed work and progress with ongoing work, targeted at the needs of (i) health professionals, (ii) consumer groups or (iii) SMEs, using the process tried and tested within FLAIRFLOW 4⁶. Accompanying these resources there will be a series of short Q/As for journalists with linked pictorial resources and quotes as appropriate.
- 3. An average of 2 syntheses/year will be written and published on the website on progress with the work of the network, focussing on (i) improving public access to and awareness of science in order to improve individual decision making, and (ii) the information needs of different target groups especially "at-risk" groups and special needs groups. Some of there syntheses will be of general interest but others will focus on the needs of a particular stakeholder group, e.g. use of database material in schools and colleges for teachers and lectures; use of traditional foods across Europe targeted at food writers and catering colleges, and the nutritional attributes of minority ethnic foods and the diets of "at-risk" groups for health professionals. These will adopt the "Synthesis Reports" approach used successfully in the FLAIRFLOW 4 programme, which combines links to EU funded work set in the context of existing knowledge about the topic.

Again supporting resources will be cross-linked and versions of the web-based articles will be submitted directly to relevant journals and magazines (an average of 6 per year). The latter activities will address the problem that use of the internet is not homogeneous across Europe and within individual member states.

- 4. **Monthly website features** will be written and published on the website for journalists and food writers. These features will also be sent to news agencies and will comprise aspects of database material collated within the network into news items that consumer, health, trade and broadcast journalists can incorporate into media stories, simultaneously demonstrating the practical utility, versatility and value of the data, and providing vehicles for its dissemination and exploitation across Europe (Link to SA3.3).
- 5. **Project presentation leaflet & poster presentation** A general leaflet and a poster presentation will be produced at month 6, and updated at months 30 and 60. These will describe the network's strategic objectives and key issues to be addressed, plans and technical approach, key results/findings, and expected achievements/impact. This will be produced by the coordinator and management office and published in hard copy and via the EuroFIR website.
- 6. There will also be an **annual congress and media campaign** (see SA3.1), on a topic selected by the SMB with advice/recommendations from the other network management/ advisory bodies. This will focus on demonstrating the type of data available, its uses (and limitations) and identifying future research needs. The proceedings of this event will be submitted for publication in a learned journal and a series of web-based resources will be published based on the proceedings for a variety of target audiences.

Five specific objectives are:

- 1. To publicise the network across Member States, accession countries and other countries outside Europe in order to establish a dedicated communication network, utilising existing EU and national networks such as the former FLAIRFLOW 4, the existing CEECFOODS, and the new LIPGENE, NUGO and other FP6 networks. Three members of the CEECFOODS network from the New Member States (FRI, NFNI & NCPHP) will be involved order to facilitate dissemination across C/E countries.
- 2. Plan and deliver a range of web-based resources to assist in knowledge transfer, professional development and dissemination of the work and findings of the network to a variety of target audiences within and beyond the consortium (see below).
- 3. Provide media and journalists with examples of how the databank system material can be used and hence, by encouraging publication of these, stimulate simultaneous publicity and exploitation of the work of the network.
- 4. Add value to the network by integrating professional development for users/stakeholders with new knowledge, dissemination and training in the databank system use and application.

⁶ How to disseminate your European research results, FLAIRFLOW 4, FFE IV.

5. Improve public access to and awareness of science, in order to improve individual decision making, the need to incorporate new knowledge into education programmes at all levels, and recognising how the availability of data could help with efforts to improve health among people following restricted diets and also Ethnic minority "at risk" groups.

SA3.2: Dissemination and Communication

Responsible: BNF, IFR, FRI, NCPHP, WU, BfEL, CESNID & Management Office

Duration: M1-60 **Deliverables**:

- 1. Number of published & joint papers (IF & CI).
- 3. Number of abstracts published during meetings and conferences.
- 4. Public awareness numbers of brochures, lay press releases, media and website hits.
- 5. Collection and review of all the national programmes in food composition research in Europe.
- 6. Number of requests for input into EU directives on food labelling and health claims.

<u>Indicators:</u> Annual compilation of all information on publications and information made available to public and policy makers. Quality of published & joint papers (IF, CI & number of partners as authors).

<u>Feedback measures</u>: Measures of feedback from various users and stakeholders will be evaluated by the SMB including (1) regular comments from the UAGs, (2) Comments & suggestions through the public side of the website (see IA1.1), (3) Reports and recommendations from the planned stakeholder workshops and other consultations in RA2.1 and SA3.3, and (4) External audit of "dissemination effectiveness and awareness" (See D3.2.6, WP3.2).

Resources needed: Budget for preparation of publication reports and other documents; budget for BNF and management office.

6.3.3 Plan for management of knowledge and intellectual property (SA3.3)

Lastly, but not least, EuroFIR recognises that European research plays a key role at the heart of the knowledge-based economy by generating and applying new knowledge to enhance the economic prosperity and quality of life of the European citizen. It is realized that the European food and nutrition Industry has the unique possibility to profit from the results of this network, thus an industry user platform will be pursued through the inclusion of industry in the network. In particular, the inclusion of SMEs in several WPs and network management will be a primary target for the network.

The plan for the management of knowledge and IP is addressed in the **Commercialisation and Durability Workpackage** (SA3.3). The EuroFIR website offers possibilities for all interested companies to learn about EuroFIR activities and make contact with the network. The network will also establish partnership with centres of knowledge transfer including food informatics and biotechnology.

This WP has main objectives:

- 1. To identify the ability of EuroFIR databank system to sustain and survive independently in financial terms after the initial funding period by the EC and the necessary actions to ensure this.
- To develop a business plan for the EuroFIR databank system after the initial funding period including a tentative business strategy, which will seek to commercialise both the databank system technology and the network's training programme.
- 3. To develop a marketing plan in full integration with the above business plan.
- 4. To link the dissemination of information and knowledge with regards to the needs of the marketing and business plans in view of EuroFIR's latter (years 2008/9 onwards) sustainability/financial survivability.
- 5. To provide best practice and training in comparative endeavours (Link to WP 3.1)

These objectives are translated into four main tasks (the first two will commence during the first year):

- 1. **Network consultations** Consultation with other subgroups, committees and existing EU entrepreneurial networks will take place from the launch of the network.
- 2. Review of comparable service offerings and organisations This will focus on review of the legal constitution, establishment, offerings, financial viability and overall effectiveness of comparable associations in the food informatics, food technology, plant and animal science sectors. Best practices and exemplars will be identified. Lessons learnt, potential opportunities and threats will be

collated with a view to proposing the legal status (e.g. commercial company, non-profit organisation, industry association, etc) of the entity that will offer

the best databank system service.

- **3. Drafting the business plan for income generation and sustainability for specific outputs –** This will focus on the component of a plan and will be tentative in the sense that it will need ratification and refinement by the entity that will undertake to implement it. The following issues will be addressed:
- Value proposition, benefits to partners and members and other parties
- Mission, Vision, Objectives and Activities
- Marketing positioning
- Legal constitution
- Cost structure, revenue, model and financial plan
- Governance and management structure
- Deployment plan
- Marketing strategy
- **4. Promotion and sustainability of the databank system-based service –** This task will include both the development of a marketing plan for the dissemination of the databank system across Europe and other continents, and identifying incubators, new venture creation support and entrepreneurship training of food scientists (Links to IA2.1 & IA3.1).

The ability to support the commercialisation of new knowledge depends increasingly on effective management of Intellectual Property and the network needs to have in place strategies and policies to ensure that IP is managed successfully, since this is often the only route to ensure the effective use of research output for public good. This aspect of knowledge transfer is covered by the <u>Commercialisation and Durability WP</u> and through the <u>Dissemination and Exploitation Committee (DEC), which will also be based within this WP and chaired by Paul Finglas (IFR).</u> The DEC ensures that the EuroFIR objectives encompass both Excellence (in research and training) and Opportunity (to exploit research and training outputs). Commercialisation activities will include:

- Discussions on why IP management is an important consideration for the network members specifically, and scientific research in general;
- Developing an *IP management strategy* for the network:
- Negotiating IP issues with network members and their organisations;
- Defining incentives;
- Discussion, and possible development, of an integrated network IP portfolio;
- Developing *performance indicators* and monitoring performance;
- Develop best practice in comparative institutions;
- Developing a commercial strategy to generate long-term income for the network including a <u>draft business</u>, <u>marketing</u> and <u>dissemination plan</u>.

Many scientists have poor skills with respect to the exploitation of their research. Thus, the best use of research discovery in Europe is not realised. These commercialisation activities address spreading of excellence with respect to this aspect of knowledge transfer.

SA3.3: Commercialisation and durability

Responsible: AUA, IFR, ILSI, TTZ, US & Management Office, UAG & DEC.

<u>Duration</u>: M1-60 **<u>Deliverables</u>**:

- 1. Report on DEC & IP policy.
- 2. Partnership with centres of knowledge transfer.
- 3. Report on best practice in comparative institutions.
- 4. Draft business plan including marketing and dissemination aspects.

Indicators: Number of industries (especially SMEs) and centres of knowledge transfer participating in the NOE.

Dependencies: SMEs; funding agencies

Resources needed: Funding of SMEs (partners and sub-contractors); budget for preparation of business plan and DEC activities.

6.3.4 Gender activities (SA3.4)

EuroFIR will contribute to the promotion of gender equality through a number of actions and activities. Our action plan constitutes practical measures that can be readily audited and that are designed to permeate the network and not be limited to individual partners or work packages. Each work package will include in its final reporting a paragraph on progress made in the implementation of the gender action plan, assess its impact and formulate recommendations. The detailed plan is given in 6.6 and includes:

- Special action to bring more women into the project;
- · Linking with networks of women scientists within the field of the project;
- Linking with schools and universities to trigger the interests of women in the project;
- Linking with other FP6 projects and EU working groups in order to develop best practice for reviewing, auditing and
 monitoring the gender dimension of the network.

SA3.4: Gender activities

Responsible: BNF, RUG, NCPHP, UHEL, AFSSA, BfEL, BGU, CSPO, NFNI, INSA, UGR, SLU, Tubitak, Management Office,

UAG & DEC.

<u>Duration</u>: M1-60

<u>Deliverables</u>:

1. Methodological framework for auditing the current state of gender balance and sensitivity.

- 2. Establish an e-network for mutual peer support and mentoring.
- 3. Develop an information resource of the relevant national and European networks of women scientists.
- 4. An audit report mapping the initial gender composition and distribution of research teams, for circulation to managers and decision-makers in the project.
- 5. Generally applicable guidelines for the dissemination of good practice in gender issues.
- 6. Produce documentation of the gender-related obstacles experienced by researchers and possible solutions.

Indicators: Gender audits of female researchers.

Dependencies: None.

Resources needed: Budget for reporting and workshops.

6.4 Management of the Consortium Activities

6.4.1 Network Bodies

All the management activities aim at coordinating and supporting the other activities of the JPA. Section 8 introduces the management structure and principles, and the management processes that will be used. The names of persons selected for specific management responsibilities as (1) Governing Council members; (2) Scientific Management Board members, (3) Project Co-ordinator; (4) Project Management Office; (5) Workpackage Leaders; (6) Dissemination and Exploitation Committee members, and (7) Users and Advisory Group members are listed in Appendix A, and the Consortium Agreement.

All outputs (training courses, e-learning courses) of the network are owned by the consortium (see Consortium Agreement for further details). The list of names involved in management activities as part of the SMB, WP-L, DEC and UAG are given in the following table:

Table 6.4.1 Scientists involved in management activities as part of the Scientific Network Management Board (SMB), Workpackage Leaders (WP-Ls), and Users and Advisory Committee (UAG).

Scientist involved in management	Organisation (country)	Management Role	Other WPs
SMB/WP-L			
Paul M Finglas	IFR (UK)	SMB, CO	WP-L (1.7, 4.0)
Dr George Chryssochoidis	AUA (GR)	SMB, DEC	WP-L (3.3)
Anders Møller	DFVF** (DK)	SMB	WP-L (1.8)
Dr Maria Antonia Calhau	INSA (PT)	SMB	WP-L (1.3 & 2.3.1**)
Prof Antonia Trichopoulou*	NKUA (GR)	SMB	WP-L (2.3.1*)
Claudia Krines***	TTZ (DE)	SMB	WP-L (2.2)
Assoc Prof Cornelia Witthöft****	SLU (SW)	SMB	Co-WP-L (3.1)
Dr Peter Hollman	WU (NL)	SMB	Co-WP-L (3.1)
Prof Judith Buttriss	BNF (UK)	SMB	WP-L (3.2)
Dr Jayne Ireland	AFSSA (FR)	SMB	Co-WP-L (1.8)
Dr Santosh Khokhar	UL (UK)	WP-L	WP-L (2.3)
Dr Jørn Gry	DFVF (DK)	WP-L	WP-L (2.4)
Anna Denny***	BNF (UK)	WP-L	WP-L (3.4***)

NB:

*until 31/8/06; **from 1/9/06; ***from 1/7/06; ****DFI from 1/1/07

Governing Council (GC)

The GC is the final decision-making body of the network and approves all major strategic decisions of the network. It will consist of one senior level representative of all the legal entities of the core participants participating in the network, and will meet at least one a year. These meetings guarantee the active involvement of all participating parties and their full information.

Scientific and Network Management Board (SMB)

The SMB represents the focal point for the network management and takes full responsibility for the management of implementing the activities linked to contractual, financial, legal issues, knowledge management, IPR and other innovations on a network level. The head of the SMB is also designated as the project co-ordinator and the SMB will meet every six months.

Furthermore, the SMB will inform each workpackage member, through the 16 workpackage leaders (WP-L), how and when to fulfil the commitment to each workpackage. The SMB will ensure that all tasks are performed as agreed and will inform the GC of all progress, and any problems, meeting the agreed objectives of the network. All WP members will be informed of the appropriate communication channels to use if major problems arise, so that the JPA can be adjusted properly. This information will enable the GC to approve the work plans and requested budgets in order to ensure the objectives of the network.

Project Co-ordinator

The co-ordinator is Paul Finglas (IFR) and he will be responsible for the overall management of the tasks as specified in the Consortium Agreement including the supervision of the Project Management Office (see below). These tasks will include:

- to inform the Commission properly
- to receive and distribute all payments made by the Commission
- to keep proper accounts and to inform the Commission of the distribution of funds
- to ensure that the all parties will duly sign the contract with the Commission promptly
- to execute the JPA and spend the budget as approved
- to inform the network frequently
- to prepare the GC meetings
- to detail the JPA and budget for each year
- to design and implement a progressive integration of activities
- to establish and facilitate the activities of the Users and advisory Group and Platforms
- to incorporate new participating parties into the network and its JPA
- to prepare and promptly submit to the EC all consolidated technical and financial reports
- to prepare and promptly submit to the EC the 18 months implementation plan and the revised consortium agreement for any new implementation plans (e.g. if new partners have to be included in the network)
- organisation of the annual network congress, GC, SMB, DEC and UAG meetings
- administration and preparation of minutes and provisions of the chairpersons of the GC and SMB, and follow-up of its decisions
- transmission of any documents and information connected with the network between the partners and other members concerned (see below for a description of the project management software used to facilitate information transfer within the network and beyond)
- to foster IPR and other innovations
- to stimulate an exploitation plan
- to pay proper attention to gender issues and activities
- to secure ethics rules and regulations.

Project Management Office (PMO)

The PMO assists the SMB, particularly the Co-ordinator, Governing Council and other EuroFIR bodies in the fulfilment of administrative and organisational tasks. The PMO will be represented by John Kingsmill (IFR Company Secretary; or his nominated deputy) and the Project Manager (Dawn Wright; from 1/9/05) at SMB or GC meetings. Through the PMO, the Co-ordinator, Institute of Food Research, will provide the professional support to transfer the Commission payments, to submit the cost statements and justification statements, to monitor the overall financial planning and accounting.

Workpackage Leaders (WP-L)

The WP-L will be responsible for the day-to-day management and co-ordination of each WP including the agreed budgets (see section B.7.2). They will provide sufficient information on the progress and milestones/deliverables to the HP-L, project co-ordinator

as required during the course of the network. The names of the selected are given in Appendix A and the Consortium Agreement. Their main responsibilities include:

- To provide the scientific lead and settle scientific disputes arising within their WP consortia;
- To prepare and promptly submit draft consolidated technical platform reports to the Co-ordinator (as specified in the Consortium Agreement);
- To attend SMB and GC meetings (as required*).

*If any WP-L is unable to attend a SMB meeting, they will be requested to nominate a deputy to attend on their behalf and the deputy will have full voting powers as set in the Consortium Agreement.

Dissemination and Exploitation Committee (DEC)

The head of the DEC will be designated as Paul Finglas (IFR) and will consist of at least one representative of each of the three other Research and Action Platforms. These representatives will be elected at the inaugural meeting of the network. It will meet every six months and will be responsible for identification of the pre-existing know-how list, the network's IP strategy and business plan.

Users and Advisory Group (UAG)

The UAG is composed of outside experts (currently 19) in the network's field and the SMB and GC will determine the exact number. It will meet annually and (a) will advise the GC on network's orientations and implementation of its mission to spread excellence, and (b) evaluate the network's JPA as well as results obtained. The UAG consists of a wide range of key users and stakeholders including representatives from food industry including SMEs and related organisations (6), policy and regulatory bodies (4), national and international database compilers (6), consumer organisations (1) and academic researchers (3).

A list of members of the UAG are given in Table 6.4.2 below with further details in Appendix A2 & A3.

Table 6.4.2. List of UAG Members (to be updated annually).

Member	Organisation (country)	Representing
Ms Susan Church (Chair) ¹	Independent Nutritionist	National compiler; diet & health policy body.
Dr Wayne Anderson	Food Safety Authority of Ireland (IE)	National food safety agency.
Dr Joanne Holden ¹	USDA (USA)	International database compiler.
Dr Hettie Schonfeldt ¹	ARC-ANPI (RSA)	International database compiler & researcher.
Dr Rianne Leenen & Dr Annet JC Roodenburg ¹	Unilever Health Institute (NL)	Food manufacturing industry.
Mr Reg Fletcher ¹	Kelloggs Management Services Europe Ltd (UK)	Food manufacturing industry.
Mr Kai Horn	Biozoon (DE)	Food SME.
Ms Beate Kettlitz ¹	CIAA (BE)	Food industry association.
Ms Valérie Rolland ¹	European Food Safety Authority (EFSA; IT)	EU regulatory & policy body.
Dr E C Smith ¹	FDA (USA)	Food policy & regulatory body.
To be agreed ¹	BEUC (BE)	European consumers.

Dr Peter Laursen ¹	V&S Danmark A/S (DK)	Researcher (bioactive compounds).
Dr Alison Stephen	HNR (UK)	Researcher (food, diet and health)
Prof Ingrid Ute Leonhauser ¹	UG (DE)	Researcher (Traditional and Ethnic foods).
Dr Helen Goranzon	SLU – Domestic Science Department	University lecturer in domestic science & dietetics
Lourdes Llorens Abando	Eurostat	Statistician
Mr George Samouris	CPC (KEPKA)	National consumers organisation
Dr Nadia Slimani	IARC-WHO (FR)	Epedemiologist
Gillian Swan	FSA (UK)	National compiler/consumption survey manager
Dr Hans Verhagen	RIVM (NL)	Diet & health researcher

¹ Possible sub-contractors or third parties (to be agreed; see Appendix A).

6.4.2 Overall network management breakdown

Overall network management will be broken down into the following series of activities, in which specific sub-committees will play a principal role.

Financial management:

EuroFIR finances are managed by the SMB, supported by the Institute of Food Research's Finance and Contracts Offices. All budgetary actions are performed according to the rules and regulations of the Model Contract and the Consortium Agreement. Standardised Operating Procedures are available to ensure that the received funds are correctly distributed, accounted for, and that cost statements are received, including external auditing.

Administrative actions

In accordance with Commission requirements the SMB will produce templates or will otherwise facilitate in the preparation of administrative documents. These actions include periodic reports, audit and financial control documents. The Consortium Agreement and contract conditions with the Commission will be monitored by the SMB to ensure compliance by the EuroFIR partners, and to ensure effective changes if alterations in the partnerships occur. Through the PMO the Co-ordinator, Institute of Food Research, will provide the support to transfer the Commission payments, to submit the cost statements and justification statements, to monitor the overall financial planning and accounting.

Periodic reporting

Organised by the SMB, and WP-L will ensure that periodic reporting is performed according to Commission guidelines. This will entail that all partners follow a model format to ensure a consistent flow of information at previously agreed time points to enable the SMB to make pivotal decisions in good time. This will guarantee that the periodic reporting to be given to the Commission and the Governing Council will contain the following key points: a financial report, an associated financial plan, an updated implementation plan, and an activity report.

Internal communication

The PMO will collect and distributes all types of communication: periodic scientific and financial reports, resources and materials overviews, strategic discussions, road map of dissemination activities, potential socio-economic impact, ethical and gender awareness.

This compilation of data will be integrated into a comprehensive and accessible package by Baigent Ltd, one of the core partners. It will be available to all participating parties through the EuroFIR web-based communication and management system. It simultaneously permits the participating parties to access via the Internet all information regarding the real-time status of the project and to communicate with each other all information pertinent to the evolution of EuroFIR. The system is already in use and facilitated the development of the project proposal. Templates will be available to support the financial administration, scientific communication, elaboration of the work plan and the budget etc. Moreover the system can be used to compare the planning with the delivered work and the spending of budget. This flow of well-managed information and this effective knowledge management will contribute to performing the following specific management tasks.

The workspace will be organised using shared-folders to mirror the Horizontal Platforms of the network. Each WP will have its own folder, which will be managed by the WP-L. The software supports the use of roles to control access to folders and documents within each workspace. Each user can be assigned a role, which allows specific access rights to areas of this workspace and the ability to manage (e.g. create, modify, delete) documents. The software provides a number of mechanisms, which will be used to keep partners informed of activity in this workspace. A daily/weekly/monthly report (as required) will be automatically sent by email to inform partners of new items in their area of workspace. A shared group calendar will be used to schedule meetings and deadlines. Other features will assist in the management of project information including version control of documents, document locking to allow live editing, and annotation – notes can be attached to documents.

A training workshop at the start-up meeting of the proposed network will instruct all scientists involved in the network in the use of the software. Although no problems are expected with the use of this system (it is currently used by >150 licensed servers), an additional back-up system based on agreed time-tabling for reporting by email will also be set up by the Co-ordinator and PMO.

The templates and databases will be managed carefully by the PMO and communicated to the different bodies and participants. The system permits the network bodies to make decisions needed in time and at the highest standards and within budget. It also allows the SMB to assess for dissemination and communication to various users and stakeholders outside the network via disseminating activities such as publications, press releases. The flow of well-managed information and this effective knowledge management will contribute to a durable integration of the activities of all the participating institutions.

Work plan definition

Tasks as defined in the Gantt and Pert charts will be assessed and the contribution of all members of EuroFIR will be identified. The SMB will assign specific tasks for each project, and ensure that all participants are aware of the resources available, and required effort and actions needed to complete the task on time, to high quality and within budget. All participants will be informed of their required actions, and when they will be expected to be performed, and the milestones and deliverables to be factored into the work. All network participants will be informed of the appropriate communication channels to use if major problems arise, so that the work plan can be adjusted properly.

Intellectual Property

The SMB evaluates the opportunities for the Network to generate Intellectual Property and other innovations, delegated to the Commercialisation Activity. The Consortium Agreement describes in detail procedures for IP patent submission, and ownership of network outputs. The SMB will continuously evaluate the opportunities for the network to generate IP and other innovations, delegated to the Commercialisation and Durability activity (SA3.3) and the DEC committee (see below). This will be undertaken for both tangible and intangible assets and will involve assessing the aims, milestones and deliverables of the network and determining where the greatest potential to produce information with commercial value will occur.

Preliminary screening of existing protocols, software applications, databank systems and new Know-How through patent office databases will reveal where the generated databanks and software can be protected. Following identification of these points, a real time analysis of the output progress by the DEC using information as provided in the knowledge management framework will permit the rapid deposition of patents and copyrights. Until such time as the Community patent legislation is passed, all scientific information will be submitted as European patent. This will enable the scientists to prepare technical and generic publications for public dissemination, simultaneously with patent protection. The competitive edge of the network both scientifically and commercially will therefore be enhanced.

Following appropriate measures to ensure that all possible tasks have been done for patent submission if necessary, the databank and/or software will be made available outside of the consortia. All the responsible scientific personnel will perform this. Depending on the context of the information generated, seminars, workshops and training courses in the universities of the participants will also serve as important vehicles for information transfer.

Overseeing gender, ethics, and science & society issues

The actions performed by the project to promote gender equality mostly by the appropriate and timely use of the knowledge management tools (web site, newsletter) will be closely monitored. The specific plan is described elsewhere in this document.

The SMB will also closely monitor the actions to promote gender equality (see section SA3.4) mostly by the adequate and timely use of the knowledge management tools (e.g. website, monthly newsletters). The ultimate goal is to ensure that these actions result in progress on the gender equality within the network (mostly as regards to the extra efforts performed by the SMB to recruit more women in senior positions, e.g. GC, UAA, SMB, RP L & WP-L).

The action plan for the promotion of gender equality (as described in 6.7) will be implemented in two stages; the gender awareness step followed by the gender sensitisation step. The SMB will ensure that all relevant gender documents of the EC and other bodies, and gender institutional website links are effectively available, and up to date, on the EuroFir website. It will co-ordinate the gender sensitisation programme (e.g. website announcement, twice a year publication in the monthly newsletter of any news or testimonials on gender equality). The gender equality annual report and audit (see SA3.4) will be based on the analysis of the completed "sensitisation programme" feedback documents and on the gender equality evolution within the network (e.g. assessment of gender equality in the training sessions, in personal training exchanges programmes, and evolution of the gender equality in senior network positions.

The science and society issues related to food composition awareness, and public health nutrition, will be closely monitored by maintaining a yearly updated feedback from the general public on the awareness of the results of the network.

MA4.1: Network Management and Coordination

Responsible: IFR

Duration & Tasks: M1-60+

On-going activities (M01-M60+);

Preparation [M(-3)-M09];

Infrastructure rollout, testing and development (M6-M24);

Critical mass loading (M12-M36);

Pilot exploitation and observation (M9-M42);

Validation, adjustment & corrections (M18-M45)

Exploitation, promotion & expansion (M36-M60);

Autonomy & growth (M60+).

<u>Deliverables</u>:

- 1. Management Handbook
- 2. Contractual reports to the EU
- 3. Internal reports
- 4. IPR arrangements

Indicators: Performance of all tasks in due time; audits by project management subcontractor.

Resources needed: A total of 7% of the budget for management structure and management office.

6.B Plans

All plans will be updated annually as part of the annual reporting to the Commission.

6.5 Plan for using and disseminating knowledge

The network will be underpinned by a robust and well-established web-based e-community software platform, provided by Baigent Ltd, which will be a powerful tool both to support interactive working between the teams involved and in the spreading of excellence via dissemination, communication and networking activities both within the network, and to teams external to the network. Furthermore, this software enables members to connect with existing relevant pan-European food research and information networks.

Overall EuroFIR will:

- 1. Identify key stakeholders (by type and identity) needing information from EuroFIR, establish contact and develop relationships
- 2. Establish key areas of interest for different stakeholder groups
- 3. Establish levels of knowledge and understanding for 2 (including, for citizens, the baseline audit)
- 4. Identify key research leaders within EuroFIR and elsewhere, share information on the above 1, 2 and 3 with them and encouraging all of them to address the stakeholder community
- 5. Recruit scientific experts and scientist-communicators from to assist with knowledge dissemination
- 6. Having established the preferred ways in which information can be received by the community, and the key areas of interest, address these within the communication strategies of EuroFIR to 'match' the stakeholders' pull with the science push
- 7. Use SA3.2 active team members to coordinate the cascade of information
- 8. Keep in contact with food composition databank research leaders to maximise the speed of transmission of quality information into the public domain, subject to peer review

Within the network: Network members, through secure password access, will be able to:

- Utilise the communication tools to contact and interact with individuals, centres of excellence or groups within the network.

 These tools will facilitate the interactive working between the teams involved and will provide the platform for information sharing.
- View and upload documents held within the central repository, which is fundamental to the management of the flow of knowledge and to the management of the knowledge portfolio. The repository has a flexible and effective filing system, which is easily searchable. Quick and unheeded access to the knowledge generated will engender the successful dissemination of knowledge and, as a result, the exploitation of results generated within the network.
- Participate in special interest groups and forums within the network and post up entries and view the events diary, which will provide details of the activities of the network.
- Connect with food technology research and information networks already in existence within the members' centres of excellence.

<u>Outside the network:</u> The e-community platform allows the progressive growth of an external community who will, after registration, have access to areas of the knowledge portfolio as deemed appropriate by the EuroFIR's Scientific Executive and Dissemination & Exploitation Committee. Individuals and teams external to the network will be able to:

- View the EuroFIR website (<u>www.eurofir.net</u>) with bulletins, newsletters, interactive sites, expert advice and a media interface:
- Register their interest and obtain a password to allow access to sections of the knowledge portfolio which has been assessed as ready for dissemination to teams outside the network;
- Join and participate in special interest groups within the network;
- Receive alerts and information on the networking, dissemination and communicating activities to help transfer knowledge to teams external to the network;
- Receive information and participate in the demonstration, take up and training activities of EuroFIR.

At regular intervals, the EuroFIR website will be updated with:

All abstracts of the scientific publications recently published:

- If possible, and depending on copyright agreements, the full length of the publications;
- Review of articles published;
- All the abstracts of the posters and free communications presented to meetings and symposia;
- Summary of EuroFIR activities.

<u>Scientific publication of research results from the network</u> - The executive editor of Trends in Food Science and Technology, one of the two official journals of EFFoST, is the coordinator of EuroFIR. The journal currently includes EU news in each of its monthly issues. The description of the EuroFIR NOE will be presented, and at regular intervals, the information concerning the JPA will be published. All scientific results from the joint research projects will be published in peer-reviewed international journals.

In the contracts with the core partners and members, it will be included that the network must always be acknowledged. In addition, all publications regarding activities of EuroFIR will include the following acknowledgement: "This study is part of EuroFIR (European Food Information Resource Network) and is funded by the 6th FP Food Quality and Safety" and "EuroFIR" will be one of the key words listed at the beginning of the paper. An EuroFIR award will be given to the best published paper of the year by a committee chaired by the coordinator but with a majority of non-EuroFIR members.

Any disputes over publications (ie one or more partners object to an aspect of any publication) will be dealt with in the Consortium Agreement.

<u>EuroFIR Disclaimer</u>: It should noted that any notice or publication by the EuroFIR contractors, in whatever form, and on, or by whatever medium, will specify that it reflects only the authors' views and that the Community is not liable for any use that may be made of the information contained therein.

<u>Dissemination and translation of research to the policy makers</u> - One of the major objectives of EuroFIR is to assist the EU and national policy makers to make recommendations for new directives on food labelling from the knowledge of its interaction of food composition data and public health nutrition, and a reduction in diet-related chronic diseases in Europe. The problem requires an integrated approach that can best be proposed by the NOE, which will be able to:

- Propose tools and guidelines to policy makers;
- Help policy makers with policies and directives on healthy eating and optimal health;
- Rapidly provide expert opinion to policy makers (EU and national) on any questions raised in the field of food composition and public health nutrition.

In this way, dissemination will continue after the lifetime of the network through the various established routes including the website. Resources for these activities will form part of the business and marketing plan that will be developed in SA3.3.

The final report on the plan for using and disseminating knowledge will be included in the overall final report of the network.

Monitoring and evaluation of feedback from users and stakeholders

Feedback from the various users and stakeholders (SA3.2, 6.5 & 6.7) will measured in a number of ways including:

- Regular feedback and comments from the Users & Advisory Group (UAG, Table 6.4.2, Annex 1) and also the bioactive advisory group (see WP2.4) will be collated and evaluated by the SMB at regular intervals (WP2.4);
- Messages and comments through the public side of the EuroFIR website including monitoring email alerts from various non-EuroFIR users will be collated and evaluated by the SMB at regular intervals (WP2.4);
- Feedback from the stakeholder workshops planned for WP2.1 (see deliverables D2.1.1-D2.13), and network consultations
 and review of comparable services for WP3.3 (see D3.3.2) during months 13-30 will be assessed by the SMB at the
 appropriate time);
- The review of dissemination and feedback from stakeholders is given as Milestone M3.26 (WP3.2) and an audit by an
 external SME will also be conducted (M15-18) into the "dissemination effectiveness and awareness" including stakeholder
 feedback (see D3.2.6, M18).

6.6 Gender Action Plan

EuroFIR will contribute to the promotion of gender equality through a number of actions and activities. Our action plan constitutes practical measures that can be readily audited and that are designed to permeate the network and not be limited to individual partners or work packages. Each work package will include in its final reporting a paragraph on progress made in the implementation of the gender action plan, assess its impact and formulate recommendations.

6.6.1 Special action to bring more women into the project

The SMB is already composed of an almost equal number of male and female members. It will promote the participation of women at all levels of the senior management structure. At the start of EuroFIR, 46% of WP-Ls are women. The enduring nature of the proposed integration will inevitably result in a turn-over of both WPs and WP co-ordinators. The Network Board will promote women at this level of activity to maintain their contribution to 50%.

• Women are already well represented at the level of the number of registered doctoral students (43/57) and researchers (74/130), figures from the current A3 forms.

6.6.2 Linking with networks of women scientists within the field of the project

The dissemination WP will ensure that networks of women researchers [e.g. 'The Women in Life Sciences' initiative centred at the Karolinska Institute] are well publicised within EuroFIR. Women participants will be encouraged to attend, contribute to, and report on events through internal and external communication routes. Financial support for this activity is provided via the budget for SA3.4.

These activities are aimed at confidence building, support and provision of role models for women researchers currently acting in support roles. A 'paper' on these initiatives will be invited from women participants for auditing and Quality Assurance purposes.

6.6.3 Linking with schools and universities to trigger the interests of women in the project

In the UK there are several initiatives that aim to enhance science in schools. This includes various teacher-scientist networks whose mission is to

- > Support the involvement of the local science community in science education;
- encourage activities of mutual benefit to both scientific and educational communities;
- provide support, advice and resources to the teachers and scientists involved in each Network;
- review and update activities in accordance with the changing needs of the network's members.

Undoubtedly similar networks exist across Europe, albeit in different forms in different countries and these will be identified. The spreading of excellence in EuroFIR will then incorporate targeting of information to young people through such networks with regards such issues relating to:

- Women and men have different susceptibility to diet-related diseases.
- Women and men often have different acute and chronic responses to nutrients.
- Women have different motivations with regard to their own, and their families, nutrition.
- Women and men process nutrition information differently and attend to different elements of dietary advice.
- Women and men often have different barriers to effecting behaviour change.

It is becoming increasingly apparent that it is crucial to develop <u>targeted</u> information on nutrient requirements specifically, and diet and health in general, based on individual needs, of which <u>gender is a major category</u>. We will encourage the use of pictures and news of ethnic minority and/or women scientists engaged in the research (rather than relying always on the 'white Caucasian male'). The focus of EuroFIR is the <u>creation of an information resource</u>. The exploitation and dissemination activities of the resource will require the consideration of gender. Existing gender impact assessment protocols will be adapted. As part of the inaugural meeting, baseline information on probable gender-specific uses of the food information resource will be identified. This will be

followed up with in-depth interviews with team leaders with responsibility for dissemination, and with key stakeholders who will use the resource.

6.6.4 Review/audit/monitor gender dimension of project

A representative from an established, independent network (such as the 'Women in Life Sciences' initiative) may be commissioned to provide an assessment of the conduct of EuroFIR with regard to gender issues. The assessment will be fed back internally and externally for audit and QA purposes. Also, the network on gender issues offered by the Commission will be of use here.

The final report on the gender action plan will be included in the overall final report of the network.

6.7 Raising public participation and awareness

Bearing in mind that European Member States have asked for an open dialogue between **Science and Society**, EuroFIR wishes to create a platform on which different views are expressed and respected on the basis of the best scientific facts and risks.

The Science and Society activities will facilitate spreading of excellence by:

- ldentification of, and regular co-programming and harmonising partners' research activities in the field of food composition, and public health nutrition, and society in order to pull together the activities in these fields leading to collaboration and divisions of labour depending on available expertise and local and European research needs in this field;
- ➤ Link this topic from within EuroFIR to outside groups and programmes in this particular field.
- Design and implementation of participatory procedures for informed debates with consumers (organisations), industry (organisations) and other stakeholders on specific issues of concern and of priorities in these fields. The debates are organised in order to identify key concerns and issues of trust and to discuss them in order to identify needs and benefits that could be provided by research or consumer products of food composition research (see RA2.1 & SA3.3). Selection of procedures (e.g. consensus conferences, citizen's juries, focus groups, joint fact finding sessions, future conditioning and public meetings) should be made carefully depending on the specific goals of the debate.
- Joint interactive foresight workshops with food and nutritional scientists in and outside the network, representatives from industry, consumer organisations, the public and health professionals and policymakers to discuss future scientific and technological developments in these field and their social, economic, legal and ethical aspects. Communicate this to policy makers in research and industry.
- Formation of a European stimulating education environment for new students and young researchers in the field of "Food Composition, Public Health Nutrition and Society'. Organise meeting place where researchers and students can present their findings. Create possibility for group-publications in this field of existing journals.

EuroFIR will conduct media campaigns and support to promote the use of food composition data for food labelling and healthy eating campaigns. The results of the research will make it possible to expand public awareness and greater use of food composition data. This will be done by:

- Regular press releases to news agencies regarding food composition data, food labelling and public health nutrition.
- The provision of material for information campaigns to all partners to be translated into national languages;
- The provision of electronic material to the media from the Website to be freely used provided the copyright to EuroFIR and its Internet address is mentioned. A regular update of the EuroFIR materials will be made available.
- A major annual campaign will be devoted to the most important research findings of the NOE. It will be decided in consultation with the Advisory Body and Governing Council.

The final report on raising public participation and awareness will be included in the overall final report of the network.

6.C Milestones

6.8 Major Milestones over full duration of the action

Milestone (month)

Year 1:

- Zero benchmarking of performance indicators (M0)
- Joint Research objectives established for the defined research areas and WP teams established (M3)
- New research areas of interest identified (M3-18)
- Internal communication optimised to adequate extent (M6)
- Submit list of six expert names to the Commission for review at 18-22 months (M6)
- Formalised peer-review process for dissemination (M6)
- Expert group for innovation monitoring and evaluation and co-ordination of standardisation efforts established (M6)
- Industrial communication platform established (M9)
- Best Practice and Quality Assurance established through standard operating procedure manual (M12)
- First national/international communication activities launched (M12)

Year 2:

- Effective platform technology sharing procedure and dissemination of established expertise established (M15)
- EuroFIR databank systems established for nutrients (M12-18)
- Plan for databank enhancement for food-derived contaminants agreed (M12)
- Initiation of audits and PT schemes (M18).
- E-learning modules in use (M15)
- SME-involvement reaches 15% of annual budget (M15).
- Extensive PhD-exchange programmes among partners (>20% of annual Research budget).
- Formal, measurable outreach work underway with stakeholder groups (M15)
- Self-auditing process in place for all partners (M15)
- First external review of prototype databank system by UAG/nominated experts with "GO/NO GO" decision (M18-22)

Year 3:

- New research topic added to joint research activities
- EuroFIR databank systems established for bioactive compounds.
- Facility sharing implemented
- Plan for self-sustainability
- Preparatory work for mid-term review completed
- Intensive contact with European Food and Nutrition Industry.
- Integration of independent e-learning modules into one high quality e-learning course
- Joint PhD-programmes and appointments among partners
- Staff exchange fully established
- Overall project budgeting system in operation
- Open food database society is shaped around core EuroFIR activities
- Extensive public website linked to major stakeholders, and communicator intermediaries using major European languages

Year 4:

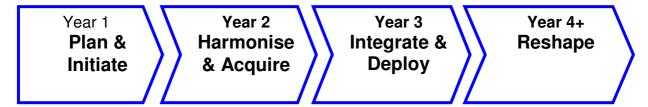
- Mid-term review completed and agreement reached with partners/commission on modifications brought up by this
 mid-term review.
- Contribution at national science meetings in partner countries spun off and undertaken without the need for central
 coordination.
- Measured awareness of food composition and public health issues raised amongst stakeholder audiences.

Year 5:

- EuroFIR is independent of EU-grant
- EuroFIR functions as core databank systems of European food composition databases.
- Annual EuroFIR is a continuing global key event.
- EuroFIR cascade is recognised as lead information source for all aspects of food composition information.

7. Quality of integration and performance indicators

By restructuring facilities and harmonising research programmes, the EuroFIR partners aim at integrating their efforts on food composition databanks. The indicators for the process of integration are foremost described as the milestones set for the work packages. These will be formally assessed at first instance by the SMB and also by the GC. This will provide insight in the progress of shaping of EuroFIR. Assessment of integration will therefore be an integrated part of annual progress evaluation. Integration will be made an integral part of the system of self-auditing/self-evaluation that will be introduced for all partners. This task will be taken up by the respective EuroFIR WP-Ls. Due to the progressive nature of the integration, the indicators of integration will change over the 5 years. An initial plan is set out below:



Year one - Plan & Initiate

- Get to know each other better
- Integrate current knowledge and practices
- Start harmonisation of database infrastructure & standards
- Discuss and define the framework of databases
- Initiate bids for network funding of joint research activities & training networks

Year two - Harmonise & Acquire

- Start using same tools and software
- Establish & test prototype database
- Start exchange of researchers
- Define SOPs/QA for sampling & analysis
- Acquire new data on key foods & components
- Initiate & establish contacts with national funding bodies to acquire additional funding
- Influence policy on European research direction*

Year three - integrate and collaborate

- Extend, link & evaluate databases
- Dissemination activities
- Reassessment of network partnership
- New research topics between partners
- Establish firm links to other IPs/NOEs (see Section 12)

Year 4 onwards- reshape

- Integrated national & other funding into JPA
- Common training & technology platform
- Agree sustainability strategy

Therefore, indicators of integration (in quantity and in quality) are determined and may be adjusted on an annual basis by the SMB and will be monitored and modified as necessary using the modified Balance Score Card below. Qualitative and quantitative targets have been proposed below and will be finalised immediately after the start of EuroFIR. A zero measurement will be done in early 2005 for the indicators as listed below. Quality of integration will be reported per work package, a bonus system will be set up for those work packages with the highest scores. Performance indicators will be closely monitored by the project co-ordinator and the PMO to ensure that adequate funding and attention within EuroFIR network is given to this topic.

^{*}Measures to be developed by IA1.2 & SMB.

7.1 Balance score card (BSC)

In order to successfully manage the integration of its partners and members, EuroFIR will use an adapted version of the Management technique called "Balance Score Card" (BSC). The BSC is more than a tactical or operational measurement system. We are using the measurement focus of the BSC to accomplish critical management processes as follows:

- Clarify and translate vision and strategy;
- Communicate and link strategic objectives and measures;
- Plan, set targets, align strategic initiatives;
- Enhance strategic feedback and learning.

It is a novel approach to apply Business Techniques to a research NOE. However, the basic principles of the BSC have to be adapted for the EuroFIR NOE. The four perspectives on which the BSC is based are Financial, Customer, Internal Business Process, and Learning and Growth. The <u>Customer in this setting is understood</u> to be the <u>community of researchers as well as the other stakeholders in the field of food composition and public health nutrition.</u>

The NOE is a tool to reduce fragmentation of the research in Europe and so, it is at the services of the Researchers to put in common their Knowledge but also their tools and even exchange tools and expertises from one centre to the other. Thus, the traditional BSC strategic framework view for Action is modified as shown in the following figure.

BSC Strategic Framework for EuroFIR:



For example, this approach can be used to measure how EuroFIR will continue beyond the financial support given by the EU in the following table:

yet offered in the NOE and approach

possible sources/ service providers.

from common

exchange tools.

research projects (WPs) with

Objective	Measures	Target	Actions
Establishment of a common nutrient and bioactive databank for Europe	(1) Number of tools/outputs provided by each partner.(2) Number of tools/outputs exchanged between the partners.	In the first five years, each core partner should provide at least FIVE tools/outputs.	(1) The Coordinator will actively approach partners who are either not offering, or not using tools in exchange.
	(3) Number of publications derived from common		(2) The Network Manager (PMO) will actively find out the demand for tools not

In the JPA, EuroFIR will design, develop and operate an information and communication system where these measurements will be captured, stored and monitored. The following table gives details of the quantitative performance indicators for measuring integration:

Objectives	Measures
EuroFIR impact	Growth of the number of EuroFIR conferences. Capability of EuroFIR annual network meeting/conference to attract external attendants from Europe and beyond. Growth of the number of hits on EuroFIR website Growth of Citation Index/Impact Factor of EuroFIR papers on Medline. Number of EuroFIR member researchers actively involved in the discussions about shaping the EuroFIR JPA. Number of registered collaborating centres and individual researchers Number of requests from potentially new core partner institutes. Citations in the Media. Advice given to policy stakeholders Interest expressed by non-European national database compilers & other organisations.
Dependence/independence of EU Funding	Interest of national funding bodies in EuroFIR's joint research and integration projects. Increase of non-EU funding with special attention to joint contracts with centres of knowledge transfer and commercial food composition database suppliers External Funding for the coordination of joint research activities.
Gender Equality	Ratio M/F researchers working in EuroFIR. % Women in senior management roles within EuroFIR.
SME involvement	Number of contacts made with SMEs. Number of SMEs as EuroFIR partners Number of new SMEs joining the consortium. Number of "spin-off" SMEs.
Involvement of Associated Candidate countries and interest from institutions outside Europe	Interest from individual scientists from associated candidate countries in joint research Interest from individual scientists from associated candidate countries in training activities. Institutional interest in EuroFIR, not necessarily with the aim to obtain full partnership. Institutional interest in EuroFIR from outside Europe. Ratio of EuroFIR funding (as % total budget) allocated to partners from associate candidate countries compared to member states.

Specific integration	Number of joint publications from EuroFIR partners.
parameters	Increase of joint publications and their IF/CI from EuroFIR partners.
	Number of joint PhD exchanges between EuroFIR partners.
	Number and extent of exchange visits between EuroFIR partners.
	Number of exchange researchers and students within EuroFIR.
	Number of certified centres for analysis.
	Number and extent of joint grants or funding between EuroFIR partners.
	Quantitative assessment of the use of the EuroFIR database, in terms of amount of data entered.
	Quantitative assessment of the use of the EuroFIR database in terms of amount of data used.
	Volume of the financial input of the partners for integrating activities
	Number of training courses supported by EuroFIR for members
	Number of training courses supported by EuroFIR for non-members
	Impact of EuroFIR training activities (e.g. number of external attendants)
	Number of scientific conferences in which by specific presentations or parallel sessions attention will be given to EuroFIR.
	Number of international/national science 'events' where EuroFIR activity features
	Number of activities carried out within the NOE but not paid from the grant
	Frequency of the use of equipment/facilities of another participant
	Number of joint patents by EuroFIR partners.
	Number and size of networked nutrient and bioactive databases.
	Number and size of EuroFIR online databank systems.
	Number of hits on Extranet.
	Growth in the number of attendees to conferences and training courses supported by EuroFIR

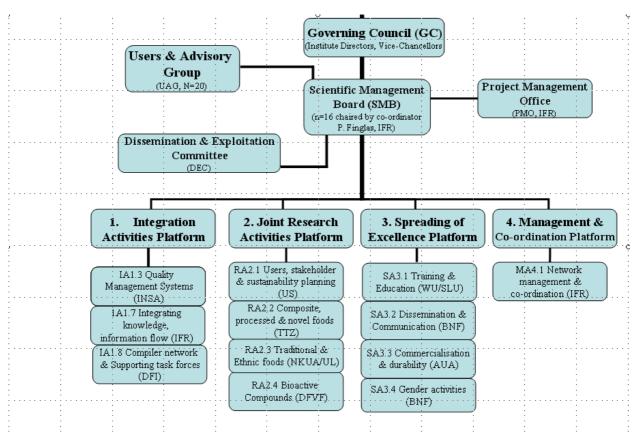
The above indicators will be monitored over the duration of the project for each partner. The Coordinator and PMO will collate all the above indicators into an "overall performance indicator for integration" for each partner. This information will be used to assess the performance of each partner over the course of the project. It will also be used as a basis for making recommendations to individual partners where performance needs to be improved. Full details will be given in the Consortium Agreement.

8. Project organisation, management and governance structure

8.1 EuroFIR Network Organisation Structure

The EuroFIR organisational structure during the period funded by the European Commission is presented in the scheme below, with the work packages programmed for the first 18 month period. Other work packages will be established in due course, but the general structure in grouping them into four main activities will be maintained (Joint Research, Integration, Spreading Excellence and Management). The proposed organisation scheme for EuroFIR is given in the following figure.

EuroFIR's Organisational Scheme (updated):



Flexibility and transparency are key factors to all professional management of large research enterprises. The Management Structure will take into account the following key objectives:

- To stay at every stage transparent and flexible;
- To keep the structure as light as possible taking into account the inherent complexity of such a NOE;
- To implement the two new funding principles of FP6: Autonomy and Joint Liability;
- To provide working procedures offering full transparency for the participants;
- To maintain a centralised and coordinated control of the entire NOE and simultaneously stimulate synergy and integration.

The model used for EuroFIR is based on the above objectives and has been adopted and adapted from successful past EU projects. The NOE consists of SEVEN management bodies:

- Governing Council (GC);
- Scientific and Network Management Board (SMB);
- Project Coordinator (The head of the SMB also assumes these responsibilities);
- Project Management Office (PMO);
- Dissemination and Exploitation Committee (DEC);

- Users and Advisory Group (UAG);
- Workpackage Leaders (WP-L).

The network's project management will be audited in the Year 2 by an external consultant and their report will include any recommendations for improvements. The report will be submitted to the SMB and GC.

(a) NOE Management Body 1: Governing Council (GC)

The highest decision-making authority within the NOE will be the GC consisting of senior level representatives of the legal entities (core contractors) participating in the NOE and chaired by the Director of IFR (or his nominated deputy). Each partner has a vote on the GC. The composition of the GC can vary as a consequence of incoming or leaving participants. By its position and role this GC guarantees the involvement of all partners. The number of council members will be at least two-thirds of the total number of the core contractors at any time. The GC will meet annually. The head of the SMB and a representative of the PMO shall attend meetings in an advisory capacity.

The GC is the Consortium's decision-making arbitration body and shall decide on the following key matters:

- Regularly reviewing the strategic thrust, mission and political orientation of the NOE;
- Regularly reviewing the Consortium's "JPA" and "Plan of Use and Dissemination" based on the recommendations of the SMB:
- Regularly reviewing the Consortium's budget and the financial allocation of the EU's contribution based on the recommendations of the SMB;
- Acceptance of actual expenditure incurred in accordance with allocations agreed within the budget as set out by the SMB;
- Modifications to the "JPA", including any decisions to abandon a research programme, or to reduce the budget allocated
 to it, based on recommendations of the SMB;
- The inclusions of any new partners.

(b) NOE Management Body 2: Scientific and Network Management Board (SMB)

The NOE will be monitored by a high level Scientific and Network Management Board, comprising of around ten senior researchers from the core partners. The head of the SMB will be designated as IFR, and represented by Paul Finglas (the project coordinator too). He has been appointed as the prospective head of the SMB and will set the agenda for all meetings as well as chair them.

The SMB will meet every SIX months at different centres of the board. The head of the SMB will be responsible for the drafting of the minutes of each meeting to formalise in writing all decisions taken and shall circulate them to all board members following each meeting. Its role will be to make recommendations to the GC regarding the scientific and managerial orientation of the project as follows:

Concerning the JPA:

- Prepare the JPA;
- Make progress reports on the state of advancement of the NOE;
- Establish the NOE deliverables for the Commission;
- Propose the NOE's budget as well as the allocation of funding between the core contractors.

Concerning the entry of new contractors and exclusion of existing contractors:

- Implement the competitive selection procedures for any new contractors with the assistance of the PMO:
- Propose any exclusion or withdrawal of existing contractors to the GC.

Concerning Intellectual Property:

- Where the contractors have not themselves identified such action, make recommendations on licensing projects pursuant to the items of Article 9 "Intellectual Property Rights";
- Make recommendations on terms and conditions of access to Knowledge and Pre-Existing Know-How by subsidiaries and affiliates not listed prior to the signature of the EC contract;
- Give instructions to the PMO concerning the management of any NOE knowledge portfolio upon consultation of the DEC;
- In collaboration with the DEC, ensure, review and authorize completed publications and communications in connection with their industrial protection, defence and valorisation as appropriate.

Concerning project monitoring:

- Make recommendations to the GC to suspend all, or part of the JPA, or to terminate all, or part of the EC contract;
- Make recommendations to the GC to request the EC to terminate the participation of one or more contractors.

(c) NOE Management Body 3: Project Coordinator

The position of the Coordinator is identified as Institute of Food Research (IFR) and is represented by Paul Finglas. The tasks of the Co-ordinator are specified in the contract between the consortium and the Commission, the Consortium Agreement, and are also briefly described as follows:

- Communicate all information in connection with the NOE to the Commission;
- Receive the entire financial contribution from the Commission and will manage this contribution by allocating it to the core Contractors pursuant to the agreed "JPA" and the decisions taken by the appropriate Committees/bodies of the network:
- Prepare the annual accounts such that it is possible to inform them of the distribution of funds among the Contractors, specifically the amounts allocated and the dates of payment to each Contractor;
- Ensure the signature of the Consortium Agreement and EC Contract;
- Prepare for the SMB the network deliverables and milestones based on the progress reports, the supporting documents and audit certificates to be provided to the Coordinator by the Contractors;
- Address the network deliverables to the Commission, after prior validation by the SMB and GC;
- Head the Project Management Office (PMO)...

(d) NOE Management Body 4: Project Management Office (PMO)

The PMO supports the SMB and GC within the network and is headed by the Project Coordinator above. The project manager will be Dawn Wright (IFR) and she will attend SMB, GC and other network meetings as required by the Coordinator. The PMO also supports the Co-ordinator for the day-to-day management as follows:

- Manage the administrative, legal, financial and other aspects of the NOE;
- Assist the Coordinator with the scientific steering of the NOE (follow-up of planning schedule, issue reminders for task initiation or completion);
- Assist the Coordinator in preparing NOE deliverables and milestones;
- Assist the SMB in implementing the competitive selection procedure for new contractors;
- Provide the secretariat of the SMB and GC.

The PMO will be based at the Institute of Food Research and will be staffed as follows (with estimated person times):

- Network/project manager (60%)
- Financial officers (ca50%)
- Contracts/Legal officer (10%)
- Secretarial and support staff (100%)
- Communications support (5%).

(e) NOE Management Body 5: Workpackage Leaders (WP-L)

Each WP will be led (or co-led for some more complex WPs) by Workpackage Leaders. Each WP-L will manage and coordinate the day-to-day activities of their respective WPs and their tasks will include:

- Providing sufficient and appropriate information on the progress to the Coordinator or SMB on request;
- Responsible for any financial budgets as agreed by the SMB;
- Co-operating with the coordinator and SMB to ensure that key milestones and deliverables are achieved on target and materials for reports and dissemination activities are supplied to the agreed timescales.

(f) NOE Management Body 6: Dissemination and Exploitation Committee (DEC)

The DEC is composed of a maximum of TWO representatives per Research and Actions Platform and its head will be appointed by the Head of the SMB, and will meet every SIX months. The role of the DEC is to:

- Propose to the SMB the updating of the Pre-Existing Know-How list;
- Establishing and reviewing the Plan for Use and Dissemination of the NOE to be submitted to the SMB and GC;
- Identify knowledge that could be the subject matter of protection, use or dissemination by decision of the SMB, or individual contractors, based on proposed publications and activity and/or progress reports issued by the WP contributors;
- Assist the SMB in the implementation of measures in connection with publications, the protection of Knowledge and their dissemination.

(g) NOE Management Body 7: Users and Advisory Group (UAG)

The UAG is composed of outside experts recognised for their expertise in the field of the NOE, appointed by the GC and may be based on recommendations of the SMB, and will determine their number for the duration of the Consortium Agreement. The heads of the SMB and DEC shall attend meetings in an advisory capacity. The UAG shall meet at least once a year and its main role is to:

- Advise the GC on NOE orientations and the implementation of its mission to spread excellence in Europe;
- Evaluate the JPA of the NOE as well as results obtained;
- Be consulted by the GC on any scientific issues;
- Make any proposal or transmit any information it deems useful to the GC.

A special function is assigned here for Stakeholders Debates. The head of the DEC will also be assigned the role of managing debates between users, Advisors and the GC members.

8.2 Decision-making process

The final decision-making body is the Governing Council. All decisions made derive directly or indirectly from this Council. As the final decision-making body the Governing Council is responsible for:

- Approving the scientific and financial annual report.
- 2. Approving the work plan and the budget for the next year.
- 3. Beyond the work plan all strategic issues.
- 4. Settling disputes.
- 5. Admitting new members to the Network.

The Governing Council takes decisions according to the principle of a majority of two thirds of the votes, exceptions are properly described in the Consortium Agreement. The Governing Council delegates the tasks of the Co-ordinator as specified in the contract between the Co-ordinator and the Commission to the PMO.

Within the SMB, the day-to-day management, including the financial administration, is entrusted to the Co-ordinator.

The above mentioned procedures and systems will be elaborated in a manual based upon the consortium agreement. This manual will present the procedures for defining and monitoring procedures, milestones and deliverables. This approach aims to implement quality assurance on all levels in the Network organisational structure and in all decision-making mechanisms. As a consequence procedures will be developed and implemented for financial, administrative and technical/scientific reporting, assessment of the degree of integration, tenders for admitting new participating parties and network exit. Specific attention will be paid to IPR and other innovations.

The Project Information and Quality System (PIQS) is a project management methodology orientated to quality and based on the Project Management Institute "Project Management Body of Knowledge" approach, as well as on ISO 10006 guidelines. It has been used in the management of several EU RTD projects, as well as industrial ones. A project-tracking tool combining MS-Project and other MS-Office components supports the methodology. The procedures and systems are supported by a web based information system.

Four management levels (administrative, financial, operational and risk management) will be used to assist the decision-making process:

8.2.1 Administrative management

(a) Reporting

In order to guarantee the transparency of the NOE management, all reports will be available on the EuroFIR website. Only documents or parts of documents concerning individuals will be kept confidential to members of the SMB and GC only.

Reporting to the Commission – Contractually, regular management and financial reports will be submitted to the Commission. The PMO will prepare the draft of all reports in due time and submit them to the SMB for approval.

Internal Reporting – In order to keep the NOE under control, each organisation participating in the NOE will submit to the PMO a full progress report as agreed. From its side, the PMO will publish monthly on the EuroFIR website a "notice board" of the status of each report and a summary of the NOE progress.

(b) Quality Assurance

The QA/QC will include the review and acceptance of the all deliverables and milestones in the NOE, and also all activities to control the progress of the NOE. A suitable qualified QA expert will be employed by the PMO for this purpose. The procedures for the control of the quality of the deliverables and milestones will be agreed by the SMB. When a deliverable or milestone is ready for review, details will be forwarded to the PMO, which will check its structure and format. It will then be sent to the designated person(s) designated as reviewers of this deliverable. For major deliverables, a panel of external experts will be appointed as reviewers. The reviewers' reports will be collected, collated and distributed to the Coordinator and SMB for approval. The SMB can request changes to be made prior to approval.

8.2.2 Financial management

Budgets - The budgets and advance payments will be distributed according to the provisions of the Consortium Agreement and the decisions of the GC and SMB. Budget forecasts will be established by the PMO in order to allow the SMB to make the most appropriate decisions.

Control - The information on participants' expenses will be gathered by the PMO and contractual financial audits will be followed-up regularly for each core partner.

Accounting - The PMO may carry out a 6-monthly analysis per partner and per WP of the consolidated information received by the core contractors.

Reporting – In addition to the annual financial report to the Commission, the PMO may issue a 6-monthly finance report describing the financial status and budget forecasts that will be distributed to the SMB and be available on the Intranet. The contractual financial and cost statements will be prepared by the PMO.

8.2.3 Operational network management

The Network organisational structure and decision-making mechanisms will evolve according to the needs of the degree of integration of the Network. This also refers to the duration of the Network beyond the period funded by the Commission. A Consortium Agreement will be signed before concluding the contract with the Commission. The first formal SMB/WP-L meeting will be organised for 11-12th January 2005 in Delft. This 'kick-off' meeting will elaborate the activities and deliverables for the first 18 months. The monitoring of the agreed activities and deliverables is supported by Gantt and Pert schemes.

The table below summarises some key players and aspects of the task organisation and management:

Objectives	Proper organisational structure and decision mechanisms, tasks of sub-projects, UAG, DEC
	, ,
Period	First and second year
Prepared by	SMB
Decided upon by	GC
Refers to	Day-to-day-management, management scheme, preparing decisions by the GC, new participating parties.
Quality assessment	Meeting quality indicators and deadlines

Besides the common exchange of information, quality assessment and monitoring of progress by personal contact and the web based management communication support system will be crucial. The communication flows can be presented as follows:

Organisation body	Frequency	Deliverables
Within Co-ordinator and PMO	daily	day-to-day management
Within SMB	weekly	day-to-day management
WP-L to Co-ordinator & PMO	every three months	activity reports (update, progress and problems)
SMB to Governing Council	every six months	scientific and financial progress reports
Co-ordinator to European Commission	annual	annual scientific and financial progress report
Participating parties to Co-ordinator & PMO	annual	annual audit report
UAG	At request	Reports by independent experts
DEC	At request	Reports by members of platform

The operational coordination regroups all the tasks required to manage the NOE as an integrated tool. This set of activities will be undertaken by the Coordinator and PMO and is directly related to the JPA of the consortium as well as management structure, decision-making process and management arrangements. It will include the following tasks:

- Assessment of the progress of integration, and spreading of excellence activities, using the foreseen indicators and balance score card methodology (B.4.2);
- Monitoring progress of the network using the PIQS methodology tool;
- Management of the IT infrastructure and applications;
- Follow-up of the specific joint research activities;
- Follow-up of the infrastructure development activities subcontracted to third parties;
- Follow-up of the spreading of excellence activities:
- Subcontractors selection procedures;
- Measure the performance indicators and their progress;
- Report monthly to the SMB about the network status.

8.2.4 Risk management

The SMB is responsible for managing the risks of the NOE, in order to prevent any deviation from the plans. The PMO will assist in this task. At the start of the NOE, the following information will be collected from the consortium and will be subsequently used to update the initial identified risks and contingency plans listed in Table 1:

- Identification of "facts" or "events" which could jeopardise the correct functioning of the NOE;
- Evaluation of the likelihood of each risk (high, medium or low);
- Quantitative evaluation of the potential damage that each risk could create (in Euros);
- Ranking of the risks based on the above information;
- Identification of all the possible measures to decrease the likelihood or limit the damage of the most critical risks.

With the help of this information, the SMB will be able to make the most appropriate decisions. This information forms the basis of the information on potential risks and contingency plans given in the last column of Table 1 and will be regularly reviewed and updated with new measures adopted above.

8.3 Management of knowledge, intellectual property and other Innovations

Integrating a considerable number of active participating parties needs a clear and coherent policy for the management of knowledge, intellectual property rights and other innovations. Each participant contributes differently with regard to pre-existing know how, generated knowledge during the period funded by the Commission and beyond, allocated funds and efforts, procedures, systems, stakeholders and users. Recognising the need for top-quality scientists to publish research results and the public source of its funds EuroFIR will make all results of its joint programme of activities available for publication. Commercial interests of partners can lead to postponing publication for a grace period of six months. Section E of the Consortium Agreement covers all regulations with regard to Intellectual Property Rights including the guidelines for publication of results. Partners are free to patent results from research activities funded through EuroFIR taking into account article 30 from the Consortium Agreement

The DEC and SMB will closely manage and monitor network publications (see role above) and the PMO will manage the IPR database for each partner containing the following information:

- The pre-existing know-how (full details will be included in the Consortium Agreement);
- The know-how acquired during the NOE, but with other funding;
- The know-how resulting from the JPA.

This will allow for each activity to define the access of right of each participating organisations. The core partners will gather information about research results and initiate relations with industry in order to translate these results in innovative new food products, tools, methods or services. SMEs will be the privileged target, and the creation of "spin-off" companies by the participation will be promoted and supported by EuroFIR.

8.4 Additions of new partners to the network and the management structure

Guidelines to allow new network partners are provided in the Consortium Agreement. To ensure the realisation of the ambitions and success of EuroFIR, acquisition of new Network partners will be actively pursued by the Co-ordinator and SMB. Full details will be given in Appendix A.4. The process will commence when the Network has proven to be operational, i.e. the current partners have taken on the activities as planned during year 1. Criteria will be tailored to the type of partner. New partners' awareness of the activities of EuroFIR will be generated through contacts with founding partners and through participation in those activities of the Network which are open for non-founding partners from the start of the Network.

9. Detailed joint programme of activities (JPA) - months 13 - 30

9.1 Introduction – general description and milestones

This section describes in detail the JPA, which is planned for months 13-30. The aim for the first eighteen months is summarised as "setting the stage" and it is the phase of getting to know each other, making inventories of current practice and research, establishing the communication platform, start sharing current technologies and procedures, and laying the foundation for joint research, including by initiating shared PhD projects. The major deliverables for the first phase will be the publication of calls for new partners, identification of funding possibilities for joint research (e.g. other FP6 calls, various national and regional opportunities), harmonising current practice and protocols, laying the foundations for shared facilities and databanks systems, and establishing joint training programmes. Also, the dissemination concepts will be established throughout Europe, and communication with key stake holders in the relevant areas will be set up.

These generalities have been translated into 17 dedicated WPs, organised as the first major blocks of work of the corresponding activities. They are grouped in four horizontal platforms of WPs. The eight Integrating WPs (IA1.1-1.8) address Strategic Objective 1 (To identify, address and overcome technical changes) and aim at harmonising, stimulating and facilitating new technology, informatics and systems for common use. These will form the basis for the four Joint Research WPs (RA2.1-2.4), which address Strategic Objectives 2 & 3 (To identify and provide new information for missing data and foods, and to identify user and stakeholder requirements) aim at exploiting the technological and scientific developments relating to databank infrastructure and specifications in order to enhance the quality of food databank linking, coverage and management. The Spreading of Excellence WPs (SA3.1-3.4) address Strategic Objectives 4 & 5 (To spread excellence and enhance impact, and to identify socio-economic and sustainability impacts] build upon the acquired knowledge to share this with target user and stakeholder groups (researchers, industry, society, healthcare), and to establish long-term durability for the network. Lastly, the Management Workpackage (MA1) describe the coordinated activities to flexibly structure the Network, achieve and monitor integration, and the procedures for SME enrolment and participation.

Managing risks and identifying contingency plans for these

The assessment of the progress of EuroFIR primary functions through internal monitoring of achieved milestones and deliverables. The level of <u>detail of the milestones and deliverables as described</u> (>150 to be reached in the first 18 months) clearly indicates that the machinery for progress assessment is in place. Progress will be formerly measured every six months, during the SMB meetings. Major deviations in milestone delivery may cause a change of strategy for a WP or complete activity. Also, external development (see below), or new insights may cause adaptations in the JPA. In general, these will be discussed within daily management of EuroFIR (i.e. CO/PMO in consultation with WP leaders and teams). This may result in alternate strategies to reach the milestones or deliverables, or in rephrasing them. In case of major impact on the goals or objectives of the network, the GC will be consulted. Here, also a role of the Users and advisory Group (UAG) is envisaged. <u>The annual meeting of the GC is the focal point of regular strategic network planning</u>.

A major task for the management is the co-ordination of the fund/grant-raising for EuroFIR activities. Networking remains a theoretical exercise if the joint research activities and the maintenance of the network infrastructure are not financed. <u>The availability of new research funds and grant opportunity will guide the shaping timing of the various research activities</u>. This will be continuously monitored by the CO and SMB, and will be one of the drivers in the advice towards the GC.

The partnership of EuroFIR has been carefully established, based upon present expertise, excellence and vision. If however, during the course of the development of the network, it is deemed useful or necessary to change or extend the partnership, this will be achieved through open or closed calls, or specific invitation. The mechanism and rules of changing the partnership have been laid down (see Article 6: Change to the Consortium) and the Consortium Agreement. In the case of newly emerging technologies, the preferred way of expansion is to select, approach and include technology based SMEs.

Milestone List (13-30 months)

Milestone no Milestone title		Delivery/Ac hieve date	Nature	Dissemination level
M1.7.1	2 nd phase completed (training, publications/ documents & methods/QA inventories.	18*	0	RE
M1.7.2	3 rd phase completed (updated IT systems manual & portals for dissemination and communication activities).		0	RE
M1.1.5	Update/publish IT systems manual/review and update as necessary	18	R	RE
M1.2.5	Benchmarking of status of integration at month 12	15	0	RE
M1.2.6	Integrated JPA for 18-30	18	R	RE
M1.2.7	Initiate the development and submission of funding bids to national bodies.	18	R	RE
M1.2.8	2 nd phase completed including centre skills & training and publications/ documents.	18	R	RE
M1.3.3	Establish and disseminate standards and traceability links including QA criteria, quality index and conference code	14	0	PU
M1.3.4*	Criteria for lab selection & PT schemes initiated (1st round)*	18	0	RE
M1.3.5**	First meeting of Quality Task Force (Nantes)**	21**	R	RE
M1.3.6	Training programme for quality formulated & commenced	27	R	RE
M1.3.7	Updated manual on QMS launched	30	R	RE
M1.4.3	General structure of databank system established and modified as required	12-18	Р	RE
M1.4.4	Consensus on rules for QC and data format and retrieval.	15	R	RE
M1.4.5	Data extraction tools available	18	0	RE
M1.4.6	Plan for databank enhancement and additional resources for month 18 onwards.	18	R	RE
M1.5.3a	Review on food-derived contaminants. Decision on future work	12	R	PU
M1.5.3b	A prototype standard for description, documentation and management of food composition data	18	Р	PU
M1.5.4	Workshop on component coverage and level of documentation in existing databases, and nutrients to be included in core data sets and future analysis proposal.	15	R	PU
M1.5.5	Report on NLG Factors, Proposal for calculation procedures.	16	R	PU
M1.5.6	Establish a CEN working group on a standard for food composition data. Formulation of work plan	18	0	RE
M1.6.4	300-500 foods per national dataset (prioritisation of EPIC foods)	15	R	PU
M1.6.5	Testing/Evaluation of Indexers' performance	18	Р	RE
M1.6.6	Fully food indexed datasets (about 1000 foods)	18	0	RE
M1.7.3	Initiate development and submission of funding bids to national bodies	18	0	RE
M1.7.4	Review of partner integration status at M24 and instigate suitable corrective action	29	R	RE
M1.8.1	External audit report by UAG on EuroFIR system (TG3)	18 – 22	R	RE

				
M1.8.2	Implementing data structures and systems; retrieval facilities (TG3)	22 – 30	0	RE
M1.8.3	Complete Testing/Evaluation of Indexers' performance (TG2)	22	R	RE
M1.8.4	EuroFIR Databank System specifications and plans accepted (TG3)		R	RE
M1.8.5	Plan for initial value documentation finalised (TG1)	24	R	RE
M1.8.6	Standard (and supporting thesauri) published on website (TG1)	24	R	RE
M1.8.7	Food Indexed datasets available on website (TG2)	24	0	PU
M1.8.8	Compiler workshop concerning review of testing of protocols (see Report D1.8.4) (TG1) Training courses on value documentation for compilers (TG1) Training course on Food Indexing (TG2) Building food composition web sites	26	0	PU
M1.8.9	Indexed food lists from new partners, updated food lists from others (TG2)	29	R	RE
M1.8.10	First full EuroFIR Databank prototype(s) implemented and ready for tests (TG3)	30	0	RE
M2.1.3	Complete initial evaluation of the extent to, and format in which food composition data is being used (Tasks 4 and 5)	18	0	PU
M2.1.4	Complete usability testing of prototype websites (Task 8)	21	R	RE
M2.1.5	Complete Step 1 of the Sustainability Plan	18	R	RE
M2.1.6	Complete Step 2 of the Sustainability Plan	24	R	RE
M2.2.4	Establish and disseminate improved methods and protocols on imputing data for composite dishes together with WP 2.1	18	R	PU
M2.2.5	Network formulated for industrial action	28	R	PU
M2.2.6	Initiate the development and submission of funding bids to national bodies	18	R	RE
M2.2.7	Guidelines for harmonized procedures in recipe calculation to produce nutrient values for composite foods	24	R	RE
M2.2.8	Establishment and identification of success factors for the show cases (go-/no-go points for further monitoring)	21	R	RE
M2.2.9	Harmonized procedures applicable and feedback from national compilers	28	R	RE
M2.2.10	Guidelines and conclusions for establishing and advancing data transfer on European level	30	R	PU
M2.3.3	Start recipe recording and documentation.	13	R	RE
M2.3.4	Identify core partners or external laboratories for analysis	18	R	PU
M2.3.10	Development suitable files for the imputation and documentation of available compositional data of traditional foods	20	R	PU
M2.3.11	Development of suitable dissemination material on traditional foods	24	R	PU
M2.3.7	Identify core partners & additional laboratories for analyses in each country	15	0	RE
M2.3.8	Start collection for ethnic foods and ingredients	18	0	RE
M2.3.9	Start to develop and submit funding bids to national bodies and other agencies (modified previous milestone)	18	R	PU
M2.3.12	Needs of European consumers of minority ethnic populations are increasing recognised in national agendas and also in FP7	24	R	PU
M2.3.13	Start collating data for each country for foods and recipes and agree validation procedures to assess data for entry into national databases	28	R	RE

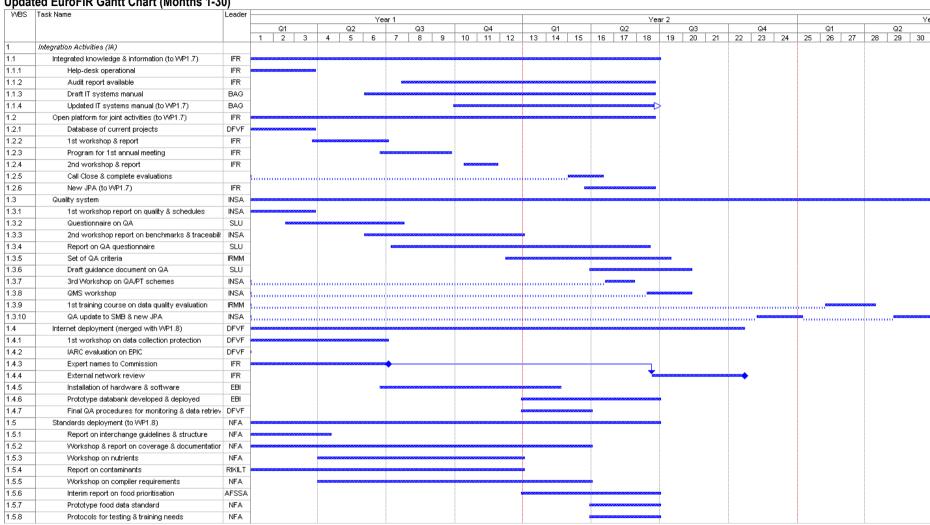
M2.4.4	Establish system for inclusion of compositional data for (1)	24	R	PU
	processed & (2) non-plant based foods.			
M2.4.5	Agree future plan and set targets for additional funding	18	R	RE
M2.4.6	Complete evaluation/entry of in vitro biological data for 150 published papers	23	R	RE
M2.4.7	Complete data entry capture for biological data from in vivo systems	24	0	RE
M2.4.8	Complete 2 nd evaluator assessment using modified data quality scoring system.	24	R	RE
M2.4.9	Complete critical evaluation/entry of in vivo data from 150 published papers	30	R	RE
M2.4.10	Upload 5000 quality checked compositional datasets to the database.	30	0	RE
M3.1.3	Implementation of e-learning courses	18	0	PU
M3.1.4	Agree future plan and set targets for additional funding	18	R	RE
M3.1.5	Measure utilisation of training and exchange grants and make modifications as require	18, 24 & 30	R	PU
M3.1.6	Implementation of new training activities for non-EuroFIR members from Europe & beyond	24	R	PU
M3.1.7	50% uptake of training and exchange grants	24	0	PU
M3.1.8	100% uptake of training and exchange grants	30	0	PU
M3.2.5	1st Science & Society meeting held	14*	PU	0
M3.2.6	1st dissemination review and report to SMB	18	RE	R
M3.2.7	1st external audit of dissemination effectiveness and awareness completed	18	RE	R
M3.2.8	Series of items for public website written (see D3.2.3 & D3.2.4)	24	R	PU
M3.2.9	Plans in place for disseminating proceedings of second Network Congress	30	R	PU
M3.3.2	Organise workshop for network technology transfer managers and existing EU entrepreneurial programmes	30+	R	PU
M3.3.3	Identify pertinent incubators, new venture creation support and entrepreneurship training	18	R	PU
M3.3.4	Establishment of an external advisory board/peer review committee for review draft business plan information for specific outputs	24	R	RE
M3.3.5	GO/NO GO on "All or Individual" tangible static/semi-interactive product prototypes and related components based on feasibility report	21	R	RE
M3.3.6	Evaluation of 1st draft of commercial exploitation plan completed and revisions agreed	24	R	RE
M3.4.6	Participatory discussion to set objectives for gender mainstreaming, and selection of indicators and criteria for monitoring gender mainstreaming in the network.		R	PU
M3.4.7	Annual assessment of success in meeting gender-informed objectives	24	R	PU
M3.4.8	Continue to participate in established networks (e.g. EC Network on Gender Aspects in Food Quality and Safety Research) as well as to continue to engage with others working on gender within FP6 on food quality and safety		R	PU
M4.3	Open call for new partners published 01/02/2006	14*	0	PU

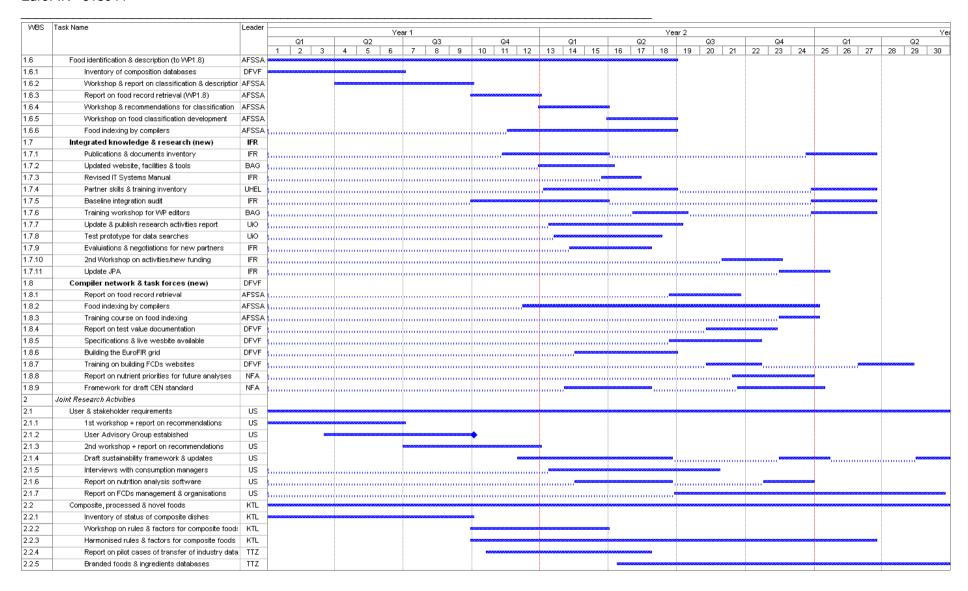
M4.5	Agreement for JPA for 2 nd year	13*	R	RE
M4.6	Agreement with new partners to be enrolled by 2006		0	RE
M4.7	Agreement of JPA and budget for 2007		0	RE
M4.8	Approval of EC of annual report of 1st period (and other reports as requested)		R	RE
M4.9	Evaluation of 1st Periodic Report		R	RE
M4.10	2 nd Full Network Meeting	21	0	PU
M4.11	Evaluation of 2 nd Periodic Report	28	R	PU

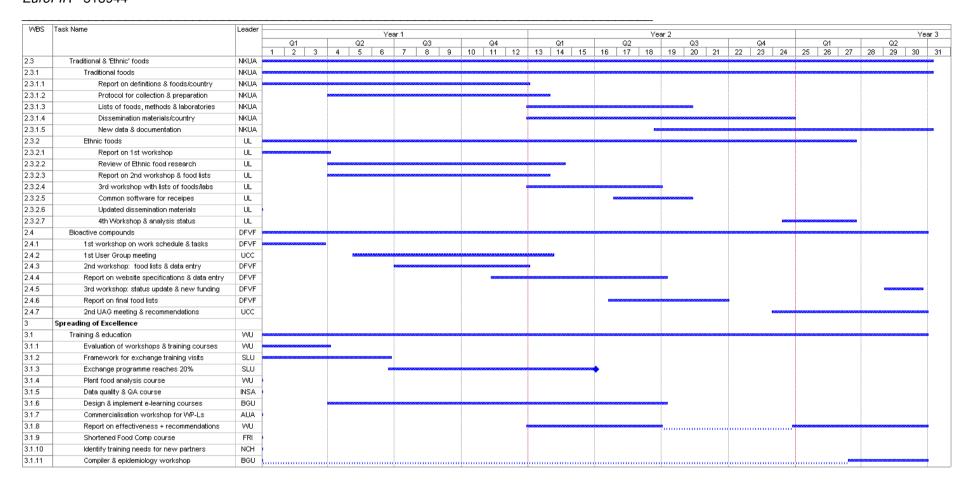
9.2 Planning and timetable

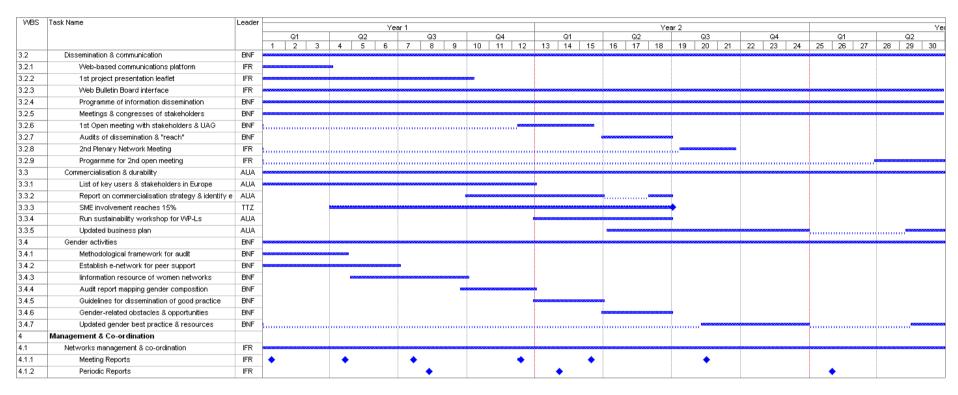
The planning of the various WPs for the second 18 months of the JPA is described in the GANTT chart below on pages 91-94. This shows the schedule for individual set of tasks for each WP for this period.

Updated EuroFIR Gantt Chart (Months 1-30)









9.3 Graphical presentation of the components

A PERT diagram showing a graphical presentation of the project showing the various interdependencies is also given on pages 95-6 below (PERT 1-2). Provisional dates have been scheduled for the period 13-30 for the following network meetings and workshops:

Month	Meeting	Duration (days)	Dates	Venue
13	SMB/GC	2	9-10/1/06	Wageningen, NL
14-15	1st EuroFIR Congress & & UAG Meeting	2	27/2-1/3/06	London, UK
17	SMB	2	7-8/6/06	Athens, GR
19	2 nd Annual EuroFIR Meeting	3	21-24/9/06	Nantes, FR
25	3 rd GC Meeting with pre-SMB Meeting	2	10/1/07	Rome, IT
27-28	EC Evaluations	2	28-30/3/07	Brussels, BE
29-30	SMB Meeting	2	May-June 2007	To be agreed
34	2 nd EuroFIR Congress & UAG Meeting; 3 rd Annual Meeting	4	22-26/10/07	Granada, Spain
37	4th GC Meeting with pre-SMB meeting	2	Jan 2008	To be agreed

9.4 Workpackage list overview

Work package list Joint programme of activities (18 months period month 13-30)

Work package No	Work package title	Lead contractor No	Person- months	Start month	End month	Deliverable No
1.1	Integrated organisation of knowledge and information flow	IFR	4.2	1	18	D1.1.3-D1.1.7
1.2	Provision of open platform for joint activities and addition of new partners	IFR	4.7	1	18	D1.2.3-D1.2.7
1.3	Certified quality system for food composition databases	INSA	38.9	1	60	D1.3.4-D1.3.10
1.4	Internet development and deployment of databank systems	DFVF	16.2	1	18	D1.4.4-D1.4.6
1.5	Standards development and specifications	NFA	14.3	1	18	D1.5.5-D1.5.8
1.6	Food identification & description	AFSSA	25.5	1	18	D1.6.1-D1.6.8
1.7	Integrating knowledge, information flow	IFR	15.3	19	30	D1.7.1-D1.7.4
1.8	Compiler network	DFVF	112.5	19	60	D1.8.1-D1.8.7
2.1	Users and stakeholders requirements	US	47.5	1	30	D2.1.1-D2.1.9
2.2	Composite, processed and novel foods	KTL/TTZ	38.8	1	30	D2.2.6-D2.2.14
2.3.1	Traditional Foods	NKUA	60.9	1	30	D2.3.2-D2.3.13
2.3.2	Ethnic minority foods	UL	34.45	1	30	D2.3.7-D2.3.18
2.4	Bioactive compounds	DFVF/UCC	67.55	1	30	D2.4.2-D2.4.11
3.1	Training, education & vision	WU/SLU	37.5	1	60	D3.1.5-D3.1.9
3.2	Dissemination and communications	BNF	42.5	1	60	D3.2.3-D3.2.10
3.3	Commercialisation & durability	AUA	24.5	1	60	D3.3.2-D3.3.8
3.4	Integrating and mainstreaming the gender dimension	BNF	7.5	1	30	D3.4.5-D3.4.7
4	Management and co-ordination	IFR	28.8	1	60	D4.8-D4.18
	TOTAL		621.6			

9.5 Deliverables List (18 months) Months 13-30

Deliverable no	Deliverable title	Delivery/ Achieve date	Nature	Dissemination level
D1.1.3	Combined centre skills infrastructure & training inventory ^a	18°	D	RE/PU
D1.1.4b	Centre training capabilities inventory ^b	15	R	RE/PU
D1.1.5	Publications & documents repository	15	R	RE/PU
D1.1.6	Methods & QA inventory	18 ^c	R	RE/PU
D1.1.7	Complete update to website structure & tools	16	0	PU
D1.2.3	2 nd EuroFIR workshop & report on prioritised programme of common research topics, guidelines for the self-auditing by partners and draft of integrated budgeting tool and new funding initiatives.	15	R	PU
D1.2.4	Identify and implement new joint research programmes for 18-60 months and targets for new funding initiatives.	18	R	RE
D1.2.5	Report on initial searches on published data and databank systems for storage and retrieval of data	16	R	RE
D1.2.6	Complete update to website structure, facilities & tools	16	0	PU
D1.2.7	Report on research questionnaire available on intranet	18	R	PU
D1.3.5	Set of QA criteria	16	R	PU
D1.3.6	Prepare draft guidance document on QA for food consumption laboratories and national database compilers	18	R	PU
D1.3.7	Report on 2 nd quality workshop with recommendations for further activities (TG1)	13	R	PU
D1.3.8	Teaching materials for quality part of Food Comp course in Bratislava (All TGs)	22	R	RE
D1.3.9	Report on critical points, hazard prioritization and quality requirements with associated SOPs (TGs2/3)	26	R	RE
D1.3.10	Teaching materials for 1st QMS workshop (All TGs)	27	0	RE
D1.4.4	Prototype EuroFIR databank system developed, deployed including data composition datasets and assessed	12-18	R	RE
D1.4.5	Final procedures for quality assurance monitoring and data retrieval facilities delivered	15	R	RE
D1.4.6	Start dataset loading	18	0	RE
D1.5.3	EuroFIR workshop on nutrients to be included in core data sets and nutrients for future analysis	12	R	PU
D1.5.6	Interim report on food prioritisation	18 ^d	R	PU
D1.8.2e	A prototype food data standard focusing on identification, expression, calculation and documentation of food component data	22 ^f	Р	PU
D1.8.39	Protocols for testing the standards for various component collections and report for testing recommendations and compiler support and training needs,	18 & 24	R	PU
D1.6.1	Inventory of European food composition databases and tables	18 ^h	R	PU
D1.8.1 ⁱ	Report on food record retrieval using existing description and classification	22 ^j	R	PU
D1.6.4	EuroFIR workshop & draft recommendations for standard food classification and description systems for use in European food composition databases	15	R	PU
D1.6.5	EuroFIR workshop on development of prototype food classification and description support facilities	18	R	PU
D1.6.6	Review paper on food classification and description systems	14	R	PU
D1.6.7	Position paper on Eurocode 2	14	R	PU
D1.6.8	Draft proposal for QA of food indexing	16	R	PU

D1.7.1	Design of information and communication system for collection and evaluation of performance indicators.	19	R	RE
D1.7.2	Report on integration status at M12 compared to M1.	21	R	RE
D1.7.3	Organise training workshop for network in the use/capabilities of web-based communications systems and tools.	ems and tools.		
D1.7.4	Report on integration status at M24 compared to M12 & M1.	27	R	RE
D1.7.5	Report on links with new compiles from with and beyond Europe	29	R	RE
D1.8.4	Report on updates/changes to food description thesauri and proposed Danish and German/Austrian translations (TG2)	24	R	PU
D1.8.5	Report on results of food indexing in compilers group (TG2)	26	R	PU
D1.8.6	Report on test value documentation by compilers using prototype standard (TG1)	28	R	RE
D1.8.7	Report on extended method and analysis documentation - the extension of the initial simple method documentation (TG1)	30	R	RE
D2.1.1	1st workshop held & report including recommendations	15 ^k	R	PU
D2.1.1	3rd workshop held & overall report on key objectives 1-3.	18 & 24 ¹	R	PU
D2.1.4	Report on Interviews with European National Food Consumption Survey Managers (Task 3)	21	R	RE
D2.1.5	Interim report on the studies involving case studies and testing of prototype websites (Task 8)	24	R	RE
D2.1.6	Report on the analysis of selected European food composition database management and organizational structures (Task 2)	30	R	RE
D2.1.7	Interim reports on the development and implementation of a sustainability and durability plan (Task 9)	18 & 30	R	RE
D2.1.8	Report on the analysis of inventory of European nutrition analysis software (Task 6)	18 & 30 R		RE
D2.1.9	Report on the analysis of interviews with developers and marketers of European nutrition analysis software (Task 7)			RE
D2.2.4	EuroFIR workshop and report on framework for the incorporation of food industry data	17	R	PU
D2.2.5	Plans for 18-24 months or WP work covering trends in novel ingredients and analytical needs to obtain satisfactory compositional data	18	R	RE
D2.2.6	Collected information of composite foods and industrial ingredients made available on EuroFIR website	12	0	PU
D2.2.7	Pilot cases on data transfer from food industry to four European national FCDBs reported	12	R	RE
D2.2.8	Report on status of collaboration with potential industry partners (TTZ, WPs 2.1, 3.3) and organisation of preliminary meeting/s for achieving common understanding	21	R	RE
D2.2.9	Report on collection of rules on use of recipe calculation procedures: including the use of yield and retention factors for imputing nutrient values for composite foods and organisation of discussion on the website.	17	R	PU
D2.2.10	Feedback report on evaluation of harmonised rules by individual members of UAG.	18	R	RE
D2.2.11	Update of plans for 18-48 months of WP covering sustainability of data transfer and analytical needs to obtain satisfactory compositional data	18	R	RE
D2.2.12	Presentation of guidelines on harmonized procedures in the Network meeting	21	R	PU
D2.2.13	Report on applications, methods and procedures to impute nutrient values for composite foods	27	R	RE
D2.2.14	Exemplary data transfer and plans to collate on EuroFIR-level	30	R	RE
D2.3.3	Report on the List of nutrients and bioactive compounds; proposed methods of analyses and proposed list of laboratories per country.	18	R	RE
	11	1		1

D2.3.4 PU 24^m R Report on the preparation method of the traditional recipes investigated. D2.3.7 Critical review of composition of ethnic foods including 18ⁿ R PU information on methods of domestic food preparation and eating D2.3.9 Report on 3rd workshop & list of ethnic foods to be collected. 22^m R PU D2.3.10 Agree plan of work for 18-36 months 18 R RE D2.3.11 Dissemination materials (poster/pamphlet per country) on 24-30 0 PU traditional foods D2.3.12 List of SME's initially interested in producing the traditional food 30 R RE Data on the nutritional composition of traditional foods & final 0 PU D2.3.13 documented/prioritised country specific traditional foods files D2.3.14 Status report to CO/SMB covering sample collection & analysis 18 R RE for each country (replaces previous deliverable) D2.3.15 Update website with new information on ethnic foods targeted at 15-30 0 PU both consumers and industry especially SMEs and submit various articles and papers on Ethnic Foods for publication. D2.3.16 Establish a common software package to harmonise recipe 20 0 RE collection in each country and complete appropriate training on recipe collection and calculation Organise 4th Workshop and submit progress report to CO/SMB D2.3.17 27 R RF covering sample collection & analysis for each country and plans for next 25-42 months. RE D2.3.18 Status report to CO/SMB covering sample collection & analysis 30 R for each country and dissemination activities. D2.4.2 1st Users Group meeting and recommendations 15° R RE D2.4.5 Report covering final food plant lists and status of health plants 18 R PU list; specifications for database deployment and data entry status. Future plan for activities including plant source materials for food D2.4.6 18 R RE flavourings, continuation of selected health food plants and input of biological data D2.4.7 PU Revised NETTOX list (1997) on major food plants in Europe 22 R (including plant parts) in printed version. D2.4.8 Draft system for searching, collating evaluating published data 22 R RE on biological activity of bioactives & in vitro model systems D2.4.9 Quality system and associated SOPs for compositional 24 R RE evaluation. 27 D2.4.10 Final exotic & health food plant lists R PU D2.4.11 Workshop report and recommendations for next 18m JPA 29 R PU D3.1.5^r Reports on ALL training activities (courses, workshops, PU 17, 23 & 29 R exchanges, conferences & Marie Curie including assessment of effectiveness as measured against EuroFIR strategic goals. D3.1.6 Report on Plant Food Analysis and Data Quality course including 18 R RF recommendations for follow-up of participants) D3.1.7 Report on Shortened Food Comp Course including 23 R RF recommendations for follow-up D3.1.8 Report on identified training needs of non-EuroFIR compilers 23 & 29 R PU from Europe and beyond activities D3.1.9 Draft programme for regional (Balkans/Middle & North 30 PU R African/C/E) workshop(s). D3.2.3 Web Bulletin Board interface for stakeholders world-wide 13-30€ Р PU respecting language, expertise levels, gender, ethnicity, disability, data protection and ethical issues. D3.2.4 Planned programme of information dissemination to suit 13-30s R PU users/stakeholders including one-pagers, compilation booklet of one-pagers, syntheses, monthly web features, bulletin board updates and congress proceedings & resources

D3.2.7 PU 20 R Published summary information about proceedings of first Network Congress on the website D2.3.8 Network Congress papers reviewed and accepted for publication 0 PU 24 D2.3.9 Second annual activity and integration reports 24 RE 0 D3.2.10 Draft programme for second Network Congress 30 R RΕ D3.3.2 Sustainability workshop on nature and content of EuroFIR's 17t R RE business plan & report, and recommendations to improve the long-term strategy for commercialisation of network outputs. D3.3.3 24^u R RE Update list of users and stakeholders D3.3.4 Draft report on USDA/FDA sustainability of USDA databank 21 R RF systems. D3.3.5 Draft report on cross-network audit regarding the expenses side, 24 R RE namely: a) expenses necessary to maintain current network operations; b) the anticipated extent of future secure and/or nonsecure national funding including results from new national compilers D3.3.6 Draft report on the analysis of the market research effort for user 24 R RE preferences, market shares and willingness to pay for the bioactive internet-based database system D3.3.7 Feasibility report on the prototype website and the EuroFIR 28 R RE databank portal. D3.3.8 Evaluation of 1st draft of commercial exploitation plan completed 30 R RF and revisions agree 18 R PU D3.4.6 Produce documentation of the gender-related obstacles and opportunities experienced by researchers. 0 PU D3.4.7 Update information resource of relevant national and European 20 networks of women scientists D4.8 2nd Annual meeting/Network Congress; proceedings prepare 21^v 0, R RE and circulated D4.9 Proposal for admission of new partners 12 0 RE D4.10 Update of JPA for 2006 15 RE 0 D4.11^w 4th meeting of SMB: minutes prepare and circulated (March 18 0. R RF D4.12 Update for JPA 2006 and foresight of priorities for 2007 18 R RE D4.13 19 5th meeting of SMB: minutes prepare and circulated (March R RE D4.15 2nd Network Meeting & 6th SMB/WP-L meeting; minutes 21 R PU prepared & circulated (October 2006) D4.16 Meeting of SMB/WP-L/DEC/GC - JPA & budget agreed months 25 R RE 25-42, minutes prepared & circulated (January 2007) D4.17 Meeting - EC evaluation of 2nd Periodic Report 27 R RE D4.18 7th meeting of SMB/WP-Ls; minutes prepared & circulated (July 30 R RF 2007)

WPs1.1 & 1.2:

aModified from `Centre skills & infrastructure' in M1-18 JPA; bCombined with D1.1.3; and cOriginal date = M12.

WP1.5:

dOrigional Date = M15; eNow D1.8.2 in new WP1.8; fOrigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; forigional Date = M18; gNow D1.8.3 in new WP1.8; foriginal D

WP2.1:

kOriginal Date = M6 amended deliverable due to modifications in the JPA.

'This Deliverable was originally formulated as a Milestone (M2.1.3: Evaluation of (a) the extent to, and format in, which food composition data is used by stakeholders & (b) potential acceptability and comprehension of Internet based systems (by Month 18). Parts (a) and (b) will now be divided into separate outputs because part (b) will have to be delivered later since the prototype testing has to be done separately based on information provided by WP1.4 (see activity 8). Part (a) will be reports based on results from Activity 5 (Food composition data users' views of currently used data) and Activity 4 (Interactive workshops with key food composition data users).

WPs2.3 & 2.4:

mOriginal Date = M18; nOriginal Date = M12; nOriginal Date = M4; and note = M4; and note = M4; and note = M18; nOriginal Date = M18

WPs 3.1 & 3.3:

rModified wording and extended reporting; sOngoing Continuation of D3.2.3 & D 2.3.4; 'Original Date = Month 12 and reworded deliverable; and program Date = Month 18

WP4:

- vOriginal Date = Month 14
- wThis SMB meeting has been amended to 5th meeting and will include the first meeting of the DEC

9.6 Work package description (18 months period, months 13-30) Integration Activities

WP 1.1: Integrated organisation of knowledge and information flow (Months 13-18)

Work package number 1.1			Start date or starting event:				1		
Activity Type		IA							
Participant id		IFR	DFVF	AUA	NKUA	UiO	BNF	Baigent	
Person-months per participant:		1.6	0.2	0	0	0.3	0.7	1.4	
Total person months:		4.2							

Objectives

- 1. To maintain, optimise and further develop the network's IT web-based communication platform and tools to enable the integrated organisation of knowledge and information flow.
- 2. To establish an open platform for the JPA activities and support EuroFIR with a high level intranet facility to enable efficient communication and efficient project management.
- 3. Provide access to the partners, public, policy makers and industry through internet technology.

Description of work

This WP is divided into two main tasks and these will transfer into WP1.7 from M18:

Task 1 (led by IFR/Baigent): Further development and optimisation of website and communications tools

These activities (M13-18) will address some modifications to the existing website structure and features to improve navigation, functionality and tools. The provisional modifications will be established by Baigent and tested by other WP members (DFVF, AUA, UiO & BNF) before any changes will be made live to the other project partners and public users:

- Introducing of a "Public Sub-Section" template
- Introducing new page templates and amending existing templates in the logged in area of the site
- Add an option to assign documents to the Public Homepage
- Amending the featured news stories on the Public Homepage from being featured stories to being assigned Items
- Amending the colour of navigation links on non-selected pages
- Amending the navigation from graphical to text based
- Sending reminders to individuals if they have not completed a form.
- Removing the "Download" link for document downloads
- Providing facilities to have versions of the website in multiple languages (French, German and Spanish) for public
 website only via direct translation of text and selected documents (to be coordinated by BNF with support from BNF
 with support from AFSSA, CESNID and BFEL).
- Broadcasting meetings on the website. To make available video conferencing facilities and tools (ultimately through
 the website in real time) so that the EuroFIR open meeting in London can be recorded for future training and
 dissemination activities.
- Amending form buttons to make them only clickable once
- Allowing text content to be fully justified
- Introducing printer friendly pages
- Undertaking Site Manager training sessions for new partners in 2006 & 2007.

IFR will monitor both hits on the public side of the website by non-EuroFIR members and on the private side by EuroFIR members on a regular basis to assess trends in website usage and effectiveness of reaching target audiences (in conjunction with WP3.2). In addition, WP-Ls and Task Leaders' website usage will be reviewed periodically and all information made available to the SMB.

Task 2 (led by IFR): Developing Framework for Knowledge Management & Documents Inventory

The second phase will be to establish the framework for the knowledge management of the network by establishing the:

- Centres skills & infrastructure inventory repository an inventory of each EuroFIR member containing skills. expertise, tools, infrastructures, material & capabilities to conduct research (link to WP 1.2), and training capabilities and this will be undertaken by UHEL & SLU (link to 3.1).
- Publications & documents repository for the research results and findings, all reports, newsletters and other documents and this will be undertaken by IFR & BNF.
- Methods and QA repository: the methods used to generate food composition data, together with the QA used to demonstrate data quality and consistency and this will be undertaken by DFVF & UiO (link to WPs 1.3 & 1.5/1.8).

The third phase will be to establish portals for dissemination and communication activities in conjunction with WP 3.2, and specifications for databank system development and deployment (link to WP 1.5/1.8). The IT web-based platform will be assessed by the working group at each phase of development and any changes incorporated into the design.

Deliverables			
D1.1.3	Month 18†	Combined centre skills, infrastructure & training inventory*	
D1.1.4**	Month 15	Centre training capabilities inventory (link WP3.1)**	
D1.1.5	Month 15	Publications & documents repository inventory.	
D1.1.6	Month 18††	1st Draft of Methods & QA inventory (link to WPs 1.3 & 1.8)	
D1.1.7	Month 16	Complete update to website structure & tools	

^{*}Modified from Centre skills & infrastructure in M1-18 JPA.

††Original date = M15.

Milestones	and expected result
M1.1.3	Month 18*: 2 nd phase completed including training, publications/documents and methods/QA inventories. Month 18+: 3 rd phase completed including update IT systems manual and portals for dissemination &
M1.1.4	communication activities (see WP1.7)

^{*}Original date = M15.

^{**}Combined with D1.1.3.

WP 1.2: Integrating research activities and addition of new partners (Months 13-18)

Work package number 1.2			Start date or starting event:			1	1	
Activity Type		IA						
Participant id		IFR	IRMM	DFVF	UHEL	UiO	NKUA	UL
Person-months per participant:		1.6	0	0.2	1	1	0	0.3
Participant id		UCC	AUA					
Person-months per participant:		0.3	0.3					
Total person-months:		4.7						

Objectives

- 1. To ensure an integrated and cross-platform coordination and communication of joint research activities; co-programming of research projects and training within the network and to identify new collaborative projects.
- 2. To identify and obtain new funding for joint research activities linked to the JPA.
- 3. To optimise network integration measures and provide annual updates on degree of individual partner integration.
- 4. To identify and recruit new network partners for specific activities or tasks, and advise on IPR issues (links to WP 3.3/4), and establish strategic links to food composition stakeholders outside Europe (FAO, INFOODS, WHO).

Description of work

The WP is divided into three main tasks and these will transfer into WP1.7 from M18:

Task 1: Research, training and new funding (led by IFR/UiO) - These activities address objectives 1 & 2 above. The collation of research projects (UiO) will be completed by Month 18 including any new national compilers from non-EuroFIR countries and the information will be made available on the new WP1.7 page on the intranet. The list of available e-food journals (UCC & UHEL) will be finalised and searches of recent published food composition data will start from M13 and will be ongoing monthly activity. Also, a suitable format for exporting the data in appropriate databases will be investigated (eg Excel, Access, RefWorks, RefMan etc) with regards ease, systematic storage and retrieval of data. Opportunities for new funding (UL, NKUA & IFR) will continue with particular emphasis on new emerging bioactive compounds in key Ethnic and traditional foods (in collaboration with WPs 2.3.1, 2.3.2 & 2.4). The updating of the core training directory (UHEL/SLU) will be undertaken twice yearly (taking into account the addition of any new partners) and the additional information on the centre skills infrastructure inventory added to this directory (link to WP3.1).

Task 2: Performance indicators and models for integration (led by IFR/AUA) - This activity addresses objective 3 above. Results from the 1st periodic report for integration will be collated, evaluated and modified in order to assess individual partner integration. Discussion with other FP6 NoEs (eg NuGO, Galen & CASCADE) will attempt to improve current models and measures and establish best practice.

Task 3: Network Expansion & Collaborative Links (IFR): This activity relates to objective 4 above. IFR will manage the entire of the evaluation of the proposals using the agreed independent experts and all reporting. The call for new partners will close on 8/3 and new partners should join the network from 1st July 2006. A workshop will be organised for new partners in June/July 2006 in order to cover financial and contractual requirements. Collaborative links will be sought between EuroFIR and national compil from non-EuroFIR countries in Europe and beyond (e.g. the Balkans, Middle & North African countries, Russia and countries of former Soviet Union,) using existing networks/contacts (e.g. CEECFOODS, FAO, INFOODS) with a particular emphasis on INcountries, and new contacts in order to identify possible collaborative links to EuroFIR and to ensure EuroFIR outputs/standards compatible to International standards (eg Codex). BGU/IMR/FRI and specific UAG members will assist in this process.

Subcontracting: Three independent experts have been approved by the Commission from an initial list of six submitted names at these experts have signed subcontracting agreements with EuroFIR. The evaluations will be conducted by remote email with possibility of a consensus meeting with the Chair of the panel and the Coordinator. These experts may be sued for future EuroFIR "Calls for New Partners (see WP1.7).

Deliverables	3	
D1.2.3	Month 11*	2nd EuroFIR workshop & report on prioritised programme of common research topics, guidelines
D4.0.4		for self-auditing by partners, draft integrated budgeting tool and new funding initiatives.

		for self-auditing by partners, draft integrated budgeting tool and new funding initiatives.
D1.2.4	Month 18	Identify and implement new joint research programmes and targets for new funding initiatives.
D1.2.5	Month 16	Report on initial searches on published data and databank systems for storage and retrieval of data
D1.2.6	Month 16	Complete update to website structure, facilities & tools
D1.2.7	Month 18	Report on research questionnaire available on intranet

^{*}Original date = M15.

Milestones	and expected result
M1.2.5	Month 15: Benchmarking of status of integration at month 12.
M1.2.6	Month 14: Integrated JPA for 13-30m.
M1.2.7	Month 18: Initiate development and submission of funding bids to national bodies.
M1.2.8	Month 18: 2 nd phase completed including centre skills & training and publications/ documents.

WP 1.3: Development of a quality framework for food composition data (Months 13-30)

Work package number	Work package number 1.3		Start date or starting event:				13	
Activity Type		1						
Participant id		INSA	IFR	NUBEL*	IRMM	DFVF	UHEL	AFSSA*
Person-months per participant:	Person-months per participant:		0.9	2.5	0.5	1.0	1.5	2.0
Participant id		CSPO*	NEVO*	SLU*	TUBITAK	CSL	FVS-FC	DFI
Person-months per participant:		1.0	1.5	1.0	1.0	3	1	0.5
Participant id		WU	ETHZ					
Person-months per participant:		0.5	1.0					
Total person months:		38.9						

^{*}Task Group Leaders (TG-Ls).

Objectives

- To ensure a common understanding of quality management systems among network partners of quality assurance requirements by compilers, analysts, and users of food composition databank systems.
- 2. To establish a sound and coherent leadership approach of the relationship between quality, food composition databank systems to ensure compatibility and harmonisation to European and International standards.

Description of work

During this period WP 1.3 will continue to achieve comparability and reliability of existing and new nutrient data under the framework of Quality Assurance Programme. This will ensure a global consensus on what constitutes a fit-for purpose EuroFIR quality requirement in order to achieve similar interpretation of analytical and compiled results across the EuroFIR compilers and/or laboratories. The integrated approach will be operated through the newly formed Quality Task Force (QTF; Chaired by CO) and comprising of smaller, focused Task Groups (TGs) in order to ensure integration of quality tools and standards across all parts of the network but especially WP1.3, WP2.3.1, WP2.3.2 & WP2.4. Four initial TGs are planned together with the training activies:

TG1 – Quality Management Systems (led by INSA) – Tasks undertaken will include the continuation of the development of the overall QMS (INSA); assisting in setting QA criteria; assisting in SOP development including sampling & equipment/installations (to feed into CEN TG in WP1.8 (UHEL/SLU/TUBITAK); overseeing laboratory selection for WPs 2.3.1 & 2.3.2 and data evaluation against EuroFIR quality standards (INSA); identifying laboratory needs for RMs (CSL); and facilitating EuroFIR labs to join relevant PT schemes (CSL/IRMM). The most appropriated quality assurance programme emerged from the guidance document will be considered for implementation by compilers and analysts. The benchmarks standards will be identified taking advantage of existing documents. The evaluation of quality system will be achieved through presentation during a series of Quality Workshops. Furthermore, the quality approach will be further disseminated through an open EuroFIR web page platform to encourage dialogue with both EuroFIR members and non-members and maximise impact. Subcontractor: NMi (only until M18).

TG2/TG3 – Compilation and Computerized System (led by AFSSA/NUBEL) – The aim of these TGs are to promote an understanding of quality requirements of compilation process and its informatics support by all EuroFIR compilers. A list of hazards and Quality Control procedures will be identified and described in a flowchart. The approach will be used to assist SOP development, setting QA criteria and overall Quality Elements that support QMS for compilers and the results feed into the CEN TG in WP 1.8. AFSSA and NEVO will define in the compilation process the hazards and SOPs needed; NUBEL will identify the critical points on computerized system, hazard prioritization and quality requirements with its associated SOPs. Other compilers ETHZ, Nevo & NCHMEN will participate.

TG4 – Quality Indices (led by CSPO/AFSSA) – The aim of this TG is to develop an integrated approach on quality indices for nutrients. Quality Indices at nutrient level will take into account what already has been done in other WPs and will further develop, refine and test appropriate system(s) making sure that any system is compatible to current system being used for the bioactive data and by other partners. The initial tasks will be to reach a consensus for the main quality criteria and gradings. This will be followed by testing the proposed system using selected nutrients and food groups and making any necessary adjustments and refinements to

the system.

Training (led by SLU/WU)- Training activities to promote the spirit, acceptance and implementation of the overall QMS among all compilers and laboratories will be undertaken in close collaboration with WP 3.1. Tasks will include the identification, planning and running training courses & workshops in line with overall strategic goals of the network. One short course on Data Quality and evaluation is planned as part of the Food Comp course in Bratislava in M21 (being run by WU/FRI). A larger workshop/training event is planned on QMS including data quality criteria in the first half of 2007 and a draft proposal for this will be prepared by SLU/WU and INSA by M24. Input from other international compilers and NGOs will be sought.

Deliverables		
Number	Month Due	Description
D1.3.4	Month 13	Report on QA questionnaires (TG1)
D1.3.5	Month 16	Set of QA criteria (TG2 initially then all TGs)
D1.3.6	Month 18	Draft guidance document on QA for food composition laboratories & national compilers (TG1)
D1.3.7	Month 13	Report on 2 nd quality workshop with recommendations for further activities (TG1)
D1.3.8	Month 22	Teaching materials for quality part of Food Comp course in Bratislava (All TGs)
D1.3.9	Month 26	Report on critical points, hazard prioritization and quality requirements with associated SOPs (TGs2/3)
D1.3.10	Month 27	Teaching materials for 1st QMS workshop (All TGs)

Milestones		
Number	Month Due	Expected Result
M1.3.3	Month 14	Establish & disseminate standards and traceability links including QA criteria, quality index and confidence code
M1.3.4*	Month 18*	Criteria for lab selection & PT schemes initiated (1st round)*
M1.3.5**	Month 21**	1st meeting of Quality Task Force (Nantes)**
M1.3.6	Month 27	Training programme for quality formulated & commenced
M1.3.7	Month 30	Updated manual on QMS launched

^{*}Formerly "Initiation of audits & PT schemes"

^{**}Formerly "Plan for continuation of the audit cycle & PT-schemes"

WP 1.4*: Internet development and deployment of EuroFIR databank systems (M13-30)

Work package number	1.4*		Star	t date or s	tarting even	ıt:		13	
Activity Type		IA							
Participant id		DFVF		IFR	NUBEL	NCPH	KTL	AFSSA	IceTec
						Р			
Person-months per participant:		3.5		0.4	0.2	0.3	0.5	0.2	0.5
Participant id		BfEL		UCC	BGU	UiO	NFNI	CESNID	EBI
Person-months per participant:		0.5		0.2	0.5	0.2	0.2	0.2	3.5
Participant id		POLYTEC		IDUFIC					
Person-months per participant:		3.5		1.8					
Total person-months:		16.2					<u>"</u>		

^{*}WP1.4 will merge with WPs 1.5 and 1.6 from month 19 (see WP1.8 for month 19-30)

Objectives

- Providing insights on the actual level of documentation and harmonization of national databases and other
 related methodological issues using the ENDB project as an advanced prototype for 10 European countries
 as part of an initial review of current Internet developments.
- 2. Specify composition data to be deployed as national and specialised sets, their integration as a coherent resource of food composition information, and the data retrieval facilities required.
- 3. Plan, specify and implement the identification and prototype development of existing and new resources of supporting information, assisting with content preparation as necessary.

Description of work:

The WP will be undertaken by DFVF with close support from EBI and IFR, and input from several other WPs on database infrastructure and specifications (WPs 1.5, 1.6, 2.1, 2.2 & 2.4).

Task 1 (DFVF & IDUFIC):

A full evaluation of the ENDB project will be undertaken by IARC (a sub-contractor of DFVF & Coordinator of EPIC-ENDB) and will include:

- > Evaluate the component coverage and definition in the 10 participating countries and option for harmonizing them:
- Make an initial evaluation of the level of documentation achieved as a basis for Task 1 in WP1.4;
- Evaluate the sources and quality of component values (e.g. original, borrowed or calculated values);
- > Simulate the quantitative contribution of the different sources of component values on real dietary consumption data from EPIC;
- Report on other ENDB methodological issues relevant for EuroFIR (e.g. recipe calculation and format, algorithms to adjust for weight changes, interchange guidelines and database management system);
- Make an initial report on enhanced guidelines for source and method documentation of values as the basis for Task 1 in WP1.5.

Task 2 (DFVF, EBI & Polytec):

Initially a basic site will be designed and prepared by EBI, DFVF and Polytec, consisting of working documents such as the existing data management recommendations. The working group will review Internet technologies to determine the storage and display formats, and search facilities available for EuroFIR resources. The review and specifications will present a detailed plan for the development of the website and its information content. A detailed investigation will report in month 18 the options for continuing operation and technical development after the end of the project, giving time to implement the arrangements. Specification of the resources will include the EuroFIR food composition data sets for both nutrients and bioactive compounds (Link to WP 2.4) and the processing, mechanisms or structures necessary to integrate these sets as underlying authoritative data in the EuroFIR framework.

Task 3 (DFVF, Polytec, IDUFIC & EBI):

The data retrieval facilities will allow users to specify foods and components, return relevant data, and provide quality measures of the retrieved data matrix. The development plan will identify resources to support the composition data, planning their preparation and EuroFIR implementation. The resources will facilitate the retrieval and use of information on foods, food components, calculation parameters, analytical methods, source references and other food-related topics identified by the project. Resources will be designed for the full range of potential users from consumers to national compilers (Link to WP 2.3).

Deliverables		
Number	Month Due	Description
D1.4.4	Month 12-18	Prototype EuroFIR databank system developed, deployed including data composition datasets and assessed
D1.4.5	Month 15	Final procedures for quality assurance monitoring and data retrieval facilities delivered.
D.1.4.6	Month 18	Start dataset loading

Milestones		
Number	Month Due	Expected Result
M1.4.3* M1.4.4 M1.4.5 M1.4.6	Month12- 18* Month 15 Month 18 Month 18	General structure of databank system established and modified as required Consensus on rules for QC and data format and retrieval. Data extraction tools available Plan for databank enhancement and additional resources for month 18 onwards.

From month 19, WP1.4 will merge with WPs 1.5 and 1.6.

WP 1.5*: Standards development (Months 13-30)

Work package number	1.5*	1.5*		Starting date or starting event			13		
Activity Type	IA								
Participant id	NFA	IFR	GUT	NUBEL	UGR	NCPH P	DFVF		
Person-months per participant:	0.5	0.4	0.3	0.3	0.3	0.2	0.5		
Participant id	KTL	AFSSA	BfEL	FRI	NKUA	UCC	BGU		
Person-months per participant:	0.3	0.8	0.5	0.4	0.3	0.3	0.3		
Participant id	INRAN	CSPO	UVI	UiO	NFNI	INSA	CESNID		
Person-months per participant:	0.3	0.5	0.4	0.3	0.4	0.4	0.4		
Participant id	TUBITAK	IDUFIC	IceTec	RIKILT					
Person-months per participant:	0.4	2.5	0.3	3.0					
Total person-months:	14.3								

^{*}WP1.5 will merge with WPs 1.4 and 1.6 from month 19 (see WP1.8 for month 19-30

Objectives:

- 1. To identify nutrients to be included in the core EuroFIR datasets and nutrients of increasing importance for which data is scarce or unreliable
- 2. Definition of procedures for the calculation and expression of values for derived components, such as energy and vitamin total activities both in databases and for output;
- 3. To define standard representations for compositional data, necessary documentation and quality criteria for their comparison and evaluation.
- 4. To set up a working group within CEN for establishment of a standard on food composition data based on above criteria.

Description of work:

The WP will continue work on selection and specifications on nutrients that will be included in the core datasets. NFA will coordinate work, arrange workshops and prepare reports. IDUFIC will assist in preparing reports, prepare draft standards and protocols. Ot partners will contribute in the preparing draft standards and protocols and with national food composition data, and join each of working groups for the five sub-tasks below. WP 1.5 will be merged with WP1.4 & 1.6 at month 18.

Workshops will be organised with national data compilers in order to define core components to be included based on occurrence and coverage as well as prioritisation of nutrients of specific interest, or for which data are missing, for possible future analysis. Requirements for definition of standard representations for compositional data, calculation of derived components, necessary documentation and quality criteria will be discussed. Based on this a prototype standard for description, documentation and management of food composition data will be elaborated.

A working group within CEN will be set up in order to establish a European standard for food composition data, based on the above work

The following main tasks are planned:

Task 1: Assessment of existing documentation guidelines and tools and preparation of draft standards (led by IDUFIC & NFA)

- > Review existing guidelines on the format and content of interchange files for food composition data;
- Review the guidelines and the delivered information for method documentation and propose improved guidelines;
- Review the guidelines for documentation of sources of data and references (both published and unpublished) and propose improve guidelines:
- Review of systems for quality rating of compositional data in collaboration with WP1.3

Task 2: Prioritisation of nutrients in EuroFIR (led by NFA/IDUFIC)

- Compile a list of components, organised into component groups, with notes on their definitions, the usefulness of their data, their relation to food groups, and aspects relating to the evaluation and harmonisation of their values; This could form a major deliverable, perhaps for late next year.
- Review & extension of the Eurofoods system of component identifiers,
- Define the criteria for inclusion of nutrients in the core datasets;
- Report on prioritisation of nutrients of increasing importance for which data is scarce or unreliable

Task 3: Prioritisation of foods in EuroFIR (led by AFSSA)

Describe how foods are prioritised by dietary survey managers

- > Understand the coordination between food composition managers and dietary survey managers in this field
- Try to propose general guidelines in this are
- Report on prioritisation of foods for review in EuroFIR.

Task 4: Evaluate the candidate EuroFIR data sets (led by DFVF)

- ldentify candidate national and specialist data sets (including a few to act as demonstration data sets at month 18) for EuroFIR and assess these, in collaboration with WP1.4 and 1.6, for suitability of content, level of documentation and standardisation requirements, particularly in countries not participating to ENDB;
- ldentify needs of national compilers for training and other support, including software tools, and develop the resources to meet these requirements;
- Review and, where appropriate, integrate findings from other WPs (WP2.1, 2.2, 2.4) in preparation of demonstration datasets and support facilities involving selected compilers;
- Review NLG-factors used in existing datasets and propose calculation procedure (with WP2.2)
- Provide recommendations on the current strengths, gaps and priorities for harmonising nutrient databases in EuroFIR.

Task 5: Set up a CEN working group for establishment of a European standard (NFA)

- > This work will be coordinated through SIS (Swedish Standards Institute), the Swedish CEN member, in collaboration with NFA.
- Formulation of a work program.

Deliverables	3	
Number	Month Due	Description
D1.5.1	Month 12	Report on interchange guidelines and data structure.
D1.5.2	Month 12	Preliminary report on current component coverage in European databases
D1.5.3	Month 12	Report on plan for food-derived contaminants
D1.5.4	Month 15	Report on component coverage and level of documentation in existing databases and nutrients to be included in core data sets and priorities for future analysis.
D1.5.5	Month 16	Report on NLG factors
D1.5.6	Month 18*	Report on food prioritisation (interim).
D1.5.7***	Month 22**	Identification of candidate specialised datasets
D1.5.8****	Month 24	Protocols for testing the standards for various component collections and report for testing recommendation and compiler support and training needs

Milestones	Milestones						
Number	Month Due	Expected Result					
M1.5.3	Month 12	Review on food-derived contaminants. Decision on future work					
M1.5.4	Month 15	Workshop on component coverage and level of documentation in existing databases, and nutrients to be included in core data sets and future analysis. Proposal.					
M1.5.5	Month 16	Report on NLG factors. Proposal for calculation procedures.					
M1.5.6	Month 18	Establish a CEN working group on a standard for food composition data. Formulation of work plan					

^{*}Origional Date = M15; **Original Date = M18; *** Now D1.8.2 in merged workpackage; ****Now D1.8.3 in merged workpackage.

WP 1.6*: Food identification & description (months 13-18)

Work package number	1.6*		Start date of	or starting e	vent:		13	
Activity Type		IA						
Participant id		AFSSA	IFR	NUBEL	NCPHP	DFVF	KTL	IceTec
Person-months per participant:		3.0	1.0	1.0	1.0	2.0	1.0	1.0
Participant id		BfEL	NKUA	BGU	INRAN	CSPO	WU	UiO
Person-months per participant:		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Participant id		NFNI	INSA	UVI	CESNID	FRI	NFA	TUBITAK
Person-months per participant:		1.0	1.0	1.0	1.0	1.0	1.0	0.5
Participant id		POLYTEC	IDUFIC	GUT	UCC	CESNID	UGR	
Person-months per participant:		1.0	1.0	0	0	0	0	
Total person months:		25.5						

^{*}WP1.6 will merge with WPs 1.4 and 1.5 from month 19 (see WP1.8 for month 19-30)

Objectives:

- 1. To enable the integration and comparison of foods in a pan-European information platform, it is necessary to harmonize existing food classification and description systems used in food composition databases, to conform to European dietary habits and needs in European intake assessments. To reach this goal, the WP will thus:
- 2. Recommend a standard food classification and description system for use in European food composition databases.
- 3. Apply these to the participating food composition databases; test recommended classification and description system for food record retrieval; improve food description thesauri.
- 4. Develop prototype food classification and description support facilities, as well as resources for supporting the use of these in database compilation and information retrieval, in collaboration with WP 1.4.
- 5. Make European food composition data interoperable, by developing mechanisms for linking foods reported in food consumption studies with available food composition data, including procedures for food aggregation.

Description of work

The <u>first phase</u> of the work (year 1) was to investigate food classification and description systems currently used in the European national data banks:

- A first task was to create a network of food composition database compilers, in collaboration with WP 1.5. Responses to the Compiler Questionnaire will allow WPs 1.5 & 1.6 to update the Inventory of European Food Composition Databases and Tables (Cost Action 99 publication, 2000), with additional countries and including databases on bioactive substances.
- Based on the Food Identification Questionnaire, a report on food classification and description in European FCDBs showed the
 national classification systems were very different but could be mapped to EFG/Eurocode classification in order to provide a
 uniform food classification for the EuroFIR network.
- The WP provided compilers with training in food classification and indexing to assure a common vocabulary and methodology. The WP has also developed prototype food classification and description support facilities (Food Product Indexer, FPI), in collaboration with WP 1.4.

The <u>second phase</u> (year 2) will be to test the aptitudes of the proposed food classification and description procedures for food record indexing and retrieval. The WP will then recommend a common food classification and description for use in European food composition databases:

- After the training during year 1, the compilers will index the foods in their food composition databases, using the LanguaL
 thesaurus and the prototype food classification and description support facilities (FPI). For quality assurance, there will be an
 evaluation of indexers' performance (link to W1.3). The target is to achieve 1000 indexed foods in their national databases by
 M18.
- Several reports will be provided: a position paper on Eurocode 2, a review paper on food classification and description, and a report on the prototype food classification and description support facilities.
- The draft food classification will be finalized by the Compilers Network, in collaboration with WPs on *Users and stakeholders* (WP 2.1) and Composite, processed and novel foods (WP 2.2) to determine the appropriateness of the proposed food classification.

After month 18, a <u>merger is proposed for WP 1.4, 1.5 and 1.6</u>. In this case, WP 1.6 will become a Task Force of the combined Work Package and the following work be carried out in this context.

The third phase will be to maintain and improve food description thesauri, while integrating new partners.

- The thesauri will be updated through expert groups, in collaboration with WPs on composite foods, traditional & ethnic foods, bioactive substances, and users' needs. Versions of the thesauri in French and Danish will be reviewed and updated; Austrian/German translations, which began in year 1, should now be finished.
- A second food indexing course will be organised after integration of new food composition databases (Central and Eastern Europe) in 2006. There will be another evaluation of food indexing for quality assurance.
- The WP will also seek to make European food composition data interoperable, by developing mechanisms for linking foods reported in food consumption studies with available food composition data. It will recommend levels of aggregation of food composition data in order to accommodate analytical results on individual food products, while at the same time allowing these results to be aggregated to wider food categories at a level compatible for all components.

These tasks will be carried out by a team of <u>core members</u> (AFSSA, DFVF, IDUFIC, POLYTEC) and by the EuroFIR <u>network of food composition database compilers</u> (UVI, IFR, Nubel, NCPHP, KTL, Icetec, BFE, NKUA, BGU, INRAN, CSPO, WU/Nevo, UiO, NFNI, INSA, FRI, NFA, CESNID & Tubitak.

Deliverables		
Number	Month Due	Description
D1.6.1*	Month 18*	Inventory of European food composition databases & tables*
D1.6.3*	Month 22*	Report on food retrieval using proposed description & classification*
D1.6.4	Month 15	Draft recommendations for standard food classification and description systems
D1.6.5	Month 18	Report on prototype food classification and description support facilities
D1.6.6	Month 14	Review paper on food classification and description systems
D1.6.7	Month 14	Position paper on Eurocode 2
D1.6.8	Month 16	Draft proposal for QA of food indexing

Milestones			
Number	Month Due	Expected Result	
M1.6.4**	Month 15*	300-500 foods per national dataset (prioritisation of EPIC foods)	
M1.6.5	Month 18	Testing/Evaluation of Indexers' performance	
M1.6.6	Month 18	Fully food indexed datasets (about 1000 foods)	

^{*}These has been rescheduled for M18 & M22, respectively, and updated with the new compilers in WP1.8.

^{* *}Original milestone title was "Recommendations for food classification and description systems for use in European food composition databases"

WP 1.7: Integrating knowledge, information flow and joint research activities (new WP from Month 19)

Work package number	Work package number 1.7		Start date or starting event:				M18	
Activity Type		IA						
Participant id		IFR	DFVF	UHEL	AUA	UCC	UiO	BNF
Person-months per participant:	1	6.4	0.5	2.0	0.7	0.7	2.0	1.3
Participant id		UL	Baigent	DFI	AFSSA	BfEL	CESNID	
Person-months per participant:		0.7	0	1.0	0*	0	0	
Total person-months:		15.3						

^{*}Translational costs included in 'Other' budget

Objectives

- 1. To maintain and further develop the network's IT web-based communication platform and tools to enable the integrated organisation of knowledge and information flow.
- 2. To establish an open platform for the JPA activities and support EuroFIR with a high level intranet facility to enable efficient communication and efficient project management.
- 3. To ensure an integrated and cross-platform coordination and communication of joint research activities; co-programming of research projects and training within the network and to identify new collaborative projects.
- 4. To identify and obtain new funding for joint research activities linked to the JPA.
- 5. To optimise network integration measures and provide annual updates on degree of individual partner integration.
- 6. To identify and recruit new network partners for specific activities or tasks, and advise on IPR issues (link to WP 4).

Description of work

This WP will commence at M18 and will be based on two earlier WPs 1.1 & 1.2. Four main tasks will continue:

Task 1: Further development and optimisation of website and communications tools (led by IFR/Baigent): These activities address objectives 1 & 2 above and the following two sub-tasks will be included:

- Providing facilities to have versions of the website in multiple languages (French, German and Spanish) for public website only via direct translation of text and selected documents (to be coordinated by BNF with support from BNF with support from AFSSA, CESNID and BFEL).
- Broadcasting meetings on the website. To make available video conferencing facilities and tools (ultimately
 through the website in real time) so that future EuroFIR open meetings can be recorded for future training and
 dissemination activities.
- Undertaking Site Manager training sessions for new partners in 2006 & 2007.

Task 2: Research, training and new funding (led by UiO/UHEL): These activities address objectives 3 & 4 above. The collation of research projects (UiO) will be completed by Month 18 including any new national compilers from non-EuroFIR countries and the information will be made available on the new WP1.7 page on the intranet. The list of available e-food journals (UCC & UHEL) will be finalised and searches of recent published food composition data will start from M13 and will be ongoing monthly activity. Also, a suitable format for exporting the data in appropriate databases will be investigated (eg Excel, Access, RefWorks, RefMan etc) with regards ease, systematic storage and retrieval of data. Opportunities for new funding (UL, DFVF & IFR) will continue with particular emphasis on new emerging bioactive compounds in key Ethnic and traditional foods (in collaboration with WPs 2.3.1, 2.3.2 & 2.4). The updating of the core training directory (UHEL/SLU) will be undertaken twice yearly (taking into account the addition of any new partners) and the additional information on the centre skills infrastructure inventory added to this directory (link to WP3.1).

Task 3: Performance indicators and models for integration (led by IFR/AUA): This activity addresses objective 5 above. Results from the 1st periodic report for integration will be collated, evaluated and modified in order to assess individual partner integration. Discussion with other FP6 NoEs (eg NuGO, Galen & CASCADE) will attempt to improve current models and measures and establish best practice.

Network Expansion (IFR): This activity relates to objective 6 above. IFR will manage the entire call, the evaluation of the proposals using the agreed independent experts and all reporting. The call for new partners will close on 8/3/06 and new partners should join the network from 1st July 2006. A workshop will be organised for new partners in June/July 2006 in order to cover financial and contractual requirements. Further contacts will be made with European compilers from non-EuroFIR countries (e.g. Estonia, Hungary, Slovenia, Czech Republic & the Balkans) and from international compilers including Africa (South Africa and other sub-

Saharian countries; various North African countries such as Morocco, Tunisia, Algeria and Egypt), South America (Brazil and Chile), and the Middle East (Jordan, Lebanon, Gaza Strip and the West Bank) in order to establish collaborative work, training and dissemination. Contacts will be made through existing partner networks especially FAO INFOODS.

Subcontracting: Three independent experts have been approved by the Commission from an initial list of six submitted names and these experts have signed subcontracting agreements with EuroFIR. The evaluations will be conducted by remote email with the possibility of a consensus meeting with the Chair of the panel and the Coordinator.

Deliverables		
Number	Month Due	Description
D1.7.1	Month 19	Design of information and communication system for collection and evaluation of performance indicators.
D1.7.2	Month 21	Report on integration status at M12 compared to M1.
D1.7.3	Month 22	Organise training workshop for network in the use/capabilities of web-based communications systems and tools.
D1.7.4	Month 27	Report on integration status at M24 compared to M12 & M1.
D1.7.5	Month 29	Report on links with new compilers from within and beyond Europe

Milestones		
Number	Month Due	Expected Result
M1.7.1	Month 18	2 nd phase completed including centre skills & training and publications/ documents.
M1.7.2	Month 24	3 rd phase completed including updated IT systems manual, portals for dissemination & communication activities and methods & QA inventory.
M1.7.3	Month 18	Initiate development and submission of funding bids to national bodies.
M1.7.4	Month 29	Review of partner integration status at M24 and instigate suitable corrective action.

WP 1.8 (New)*: Compiler network and supporting task groups

Work package number	1.8		Start date	or starting ev		19		
Activity Type		IA						
Participant id		DFVF	AFSSA	GUT	RUG	NUBEL	NCPHP	KTL
Person-months per participant:		6.0	8.0	1.0	1.5	2.5	3.5	2.5
Participant id		IceTec	BfEL	NKUA	UCC	BGU	INRAN	CSPO
Person-months per participant:		2.5	2.5	2.5	1.0	2.5	2.0	2.5
Participant id		NEVO*	UIO	NFNI	INSA	UVI	CESNID	FRI
Person-months per participant:		2.0	2.5	2.5	2.0	2.0	2.0	3.0
Participant id		NFA	TUBITAK	EBI	Polytec	IDUFIC	NNC	ETHZ
Person-months per participant:		5.0	2.0	9.0	6.0	11.0	4	3
		IMR	FVS-FC	DFI**	IFR	WU		
		6	2	3.5	4.0	0.5		
Total person months:		112.5						

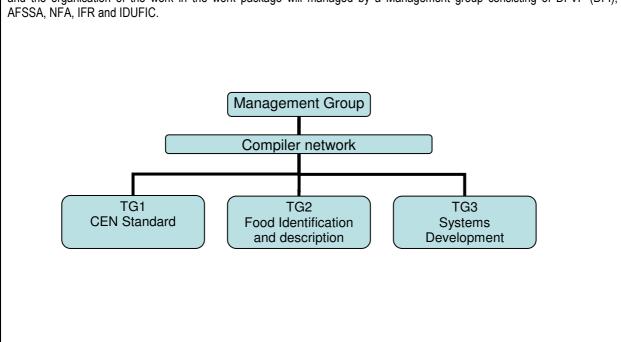
^{*}from 1/7/06; **from 1/1/07

Objectives

- 1. Organize and maintain the EuroFIR Compiler Network with focus on training of compilers in food description, value documentation and information technology issues like food composition databases on the internet.
- 2. To set up a working group within CEN for establishment of a standard on food composition data based on above criteria.
- 3. To establish and test a standard food classification and description system for use in European food composition databases.
- 4. Make European food composition data interoperable, by developing mechanisms for linking foods reported in food consumption studies with available food composition data, including procedures for food aggregation.
- 5. Further specify composition data to be deployed as national and specialised sets, their integration as a coherent resource of food composition information, and the data retrieval facilities required.

Description of work

The three work packages WP1.4, 1.5 and 1.6 are merged by the end of month 18 in order to form a single work package WP1.8 consisting of the established Compiler Network and its supporting task forces. The WP1.8 will be led by DFVF (DVI) and the organisation of the work in the work package will managed by a Management group consisting of DFVF (DFI), AFSSA NFA IFR and IDLIFIC.



The Compiler Network is supported by three Task Groups:

- CEN Standards task group (TG1, led by NFA)
- Food identification and description task group (TG2, led by AFSSA/DFVF (DFI))
- Systems Development (databank steering group; led by DFVF/IDUFIC)

The Compiler Network, involving DFVF (DFI), AFSSA, NFA, IFR, NUBEL, NCPHP, KTL, BfEL, UiO, NFNI, UCC, BGU, INRAN/CSPO, NEVO, INSA, CESNID/UGR, ICETEC, GUT/UVI, FRI, NKUA, TUBITAK, ETHZ, NNC, IMR & FVS-FC, plays a central role in the implementation of the EuroFIR databank system. Based on the input from the three task groups, the compilers will describe the foods and document component values in the regional/national/specialised datasets according to the harmonised and standardised criteria defined by the Food Identification and description and CEN Standard task groups. The Compiler Network will deliver the documented datasets to be included in the EuroFIR databank system.

The CEN Standards Task Group (TG1) will prepare the standards for food data documentation by setting up a working group within CEN for establishing a European Standard on food composition data, including necessary documentation and quality criteria for management and data interchange. The work will be coordinated through SIS (Swedish Standards Institute), the Swedish CEN member, in collaboration with NFA. Once a CEN working group is established, the CEN procedures will guide the formulation and execution of the work program, with respect to the organisation of meetings/workshops. The task group will initially involve SIS, NFA, IDUFIC, DFVF, AFSSA, IFR, NUBEL, NEVO and ICETEC. Tasks will include specifications on necessary documentation of compositional data, e.g. components, foods, methods, values and quality criteria, as a basis for their comparison, evaluation and interchange.

The TG is responsible for maintenance and update of all standard vocabulary used in connection component description and value documentation.

The Food Identification and Description Task Group (TG2), involving AFSSA; DFVF (DFI), Polytec, UVI and IDUFIC, will test the aptitudes of the proposed food classification and description procedures for food record indexing and retrieval. It will implement the recommended common food classification and description for use in European food composition databases, as well as maintain and improve food description thesauri, while integrating new partners. Tasks will include the application of systems to the participating food composition databases from the Compiler Network; test recommended classification and description system for food record retrieval, and improve food description thesauri. The TG will also further develop and implement prototype food classification and description support facilities, as well as resources for supporting the use of these in database compilation and information retrieval. The TG is responsible for the maintenance and update of the LanguaL thesaurus as well as eventual inclusion of other food description thesauri.

The **Systems Development Task Group (TG3)**, involving DFVF (DFI), EBI, KTL, Polytec, IDUFIC, BfEL & ETHZ, will set up and implement the EuroFIR Databank System according to the accepted criteria laid down in the specifications delivered by month 18. The data retrieval facilities will allow users to specify foods and components, return relevant data, and provide quality measures of the retrieved data matrix. The development plan will identify resources to support the composition data, planning their preparation and EuroFIR implementation. The resources will facilitate the retrieval and use of information on foods, food components, calculation parameters, analytical methods, source references and other food-related topics identified by the project. Resources will be designed for the full range of potential users from consumers to national compilers. The TG will further plan, specify and implement the prototype development of existing and new resources of supporting information, assisting with content preparation as necessary, as well as provide the necessary training for partners.

Deliverables		
Number	Month Due	Description
D1.8.1	22	Report on food record retrieval using proposed description and classification (TG2; formerly D1.6.3)
D1.8.2	22	Prototype food composition data standard on identification, expression & documental of food component data (TG2)
D1.8.3	24	Report on protocols for testing the standards for various component collections (in priority components) and report for testing recommendations and compiler support and training needs (TG1)
D1.8.4	24	Report on updates/changes to food description thesauri and proposed Danish and German/Austrian translations (TG2)
D1.8.5	26	Report on results of food indexing in compilers group (TG2)
D1.8.6	28	Report on test value documentation by compilers using prototype standard (TG1

D1.8.7	30	Report on extended method and analysis documentation – the extension of the initial	
		simple method documentation (TG1)	

Milestones		
Number	Month Due	Expected Result
M1.8.1	18-22	External audit report by UAG on EuroFIR system (TG3)
M1.8.2	22-30	Implementing data structures and systems; retrieval facilities (TG3)
M1.8.3	22	Complete Testing/Evaluation of Indexers' performance (TG2)
M1.8.4	22	EuroFIR Databank System specifications and plans accepted (TG3)
M1.8.5	24	Plan for initial value documentation finalised (TG1)
M1.8.6	24	Standard (and supporting thesauri) published on website (TG1)
M1.8.7	24	Food Indexed datasets available on website (TG2)
M1.8.8a	26	Compiler workshop concerning review of testing of protocols (see Report D1.8.4) (TG1)
M1.8.8b	26	Training courses on value documentation for compilers (TG1)
M1.8.8c	26	Training course on Food Indexing (TG2)
M1.8.8d	26	Building food composition web sites" training courses (TG3)
M1.8.9	29	Indexed food lists from new partners, updated food lists from others (TG2)
M1.8.10	30	First full EuroFIR Databank prototype(s) implemented and ready for tests (TG3)

Research Activities

WP 2.1: Users, Stakeholders and Sustainability Planning*

Work package number 2.1			Start dat	e or starting	1	1		
Activity Type		RA						
Participant id		US	KTL	BfEL	TTZ	AUA	INRAN	INSA
Person-months per participant:		36.0	1.0	1.0	1.0	1.0	1.0	1.0
Participant id		BNF	IRMM	DFVF	INRAN	FRI	NNC	FVS-FC
Person-months per participant:		1.5	0	0.5	0	0	1	1
Participant id		AFSSA	NFA	DFI				
Person-months per participant:		0.5	0	1.0				
Total person months:		47.5						

^{*}Original title was "User and Stakeholder Requirements"

Objectives

- 1. To determine the extent to, and format in, which food composition data is used by various user and stakeholder groups in Europe.
- 2. To determine what structures exist that enable interaction between stakeholders, users and compilers of food composition data on a national level and whether they are sustainable in the future.
- 3. To test user and stakeholders' acceptability and comprehension of information gained from an Internet-based food composition databank systems.
- 3. To promote and produce a sustainability plan EuroFIR's outputs.

Description of work

This WP will work closely with WPs2.1 (TTZ & ILSI) & 3.2 (BNF) on industrial consultations, WP3.3 (AUA) on developing a commercial strategy for the long-term income for the network and WP4 (IFR) on overall network coordination and strategic direction. In particular, this WP will play a key role in the Sustainability Task Force (see Task 9 below). The planned activities in this WP parallel activities across the network including integration (WP1.3, WPs1.4/1.5/1.6), research (WPs 2.2, 2.3 & 2.4) and spreading of excellence (WPs 3.1, 3.2 & 3.3). The WP is sub-divided into 9 tasks:

Continue Task 2: Analysis of selected European food composition database management and organizational structures (D2.1.6) (US, Susan Church, KTL, INSA & INRAN).

The aims of this task are to explain the current status of various food composition databases by considering the historical development of food composition information in the different European countries, the principal participants in the food composition data compilation process (e.g. users, stakeholders, compilers) will be identified. Management structures will be depicted with the aim to identify current and potential stakeholders. The lines, mechanisms and channels of communication between the user, stakeholder and compilers' community will also be identified. This activity comprises interviews with selected European national food composition database compilers with the overall aim of revealing the currently existing management and organizational structures. It will focus on the history, management structures, funding sources, and lines of communication with all users & stakeholders. The main aspect of this analysis is to determine what structures exist that enable interaction between stakeholders, users and compilers of food composition data on a national level and whether they are sustainable in the future. Compilers from the CEECFOODS network have been interviewed, thus the next steps are to interview compilers in the Northern and Southern European region. The work includes developing an interview schedule; identifying/recruiting interviewees and conduct interviews; and analysing and interpreting the interview data. These results will form the basis for the rationale for European cooperation as it determines the extent to which current national activities can or cannot be integrated into European collaborative efforts (e.g. compilation on national level may be replaced by European level compilation whilst data analysis may continue at national level). The viability and sustainability of these efforts will depend on sufficient financial and administrative structures being established, for which future stakeholders need to be identified. These aspects will be especially integrated into WP 3.3 as they form the foundation of the commercialisation and durability plans that are being developed.

US: Carry out interviews and analyse and write up data.

Susan Church: Based on her previous role at the UK FSA and her background knowledge in the context of European FCData history her involvement with this activity is planned as follows: Advice on management structures and relationships of the principal participants in the food composition data production process; feed into the interview schedule to be developed by the WP2.1 team to interview compilers form the Northern and Southern European region; and review the results after the WP2.1 team has analysed and interpreted the interview data.

TTZ: Help with analysing and writing up data - specifically information focussing on relationship with industry.

KTL, INSA & INRAN – national compilers assisting in the organisation of workshops.

New Task 3: Building partnerships with key stakeholders within and outside Europe (D2.1.4) (US, Susan Church, AFSSA, INSA, BfEL)

This TASK will work closely with WPs 1.7 & 2.2. In the context of sustainability it is imperative to consider the motivation for stakeholders to produce and maintain food composition database systems. In addition, it is important to understand which parts of the data production process do they "own" in terms of providing management, funds or carrying out tasks. EuroFIR will have to engage stakeholders in that what EuroFIR aims to deliver, in order to make it sustainable. Thus, EuroFIR needs to understand what makes stakeholders buy into what it wants to deliver. The aims of this task are to understand European National Food Consumption Survey Managers' wants and needs with regard to food composition data and their relationship with the national food composition databases. Key stakeholders include European national food consumption survey managers, and representatives from FAO INFOODS, WHO, EFSA, DG SANCO and industry. Complexity might be added because some stakeholders are primarily proprietary users of their own data (e.g. organisations that are responsible for food consumption surveys as well as compilers of food composition data). This aspect has implications for the content and quality of data systems. The work includes developing an interview schedule; identifying/recruiting interviewees and conduct interviews; and analysing and interpreting the interview data. A final paper will be prepared for submission to a peer-reviewed journal.

US: Collect, analyse and write up data.

Susan Church: Advice on relationships between international stakeholders such as, e.g. FAO, WHO, EFSA and national stakeholders.

BfEL, AFSSA & INSA: Comment on interview schedule. Help with collecting, analysing and writing up data.

TTZ: Help with analysing and writing up data – specifically information focussing on relationship with industry.

Continue Task 4: Interactive workshops with key food composition data users (D2.1.3) (US, AUA, DFVF, AFSSA, BNF & others to be determined)

This activity aims, through workshops, to obtain the views of key user groups of food composition data from outside of the EuroFIR network about the type of uses, the tools currently used and envisioned to be used in the future to access data, and mechanisms to communicate their requirements to compilers. Members of EuroFIR's User Advisory Group will be wherever possible involved in these events. The activity will also help elicit topics to be included in the generic questionnaire used in Activity 5.

It involves the development of a workshop format that can be used by EuroFIR partners to run interactive workshops with groups of key food composition data users. The aim being to collect and record the results of discussions with users in a systematic way which will allow comparisons between user groups. Events will be identified where it will be possible to meet with these users. Group discussions will focus on what food composition data are being used for in their field, the tools that they are currently using or would like to use in the future to access data, and the mechanisms that they find appropriate and effective to communicate their requirements to data compilers. Workshops will continue to be organized with user groups that have not yet been consulted. Where possible other EuroFIR partners will be encouraged and supported to run events in their countries following the guidelines developed as a result of the workshops run in the first 12 months. The next identified event is: "6th International Conference on Dietary Assessment Methods (ICDAM6)" on 27-29 April, 2006, Copenhagen.

US: Collect, analyse and write up data.

INRAN, INSA, NNC, FVS-FC, DFI, AUA, KTL: assisting in the organisation of interactive workshops.

TTZ: Help with analysing and writing up data – specifically information focussing on relationship with industry.

Continue Task 5: Food composition data users' views of currently used data (US, Susan Church, INSA, INRAN, KTL & BfEL)

This activity aims, through buestionnaires, to obtain the views of key user groups of food composition data from outside of the EuroFIR network about the type of uses, the tools currently used and envisioned to be used in the future to access data, and mechanisms to communicate their requirements to compilers. Future activities related to this task build upon the results and experiences collected when piloting the questionnaire with representatives from the food industry (see Milestone 2.1.2). The aim of this activity is to develop a generic questionnaire regarding user views about national databases. This will be used in countries where the database managers or others are willing to work with WP 2.1 (e.g. Portugal and Italy have expressed an explicit interest to be included here) to distribute the questionnaire to various food composition data user groups. The questionnaire will cover topics such as the preferred and most appropriate formats to access data, timeliness of making data updates available, quality requirements, pricing and communication related to developments relating to food composition data. The methodology used will include five steps: (1) develop generic questionnaire, (2) establish data collection sites and methods, (3) collect data, (4) analyse and interpret data, and (5) write up findings in the form of a paper for submission to a peer-reviewed journal (D2.1.3).

US: Collect, analyse and write up data.

Susan Church: based on her role as the leader of the UAG her involvement with this activity is planned as: Providing support by consulting the UAG (or individual members) for feedback on questionnaires and providing access to key user groups across Europe.

INRAN, INSA, NNC, FVS-FC, DFI, AUA & KTL: Collect FCData user data via questionnaires.

BfEL & AFSSA: analyse information logged to describe user queries

TTZ: Help with analysing and writing up data – specifically information focusing on relationship with industry.

New Task 6: Inventory of European nutrition analysis software (US, Susan Church, KTL, BfEL & DFVF)

The aim of this task is to provide an inventory of nutritional analysis software available in the EuroFIR partner countries with particular reference to functions, target audiences, and pricing. The basis for this activity is the inventory of nutritional analysis software available in the UK compiled by the contractor Susan Church, which is part of WP3.2. This activity relates strongly to Activities 2, the analysis of European food composition database management and organization structures; and 7, which comprises interviews with developers and marketers of nutrition analysis software. The latter activity is being carried out to better understand the wants and needs of developers and marketers, and their relationship with the national food composition database managers and customers (i.e. end-users of food composition data).

The collected information will provide a general overview of the range and type of products currently marketed. A final analysis of this information will highlight the limitations of currently marketed nutrition analysis software and will aid in identifying how the network can add value in the software development process and exploit these potential enhancements financially. Improvements may include:

- Enhancing the technical features of an existing software product,
- Enhancing the features that help the user with their understanding and interpretation of nutrition data,
- Developing a new software product, and
- Providing training to software producers and users of their products.

A checklist, criteria and web-based data collection tool that will be used to describe the selected nutrition analysis software will be

developed. Importantly, information about which databases are included in products will be logged. A data collection process will be devised; network partners will be asked to supply information about programmes that they are familiar. It is suggested that official WP 2.1 partners in Italy, Germany, Belgium and Denmark, as well as partners who expressed an interest in participating in WP 2.1 (e.g. Portugal, France and Slovakia) could help compiling this pan-European software inventory. Relevant information will also been collected as part of other WP2.1 activities. It will be necessary for the people involved in the collection and even more importantly the analysis of this data to have sufficient knowledge and experience of the topic of nutrition analysis. The reviewers will assess the collected information for relevance and quality. The findings will be summarised and written up in the form of a paper for submission to a peer-reviewed journal. A deliverable has been added to update the CO/SMB of progress and recommendations for the continuation of this task at Months 18 & 30 (see D2.1.7).

US: Collect, analyse and write up data.

Susan Church: involvement with this task is directly linked to the inventory of nutritional analysis software available in the UK compiled by Susan: Share experiences/learning's from the UK exercise and feed into the data collection format and interview schedule that can be used by EuroFIR partners to carry out a similar inventory in their countries.

DFVF & KTL: Help with collecting, analysing and writing up data.

TTZ: Help with analysing and writing up data – specifically information focussing on relationship with industry.

New Task 7: Interviews with developers and marketers of European nutrition analysis software (US, Susan Church, AUA & others to be determined including possible new partners to be selected in 2006)

Interviews with developers/marketers of nutrition analysis software are needed to better understand their wants and needs, and their relationship with the national food composition database managers and customers (i.e. end-users of food composition data). This study forms an integral part of the analysis of European food composition database management and organization structures in WP2.1 (see Activity 2). EuroFIR needs to decide how the network can add value in the software development process and exploit these potential enhancements financially (e.g. enhancing the technical features of an existing software product, enhancing the features that help the user with their understanding and interpretation of nutrition data, developing a new software product, providing training to software producers and users of their products). In addition, this will form the foundation of the sustainability and durability plans. The work includes developing an interview schedule; identifying/recruiting interviewees and conduct interviews; and analysing and interpreting the interview data. A final paper will be prepared for submission to a peer-reviewed journal. A deliverable has been added to update the CO/SMB of progress and recommendations for the continuation of this task at Months 18 & 30 (see D2.1.7).

US: Carry out interviews and analyse and write up data.

Susan Church: based on her previous role at the UK FSA her involved is: advising on the developers'/marketers' of nutrition analysis software relationship with national food composition database managers and feeding into the interview schedule that will be developed by the WP2.1 team.

DFVK, KTL & AUA: Help with collecting, analysing and writing up data.

TTZ: Help with analysing and writing up data – specifically information focussing on relationship with industry.

New Task 8: Develop and implement a sustainability and durability plan for EuroFIR's outputs (M2.1.5 and D2.1.7) (IFR, US, TTZ, ILSI, BNF & AUA)

The development of a sustainability concept relates to developing a resource management plan including the following key elements:

Creating a vision statement

- Building and maintaining collaboration among the network partners
- Identifying stakeholders/advocates
- Finding funding (This includes maximizing existing resources, identifying and pursuing other funding opportunities and creating new funding sources. One option for new funding sources is to make network outputs commercially available, which requires the development of a business plan in order to secure these new revenue generating sources. WP3.3 continues to work on this item)
- Putting a management system / administrative structures in place

The process of developing a sustainability plan will follow steps 1-5 which have been laid out below (see WP2.1 & WP2.2 discussion paper "The process of developing a sustainability and durability plan for EuroFIR's outputs.") The forum for the work could be the Sustainability Workgroup that emerged from the Integration Group that was originally established in Delft. The suggested roles and responsibilities that the specific partners play for this activity are as follows:

- WP4 (IFR) will lead the Sustainability Task Force and organise 6-monthly workshops (attached to the SMB meetings).
- WP2.1 (US) has responsibility for developing and guiding the implementation of the plans for sustainability in close collaboration with the other Task Force members.
- WP2.2 (TTZ & ILSI) and WP3.2 (BNF) focus on liaising with and consulting the food industry sector (see their respective detailed plans of activities under WPs 2.2 & 3.2)
- WP3.3 (AUA) focuses on collating the information that the process of developing the business and marketing plan will
 identify with regard to the EuroFIR network outputs that will have the potential to generate income and the elements
 needed to achieve this. The summary should follow a format needed for a business plan.
- UAG (via Susan Church) plays an advisor role and will be asked to comment on the initial sustainability plan.

The process of developing a sustainability plan can be broken down into the following steps:

- Step 1: WP-Ls will identify and describe the final outputs resulting from their activities during the lifespan of the funding by the EU.
- Step 2: For each output the workpackage leaders will provide answers to the following 6 questions:
 - Q1 Is this output the result from a one-off exercise or should the output be updated, maintained beyond the EU funded period?
 - Q2 Who should be the future owner of this output?
 - Q3 Who do you see as the future stakeholder(s)⁷ of this output?
 - Q4 Who do you see as the future user(s) 8 of this output?
 - Where/on which level should this output be sustained (national level, European level, international level (e.g. international organizations (e.g. INFOODS)?
 - Q6 What are the necessary actions⁹ that need to be undertaken in order to ensure that this output of your activity is wanted/needed/sustained in the future?

⁷ **Definition of stakeholder:** Stakeholders are those willing to invest resources and accept some responsibility for maintaining the viability of food composition data compilation because of their own interest in the data. Stakeholders may also be "Users" of food composition data.

⁸ **Definition of user:** Those who make use of food composition data; anyone that uses or employs food composition data as a means to fulfil a task. Users may also be "Stakeholders" of food composition data.

⁹ "Actions" in this context are referring to, e.g. setting up management/organisational structures, funding structures.

Step 3: The responses from the workpackage leaders with regard to each of their outputs will be analysed and grouped based on yet to be carefully defined criteria (e.g. such as required administrative structures, future ownership including responsibilities (e.g. funding) and rights).

Step 4: The actual sustainability plan will be developed including a commercial strategy to generate long-term income for the network. This step involves producing a draft business and marketing plan (in WP3.3) covering the definition of the remit and scope of a EuroFIR entity if needed and/or finding other "ownerships" as required/feasible/sustainable, and consideration of intellectual property rights.

Step 5: The necessary actions to implement the sustainability plan will be initiated and executed.

These steps will help identify how the EuroFIR databank system and other outputs can be sustained and what actions are necessary to ensure their long-term durability. The sustainability plan will be updated regularly following network progress and feedback from the SMB, GC, UAG and other appropriate advisory bodies.

Deliverables	3	
Number	Month Due	Description
D2.1.1*	15*	Draft paper on importance of FCDBs for a peer-reviewed journal (Task 1)
D2.1.3**	18** & 24	Interim reports that give evaluations of the extent to, and format in which food composition data is being used** (Tasks 4 and 5)
D2.1.4	21	Report on Interviews with European National Food Consumption Survey Managers (Task 3)
D2.1.5	24	Interim report on the studies involving case studies and testing of prototype websites (Task 8)
D2.1.6	30	Report on the analysis of selected European food composition database management and organizational structures (Task 2)
D2.1.7	18 & 30	Interim reports on the development and implementation of a sustainability and durability plan (Task 9)
D2.1.8	18 & 30	Report on the analysis of inventory of European nutrition analysis software (Task 6)
D2.1.9	18 & 30	Report on the analysis of interviews with developers and marketers of European nutrition analysis software (Task 7)

^{*}Original date = M6; amended deliverable due to modifications in the work plan.

^{**}This Deliverable was originally formulated as a Milestone (M2.1.3: Evaluation of (a) the extent to, and format in, which food composition data is used by stakeholders & (b) potential acceptability and comprehension of Internet based systems (by Month 18). Parts (a) and (b) will now be divided into separate outputs because part (b) will have to be delivered later since the prototype testing has to be done separately based on information provided by WP1.4 (see activity 8). Part (a) will be reports based on results from Activity 5 (Food composition data users' views of currently used data) and Activity 4 (Interactive workshops with key food composition data users).

Milestones		
Number	Month Due	Expected Result
M2.1.3**	18	Complete initial evaluation of the extent to, and format in which food composition data is being used (Tasks 4 and 5)
M2.1.4	21	Complete usability testing of prototype websites (Task 8)
M2.1.5	18	Complete Step 1 of the Sustainability Plan.
M2.1.6	24	Complete Step 2 of the Sustainability Plan.

WP 2.2: Composite, processed and novel foods

Work package number 2.2			Start date or starting event:				1	
Activity Type		R						
Participant id		TTZ**	IFR	RUG	NUBEL	KTL*	AFSSA	IceTec
Person-months per participant:		14.0	0.6	0.2	0.5	6.0	0.2	1.5
Participant id		BfEL	ILSI	AUA	INRAN	CSPO	WU	UiO
Person-months per participant:		3.0	3.0	1.0	0.2	0.2	0	0.2
Participant id		CESNID	NFA	TUBITAK	US	FVS-FC	ETHZ	DFI
Person-months per participant:		0.2	0.2	0.2	1.6	1	3.5	1.0
Participant id		DFVF						
Person-months per participant:		0.5						
Total person months:		38.8						

^{*}WP-L until 30/6/06; **WP-L from 1/7/06.

Objectives

- 1. Specify standard procedures for the calculation of the composition of prepared and composite foods from their ingredients intermediate products, including application of yield and nutrient retention factors, and formulate standard sets of factors.
- 2. Investigate the general availability of composition data on food industry products, options for improving information flow between industry and database compilers, and specific activities to improve the quality and timeliness of composition data and define industry requirements and establish guidelines for the effective incorporation of industry data in databank systems.
- 3. Strengthen and consolidate concepts for industrial consultation by further industrial lobby work and support further harmonisation and collation on European level.
- 4. Initiate running and efficient data transfer units on national level by data transfer show cases and generate branded and industrial composite food data in these show cases.

Description of work

work of this WP will be led by KTL until month 18 for continuing harmonization in imputing procedures of nutrient values and recipe calculation systems. From month 19 onwards, the WP will be led by TTZ and will focus on establishing industrial participation, collation and further exemplary data transfer. Next to an inventory of processes for composite dishes amongst the partners with FCDB, the following detailed tasks are planned:

4. Harmonization of procedures and rules for calculating the composition of composite foods (led by KTL):

- Collection and precise description of procedures for calculating the composition of prepared and composite foods from their ingredients or constituents.
- Review and harmonisation of yield and nutrient retention factors in calculation procedures together with WP1.5.
- Formulation of guidelines for recipe calculation procedures and the use of yield and retention factors (KTL and BfEL) according
 to a standard set of factors to be used in the calculation of the nutrient values in composite and processed foods. Evaluation of
 guidelines by individual UAG members.
- Definition of rules for the imputation of compositional data for foods reported in consumption data but for which analytical data is insufficient in present European datasets.

5. Industrial consultation and further initiation of data transfer on national level and two-way communication (led by TTZ/BfEL):

- Building of a European network for collaboration with food industry corporations (led by TTZ, ILSI and WPs 2.1 and 3.3 with support of BNF)
- Initiation and assessment of deep data transfer show cases with different possibilities:
 - 1. Using retailer data (TTZ, IFR, ILSI, based on the work of BNF)
 - 2. Transfer, utilisation of/for labelling purposes (TTZ, ICETEC, ILSI and externals: CIAA, major companies and SMEs yet to be identified)
 - 3. Collection, incorporation and updating information on branded food items by:
 - a) building a branded foods database and assessing feasibility and marketing, where yet structures for such a database have been lacked (TTZ, BfEL; external BLL and companies to be identified);

b) developing and testing a framework for further collecting, procedures and matching with information of generic foods, where existing structures have to be respected (KTL, NUBEL, IFR, TTZ, industrial companies to be identified)

The data transfer will be carried out by means of the EuroFIR prototype, where possible, and/or supported by DFVF in frame of the WP1.8. Initial focus will be set on foods with substantial compiler interest and/or well-recorded nutritional data (e.g. dietetic and functional foods), exploring further barriers and boarders in data transfer (e.g. detailed ingredients information).

- Initiation of national contacts to industrial associations for building more data transfer units throughout Europe.
- Identification of new data transfer needs (e.g. food supplements) and high-value data for industrial users (with support of the established contacts and the UAG).

6. Other activities (led by TTZ)

- Disseminate guidelines for Europe-wide discussion and applications together with WP 2.1 within EFSA, national food control
 authorities and food industry organisations
- Summary and assessment of the findings and plans for further planning within the EuroFIR-network.

Deliverab	les	
Number	Month Due	Description
D2.2.6	Month 12	Collected information of composite foods and industrial ingredients made available on EuroFIR website.
D2.2.7	Month 12	Pilot cases on data transfer from food industry to four European national FCDBs reported
D2.2.8	Month 21*	Report on status of collaboration with potential industry partners (TTZ, WPs 2.1, 3.3) and organisation of preliminary meeting/s for achieving common understanding
D2.2.9	Month 17	Report on collection of rules on use of recipe calculation procedures: including the use of yield and retention factors for imputing nutrient values for composite foods and organisation of discussion on the website.
D2.2.10	Month 18	Feedback report on evaluation of harmonised rules by individual members of UAG.
D2.2.11	Month 18	Update of plans for 18-48 months of WP covering sustainability of data transfer and analytical needs to obtain satisfactory compositional data
D2.2.12	Month 21	Presentation of guidelines on harmonized procedures in the Network meeting
D2.2.13	Month 27	Report on applications, methods and procedures to impute nutrient values for composite foods
D2.2.14	Month 30	Exemplary data transfer and plans to collate on EuroFIR-level

^{*}Original date = M18.

Milestones		
Number	Month Due	Expected Result
M2.2.1	24	Guidelines for harmonized procedures in recipe calculation to produce nutrient values for composite foods
M2.2.2	21	Establishment and identification of success factors for the show cases (go-/no-go points for further monitoring)
M2.2.3	28	Network formulated for industrial collaboration
M2.2.4	28	Harmonised procedures applicable & feedback from national compilers
M2.2.5	30	Guidelines and conclusions for establishing and advancing data transfer on European level

WP 2.3.1: Traditional Foods

Work package number 2.3.1			Start date or starting event:				1	1	
Activity Type		RA							
Participant id		NKUA*	IFR	GUT	RUG	NCPHP	DFVF	IceTec	
Person-months per participant:		8*	0.9	2.5	2.5	4.5	1.5	2.5	
Participant id		BfEL	INRAN	CSPO	NFNI	INSA**	UVI	CESNID	
Person-months per participant:		2.5	5.0	3.0	4.0	12	3.0	2.5	
Participant id		UGR	TUBITAK	NNC					
Person-months per participant:		1.5	2.0	3					
Total person months:		60.9							

^{*}WP-L until until 1/9/06; **new WP-L from 1/9/06

Objectives

- 1. To define the term "traditional" and determine the recipes or foods to be classified under this food group
- 2. To establish a common methodology for the systematic investigation of traditional foods across Europe
- 3. To provide new data on the nutritional composition of traditional foods for inclusion in national food composition tables with representative raw ingredients and recipes.
- 4. To develop dissemination material on traditional foods.

Description of work

NKUA will remain WP-L until 31/8/06 and INSA will then take over. The 2nd year periodic reporting will be undertaken jointly by NKUA for the period up to 1/9/06 and INSA for the remainder of the year. The Greek dataset and associated information on the selected traditional foods will be delivered by NKUA or a subcontractor.

Participants representing Austria (GUT), Belgium (RUG), Bulgaria (NCPHP), Denmark (DFVF), Germany (BfEL), Greece (NKUA), Iceland (IceTec), Italy (INSA/CSPO), Poland (NFNI), Portugal (INSA), Spain (CESNID/UGR), Turkey (Tubitak) and Lithuania (NNC), will be responsible for the identification of the traditional foods and recipes in their respective countries, as well as the implementation of a pilot study involving the collection and preparation of selected traditional food recipes. Participants will obtain experience and know-how on the common methodology for the systematic investigation of traditional foods and consequently, the remaining traditional foods of the prioritised list with no available compositional data may be investigated by the participants in the context of future research activities at a national level and thus, their national food composition tables can be gradually and continuously updated with new data on traditional foods. The WP will be divided into the following tasks:

k 1: Definition of the term 'traditional" and recipe selection (month 13)

lementation of the 2nd workshop on the 26th-27th of January, 2006 in Athens, with principle aims:

- to finalize the definition of the term "traditional" within EuroFIR
- to select the specific traditional foods and recipes to be investigated for each country.
- to provide partners with a protocol for recipe recording and sample collection in order to be able to proceed with the following WP task following a common methodology.

inimum of 5 food samples (2 recipes and 3 ingredients) will be selected for investigation per country.

k 2: Recipe recording and sample collection (months 14 -24)

- Traditional foods will be prepared by local inhabitants in the region where they are traditionally consumed.
- A thorough description of the traditional preparation procedure including all parameters (e.g. quantities, temperature, time), as well as empirical techniques applied will be reported and recipes for traditional foods will be included in the national food composition tables.
- Adequate amounts of the composite foods (recipes) as well as the raw ingredients used (primary foods) will be collected for sample preparation and analysis.
- Audiovisual material on the recipe preparation (photos and/ or video, DVD) will be collected to be used for the dissemination and promotion of the food.
- Each recipe will be reproduced in the laboratory in order to prepare 5 multiple samples, which will be "pooled" into a composite sample of the food or recipe, thus giving an average value.

Task 3: Preparation of samples for nutritional analyses. (months 14-24)

The protocol for recipe recording, sample collection and preparation of samples will be agreed by all participants (including the new partner, NNC) prior to the commencement of this task in order to ensure a common methodology for the systematic investigation of traditional foods in Europe.

- The list of nutrients, the methods and the list of laboratories for analysis (Month 18) will be finalised with the collaboration of WP 1.5 (Standard's development & Specifications), WP 1.3 (Quality framework) and WP2.4 (Bioactive compounds).
- Preparation of samples for analysis through freezing and/or freeze-drying procedures.
- Distribute samples to laboratories for analysis.

Task 4: Repetition of the above tasks (2/3) for the selected recipes where the determination of bioactive compounds is involved (months 18-30)

This task aims at limiting discrepancies and taking into account seasonal and regional variations and will be undertaken in close collaboration of WP2.4.

Task 5: Chemical analysis for the determination of the nutritional composition of the selected traditional foods and recipes (months 19-30)

This task involves the "collaborating laboratories", which will produce food compositional data on the traditional food samples supported by a laboratory protocol of the applied methodology.

Task 6: Development and promotion of dissemination material for the selected traditional foods and recipes (months 19-30)

Development of a poster and / or pamphlet on the selected traditional foods (separate dissemination material per country), which will focus on the recorded recipe and photos of its preparation. The pamphlets will also be distributed to relevant national SME's and a list of SME's interested in the production of the food according to the traditional recipe will be developed.

Task 7: Finalization of the documented / prioritised country specific traditional foods (months 13-30)

Using the country specific documentation/prioritisation files and developed guidelines, partners may continue enriching their country-specific files and deliver a more completed list at the end of this period.

Task 8: Collection of available compositional data on traditional foods (months 19-30)

The traditional foods of the preliminary prioritised list for which the documentation shows that composition data is readily available, will be considered for inclusion in the national food composition tables as such, following the data quality evaluation and input from WP 1.3. Therefore, the relevant compositional data will be collected and documented in appropriate files, in order to be evaluated in the following period.

Deliverables		
Number	Month Due	Description
D2.3.2	Month 15	Report covering protocol for recipe recording, collection and preparation of samples
D2.3.3	Month 20	Report on the list of nutrients and bioactive compounds, proposed methods of analyses and proposed list of laboratories per country
D2.3.4	Month 24*	Report on the preparation method of the traditional recipes investigated.
D2.3.11	Month 24-30	Dissemination materials (poster/pamphlet per country) on traditional foods
D2.3.12	Month 30	List of SME's initially interested in producing the traditional food
D2.3.13	Month 30	Data on the nutritional composition of traditional foods & final documented/prioritised country specific traditional foods files

^{*}Original date = M18

Milestones		
Number	Month Due	Expected Result
M2.3.3	Month 13	Start recipe recording and documentation.
M2.3.4	Month 18	Identify core partners or external laboratories for analysis.
M2.3.10	Month 20	Development suitable files for the imputation and documentation of available compositional
		data of traditional foods.
M2.3.11	Month 24	Development of suitable dissemination material on traditional foods

WP 2.3.2: Ethnic Foods

Work package number 2.3.2			Start dat	e or starting	event:	13			
Activity Type	Activity Type								
Participant id		UL	IFR	RUG	DFVF	AFSSA	BGU	INRAN	WU
Person-months per participant	Person-months per participant:		0.45	3.0	1.5	1.5	3.0	3.0	0
Participant id		CESNID	CSL						
Person-months per participant	:	3.0	1.0						
Total person months:		34.45							

Objectives

- 1. Providing new and reliable data on the composition of foods consumed by both ethnic and mainstream populations for inclusion in national food composition databases.
- 2. Transfer of scientific and technological knowledge to consumers [ethnic and mainstream populations] and industry; promoting knowledge of ethnic foods thereby increasing consumer choice and market opportunities.
- 3. Develop and promote programmes of dietary advice and diet/health information targeted at individual ethnic populations.

Description of work

The planned work is sub-divided into 2 sub-tasks addressing the three overall objectives above for this WP:

Task 1: Sample collection and analysis - For each country the following activities are planned:

UK (UL) - Currently 30 Indian foods (Gujarati, Bengali, Punjabi) have been identified. These include modified and authentic ethnic foods. 35 nutrients will be analysed but the final list is to be agreed with all partners. For modified ethnic foods, ingredients will be sought and recipes from SME's, for authentic/homemade dishes the recipes will be collected from volunteers, prepared, cooked and analysed. Selected ingredients will also be analysed directly.

France (AFSSA) - 30 priority foods have been identified for analysis, these include 18 North African, 4 Creole and 8 Asian foods. Further work is needed on these to compare lists with other EuroFIR partners. For authentic foods, the composition will be calculated from the nutritional composition of ingredients. For modified ethnic foods and ingredients, these are prepared products that cannot be calculated and will be analysed directly.

Spain (CESNID) - Latin American foods have been prioritised, particularly Mexican as other EuroFIR partners have prioritised the other major immigrant groups identified in Spain. Currently the list consists of around 59 foods (Latin American, Mexican, and Chinese/Asian) but this will be refined further. CESNID will focus on modified brands using information from their report and restaurants may also be included. For homemade foods, recipe calculation will be used but these need to be verified with key informants first.

Italy (INRAN) - The priorised list of foods is 31 at present. These include (Oriental cuisine/ Latin America cuisine, North African/African cuisine and East Europe cuisine such as Rumanian.INRAN will be focusing on industrial foods, dishes bought in shops and restaurants and homemade foods.

Denmark (DFVF) - Denmark will be focusing on Turkish and ex-Jugoslavian cuisine as these are the two largest populations. Prioritisation of their food list will be based on a food survey to identify these foods. This work will not be completed until month 16.

The Netherlands (WU/NEVO) - The Netherlands has identified the largest ethnic population as Surinamese. A food list of approx 135 foods has been prioritised, consisting of Moroccan, Turkish and Surinamese foods. This is proposed to be reduced further to around 20-30 foods by February 2006.

Israel (BGU) - The prioritized list of foods for analysis consists of various ethnic groups (Israeli, Jewish, Ethiopian, Bedouin, Mediterranean, Russian, Moroccan, & Arabic). Covering 24 foods. BGU propose using INRANs protocol using ingredients for restaurants and commercial foods.

In addition, UGENT will be invited to join this WP to investigate ethnic foods from Ethnic groups from sub-Saharian countries living in Brussels.

Four sub-tasks have been identified:

Sample preparation, collection and recipe recording: Composite samples of each modified ethnic food [n=3-6] will be collected from supermarkets, restaurants and takeaways and pooled to represent the range and variation in the composition. Whilst each ethnic food (3-6) will be prepared by the housewives to represent the variation in food preparation methods and minor ingredients used. The samples will be collected using standardised methods from the household and pooled into one composite sample. Raw ingredients will be collected from supermarkets and specialised shops. A total number of 210 foods have been prioritised [30 foods per country] to provide food composition data from chemical analyses and calculated nutrient data from recipes.

Nutrient analyses [months 14-18]: Sample preparation [including storage and handling], the list of prioritised nutrients, analytical methods and laboratories will be finalised in collaboration with WPs1.3, 1.5/1.8, 2.3.1 and WP 2.4. Samples will be kept frozen or freeze-dried and distributed to the labs for analyses. CSL & IFR will assist above partners identify suitable laboratories (either from either core partners or non-EuroFIR) to carry out analysis. The proposed list of laboratories, samples and nutrients to be analysed will be agreed by Month 15.

Recipe information and nutrient composition [month 21- 30]: This sub-task will address training needs of all partners for recipe collection and calculation, and use of common software to harmonise results. In particular, BGU and CESNID will run a workshop for other WP members on the use of their recipe software.

Exchange of existing data between national databases for selected ethnic foods will be carried out [month 17-24] by all partners and coordinated by UL. The **Validation of already published food composition data** will include both scope and feasibility of recipe information and published data for incorporation in national databases will be evaluated [following recommendations from WP2.2). Training needs for validation of new and published data and entry to the national databases (in collaboration with WPs 1.3 & 2.2, 2.4 and 2.3.1) will be identified.

The WP will also address training needs of all partners for recipe collection and calculation, and use of common software to harmonise results. In particular, BGU and CESNID will run a workshop for other WP members on the use of their recipe software. The scope and feasibility of recipe information and published data for incorporation in national databases will also be evaluated (following recommendations from WPs 1.3, 2.2 & 2.3.1).

2. Transfer of scientific and technical knowledge to consumers and industry

A two-day invited 3rd workshop will be organised (ca M21) in order to:

- Discuss & agree sampling plan including number of composite samples to be collected, sample size, list of nutrients, methods to be used and proposed list of laboratories (in collaboration with WPs 1.3 & 1.5).
- Identify additional bioactive compounds with putative health benefit for additional sample analysis (in collaboration with WP2.4)
- Produce a preliminary draft report on the composition of the key dietary ingredients associated with health/disease on the basis of literature review.
- Bring together core partners and sub-contractors involved in the collection of food samples, recipe information, analysis of samples; in this way an effective team spirit will be produced.
- Exchange of existing data between national databases for the same Ethnic foods.
- Publicise the importance of these foods within both the project and the European marketplace.

New funding initiatives will be sought by all WP partners to support the various national activities above. Inputs on the importance of ethnic foods will be fed into the Strategic Research Agenda of the ETP *Food for Life* which will, hopefully, ensure this area [as well as the needs of European consumers of minority ethnic populations] is highlighted in the FP7 Work Programme and opportunities to extend the activities of this WP across future FP7 projects. In addition this WP will optimise interactions and co-operation in the area of ethnic foods between EuroFIR and HARMONY [a nutritional NoE being submitted to the final call of FP6 in February 2006] so that co-programming of new research activities could be developed.

Programmes of dietary advice and diet/health information targeted at individual ethnic populations will be initially developed for delivery after 30 months once new validated data and dietary information is available. The dietary advice is likely to be on foods containing high and low amounts of fat, sugar, salt and specific micronutrients (eg iron, calcium, folate and vitamin D).

Draft and submit popular articles and/or scientific papers and features for EuroFIR website will be undertaken by UL and other

partners in collaboration with WP3.2 including the review of literature by UL and other partners and several features for the website on commonly consumed ethnic foods in several European countries. A poster and possible talk will be presented at the Barcelona conference in September 2006.

For the public, booklets will be produced including authentic recipes across European countries with some cultural/ethnic/historical stories and nutritional values and health related recommendations. Meetings for the public will include description of ethnic groups in selected countries as well as their cooking methods and recipes and some kind of cooking experience to get the flavour of ethnic recipes.

Proposed UAG Members – Natco Foods, Noon foods and other industries will be identified by the WP partners and some selected to join the UAG to provide advise on the Ethnic food industry in Europe and possible areas of collaboration. In particularly, the industry will assist in supplying various Ethnic foods and ingredients for analysis and other general information.

Deliverables		
Number	Month Due	Description
D2.3.7*	Month 18*	Critical review of composition of Ethnic foods including information on methods of domestic food preparation and eating practices.
D2.3.9	Month 22	Report on 3 rd workshop including list of ethnic foods to be collected for each country, list of laboratories, methods and dissemination activities.
D2.3.10	Month 18	Agree plan of work for 18-36 months
D2.3.14	Month 18	Status report to CO/SMB covering sample collection & analysis for each country (replaces previous deliverable)
D2.3.15	Months 15-30	Update website with new information on ethnic foods targeted at both consumers and industry especially SMEs and submit various articles and papers on Ethnic Foods for publication.
D2.3.16	Month 20	Establish a common software package to harmonise recipe collection in each country and complete appropriate training on recipe collection and calculation
D2.3.17	Month 27	Organise 4 th Workshop and submit progress report to CO/SMB covering sample collection & analysis for each country and plans for next 25-42 months.
D2.3.18	Month 30	Status report to CO/SMB covering sample collection & analysis for each country and dissemination activities.

^{*}Original date = M12 to permit additional comments and input from WP partners.

Milestones		
Number	Month Due	Expected Result
M2.3.7	Month 15	Identify core partners & additional laboratories for analyses in each country.
M2.3.8	Month 18	Start collection of ethnic foods and ingredients.
M2.3.9	Month 18	Start to develop and submit funding bids to national bodies and other agencies (modified previous milestone)
M2.3.12	Months 24	Needs of European consumers of minority ethnic populations are increasing recognised in national agendas and also in FP7.
M2.3.13	Month 28	Start collating data for each country for foods and recipes and agree validation procedures to assess data for entry into national databases.

WP 2.4: Bioactive Compounds

Work package number	Work package number 2.4		Start date or starting event:				13 th month		
Activity Type		RA							
Participant id		DFVF	IFR	GUT	NCPHP	UHEL	IceTec	BfEL	
Person-months per participant:		12.6	14.9	1.8	1.8	1.8	1.8	1.8	
Participant id		AUA	UCC	INRAN	UVI	NFA	SLU	TUBITAK	
Person-months per participant:		1.8	14.4	1.8	1.8	1.8	1.8	1.8	
Participant id		UL	Polytec	IRMM					
Person-months per participant:		1.8	1.8	2.25					
Total person-months:		67.55							

Objectives:

To establish a web-based integrated database (EuroFIR-BASIS) on critically assessed compositional and biological activity data for bioactives in major European foods.

Specific objectives:

- 1. To establish and populate a web-based database on critically assessed composition data on bioactive constituents in plant and non-plant-based foods (including wine, chocolate & soya products).
- 2. To extend the web-based database system to allow the inclusion of critically assessed biological effects data on bioactive constituents.
- 3. To update the plant and plant part lists to include major European food plants in 15 European languages, and to produce new lists covering exotic food plants, health food plants, and processed plant based foods.
- 4. To deploy the database in an internet environment to facilitate accessibility for stakeholders and end-users including food authorities, researchers, industry and consumers for general diet and health considerations and in order to support the evaluation of genetically modified foods e.g. plant foods.
- 5. To ensure compatibility of the EuroFIR-BASIS database with the standard specifications developed for the EuroFIR databank system.

Description of work:

This WP is led by DFVF with close support from UCC and IFR. Two workshops are planned during the 18 months. The WP management group (the WP-L from DFVF and the two co-leaders from IFR and UCC) will continuously be in close collaboration work undertaken in WPs 1.3, 1.4, 1.5 and 1.6 (WP1.8 from 1/7/06) in order to ensure compatibility of the BASIS database to EuroFIR databank systems. In particular, the team will ensure that the development and implementation is entirely consistent a compatible with the nutrient databanks.

In order to organise the work and to achieve the stated objectives, WP2.4 comprises:

Workpackage leader Jørn Gry (DFVF), a management group and three task groups: the Composition Evaluators Task Group (CEG), the Biological Evaluators Task Group (BEG), and the Plant List Task Group (PLG). The Bioactive User Group will be disbanded from M18 and members will join the main UAG.

(1) Management Group (MG)

Workpackage and Task Leader Jørn Gry (DFVF), Task Group Leaders Mairead Kiely (UCC) and Paul Kroon (IFR). The WP-L oversees in close cooperation with the two other MG members the activities of the WP and ensures there is good communication between the task groups within this WP and other WPs above, as well as with relevant research groups outside EuroFIR.

(2) Composition evaluators group (CEG):

This TG is led by Paul Kroon and Jenny Plumb (IFR) and includes: Manuela Buchgraber (IRMM), Ana Lucia Vasquez Caicedo (BfEL); Erdal Ertas (Tubitak), Hannes Hafsteinsson (IceTec), Anna-Maija Lampi (UHEL), Erik Norby (Polytec), Fany Ribarova (NCPHP), Heidi Schwartz (UVI) and Sonja Thanner-Lechner (GUT) and two subcontractors (Mike Rhodes & Eduardo Rosa; data evaluators; IFR). This task group is concerned with obtaining, evaluating and inputting compositional data on bioactives in plant foods. During the first 12 months, the CEG has agreed the format and content of an 'input form', based on the input form developed for the BASIS database to support the critical evaluation of primary reference material, and deploy the input form in an internet environment. In addition, the BASIS database of critically assessed compositional data on plant bioactives has been converted to a web-based format. A list of priority and secondary bioactive compound classes has been agreed and Lead Evaluators assigned to each priority class. Evaluators received training and an evaluator assessment was completed. New compositional data has been added to the database according to the priority compound class list.

From months 13-30 the workplan is as follows:

• Establish and implement a quality control system to control all aspects of the evaluation and data inputting process (with input from WP1.3), including training and assessment of evaluators

- To improve the database appearance and report formats, including compound structures, updating of synonyms and compound class lists, and links with the ChEBI database
- To initiate a workable mechanism for inputting data for processed foods (e.g. wine, chocolate, soy products) and nonplant-based foods
- To liaise closely with WP1.8 to ensure compatibility of EuroFIR-BASIS with the EuroFIR databank, namely component description, food identification, method description, and data quality assessment/scoring.
- To continue inputting compositional data to the database. This will be a continuous activity with the following as priorities:
 (i) good coverage of the priority compound classes, (ii) good coverage of the 100 most important European food plants, (iii) inclusion of widely consumed processed foods containing plant bioactives.

(3) Biological effects evaluators group (BEG)

This TG is led by Mairead Kiely and Darina Sheehan (UCC) and involves Christer Andersson (NFA), Afaf Kamal-Eldin (SLU), Barbara Engeli (Swiss Public Health, collaborator), Jørn Gry (DFVF), Maria Kapsokefalou (AUA), John Christian Larsen (DFVF), Erik Norby (Polytec), Mauro Serafini (INRAN), and Gerrit Speijers (subcontractor).

This task group is concerned with developing a system to critically evaluate published data on biological effects of bioactives in plant-based foods, developing data input forms to capture these data in *in vitro* and *in vivo* systems and inputting these data into the EuroFIR BASIS database.

During the first 12 months, the BEG initialised the development of a system to critically evaluate published data on biological effects of bioactive constituents in plant-based foods and by the end of 2005 a draft data input form was ready for BEG members to commence trial evaluations of *in vitro* studies. The list of priority and secondary bioactive compound classes was agreed in line with the CEG and members of the BEG identified their special areas of expertise in terms of compound classes and the types of research studies they were most familiar with. Members of the BEG received training to ensure quality and consistency between each evaluator's assessments.

From months 13-30 the workplan is as follows:

- To revise and finalise the initial draft of the *in vitro* data input form and to use it to capture data on studies focussing on *in vitro* systems.
- To continue to develop the *in vivo* (animal and human) data input form, to conduct trial evaluations of form, to finalise it and to use it to capture data on studies focussing on animal and human interventions with plant-based bioactives.
- To link closely with the CEG to ensure compatibility between the data entered by the CEG and BEG particularly in relation to the database structure and outputs.
- Training of evaluators, both existing and new members will be continuous throughout the project to ensure consistency between evaluators' assessments and compatibility with the quality framework developed for EuroFIR-BASIS in collaboration with WP 1.3.
- To continuously link with WP1.8 to ensure compatibility with the EuroFIR databank, particularly in relation to food and component identification and methods descriptions.
- To link with the CEG to establish systems that are compatible with the existing EuroFIR BASIS structure to enable broader evaluations of plant-based fermented and processed food products, including wine, soy products etc.
- To develop a synthesis report to outline the state-of-the-art in relation to non-plant bioactive constituents in foods for consideration by the management group and future workplans.

(4) Plant list group (PLG)

This TG is led by Jørn Gry and Folmer Eriksen/Kirsten Pilegaard (DFVF) and includes Erik Norby (Polytec) and Marten Sørensen (subcontractor to DFVF).

This task group is concerned with preparation of lists of food plants and edible mushrooms. e.g. major food plants, exotic food plants (in cooperation with WP2.3.2), and health food plants. The lists are used as a source for selection of food plants for inclusion in the EuroFIR-BASIS database. It is part of the task to ensure correct scientific names and trivial names in several European languages. A list on plant based processed foods will be worked out in cooperation with CEG and BEG.

During the first twelve months the PLG has initiated the revision of the list on major food plants used in Europe (the former NETTOX-list, 1997) using current scientific nomenclature and taxonomy and including plant parts in order to update and improve the utility of the list, e.g. for national food authorities and DG SANCO for defining novel food plants. Preparation of a list including major food plants in Europe 2006 has also been initiated as well as preparation of a list of exotic food plants and an initial list on health food plants in Europe. The lists will apart from food plants also include edible mushrooms.

From months 13-30 the workplan is as follows:

- To finalise the revised NETTOX list (1997) on major food plants with plant parts. The list will contain trivial names in 12 European languages of which the trivial names in English and Danish have been updated
- To finalise the list of major food plants (including plant parts) in Europe 2006 including trivial names in a series of European languages
- For all lists to assure compatibility with LanguaL (in cooperation with WP1.8)
- To finalise the list on exotic food plants (approximately 1000 plants)
- To finalise the list on health food plants (approximately 200 plants)
- List on most important plant based processed foods (in cooperation with CEG and BEG)
- Prioritisation of 100 major food plants for inclusion in the database to ensure good coverage for compositional and biological data
- Compilation of food plant pictures and preparation of descriptions of corresponding plant parts
- Future plans for activities based on current status on food groups, compositional and biological data covered in the database

Deliverables		
Number	Month Due	Description
D2.4.2	Month 14*	1st Users Group Meeting recommendations.
D2.4.3	Month 15	2 nd EuroFIR Workshop report covering lists for selected health & exotic food plants; status data assessment/entry & specifications and biological data input form.
D2.4.4	Month 15**	2 nd Users Group Meeting and recommendations for additional funding**
D2.4.5	Month 18	Report covering final food plant list on major food plants and edible mushrooms (about 350) in Europe (electronic version) and status on health food plants list; specifications for database deployment and data entry status.
D2.4.6	Month 18	Future plan for activities including plant source materials for food flavourings, draft list on health food plants (about 200) and input of biological data (about 75 papers).
D2.4.7	Month 22	Revised NETTOX list (1997) on major food plants in Europe (including plant parts) in printed version.
D2.4.8	Month 24	Draft system for searching, collating evaluating published data on biological activity of bioactives & in vitro model systems
D2.4.9	Month 24	Quality system and associated SOPs for compositional evaluation.
D2.4.10	Month 27	Final exotic & health food plant lists
D2.4.11	Month 29	Workshop report and recommendations for next 18m JPA

^{*}Original date was M3 and this ahs been postponed to M14 to allow establishment of group.

^{**}To be deleted - BUG will be disbanded from M18 and members merged with the main UAG.

Milestones		
Number	Month Due	Expected Result
M2.4.4*	Month 24*	Establish system for inclusion of compositional data for (1) processed & (2) non-plant based foods.
M2.4.5	Month 18	Agree future plan and set targets for additional funding.
M2.4.6	Month 23	Complete evaluation/entry of in vitro biological data for 150 published papers
M2.4.7	Month 24	Complete data entry capture for biological data from in vivo systems
M2.4.8	Month 24	Complete 2 nd evaluator assessment using modified data quality scoring system
M2.4.9	Month 30	Complete critical evaluation/entry of in vivo data from 150 published papers
M2.4.10	Month 30	Upload 5000 quality checked compositional datasets to the database

^{*}Original milestone changed from "Final major food plant & exotic food plant lists, database specifications and final input form for critically assessed biological data" (M18)

Spreading Excellence Activities

WP 3.1: Training, education and vision to postgraduates and young scientists

Work package number 3.1			Start date	or starting	1	1		
Activity Type		SA						
Participant id		WU	SLU	NCPHP	UHEL	BGU	IMR	FRI
Person-months per participant:		14.0	10.0	1.5	1.0	3.0	3.0	3.0
Participant id		DFVF	AFSSA	DFI				
Person-months per participant:		1.0	0.5	0.5				
Total person months:		37.5						

Objectives

To <u>promote knowledge</u>, <u>skills development and vision</u> in food composition research within the network, and across Europe through a coherent set of closely inter-related training and education activities, and to <u>promote gender equality in training opportunities and uptake</u>. These activities will bring a <u>high level of integration</u> of existing and new training activities to this field. In particular, we will:

- Organise, develop and coordinate training activities (workshops, courses) linked to the network's strategic goals;
- Coordinate information on specialised research facilities and training opportunities at all network partners and additional collaborators (link to WP 1.7)
- Co-ordinate and optimise training exchange programmes for the whole network and collaborating centres (links to WPs 3.2, 3.3 & 3.4)

Description of work

This WP will be jointly led by WU and SLU. All activities will be designed in such a way that they are providing a clear added value to already existing activities in Europe. For all specific training activities will be clearly indicated what resources the network provide for the non-members of EuroFIR. Close collaboration with the other WPs 3.2 and 3.4 will ensure an integrated training programme for the network and beyond. The network has set a target of at least 40% women on all training activities during the second 18 months.

(1) Specialised workshops and training courses (led by WU):

The following workshops have been identified for months 13-30 and will be organised from this WP in close collaboration with other WPs and partners-

- Shortened (2 weeks) Food Comp Course (Eastern Europe) 2006 (M22; to be organised by FRI/WU/NCPHP);
- Plant Food Analysis and Data Quality Course (4 weeks) in 2006 (M16; to be organised by WU);
- Preparation of regional (Balkans/Middle-Eastern/North Africa) workshop on compiling for 2007 (tentatively food indexing, data quality) (organised by WU/BGU/DFVF/IMR).

The following workshops will be organised by other WPs (and reported elsewhere under the relevant WP):

- Workshop (2-3 days) "Solving practical problems in Data Quality Evaluation" [M20; to be organised by WP 1.3 (INSA) in collaboration with WU & Quality Task Force];
- Training course on Data Quality Evaluation [M27; to be organised by WP 1.3 (INSA) in collaboration with WU & Quality Task Forcel:
- Course (2 days) on Food Indexing & Value documentation [M27; to be organised by WP 1.8 (AFSSA)];
- Building Food Composition Websites [M19 & M26; to be organised by WP1.8 (DFVF)].

Reports of each training course/workshop will be made by the organising WP in close cooperation with this WP including the following items: aims, participants, programme, evaluation by participants. Six months following each training event the effectiveness of the event will be measured via a questionnaire for all participants. WU/SLU will interact with all WPs across the JPA to identify training needs and develop appropriate workshops & courses in a variety formats including e-learning. An inventory of needs for training will be made via WP-Ls and used to update this list throughout the year. In particular, SLU will join the Quality Task Force linking WPs 1.3, 1.8 & 2.4 and attend meetings as required to fully integrate and maximise current available training courses and workshops and help to identify/develop new training possibilities. In addition, SLU will liaise with UHEL in order to complete and maintain core training directory, and make this widely available to all network members (link to WP1.7).

(2) Optimisation of existing Marie Curie Training Sites (led by SLU):

This task will be temporary suspended until FP7 commences in 2007.

(3) Exchange training visits including PhD-fellowship awards (led by SLU):

Coordination of exchange training visits for doctoral students, postdoctoral fellows and research staff affiliated to the network (internal students) and for external junior scientists, and of the PhD award programme with fellowships for key research activities. Agreement via a policy paper (D3.1.2) was an early priority to launch training activities by month 6 (D3.1.3). Ongoing and future activities for month 13-30 are:

- Coordination/contact with host organisations, applicants, reviewers, EuroFIR accountancy; reporting towards PMO, DEC (WPs1.2/1.7).
- Constant update of documents (regarding on-line application, reporting, evaluation, guidelines), adaptation of ongoing activities/procedures to changing requirements of NoE and to specific needs in all WPs.
- Increase awareness and participation in programme via effective communication to potential trainees via website, leaflets, and direct email approach of PhD students/young scientists.
- Preparation of a policy document on training activities as defined in technical annex for candidate/new member states and non-EuroFIR members.
- Outline of document regarding procedures/training activities for non-EuroFIR groups (research institutes/industry/other endusers) in respect to future sustainability/commercialisation of EuroFIR training activities.

(4) Other training at symposia and conferences (led by SLU):

Training for undergraduates, postgraduates and junior scientists is organised in the form of symposia and training courses. Ongoing and future activities for month 13-30 are:

- Coordination/contact with applicants, reviewers, EuroFIR accountancy; reporting towards PMO(activities for WP1.7 budgeted in WP3.1).
- Finalisation of the policy document.
- Planning of specific future training activities; implementation of procedures for on-line application, evaluation, approval.
- Increase awareness and participation in programme via effective communication to potential trainees via website, leaflets and direct email approach of PhD students/young scientists.
- Constant update of documents, adaptation of ongoing activities/procedures to changing requirements of NoE.

(5) Design and implementation of e-learning courses and information exchanges for world-wide access (led by WU/BGU):

These tasks will be undertaken by WU, BGU & IMR. Core training courses and workshops on the strategic goals of the network suitable for development into E-learning formats will be identified and plans prepared for further exploitation. In addition, existing resources on teaching materials (including on-line courses) will be retrieved and linked to the EuroFIR website.

(6) <u>Inventory of specific training requirements of compilers in non-EuroFIR countries in Europe and specific INCO countries (led by BGU/IMR/NCPHP):</u>

This task seeks to establish contacts with national compilers in non-EuroFIR countries in the Balkans, C/E countries, Middle & North Africa, Russia and countries of the former Soviet Union using existing with a particular emphasis on INCO countries and new contacts (e.g. CEECFOODS, FAO INFOODS & WHO) in order to identify their specific training needs and opportunities for collaboration with EuroFIR. These training needs and ideas will be developed into specific training courses, workshops, training exchange visits, in collaboration with EuroFIR. Proposals will be submitted to the CO/SMB for consideration.

Deliverables		
Number	Month Due	Description
D3.1.5	17, 23 & 29	Reports on ALL training activities (courses, workshops, exchanges, conferences & Marie Curie including assessment of effectiveness as measured against EuroFIR strategic goals.
D3.1.6	18	Report on Plant Food Analysis and Data Quality course including recommendations for follow-up of participants)
D3.1.7	23	Report on Shortened Food Comp Course including recommendations for follow-up
D3.1.8	23 & 29	Report on identified training needs of non-EuroFIR compilers from Europe and beyond activities
D3.1.9	30	Draft programme for regional (Balkans/Middle & North African/C/E) workshop(s).

Milestones		
Number	Month Due	Expected Result
M3.1.5	18, 24 & 30	Measure utilisation of training and exchange grants and make modifications as required
M3.1.6	24	Implementation of new training activities for non-EuroFIR members from Europe & beyond
M3.1.7	24	50 % uptake of training and exchange grants
M3.1.8	30	100% uptake of training and exchange grants

WP 3.2: Dissemination and Communication

Work package number 3.2			Start date	Start date or starting event:				1	
Activity Type		SA							
Participant id		BNF	IFR	FRI	NCPHP	CESNID	WU	BfEL	
Person-months per participant:		30	4.5	1.5	3.0	1	1.5	1	
Total person months:		42.5							

Objectives

- 1. To disseminate EuroFIR outcomes to users and stakeholders in Europe and beyond, using concepts and approaches developed in Year 1, in order to maximise the speed of impact of the advances in understanding of food composition databank systems generated through the network.
- 2. To target the general public directly via the public website and the media, working in conjunction with EuroFIR partners where possible.
- 3. To actively communicate with and engage with food industry in sharing contemporary compositional data for their products, in conjunction with other related WPs (see below), and to feed these experiences into the work underway in WP2.1, 2.2 & 3.3 on sustainability of the Network.
- To use the feedback from the external audit and UAG to refocus the communication strategy as required and in discussion with the CO/SMB.

Description of work

This WP is contributing towards integration via spreading of excellence and engaging directly with some key user groups (e.g. industry), integrating with and in support of the work of WPs 2.1 & 2.2. The WP is led by BNF (an SME). IFR (link to WP1.1, WP1.7 and EuroFIR website, and with dissemination outside Europe with particular focus on international compilers and users) and FRI & NCPHP/IMR (dissemination and networking in C/E countries, the Balkans, Russia and countries of the former Soviet Union) will provide support. The new skills of those benefiting from relevant training programmes (WP 3.1) will also be utilised, co-ordinated by BNF (NCPHP, NKUA, WU).

The dissemination activities will include:

- Continued use and development of the branding and style guide for EuroFIR developed in months 1-12, for use by all partners.
- Encouraging all partners to use materials developed in WP3.2 as a means of promulgating EuroFIR messages via onward transmission to stakeholders, using a cascade approach to ensure that communication messages are rapidly shared.
- Using, and developing further, links with communication streams (and expertise) of other communication intermediates such
 as other FP6 IPs and NOEs; the UAG; communications agencies; health professionals, consumer groups, policy makers
 (EU, DG SANCO, EFSA, WHO, FAO INFOODS and national representatives), opinion leaders, educators, researchers and
 funding agencies.

Specific activities will include:

- Preparing information of interest to users and stakeholders (for the public website and other uses), including bulletin board updates, newsletters (2/year), one-pagers (4/year), synthesis reports (2/year), monthly website features, congress proceedings and other resources and visual images using this to attract international mainstream and technical print and broadcast media.
- Organising an annual congress/network meeting, including a session on Science in Society.
- Making use of specialist communication streams, including those targeted at SMEs, and the annual media campaign to publicise the existence, strengths and potential of EuroFIR.
- Taking responsibility for the content of the public-facing EuroFIR website, and presenting key webpage information in French, German and Spanish, as well as English (linked with WP1.7).
- Working with WP3.1 to assist in coaching members (including students) in communication skills and ensuring that, once trained, these individuals are encouraged to assist locally in EuroFIR dissemination activities.
- Working with WPs 1.7, 2.1, 2.2 & 3.3 on integration, sustainability and industry liaison activities.

In undertaking these activities, attention will be paid to the issues of national sensitivities, restrictions of partner language fluency, the needs of those without Internet access, data protection, disabilities, IT literacy and speed/availability of electronic connectivity, and perceived requirements for information within EuroFIR.

Examples of themes that will be a focus of communications activities in months 13-30 include: the report on composite foods to be published in month 12 by WP2.2, progress with development of the new databank systems portal; findings emerging from WP2.1; scheduled deliverables in WP2.3.1.

Sub-contracting – external dissemination audit by Dr Juliet Gray (SME). Sub-contracting – Susan Church regarding UAG and support for WP 3.2 and other specific workpackages.

Deliverables		
Number	Month Due	Description
D3.2.3	Month 13-30	Web-bulletin board interface for stakeholders and world-wide respecting language, expertise levels, gender, ethnicity, disability, data protection and ethical issues (a further 12 web features/year).
D3.2.4	Month 13-30	Planned programme of information dissemination to suit users/stakeholders including further 4 one-pagers/year, 2 syntheses/year, 1 compilation booklet & 2 newsletters/year.
D3.2.5	Month 0-18	Meetings and congresses of stakeholders and of EuroFIR partners
D3.2.6	Month 18	Audit of dissemination "reach and effectiveness"
D3.2.7	Month 20	Published summary information about proceedings of first Network Congress on the website
D3.2.8	Month 24	Network Congress papers reviewed and accepted for publication
D3.2.9	Month 24	Second annual activity and integration reports
D3.2.10	Month 30	Draft programme for second Network Congress

Milestones		
Number	Month Due	Expected Result
M3.2.5*	Month 14*	1st Science and Society meeting held
M3.2.6	Month 18	1st dissemination review & report to SMB
M3.2.7	Month 18	External audit of dissemination effectiveness and awareness completed
M3.2.8	Month 24	Series of items for public website written (see D3.2.3 & D3.2.4)
M3.2.9	Month 30	Plans in place for disseminating proceedings of second Network Congress

^{*}The decision was taken by the CO/SMB to delay the first annual congress until February 2006 (month 14). This event incorporates a session on Science and Society so M3.2.5 has moved to M14.

WP 3.3: Commercialisation and durability

Work package number 3.3			Start date or starting event:				1	
Activity Type		SA						
Participant id		AUA	IFR	ILSI	TTZ	US	DFVF	
Person-months per participant:		20	0.9	1.0	1.0	1.6	0	
Total Person Months:		24.5						

Objectives

- 1. To identify the practice that internationally known national compilers use in securing funds for maintaining their own food composition tables.
- 2. To determine the extent of current ability of national food compilers in the EuroFIR network to generate income/ raise funds as well as what costs they incur to maintain current food composition tables.
- 3. To identify stakeholders and users for the internet-based food composition databank systems.
- 4. To test user and stakeholders' acceptability and comprehension gained from the internet-based food composition databank systems.
- 5. Development of a draft commercial opportunities plan.

Description of work:

Task 1. AUA will visit USDA/FDA to exchange information and explore current practice for costing and fund raising. A report will be delivered to the Consortium (D3.3.4).

Task 2 (AUA/IFR). This concerns the identification of the expenses that the national compilers incur for the maintenance of the current food composition tables (per cost category) and the funds they have raised / expected to raise for the same purpose. It is continuation of work done during year 1 (information already collected from 15 compilers). An existing protocol and questionnaire will be used to collect the same information from the remaining compilers. The task will be concluded with an analysis of the collected data and report submission to the Coordinator (D3.3.5).

Task 3 (AUA/TTZ/ILSI). The lists of users and stakeholders initiated during year 1 (D3.3.1) will be expanded with new entries for potential audiences. Possible categories may include: industry (catering, retail vendors, slimming, sports nutrition and supplements); government/policy makers; health professionals; researchers, nutritionists (associations, federations). The entries will be entered in a customer relationship management database system held in AUA. (D3.3.3).

Task 4 (AUA/US). AUA will first develop a list of tables that the current WP 2.4 bioactive internet-based database system can also contain (a "wish-list" of characteristics potentially wanted for the specific database by users and stakeholders). Selected users and stakeholders will subsequently be contacted to clarify the suitability and usefulness of the characteristics and revise the list. Input on the matter will also be provided by WP 2.1 (Task 5). A survey of target audiences using professional marketing research agencies will subsequently quantitatively test user acceptability. The names of target individuals developed through Task 3 (above) will be used for the survey. A conjoint, discrete choice or other suitable marketing research experiment will also be simultaneously implemented to numerically assess the likely market share for a sub-section of database characteristics and the "willingness to pay" of the target individuals. This sub-section will include the characteristics (tables/information) that the bioactive internet-based database system currently contains. The outcome of the activity will take the form of a confidential report to the SMB/UAG for evaluation and recommendations (D.3.3.4).

Task 5 (AUA/IFR). Following the identification of EuroFIR outputs by WP 2.1 (Task 9), AUA will contact technical, operations or executive personnel in all involved partners for such outputs with the purpose to identify the technical feasibility of including such outputs (tangible static/semi-interactive outputs and/or procedural improvements where possible) in EuroFIR's website/ databank portal. This links to D2.1.5. A feasibility report (confidential) will be prepared for circulation to the SMB/UAG (D.3.3.5).

Task 6 (AUA/IFR). Following the identification of EuroFIR outputs by WP 2.1 (Task 9) that have the potential to be commercially exploited by EuroFIR, a tentative commercial opportunities plan will be developed containing marketing evaluation, analysis and choices as well as financial survivability indications for the chosen outputs (D.3.3.6).

Deliverables	i	
Number	Month Due	Description
D3.3.2*	Month 17*	Sustainability workshop on nature and content of EuroFIR's business plan & report, and recommendations to improve the long-term strategy for commercialisation of network outputs.
D3.3.3	Month 24**	Updated list of users and stakeholders
D3.3.4	Month 21	Draft report on USDA/FDA sustainability of USDA databank systems.
D3.3.5	Month 24	Draft report on cross-network audit regarding the expenses side, namely: a) expenses necessary to maintain current network operations; b) the anticipated extent of future secure and/or non-secure national funding including results from new national compilers
D3.3.6	Months 24	Draft report on the analysis of the market research effort for user preferences, market shares and willingness to pay for the bioactive internet-based database system
D3.3.7	Month 28	Feasibility report on the prototype website and the EuroFIR databank portal.
D3.3.8	Month 30	Evaluation of 1st draft of commercial exploitation plan completed and revisions agree

 $^{^{\}star}$ Originally scheduled for M12 but moved to M18 to coincide with SMB/WP-L meeting in Athens.

^{**}Original date = M18.

Milestones		
Number	Month Due	Expected Result
M3.3.2*	Month 30+*	Organise workshop for network technology transfer managers and existing EU entrepreneurial programmes.
M3.3.3	Month 18	Identify pertinent incubators, new venture creation support and entrepreneurship training.
M3.3.4	Month 24	Establishment of an external advisory board/peer review committee for review draft business plan information for specific outputs
M3.3.5	Month 21	GO/NO GO on "All or Individual" tangible static/semi-interactive product prototypes and related components based on feasibility report.
M3.3.6	Month 24	Evaluation of 1st draft of commercial exploitation plan completed and revisions agreed

^{*}Originally scheduled for M6 but this was too early and has been partially replaced by workshop for WP-Ls (see D3.3.2 above) and the original workshop will be scheduled to M30 onwards.

WP 3.4: Gender Activities

Work package number 3.4			Start date or starting event:				13	
Activity Type		SA						
Participant id		BNF	IFR	RUG	NCPHP	UHEL	AFSSA	BfEL
Person-months per participant:		3.0	1.5	0.25	0.25	0.25	0.25	0.25
Participant id		NKUA	BGU	CSPO	NFNI	INSA	UGR	SLU
Person-months per participant:		0	0.25	0.25	0.25	0.25	0.25	0.25
Participant id		TUBITAK	FRI					
Person-months per participant:		0.25	0					
Total person months:		7.5						

Objectives

- 1. Continue to audit the gender balance within the project, with particular emphasis on women's roles.
- 2. Continue to collate sex-disaggregated statistics (both within the project team and in the research) in accordance with current European Commission recommendations.
- 3. Continue to assess the extent to which women have, and can progress towards having management and decision-making responsibilities. Assess the constraints or obstacles to equality and gender mainstreaming.
- 4. Continue to ensure gender sensitivity in the research project, in its practice and documentation.
- 5. Trial and revise target-based objectives for equality and gender integration, and tools for their evaluation.
- 6. Provide up-to-date information on equal opportunity policies and schemes as the project evolves.
- 7. Establish and enhance equal opportunity networks that meet the needs of women in the project.

Description of work

The WP will be led by BNF in close collaboration with IFR. There will be an annual gender information audit Gender fora will be linked with the project's regular partner meetings, to ensure that equality of opportunity has high visibility on the project agenda and across all project activities. These will also allow the continual evaluation of the success of the integration of gender issues. The third aspect of the methodology is the creation of support networks and linkage to existing networks: to increase dialogue and transparency; to allow experiences and information to be shared, and to disseminate good practice.

Four activities are planned:

Activity 1: Gender information audit – this will continue to be done on an annual basis. The exploitation and dissemination activities of the resource will require the consideration of gender and WP3.4 will feed into these activities.

Activity 2: Collation and promotion of information on good practice in gender mainstreaming - feedback from the first gender audit will be shared with partners, for example dissemination of equal opportunities policy messages; of information on good practice across all partners; of schemes for improving gender balance (direct and indirect) will be included.. Information from future annual audits will also be disseminated as well as other relevant information. The timing of meetings will be considered to suit those with caring responsibilities; suitable child care facilities will be identified for meetings. Women will continue to be encouraged to attend senior management meetings as observers to promote interest and confidence in attaining management roles.

Activity 3: Setting objectives for equality and integration, and developing methodologies for monitoring and evaluation - Quantitative targets set for equality (e.g. 40% minimum of both genders) at all levels of the project and as speakers at all partner meetings will be reviewed and revised if appropriate. It will be ensured that invitations for submissions actually mention women and men to overcome unrecognised bias. Qualitative targets for integration will be set and closely monitored (e.g. ensuring gender-neutral language used in all communications).

Activity 4: Networking support for equality of opportunity - Events will be planned and organised to raise awareness within the project and in the wider public arena making use of existing e-networks and appropriate web-based discussion groups. Positive use will be made of local groups for networking and training opportunities and this will be extended to other partners in the project.

The plan for the 2nd 18 months of the network will include ongoing monitoring (could we delete appraisal?) and appraisal with annual updates.

Sub-contracting: Gender expert advice and consultancy (as necessary).

Deliverables		
Number	Month Due	Description
D3.4.5	Month 15	Generally applicable guidelines for the dissemination of good practice in gender issues.
D3.4.6	Month 18	Produce documentation of the gender-related obstacles experienced by researchers and possible solutions.
D3.4.7	Month 20	Update information resource of relevant national and European networks of women scientists

Milestones		
Number	Month Due	Expected Result
M3.4.6	Month 18	Participatory discussion to set objectives for gender mainstreaming, and selection of indicators and criteria for monitoring gender mainstreaming in the network
M3.4.7	Month 24	Annual assessment of success in meeting gender-informed objectives.
M3.4.8	Month 13-30	Continue to participate in established networks (e.g. EC Network on Gender Aspects in Food Quality and Safety Research) as well as to continue to engage with others working on gender within FP6 on food quality and safety.

Management Activities

WP 4.0: Network management and co-ordination

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Work package number	4.0		Start date	or starting event:			13	
Activity Type		MA						
Participant id		IFR						
Person-months per participant:		28.8						
Total person months:								

Objectives

This WP covers both strategic and daily management of EuroFIR, as described in the Description of Work, para. 6.4) and in the Consortium Agreement. In the first Year a range of activities focused on <u>establishing the systems for efficient management</u> (protocols and formats for reporting within the management structure, and to the Commission), and the training of the core partners in the reporting procedures to be used. The period 13-30 months, work will continue to optimise these systems with close collaboration between Co-ordinator, SMB and PMO.

The main objectives are therefore to:

- 1. Maintain flexible and adequate network management for months 13 to 30
- 2. Fulfil the general co-ordinator's responsibilities described in section B.6 (and Annex 3 for more details) including the elaboration of the JPA for months 13 to 30
- 3. Organise the open calls, meetings, events and training activities outlined in section B.6 (and listed in the deliverables below)
- 4. Prepare the financial and technical reports for the EC including the approval of the breakdown of costs for the first 12 months
- 5. Design the next 18 months work programme and contract negotiations with the EC on behalf of the Consortium.

Description of work

Specific management issues will be dealt with are described below:

Organisation structure and network management operating procedures

- 1. The PMO within IFR will continue to maintain flexible and adequate network management for months 13-30. The GC, SMB, DEC, UAG and PMO will continue to be kept informed of Network output by the coordinator. Network Management procedures will be audited and changed according to the needs of the Network. Open call for new partners to be organised for first half of 2006 and plans for 2nd call in 2007 will be investigated. Collect/collate the progress reports and the annual reporting from the respective WPs for period 2, to prepare and update the JPA from these reports and to use the reporting to shape the communication and dissemination process. Write SOP on New Call for Partners.
- 2. Organise flexible meeting structure This will involve organisation of:
 - Twice year SMB meetings, annual network congress, annual GC and UAG meetings
 - Open calls for sub-contractors and new partners as necessary
 - Training course for Sitemanager
- 3. <u>Technical and Financial reporting to the EC</u> These will included annual progress reports, minutes from all GC, SMB, UAG, DEC and general assembly meetings; consolidated annual technical and annual reports (as specified in the EC-contract); third 18 months JPA and associated budget forecasts and administration and preparation of minutes of the GC and UAG meetings. Write SOP for periodic reporting using information learned from first periodic report.
- 4. <u>Internal communication</u> special attention will continue to be given to the optimal and flexible internal communication as a prerequisite for integration.
- 5. <u>SME involvement</u> The SMB will continue to decide a strategy to include SMEs in the various WPs. Specific tasks will continue to be identified in may of the WPs above.
- 6. <u>Creation of partner commitment</u> In the second year EuroFIR will continue to visit all partners, either by the CO and/or members of the SMB. These visits will take place both at management and research level. To this purpose, the various meetings of the SMB will rotate among the partners.

7. Interaction with funding bodies The success of EuroFIR will have to be maintained with continued and increasing funding (apart from the grant for integration). This task is for every individual WP and core partner researcher, the SMB will supervise these activities and also interact with regional and EU-Funding bodies in order to mutually acquaint with the concept of the Network of Excellence and to exploit its potential

Deliverables		
Number	Month Due	Description
D4.8	Month 14	*Network Congress: Food information databank systems & 1st meeting of UAG
D4.9	Month 18	**Proposal for admission of new partners from 2006; proceedings prepared & circulated.
D4.10	Month 14	Update of JPA for 2006 1st year periodic report new JPA for 13-30m and financial report.
D4.12	Month 13	Update for JPA 2006 and foresight of priorities for 2007
D4.11	Month 18	***4 th Meeting of SMB; minutes prepared & circulated (June 2006).
D4.13	Month 13	Meeting of SMB/WP-Ls/GC- JPA & budget agreed months 13-30, minutes prepared & circulated (January 2006)
D4.14	Month 16	Meeting - EC evaluation of 1st Periodic Report
D4.15	Month 21	2 nd Network Meeting & 6 th SMB/WP-L meeting; minutes prepared & circulated (October 2006)
D4.16	Month 25	Meeting of SMB/WP-L/DEC/GC – JPA & budget agreed months 25-42, minutes prepared & circulated (January 2007)
D4.17	Month 27	Meeting - EC evaluation of 2 nd Periodic Report (March 28th-30th 2007)
D4.18	Month 31	7 th meeting of SMB/WP-Ls; minutes prepared & circulated (July 2007)

^{*} This deliverable has been amended and the 2nd annual meeting is now planned for month 21

Milestones

Number	Month Due	Expected Result
M4.3	*Month 14	Open call for new partners published 01/02/2006
M4.5	**Month 13	Agreement of JPA for 2nd year agreed.
M4.6	***Month 17	Agreement with new partners to be enrolled by 2006.
M4.8	Month 15	Approval of EC of annual report of 1st period (and other reports as requested)
M4.7	****Month 25	Agreement of JPA and budget for 2007-08.
M4.9	M16	Evaluation of 1st Periodic Report
M4.10	M21	2nd Full Network meeting
M4.11	M27	evaluation of 2nd Periodic Report

^{*} This milestone has been rescheduled from Month 6 see D4.10

^{**} M12 New partners will now join EuroFIR from 1.7.06 due to rescheduling of the call (see WP1.2)

^{***} This SMB has been amended to 5th meeting and will include the first meeting of the DEC

^{**} This milestone has been rescheduled to Month 13

^{***} This milestone has been rescheduled to Month 18 see D4.13

^{****} This milestone has been rescheduled to Month 25

10. Project resources and estimation of incurred eligible costs

10.1 Efforts for the full duration of the project. – person months

Project Number (acronym) - FP6 513944 (EuroFIR)

Network Activity Type	Joint Programme of	Activities		Consortium	TOTAL per
7 1	Integrating Activities	Jointly executed research activities	Spreading of Excellence activities	Management activities	PARTICIPANT
		T	T	T	, ,
Participant 1 (IFR)	58	55	32	123	268
Participant 2 (GUT)	8.3	13.3	0	0	21.6
Participant 3 (RUG)	20	12	2	0	34
	_	T		T	_
Participant 4 (NUBEL)*	0	0	0	0	0
	1.0	T .			Lie
Participant 5 (IRMM)	3	9	0	0	12
Double in ant C (NICDLID)	17	20	2	0	39
Participant 6 (NCPHP)	11	20	2	0	39
Participant 7 (DFVF)	67	56	5	0	128
D (1) (0 ((TL))	1.40	I 00			T 40
Participant 8 (KTL)	13	30	0	0	43
Participant 9 (UHEL)	8	8	2	0	18
Participant 10 (AFSSA)	52	12	3	0	67
Participant 11 (IceTec)	13	17	0	0	30
	1	Las	Γ.	Γ.	1 1
Participant 12 (BFeL)	13	23	2	0	38
D. I'.'. (142 /II OI)	1.0	140	I 0	I 0	140
Participant 13 (ILSI)	0	10	0	0	10

Participant 14 (TTZ)	0	13	7	0	20
Participant 15 (NKUA)	17	60	2	0	79
Participant 16 (AUA)	3	0	28	0	31
Participant 17 (UCC)	17	50	0	0	67
Participant 18 (BGU)	9	8	27	0	44
Participant 19 (INRAN)	13	28	0	0	41
Participant 20 (CSPO)	10	13	2	0	25
Participant 21 (WU)	2	8	42	0	52
Participant 22 (UiO)	20	5	0	0	25
Participant 23 (NFNI)	13	18	2	10	33
Participant 24 (INSA)	63	5	2	0	70
Participant 25 (UV)	10	15	0	0	25
Participant 26 (CESNID)	13	20	0	0	33
Participant 27 (UGR)	10	5	2	0	17
	•				
Participant 28 (FRI)	15	17	7	0	39
Participant 29 (NFA)	25	15	0	0	30
Participant 30 (SLU)	5	5	32	0	42
Participant 31 (TUBITAK)	13	15	2	0	27
Participant 32 (BNF)	5	5	117	0	127

European Food Information Resource Network *EuroFIR* - 513944

Final Annex 1 (DoW with JPA₁₃₋₃₀)

Participant 33 (EBI)	53	0	0	0	53
Participant 34 (CSL)	10	0	0	0	10
Participant 35 (UL)	3	65	0	0	68
Participant 36 (US)	0	60	0	0	60
Participant 37 (BAG)	20	0	0	0	15
Participant 38 (RIKILT)	5	5	0	0	10
Participant 39 (POLYTEC)	37	6	0	0	43
			1		1
Participant 40 (IDUFIC)	45	0	0	0	45
Participant 41 (NNC)	24	24	0	0	48
Participant 42 (ETHZ)	18	21	0	0	39
Participant 43 (IMR)	36	0	18	0	54
Participant 44 (FVS-FC)	18	12	0	0	30
Participant 45 (DFI)	18	3.6	0	0	21.6
Participant 46 (NEVO)	27	0	0	0	27
Farticipant 40 (INEVO)	<u> </u>	Ι υ	Ι υ	Į U	21
TOTAL per ACTIVITY Type	844.3	766.9	338	123	2072.2
Overall TOTAL efforts					1852.6

^{*}NUBEL man efforts included in RUG

10.2 Efforts for months 13 – 30 of the project

Project Number - FP6 513944 (EuroFIR)

	Participant 1 IFR	Participant 2 GUT	Participant 3 RUG	Participant 4 NUBEL*	Participant 5 IRMM	Participant 6 NCPHP	Participant 7 DFVF	Participant 8 KTL	Participant 9 UHEL
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	1.6	0	0	0	0	0	0.2	0	0
WP1.2: Integrating research activities and addition of new partners	1.6	0	0	0	0	0	0.2	0	1.0
WP1.3: Development of a pan- European quality management system.	0.9	0	2.5	0	0.5	0	0.5	0	1.5
WP1.4: Internet development and deployment of EuroFIR databank systems	0.4	0	0.2	0	0	0.3	3.5	0.5	0
WP1.5: Standards development & specifications	0.4	0.3	0.3	0	0	0.2	0.5	0.3	0
WP1.6: Food identification & description	1.0	0	1.0	0	0	1.0	2.0	1.0	0
WP1.7: Integrating knowledge, information flow and joint research activities	6.4	0	0	0	0	0	0.5	0	2.0
WP1.8: Compiler network and supporting task forces	4.0	1.0	4.0	0	0	3.5	6.0	2.5	0

	Participant								
	1	2	3 '	4	5	6	7	8	9
	IFR	GUT	RUG	NUBEL*	IRMM	NCPHP	DFVF	KTL	UHEL
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users and stakeholders	0	0	0	0	0	0	0.5	1.0	0
WP2.2: Composite, processed and novel foods	0.6	0	0.7	0	0	0	0.5	6.0	0
WP2.3.1: Traditional foods	0.9	2.5	2.5	0	0	4.5	1.5	0	0
WP 2.3.2 Ethnic Minority foods	0.45	0	3.0	0		0	1.5	0	0
WP2.4: Bioactive compounds	14.9	1.8	0	0	2.25	1.8	12.6	0	1.8
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	0	0	0	0	0	1.5	1.0	0	1.0
WP3.2: Dissemination and communication	4.5	0	0	0	0	3.0	0	0	0
WP3.3: Commercialisation and durability	0.9	0	0	0	0	0	0	0	0
WP3.4: Gender activities	1.5	0	0.25	0	0	0.25	0	0	0.25
TOTAL JPA									
	1		_	_		•			_
Consortium Management Activities	40.05	5.6	14.45	0	2.75	16.05	31.5	11.3	7.55
WP4: Network management and coordination	28.8	0	0	0	0	0	0	0	0
TOTAL Cons. Management									
TOTAL per PARTICIPANT	68.85	5.6	14.45	0	2.75	16.05	31.5	11.3	7.55

^{*} NUBEL efforts are included in RUG

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	Dortioinant	Dorticipant	Dortisinant	Dortisinant	Dortioinant	Dortioinant	Dorticinant	Dortioinant	Dortisinant
	Participant 10	Participant 11	Participant 12	Participant 13	Participant 14	Participant 15	Participant 16	Participant 17	Participant 18
	AFSSA	IceTec	BFeL	ILSI	TTZ	NKUA	AUA	UCC	BGU
	AI OOA	100100	DI CL	ILOI	112	NICOA	NON	000	БОО
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	0	0	0	0	0	0	0	0	0
WP1.2: Integrating research activities and addition of new partners	0	0	0	0	0	0	0	0.3	0
WP1.3: Development of a pan- European quality management system.	2.0	0	0	0	0	0	0	0	0
WP1.4: Internet development and deployment of EuroFIR databank systems	0.2	0.5	0.5	0	0	0	0	0.2	0.5
WP1.5: Standards development & specifications	0.8	0.3	0.5	0	0	0.3	0	0.3	0.3
WP1.6: Food identification & description	3.0	1.0	1.0	0	0	1.0	0	0	1.0
WP1.7: Integrating knowledge, information flow and joint research activities	0	0	0	0	0	0	0.7	0.7	0
WP1.8: Compiler network and supporting task forces	8.0	2.5	2.5	0	0	2.5	0	1.0	2.5

	Daudiain and	Double in and	Dantialia and	Dantialaant	Dantiala and	Dantialaant	Danital and	Dantiala and	Dantiala ant
	Participant 10	Participant	Participant 12	Participant	Participant	Participant 15	Participant 16	Participant	Participant 18
	AFSSA	11 IceTec	BFeL	13 ILSI	14 TTZ	NKUA	AUA	17 UCC	BGU
	AFSSA	icerec	DreL	ILOI	112	INNUA	AUA	000	ВОО
						1		1	
Jointly executed research activities									
WP2.1: Developing food									
composition databank systems	0.5	0	1.0	0	1.0	0	1.0	0	0
and related tools for use with									
various users and stakeholders									
WP2.2: Composite, processed	0.2	1.5	3.0	3.0	14.0	0	1.0	0	0
and novel foods	V.E	1.0	0.0	0.0	11.0		1.0		
WP2.3.1: Traditional foods	0	2.5	2.5	0	0	8.0	0	0	0
	•						-		
WP 2.3.2 Ethnic Minority foods	1.5	0	0	0	0	0	0	0	3.0
WP2.4: Bioactive compounds	0	1.8	1.8	0	0	0	1.8	14.4	0
Spreading of Excellence activities									
WP3.1: Training, education and									
vision to postgraduates and	0.5	0	0	0	0	0	0	0	3.0
young scientists.									
WP3.2: Dissemination and	0	0	1.0	0	0	0	0	0	0
communication	U	0	1.0	0	0	0	0	0	0
WP3.3: Commercialisation and	0	0	0	1.0	1.0	0	20.0	0	0
durability	U	0	0	1.0	1.0	U	20.0	0	0
WP3.4: Gender activities	0.25	0	0.25	0	0	0	0	0	0.25
TOTAL JPA	16.95	10.1	14.05	4.0	16.0	11.8	24.8	16.9	10.55
									_
Consortium Management Activities									
WP4: Network management and	0	0	0	0	0	0	0	0	0
coordination	0	0	0	0	0	0	0	0	0
TOTAL Cons. Management									
		1	•	•	1	•	1	•	
TOTAL per PARTICIPANT	16.95	10.10	14.05	4.0	16.0	11.8	24.8	16.9	10.55
TOTAL per PARTICIPANT	16.95	10.10	14.05	4.0	16.0	11.8	24.8	16.9	10.55

	Participant 19 INRAN	Participant 20 CSPO	Participant 21 WU	Participant 22 UIO	Participant 23 NFNI	Participant 24 INSA	Participant 25 UV	Participant 26 CESNID	Participant 27 UGR
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	0	0	0	0.3	0	0	0	0	0
WP1.2: Integrating research activities and addition of new partners	0	0	0	1.0	0	0	0	0	0
WP1.3: Development of a pan- European quality management system.	0	1.0	0.5	0	0	20.0	0	0	0
WP1.4: Internet development and deployment of EuroFIR databank systems	0	0	0	0.2	0.2	0	0	0.2	0
WP1.5: Standards development & specifications	0.3	0.5	0	0.3	0.4	0.4	0.4	0.4	0.3
WP1.6: Food identification & description	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0
WP1.7: Integrating knowledge, information flow and joint research activities	0	0	0	2.0	0	0	0	0	0
WP1.8: Compiler network and supporting task forces	2.0	2.5	0.5	2.5	2.5	2.0	2.0	2.0	0

	Dortisinant	Participant	Participant	Participant	Dortisinant	Participant	Participant	Participant	Participant
	Participant 19	Participant 20	Participant 21	22	Participant 23	Participant 24	25	26	Participant 27
	INRAN	CSPO	WU	UIO	NFNI	INSA	UV	CESNID	UGR
	IINIVAIN	0310	VVO	010	INI INI	INOA	UV	CLONID	UGIN
Jointly executed research activities									
•									
WP2.1: Developing food									
composition databank systems and related tools for use with	1.0	0	0	0	0	1.0	0	0	0
various users and stakeholders									
WP2.2: Composite, processed									
and novel foods	0.2	0.2	0	0.2	0	0	0	0.2	0
WP2.3.1: Traditional foods	5.0	3.0	0	0	4.0	12.0	3.0	2.5	1.5
WP 2.3.2 Ethnic Minority foods	3.0	0	0	0	0	0	0	3.0	0
WP2.4: Bioactive compounds	1.8	0	0	0	0	0	1.8	0	0
Spreading of Excellence activities									
WP3.1: Training, education and									
vision to postgraduates and	0	0	14.0	0	0	0	0	0	0
young scientists.									
WP3.2: Dissemination and	0	0	1.5	0	0	0	0	1.0	0
communication	· ·	· ·	1.0	Ů	O .	· ·	0	1.0	O .
WP3.3: Commercialisation and	0	0	0	0	0	0	0	0	0
durability		-							
WP3.4: Gender activities	0	0.25	0	0	0.25	0.25	0	0	0.25
TOTAL JPA	14.3	8.45	17.5	7.5	8.35	36.65	8.2	10.3	2.05
		1	1	•	1			1	
Consortium Management Activities									
WP4: Network management and	0	0	0	0	0	0	0	0	0
coordination	•	, and the second			, and the second			•	•
TOTAL Cons. Management									
TOTAL	440	0.45	47.5	7.5	0.05	00.05		100	0.05
TOTAL per PARTICIPANT	14.3	8.45	17.5	7.5	8.35	36.65	8.2	10.3	2.05

	Participant 28 FRI	Participant 29 NFA	Participant 30 SLU	Participant 31 TUBITAK	Participant 32 BNF	Participant 33 EBI	Participant 34 CSL	Participant 35 UL	Participant 36 US
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	0	0	0	0	0.7	0	0	0	0
WP1.2: Integrating research activities and addition of new partners	0	0	0	0	0	0	0	0.3	0
WP1.3: Development of a pan- European quality management system.	0	0	1.0	1.0	0	0	3.0	0	0
WP1.4: Internet development and deployment of EuroFIR databank systems	0	0	0	0	0	3.5	0	0	0
WP1.5: Standards development & specifications	0.4	0.5	0	0.4	0	0	0	0	0
WP1.6: Food identification & description	1.0	1.0	0	0.5	0	0	0	0	0
WP1.7: Integrating knowledge, information flow and joint research activities	0	0	0	0	1.3	0	0	0.7	0
WP1.8: Compiler network and supporting task forces	3.0	5.0	0	2.0	0	9.0	0	0	0

		T	T	1	T	T =	T =	1	T =
	Participant	Participant	Participant	Participant	Participant	Participant	Participant	Participant	Participant
	28	29	30	31	32	33	34	35	36
	FRI	NFA	SLU	TUBITAK	BNF	EBI	CSL	UL	US
		1		_	1		1	1	
Jointly executed research activities									
WP2.1: Developing food									
composition databank systems	0	0	0	0	1.5	0	0	0	36.0
and related tools for use with									
various users and stakeholders									
WP2.2: Composite, processed	0	0.2	0	0.2	0	0	0	0	1.6
and novel foods									
WP2.3.1: Traditional foods	0	0	0	2.0	0	0	0	0	0
WP 2.3.2 Ethnic Minority foods	0	0	0	0	0	0	1.0	18.0	0
WP2.4: Bioactive compounds	0	1.8	1.8	1.8	0	0	0	1.8	0
Spreading of Excellence activities									
WP3.1: Training, education and									
vision to postgraduates and	3.0	0	10.0	0	0	0	0	0	0
young scientists.									
WP3.2: Dissemination and	1.5	0	0	0	30.0	0	0	0	0
communication	1.0	Ů	0	, , , , , , , , , , , , , , , , , , ,	00.0	0	Ů	0	0
WP3.3: Commercialisation and	0	0	0	0	0	0	0	0	1.6
durability	-								
WP3.4: Gender activities	0	0	0.25	0.25	3.0	0	0	0	0
TOTAL JPA	8.9	8.5	13.05	8.15	36.5	12.5	4.0	20.8	39.2
Consertium Management Activities									
Consortium Management Activities									
WP4: Network management and coordination	0	0	0	0	0	0	0	0	0
TOTAL Cons. Management				1					1
TOTAL per PARTICIPANT	8.9	8.5	13.05	8.15	36.5	12.5	4.0	20.8	39.2
TOTAL PET FAILTICIFAINT	0.0	0.0	13.03	0.10	30.3	ILIJ	7.0	20.0	JJ.Z

	Participant 37 Bagient	Participant 38 RIKILT	Participant 39 POKYTEC	Participant 40 IDUFIC	Participant 41 NNC	Participant 42 ETHZ	Participant 43 IMR	Participant 44 FVS-FC	Participant 45 DFI
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	1.4	0	0	0	0	0	0	0	0
WP1.2: Integrating research activities and addition of new partners	0	0	0	0	0	0	0	0	0
WP1.3: Development of a pan- European quality management system.	0	0	0	0	0	1.0	0	1.0	0.5
WP1.4: Internet development and deployment of EuroFIR databank systems	0	0	3.5	1.8	0	0	0	0	0
WP1.5: Standards development & specifications	0	3.0	0	2.5	0	0	0	0	0
WP1.6: Food identification & description	0	0	1.0	1.0	0	0	0	0	0
WP1.7: Integrating knowledge, information flow and joint research activities		0	0	0	0	0	0	0	1.0
WP1.8: Compiler network and supporting task forces	0	0	6.0	11.0	4.0	3.0	6.0	2.0	3.5

	Participant	Participant	Participant	Participant	Participant	Participant	Participant	Participant	Participant
	37 Bagient	38 RIKILT	39 POKYTEC	40 IDUFIC	41 NNC	42 ETHZ	43 IMR	44 FVS-FC	45 DFI
				1 .2 00					
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users and stakeholders	0	0	0	0	1.0	0	0	1.0	1.0
WP2.2: Composite, processed and novel foods	0	0	0	0	0	3.5	0	1.0	1.0
WP2.3.1: Traditional foods	0	0	0	0	3.0	0	0	0	0
WP 2.3.2 Ethnic Minority foods	0	0	0	0	0	0	0	0	0
WP2.4: Bioactive compounds	0	0	1.8	0	0	0	0	0	0
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	0	0	0	0	0	0	3.0	0	0.5
WP3.2: Dissemination and communication	0	0	0	0	0	0	0	0	0
WP3.3: Commercialisation and durability	0	0	0	0	0	0	0	0	0
WP3.4: Gender activities	0	0	0	00	0	0	0	0	0
TOTAL JPA	1.4	3.0	12.3	16.3	8.0	7.5	9.0	5.0	7.5
Consortium Management Activities									
WP4: Network management and coordination	0	0	0	0	0	0	0	0	0
TOTAL Cons. Management									
· · · · · · · · · · · · · · · · · · ·		I .		I	I	I		1	I
TOTAL per PARTICIPANT	1.4	3.0	12.3	16.3	8.0	7.5	9.0	5.0	7.5

	Participant 46 NEVO	Participant	TOTAL ACTIVITIES						
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	0								4.2
WP1.2: Integrating research activities and addition of new partners	0								4.7
WP1.3: Development of a pan- European quality management system.	1.5								38.9
WP1.4: Internet development and deployment of EuroFIR databank systems	0								16.2
WP1.5: Standards development & specifications	0								14.3
WP1.6: Food identification & description	0								25.5
WP1.7: Integrating knowledge, information flow and joint research activities	0								15.3
WP1.8: Compiler network and supporting task forces	2.0								112.5

	Participant 46 NEVO	Participant	TOTAL ACTIVITIES						
			•					•	•
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users and stakeholders	0								47.5
WP2.2: Composite, processed and novel foods	0								38.8
WP2.3.1: Traditional foods	0								60.9
WP 2.3.2 Ethnic Minority foods	0								34.45
WP2.4: Bioactive compounds	0								67.55
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	0								37.5
WP3.2: Dissemination and communication	0								42.5
WP3.3: Commercialisation and durability	0								24.5
WP3.4: Gender activities	0								7.5
TOTAL JPA	3.5								592.8
Consortium Management Activities									
WP4: Network management and coordination	0								28.8
TOTAL Cons. Management									621.6
TOTAL per PARTICIPANT	3.5	<u> </u>			<u> </u>	<u> </u>			

10.3 EC Contribution for the full duration of the project

A3.2: The number of researchers and doctoral students involved in the project for the whole duration.

Proposal Number	513994	Proposal Acronym	EuroFIR	

Particip ant n°	Participant short name			rchers to be		of doctoral so in the netwo	tudents to be	Maximum allowable EC
anun		integrated Female	Male	Total	Female	Male	Total	contribution
		remale	iviale	Total	remale	iviale	Total	for projec
								duration
1	IFR	1	3	4	0	0	0	
2	GUT	0	2	2	1	0	1	
3	RUG	0	3	3	2	1	3	
4	NUBEL	1	1	2	0	0	0	
5	IRMM	1	1	2	0	0	0	
6	NCPHP	2	1	3	4	0	4	
7	DFVF	0	4	4	2	2	4	
8	KTL	3	0	3	2	0	2	
9	UHEL	3	1	4	2	0	2	
10	AFSSA	3	1	4	0	0	0	
11	IceTec	1	1	2	2	2	4	
12	BFeL	1	1	2	1	1	2	
13	ILSI	1	1	2	0	0	0	
14	TTZ	1	0	1	0	0	0	
15	NKUA	3	0	3	0	1	1	
16	AUA	1	2	3	0	0	0	
17	UCC	2	1	3	2	1	3	
18	BGU	3	0	3	4	0	4	
19	INRAN	2	2	4	0	0	0	
20	CSPO	3	0	3	0	0	0	
21	WU	2	2	4	5	1	6	
22	UiO	3	0	3	0	0	0	
23	NFNI	2	1	3	1	0	1	
24	INSA	4	0	4	1	0	1	
25	UVi	0	2	2	0	1	1	
26	CESNID	2	1	3	0	0	0	
	UGR	1	2	3	1	0	1	
27								1
28	FRI	2	1	3	1	0	1	

Please use as many copies of form A3.2 as necessary for the number of participants	Form A3.2 page	1	of	2	
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Proposal Number 513994 Proposal Acronym *EUR*OFIR

Number	of researchers and doctor	ral students	to be inte	grated. Maxir	num allowa	ble EC conf	ribution	
Particip	Participant short name	Number of	of resear	chers to be	Number o	f doctoral s	tudents to be	Maximum allowable
ant n°		integrated				in the netwo		EC contribution for
		Female	Male	Total	Female	Male	Total	project duration
29	NFA	2	2	4	0	0	0	
30	SLU	3	1	4	3	2	5	
31	TUBITAK	2	1	3	2	1	3	
32	BNF	3	0	3	0	0	0	
33	EBI	1	1	2	0	0	0	
34	CSL	1	2	3	0	0	0	
35	UL	1	1	2	1	0	1	
36	US	2	0	2	0	0	0	
37	BAG	0	1	1	0	0	0	
38	RIKILT	1	1	2	0	0	0	
39	Polytec	0	1	1	0	0	0	
40	IDUFIC	0	1	1	0	0	0	
41	NNC	1	4	5	0	0	0	
42	ETHZ	1	4	5	1	0	1	
43	IMR	3	0	3	3	0	3	
44	FVS-FC	3	1	4	2	1	3	
45	DFI	0	1	1	0	0	0	
46	NEVO	2	0	2	0	0	0	
Total		74	56	130	43	14	57	12,000,000

Please use as many copies of form A3.2 as necessary for the number of participants	Form A3.2 page	2	of	2

A3.1: Distribution of the EC contribution over the full duration of the project.

Draw and Musekan	E42044	Droposal Agranum?	Fura FID
Proposal Number	513944	Proposal Acronym²	EUTOFIK

Reporting Periods	Month x – Month y	Requested Grant for Integration		
		Total	In which first six months	
Reporting Period 1	M1 – M12	2,452,793*		
Reporting Period 2	M13 – M24	3,364,805**	1,682,402**	
Reporting Period 3	M25 – M36	2,682,402**	1,682,402**	
Reporting Period 4	M37 – M48	2,000,000	1,000,000	
Reporting Period 5	M49 – M60	1,500,000	750,000	
Total	Full duration	12000000		

Estimated costs of the Joint Programme of Activities	
Estimated costs for the full duration	12,103,691**
Estimated costs for the second 18 months	5,160,220**

^{*}Actual expenditure for year 1
**Revised budget breakdowns based on year 1 expenditure

10.4 Project management level description of resources and grant

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
1. IFR	Considerable technical knowledge and know how in the determination of nutrient and bioactive content of foods using a range of analytical techniques (HPLC, LC-MS, GC-MS, NMR, ICPMS). Knowledge of bioavailability of micronutrients from food. Experience of organising international proficiency schemes for nutrients and bioactive compounds. Sampling protocols for foods and quality systems.	Co-compiler for the 6th Edition of McCance & Widdowson's The Composition of Foods (UK food tables), and electronic dataset for 2000 foods. NOTIS database of bioactive compounds of putative health benefit. Database construction and management; software for nutrient intakes.	Considerable experience of participating in EU FP4-FP6 projects in food safety, diet and health areas.
2. GUT	Wide range of analytical equipment for measuring the substances of interest; analysis of food constituents; measurement of antioxidant activity, and sampling protocols for foods.	Databases on poly-phenols, carotenoids and contaminants in fruits and vegetables.	Experience of working on EU projects (FP5, FP6, COST 99 & 927), Austrian government contracts, food producers. Access to dissemination routes via Erndhrung /Nutrition and Lebensmittel – und Biotechnologie and Austrian Society of Chemistry.
3. RUG 4. NUBEL	Analytical equipment (mainly HPLC and GC) for measuring the substances of interest. Know-how of composition of foods and influence of processing on this composition, and on analysis of food constituents, especially for vitamins in foods. Knowledge on quality control and quality assurance procedures for routine and research work in laboratories, knowledge on validation of chemical analysis methods for foods and accreditation of laboratories (auditor BELTEST). Dieticians' expertise present in the team Statistical and epidemiological expertise.	Databases on nutritional value and presence of contaminants in fish and marine products (POD project). Experience of working on other EU projects (FP3, FP4, FP5 and FP6), on Federal government contracts (POD), and on research projects financed at the Flemisch level (FWO, IWT, POD). Databases on consumption in different subgroups of the population, established over the past 25 years and including on the whole more than 25,000 individuals. Manager NUBEL database for Belgium.	Experience of collaboration with Belgian food producers. Link with the ongoing Belgian national food consumption survey Experience and know-how in the field of probabilistic modelling for the estimation of nutrient intake on population level. Experience in the organization and statistical evaluation of results of interlaboratory collaborative studies.
5. IRMM	Extensive knowledge on organization of proficiency tests and collaborative trials for method validation. Analytical capacities in a large range of food matrices and large range of analytes. Preparation of certified reference materials for food & contaminant analysis.	Acrylamide content monitoring database (about 3500 assessed entries). Electronic databases on methods for the detection of feed additives, and functional foods.	Experience in participation in several Shared Cost Actions. Core research funding through the EC. Capacity in statistical interpretation of results, i.e. collaborative trials and proficiency tests.

Partner Other related knowledge & related Methods & food analysis Databases & computing software. experience 6. NCPHP Experience in food composition Food Composition Knowledge on quality control and quality analysis (macronutrients; Database - Bulgarian Food assurance. Information on national total micronutrients; biologically active Composition Tables (762 diet study (nutritents, contaminants and compounds - flavonoids, foods & 54 parameters). additives). Analysis and development of Database for flavonols, carotenoids, melatonin). Experience new formulas for dietary supplements Member in food safety analysis (toxic flavones and catechins in and functional foods. elements, pesticides, mycotoxines). CEECFOODS network. Bulgarian fruits, vegetables Experience in validation of food wines. Data chemical analysis methods and carotenoids in foods. Data accreditation. for contaminants in foods. 7. DFVF Research on food composition, food Manager for Danish Food Research to promote safe and healthy consumption, food analysis and Composition database foods, to promote healthy food habits and bioactive substances. Research on version 6.0. prevent food related diseases in humans. Bioactive substances, especially toxic Bioactive plant foods Food safety in relation to chemistry, toxicology microbiology. information system with constituents. and electronic input forms Epidemiology and risk assessment. version 3.2. Diagnostic surveillance. Nutrition and food related diseases in humans. Scientifically based advisory services to the Danish authorities. 8. KTL Manager for Finnish food Aggregated data from Finnish National FINDIET 2002 study. Data composition data bank Fineli^R. model and data structures for food composition database. In-house software for Data model, data structures and management of FCB Fineli. software for presentation of food In-house software for using information at the internet. FCDB Fineli in dietary Basic food composition data for food surveys. items from Finnish food composition database Fineli, release 4, 2004. 9. UHEL Knowledge about planning and Funding from national source to carry out carrying out food composition research in this field. studies. Developed and validated Experience of participating in EU projects, COST actions and the methods for food components especially bioactive compounds. NEODIET project and for the evaluation Experience and know-how for the of food composition data. evaluation and validation of analytical methods for food research. 10. AFSSA Aggregated data from Aggregated data from French national dietary survey (1998-1999). French food composition databank, version 2004. Four scientists and 1PhD student forms part of the French National Nutrient Database Team. 11. IceTec Research in the field of food science Manager of Icelandic food IceTec has participated in several EU includes food composition, database composition database projects, especially in the field of food management, meat science & involving the co-operation processing and fish technology. traditional foods, processing between six Institutes in technology and microstructure. Iceland concerning the database. 12. BFeL Projects include the assessment of Manager of database on The Federal Research Centre

Partner Methods & food analysis Databases & computing Other related knowledge & related software. experience food components and new German food composition Nutrition and Food is a research centre processing techniques (e.g. high includes 11,000 foods and affiliated with the Federal Ministry of pressure or osmotic treatment, dishes. For each food, Consumer Protection, Food about 140 nutrients are biopreservation using protective Agriculture. It carries out research in the bacteria). Further approaches given. The data base is fields of nutrition and food sciences, with comprise the enhancement of food currently being upgraded special emphasis on vegetables and fruit, quality and hygiene by means of and of nutritional behaviour. and extended processing, evaluation of physiological benefits of conventional and novel or genetically modified food, consumer behaviour and attitudes towards food and nutrition. Research results on bioactive 14. TTZ Experience in web-based Contact network in the food industry (over compounds & innovative food data base applications, 500 SMEs, industrial players, RTDs). ingredients of putative health benefit semantic data integration; Established experiences and networks for as well as specific malnutrition issues research results and fund rising and optimisation of bids. granted by the work in NUTRIexperience from bio-SENEX. informatics problems. Research results on processing technologies and quality impact. Analytical methods for many food components, Experience in data-mining (esp. classification, clustering esp. kmeans, nearest-neighbour, principal component analysis, statistical evaluation and prognosis with Matlab and Maple). 15. NKUA Framework for the systematic Data from the "Composition Experience of participating in other EU investigation of traditional foods and tables of foods and Greek projects, including co-ordination. analytical data on the composition of dishes" including the Experience of collaboration with Greek traditional Greek primary composition of 114 Greek SMEs and the Greek food industry. and composite food. Experience of collaboration with the dishes, estimated through the UNIDAP software. The Greek agri-food and culinary sector. Educational experience on public health composition refers to energy as well as 27 nutrients. nutrition. The DAFNE (Data Food Experience in working on the compilation Networking) databank, with of the EPIC nutrient database (ENDB), in information on the daily food particular documenting, standardizing and applying quality control to the Greek availability in 16 European countries (www.nut.uoa.gr). data. The DAFNE food classification scheme, for grouping food data of 16 European countries under common food groups. 16. AUA Knowledge and material developed in Software engine application Greek regarding new venture developed for advanced establishment training of customization of business agronomists, food scientists and plans' marketing, financial technologists in Greece. and production related Knowledge base regarding computations, metrics' entrepreneurship in the area of assessment and reporting. agronomy, food science and

quality control to the Italian data and co-

ordinating activities related compilation of

Partner Methods & food analysis Databases computing Other related knowledge & related software. experience technology. Knowledge in the area of business plan development and commercialisation for agronomy, food science and technology areas. 17. UCC Experience and know-how on the Database of phytoestrogens 1. Experience on collaboration with food evaluation, compilation/construction and carotenoids in foods: industry and the agri-food sector. 2. and application of composition data compilation Experience in working on FP5 and FP6 The and for bioactive constituents, particularly analysis of National food projects, both past and current, and links phytoestrogens and carotenoids in consumption and recipe with key personnel in these projects. foods. databases. Know-how in the identification of foods and their description Know-how in the compilation and analysis of National food consumption databases. 18. BGU Food composition and public health In-house Israeli food Give on-line lectures to **EuroFIR** research experience. Experience composition database for members, European Universities and related compilation of recipes and over 1450 common foods educational institutions. complex and ethnic-specific dishes. such as bread, milk, fruits, Development of quantitative dietary vegetables etc. Data entry assessment methodologies for systems for a variety of dietary assessment "western" and "shared plate" eating habits. Experience of linking food methods. composition data to food frequency questionnaires and to other dietary assessment instruments. Considerable experience in the planning, performance and analysis of community based epidemiological studies and running intervention trials. 19. INRAN Considerable experience in planning Italian food composition and carrying out Food consumption database. surveys in the context of food data Database on isoflavone and management, issues concerning food lignan content of European description, food coding and food (on behalf of the Venus aggregation. Experience on bioactive consortium - EU project no. compounds and analytical studies on FAIR -CT98-4456). composite Italian dishes. 20. CSPO Statistical analyses of large Assistance Experience in working on other European epidemiological databases (in compilation of multicultural projects (EPIC, COST action 99 and particular case-control and databases (10 EU countries 927), US based projects (Physician prospective studies, EPIC Italy and involved in ENDB) and Health Study and Nurses' Health Study); EPIC Europe). understanding different food Experience with Italian (e.g. AIRC) and Contacts with the USDA Nutrient traditions. Databases International funding agencies (e.g. Data Laboratory and with US leading latest version of the "Food nutritional epidemiologists. composition database for Experience in working on EPIC project, for the compilation of the EPIC nutrient Experience in linking food epidemiological studies in Italy (approx. 1000 items composition data to food frequency database (ENDB), in particular questionnaires and to other dietary and 70 nutrients). documenting, standardizing and applying

assessment instruments.

Experience in running intervention

Partner	Methods & food analysis	Databases	&	computing	Other	related	knowledge	&	related
		software			experie	ence			

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	trials. Compilation of food composition databases, in particular with information gathered from different sources and on missing information for specific micro-nutrients.		recipes and complex dishes.
21. WU	Know-how on compilation of food composition databases (Dutch Food Data Base (NEVO), also on dealing with compilation of food composition data gathered from different sources and on finding missing information for specific micronutients. Experience in statistical analyses of large epidemiological datasets (in particular case-control EPIC-Italy and EPIC-Europe); Experience of working on the EPIC project, for the compilation of the EPIC Nutrient DataBase (ENDB), in particular documenting, standardising and applying quality control to the Italian data and co-ordinating activities related compilation of recipes and complex dishes. Experience of linking food composition data to food frequency questionnaires and to other dietary assessment instruments. Experience in running intervention trials. Broad experience in nutrient and micronutrient analysis, and their quality control, and bioavailability of micronutrients.	Experience in training in design & use of databases. Know-how on compilation of multicultural databases (10 EU countries involved in ENDB) and understanding different food traditions.	Experience of working on other European projects (EPIC, COST action 99, COST action 927). Contacts with the USDA Nutrient Data Laboratory and with US leading nutritional epidemiologists;
22. UIO		Manager of Norwegian food composition databank 2001, revised 2003. Aggregated food consumption data from the Norwegian dietary survey among adults (1997) and children 4, 9 and 13 years old (2000-2001). Aggregated food consumption data from the Norwegian Fish and Game study (1999-2000).	
23. NFNI	Food analysis expertise in a range of nutrients and other food components. A variety of specialized equipment for food analysis.	Manager of Polish database covering over 800 food products and dishes. Software to calculate	

Methods & food analysis Partner computing Other related knowledge & related Databases software. experience

		amounts of energy and nutrients in the diet and in mixed products.	
24. INSA	The Food Safety and Nutrition Centre's research covers microbiology, chemistry, toxicology, bromatology, nutrition and food safety. Current projects include determination of contaminants and food contact materials in food supply; updating and enlarging Portuguese Food Composition Table; conducting 2nd national food consumption survey; allergenicity of GMOs in food; nutritional composition of fish and fish products; assessment of exposure and body levels of environment contaminants for individuals eating fruits and vegetables and preparation and certification of reference materials.	Manager of the Portuguese food Composition Database, which includes 950 foods (raw and cooked) and recipes). Data on relevant nutrient contents of fish (raw and cooked) and bread consumed by Portuguese population not yet included in the Portuguese food composition database. In-house data and retention factors on Portuguese cooked foods. Food Composition data from National Food and Dietary Survey and other food and nutrition surveys.	CSAN provides a consultancy service to private and public companies to implement EC directives. Standardisation of analytical methods and production /harmonisation of national and European legislation related to food. Participation in international committees ISO, CEN, FAO/WHO & Codex.
25. UVI	HPLC and coulometric electrode array detection methods for the determination of phytoestrogens. Collected data for 100 commercial food samples. New methods for lignans in foods using LC-MS and LC-coulometric electrode array detection methods.		Organisation of workshops, seminars and symposia. Experience in editing special issues (J. Chromatography). Cooperation with several partners in Europe (QLK1-1999-01197).
26. CESNID- UB	Experience in the development of information systems used in the compilation and management of food composition data. Dietitians and chefs, who can provide counselling and/or participate in the selection and preparation of recipes. Preparation of these recipes at the CESNID culinary technology laboratory.	Food composition data base with values for 698 foods and 35 components. A database for 400 additional foods, but only for few components (e.g. fatty acids and minerals).	
27. UGR	Experience in nutrition epidemiology and education. Nutrition assessment of the Andalusian population in Spain. Analytical equipment for measuring the substances of interest. Measurement of food composition especially fatty acids profile. Know-how on sampling of foods.	Databases of food (four editions, the last with 1,100 foods, analytical and bibliographic). Nutritional software for nutrition assessment and diet design.	Opportunities to collaborate with anthropologists and gastronomy experts for traditional recipes in Spain
28. FRI	Food analysis. Scientific experiences in mycotoxins analysis mainly focused on fumonisins and	Aggregated data from Slovak food composition database available in	Experience of working in other EU projects, management of the CEECFOODS sub-regional food

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Partner Other related knowledge & related Methods & food analysis Databases & computing software. experience printed form and DBFS form ochratoxin A. Evaluation of composition database. acrylamide and kinetic studies related (1400 foods, cca 300 food to its generation and occurrence in characteristics) available. In-house software for recipe foodstuffs. Irradiated spices determination and influence of calculation, assessment of irradiation on volatile compounds dietary consumption. profile of species as well as antioxidative properties. Special experiences in volatile compounds determination, retention indexes. mass spectra and molecular structure evaluation. Trace elements analysis and focus on wines and liptov cheese (bryndza) regional origin determination. Determination of pathogenic microorganisms based on DNA analysis. In most cases accredited analytical methods applied. 29. NFA Food analysis. Data from Swedish food Experience of working in EU and other Evaluation of food composition data. composition database. international projects (FP5, FP6, COST Extensive toxicological expertise in System development, web 99, EPIC, EFCOSUM). genotoxic substances, naturally applications and database maintenance. occurring toxins and other substances in foods, nutritional and antinutrional factors, and GMOs in Special competence in analysis of nutritional and other components of foods, especially vitamins and trace elements using certified methods. Advanced methods to assess nutrient 30. SLU Collaboration in EC projects (FLAIR, Databases for publications BCR-MAT, FP5, FP6, COST 99 & 919) via SLU-library. Computer bio-availability. Advanced analytical equipments. techniques in course and with industry & governmental Scientific and analytical excellence teaching, training & eauthorities. on (a) lipids - cholesterol and learning. Software for Track record of fund raising via TMRphytosterols, lipid oxidation & HPLC education, statistics, Marie-Curie, other EC-programmes (see products; (b) starch and dietary fibre reference database (e.g. above), national research councils & composition; (c) acrylamides in folates). industry. Track record of training of cereals; (d) vitamins - tocopherols, Software for LC and GC under-, post- & graduates (all genders & tocotrienols, folates and vitamin B12; equipment control. nationalities). (e) bioactive compounds - phenolics, lignan, alkylresorcinols and avenanthramides. 31. TUBITAK Laboratory accreditation (EN ISO/IEC Database on composition of Good relations with Turkish Food hazelnuts. Know how on quality management Organiser of the International Food and system in food laboratories. Nutrition Congress (July 2005). Experience in internal quality control, method validation and measurement uncertainty. Experience in energy and nutrient analysis (vitamins, minerals, fatty acids, artificial, sugars & sweetener,

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	organic acids etc.) by instrumental analysis methods. Experience on contaminant analysis (e.g. mycotoxins & heavy metals). Traditional foods data collection, sampling and nutrient analysis.		
32. BNF	Food composition data and deriving practical information from it. Track record in dissemination and media communication. Extensive food industry contacts.	BNF networks and databases including existing EU-wide communication networks. Experience with food analysis software packages.	Awarding winning website attracting approx. 1.5 million per month. Experience of working in other EU projects, UK government and research council contracts. Wide range of contacts across academia, education, research, health professionals, food industry, government and the media. Representation on key UK research and government committees.
33. EMBL-EBI	Expertise in the collection, organisation, interpretation and distribution of molecular biology data through the development and maintenance of databases of nucleotide and protein sequences.	Extensive technical experience in database management (oracle, mySQL) in Unix environment, development of standards (OMG LSR, MIAME & PSI) and online scientific service provision.	
34. CSL	Analytical proficiency in a wide range of matrices and analytes. Food analysis performance assessment scheme (FAPAS) for food chemistry. Genetically modified materials analysis (GeMMA) for GMO analysis. Food examination performance assessment scheme (FEPAS) for food microbiology. Laboratory environmental analysis proficiency scheme (LEAP). Expertise in microbiology and GMO analysis, and UKAS technical management.	Electronic submission of results for FAPAS, FEPS and GeMMA. State of the art statistical analysis of homogeneity data and proficiency test data sets.	All the schemes are recognised by UKAS as external PT schemes for the purpose of laboratory accreditation to ISO/IEC 17025. FAPAS® and FEPAS® are accredited by UKAS to ISO/IEC Guide 43-1:1997, through assessment against ILAC G13-2000 and relevant elements of ISO 9000:1994. Access to world-renowned statistical advisers and experienced scientists who are available to help with a wide range of technical and scientific problems.
35. UL	Sampling for food composition studies. Analytical facilities [HPLC] for measuring flavonoids and caffeine. Know-how of nutrient and non-nutrient composition of ethnic foods. Cholesterol-lowering effects of key ingredients. Falvonoids and antioxidant activity of ethnic foods consumed in the UK, China and Indian sub-continent.	Data on catechins and caffeine in tea beverages, selected fruit and vegetables. NETTOX and BASIS databases for non-nutrients	Knowledge of assessment of dietary survey requirements of ethnic UK populations. A particular expertise is related to composition of ethnic foods and nutritional requirements of ethnic populations. Knowledge of the absorption and metabolism and functional consequences. Experience of working in other EU projects, UK government, research councils and International agencies.
36. US	Qualitative and quantitative methods to gain stakeholder views on food composition data. Track record in	University of Surrey stakeholder networks and databases.	Experience of working in other EU projects, including coordination, UK government and research council

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	stakeholder research and extensive stakeholder contacts.		contracts.
37. BAG	Best practice and recommendations in structuring and presenting information for the web. Best practice in creating accessible usable websites using the content management tools provided.	Best practice on database design and construction for web accessibility. HTML code and graphics created for the project itself.	Baigent are experts in creating and managing complex and challenging websites for a wide variety of clients. We combine design and technical expertise under one roof backed with outstanding project management and consultancy services and deliver all our projects to the highest international standards.
38. RIKILT	Broad experience in analysis of nutrients, micronutrients, phytochemicals, and contaminants. Know-how on a large variety of analytical techniques Extended experience in analytical quality control systems and their management. State-of-the-art experience in dietary exposure measurements.	Experience in construction and management of the national Dutch database on contaminants. Residue database KAP (Quality Programme Agriculture Products). Food consumption database Dutch Infants RIKILT. Probabilistic risk assessment software MCRA-software (Monte Carlo Risk assessment).	
39. Polytec	Design and development of software for description and classification of food, including BASIS, FLAVIS, PISCIS and LanguaL. Development of WEB applications using ASP, PHP and Content Management systems.	Database design, implementation and operation. Experience in design and implementation of desktop application using Borland Delphi with Paradox, Microsoft Access and Microsoft SQL Server.	Numerous international assignments over the last 10 years with development of environmental information systems. Quality assurance activities, e.g. QA for the National Danish Waste Information System ISAG for more than 10 years.
40. IDUFIC	Development of data content, data structure and data interchange specifications for food composition data and documentation. Knowledge of chemical nomenclature, chemical structure handling and the chemical abstracts service registry system.	Detailed know-ledge of various European national food composition databases, and liaison with their compilers. Management and interconversion of database, spreadsheet, text and HTML formats. Design, production and quality control of data collections and bibliographic databases. Development of food composition data management software. Knowledge of SGML and XML. Preparation of informative websites, for example the Eurocode 2 site.	
41. NNC	Food consumption monitoring and nutrients/contaminants intake	Activities in the food composition and	Food consumption monitoring is recurrently executed every 5 years and

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	calculation and risk assessment. 2. Food composition and contamination research and databases compiling. 3. Analysing of data, drafting of food safety legal acts and proposing corrective actions on public health for the Ministry of Health and the government.	contamination research field composed from data collection, calculation of nutrients of the foodstuffs and compiling the databases. The foodstuffs composition database is compiled mainly by calculation of nutrients from recipes. Food composition data are also collected from food industry laboratories.	covers representative samples of respondents from whole country. The 24-hour recall method with visualization of portion size is used. Public health centers from all districts of the country take part in this monitoring. NNC carries on National Nutrition and Health Behavior monitoring of Lithuanian population also in recurrence of 5 years. The last study was executed in 2002-2003.
42. ETHZ		The current Swiss food composition database is affiliated to the Department of Agricultural and Food Sciences. It will be restructured, updated and extended within the next three years in order to provide a solid fundament for the projected first national nutrition survey in Switzerland.	ETH Zurich, one of the internationally leading Universities, is an institution of the Swiss Confederation dedicated to higher learning and research. The ETH produced together with the Swiss Federal Office of Public health the actual Swiss food composition database. Research and education in food sciences and human nutrition constitute an important part of the Department of Agricultural and Food Sciences, whose mission is to understand the components of the food chain from the molecular and organizational to the socio-economic level and their interactions within and between these levels.
43. IMR		The team from department have created software: for nutrition planning and diet modelling, dietary evaluation of the nutrition quality based on food record, nutritional status monitoring and evaluation of the population.	The main expertise of the institute are: research in nutrition and public health, nutrition expertise, nutritional epidemiology; obesity; nutrition and NCDs, nutrition education and counselling, healthy nutrition promotion, teaching human nutrition and dietetics, B.Sc and postgraduate level. Department of Nutrition and Metabolism composed of food scientists, nutritional researchers, nutritionist, medical doctors, biologists, molecular biologists, chemists, pharmacists, biochemists all active in nutrition research. Our researchers were involved in the national study of atherosclerosis risk factors, nutritional status and the quality of nutrition in schoolchildren as well as diet and health status in adult population.
44. FVS-FC	FVS-FC ensures unified state surveillance and control over the food circulation and the sector of veterinary medicine. It demonstrates the integrated "farm-to-fork" approach by realization of food surveillance at all stages of food production, processing, marketing and		Food Center is an independent structural unit of Food and Veterinary Service of Latvia* (FVS) and the main task of the institution is to ensure the registration and approval of certain food stuffs and food and feed components (for instance, food supplements, diet food, novel food, GMO's). Activities of Food Center

Partner Methods & food analysis Databases & computing Other related knowledge & related software. experience transportation. According to include: research programming; organization of scientific and/or the bestnational legislation the FVS is responsible for performing of risk practice grounded networking; and risk communication; risk assessment; and factor research and analysis. collecting and analyzing of the scientific and technical data, according to the aims and tasks of FVS and Food Center. Food safety is a share responsibility for all stakeholders in the food chain. Food Centre liaises closely with academia, food industry, consumer organizations and government. The Food Centre has set itself the task of working in collaboration with all players in a common goal of consumer protection. 45. DFI DFI is an SME in food On request, DFI is carrying out specific tasks in the field of computerised food informatics and was founded in 1985. DFI has composition databanks; among these extensive international bigger tasks systems for diagnosis of food intolerance or allergy can be expertise in food composition and food mentioned. DFI has also worked with the consumption databanks as Danish Cancer Society in connection with well as programming and the construction of intake calculation intake and exposure systems - both for the Society's own estimations. DFI has dietary surveys as well as the part which is connected to the pan-European EPIC detailed knowledge in the study (European Prospective Study into construction and Nutrition and Cancer). DFI was involved implementation of online in building up the Icelandic food food composition databanks as well as browser specific composition database and the software applications. Over for nutrient intake calculations. years, DFI has carried out several big tasks for public authorities building up larger food composition databases data evaluation. and Furthermore. DFI is used as consultant in evaluation of and intake exposure calculation software. 46. Our group is situated in the Business In the Netherlands the TNO/NEVO **NEVO Foundation** Unit 'Quality and Safety' and in the Department Food and Chemical Risk maintains the Dutch nutrient Analysis, and focuses on Dietary database, on which the Exposure Assessment (including official food composition among other things the Dutch table (NEVO table) is National Food Consumption Survey). based. The NEVO Analytical Epidemiology (including Foundation is funded by the the Netherlands Cohort Study on Diet Dutch government and and Cancer, a large prospective hosted at the TNO Quality study of 120,000 subjects that started for Life. The NEVO in 1986), Risk Perception, Integrated Foundation was established Design of Healthy Foods, Claim in 1985 and consists of a

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	substantiation and perception and consumer behaviour. Further, our business unit has a wide variety of expertise in the field of assessment of human exposure to food and chemicals, toxicological risk assessment and risk management.	Board, a Bureau and an Expert Working Group	

11. Ethical issues

None.

12. Other issues

The following table summarises the connections and links between EuroFIR partners with FP6 and other EC COST projects:

EU FP6 Project (Type)	EuroFIR Core Partner(s)	EuroFIR Researchers
SAFE FOODS (IP)	DFVF, RIKILT, AUA	Anders Moeller, Jacob van Klaveren, Dr George Chryssochoidis
QUALITY LOW INPUT FOODS (IP)	IFR	Paul Finglas
LIPGENE (IP)	BNF	Dr Judy Buttriss
SEAFOODSPlus (IP)	IFR, IceTec	Dr Olafur Reykdal
GALEN (NoE)	IFR	-
NuGO (NoE)	IFR	Dr Sian Astley & Catherine Reynolds
NOFORISK (SSA)	DFVF	Anders Moeller
FLORA (STREP)	IFR, DFVF	Paul Finglas, Dr Paul Kroon, Anders Moeller & Dr Jorn Gry
FLAVO (STREP)	IFR	Dr Paul Kroon
COST Action 926*	IFR, DFVF	Paul Finglas, Dr Paul Kroon, Anders Moeller & Dr Jorn Gry

^{*} Impact of New Technologies on the Health Benefits and Safety of Bioactive Plant Compounds.