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
Related to other Contract no.: *(to be completed by Commission)*

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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)
NCH	National Centre of Public Health Protection (acronym in CPF is NCPHP)
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

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”
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”
GA_2LEN	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
N/A	not applicable
NDL	Nutrient Data Laboratory (USA)
NeoDiet	Nutritional Enhancement of Plant Derived Foods
NETTOX	Network on Toxicants
NEVO	Dutch nutrient database
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-FOODS	Oceania Section, INFOODS
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
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”
SCOOP	Scientific Cooperation
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 (6 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:

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.

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

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
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*	*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+) ➢ Implement facility sharing (M18+)	*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	*WP1.2:* Deliverables: ➢ Database of currently available projects (M3) ➢ Report on optimal research methods, training needs and indicators for integration (M6) ➢ Programme for 2nd EuroFIR meeting (M9) ➢ Report on prioritised programme of joint research topics, guidelines for self-auditing and budgeting tool (M12) Milestones: ➢ Hold inaugural meeting and launch (M1) ➢ Zero benchmarking of integration status (M3) ➢ Launch of PhD programme (M6) ➢ Improved methodologies, tools and systems available (M12) ➢ Publish integration status (M15 & update (M30 & M45) ➢ Identify and implement new joint research programme (M18) ➢ Add new research topic to joint research activities (M18+) ➢ Implement facility sharing (M18+)	*Insufficient integration.* Establish specific criteria (reviewed every 6 months by SMB) for monitoring degree integration among partners and implement corrective actions as required.

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
		➢ Overall project budget system in operation (M18+) ➢ Contribution at national science meetings without need for central coordination (M18+)	
Specific objective 1.3. To ensure a common understanding of quality management systems and establish a sound and coherent leadership approach of the relationships between quality, food science and databank systems	*IA1.3:* 1. Develop a dialogue with all partners to ensure 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	*WP1.3:* Deliverables: ➢ 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)	*Plans not widely adopted by laboratories across member States.* 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	*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 (M12-18) ➢ Final procedures for QA monitoring & data retrieval 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	*Insufficient input from national database managers and key users leads to recommendations not been widely accepted across Member States.* Early establishment of working group of national database compilers and key users ensures their acceptance of recommendations + establishment of CEN working group (M18) helps to "sell" recommendations to all member states.

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
	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).	established (M12-18) ➢ Consensus on rules for QC & data format/retrieval (in co-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+)	
Specific objective 1.5: To identify food components to be included in the databank, and define standard representations for compositional data, necessary documentation and quality criteria for their comparison and evaluation.	*IA1.5:* 1. 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. 2. Establish national compiler network for Identifying foods to be prioritized in EuroFIR. 3. To define standard representations for compositional data, necessary documentation and quality criteria for their comparison and evaluation. 4. 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. 5. Providing recommendations on the current strengths, gaps and priorities for harmonizing nutrient databases in EuroFIR 6. To establish plan for the extension of work to the food-derived contaminants.	*WP1.5:* 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 documentation & 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+) Milestones: ➢ Hold inaugural meeting to create management team and launch (M1) ➢ Establish national compiler networks (M3) ➢ Complete review on food-derived	*Insufficient input from national database managers and key users leads to recommendations not been 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.**

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
		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 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.	*WP1.6:* Deliverables: ➢ Inventory of European food composition databases and tables (M6). ➢ Report on current classification & description systems & mechanisms for linking foods (M9). ➢ Report on food record retrieval using 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 food classification systems (M9). ➢ Publish recommendations for food record retrieval (M120. ➢ Publish recommendations for classification & description systems (M15). ➢ Establish prototype food classification & description support facilities (M18).	*Insufficient input from national database compilers 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 recommendations and key practices. *No consensus can be made on a food classification system to be used at the Europe*an *food composition 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*	*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.	*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:	*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

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
stakeholder requirements for using food composition data in Europe.	3. Test user and stakeholders' acceptability and comprehension of information gained from an Internet-based food composition databank system	➢ 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+).	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 the calculation of composite and processed foods. 3. Define rules for the imputation of data for foods reported as consumed but not represented in present datasets. 4. Investigate the general availability of compositional data for foods and possible delivery methods from production and retail organisations of compositional data and up-to-date information on trends in processed and novel foods. 5. Develop a framework for collecting, incorporating and updating compositional information on brand name foods in EuroFIR databank and definition of a basis for interrelating brand name foods with generic food items. 6. Exploit food industry requirements for the EuroFIR databank including its use for labelling and calculation of the composition of composite food products.	*WP2.2:* Deliverables: ➢ Report on rules and factors for imputing data for composition of composite and processed foods (M6). ➢ Report on guidelines on the Incorporation of food industry data (M15). ➢ Report on initial food industry requirements (M18) Milestones: ➢ Hold inaugural meeting to create management team and launch (M3) ➢ Collect information on national trends and databases of composite foods and industrial ingredients in each partner (M6) ➢ Preliminary description of European food brand databases (M12) ➢ Establish and disseminate improved methods and protocols on imputing data for composite dishes together with WP 2.1 (M18) ➢ Establish plans for network with food industry organisations for data change experiments (M18) ➢ Initiate the development and submission of funding bids to national bodies (M18+) ➢ Establish intensive contact with European food and nutrition industries (M18+).	*Limited involvement of food industry.* Close contact with WP 3.2 (dissemination and communications) and the UAG is a priority and will identify suitable industrial contacts. The inclusion of ILSI and other industrial bodies/associations will also be undertake to ensure industry wide participation in EuroFIR. *Unwillingness of industrial companies and organisations to deliver any part of brand information.* Early involvement of industry and trade associations to establish dialogue and agreement of approaches to be used for gathering food industry data on foods and brands. UAG will have a wide range of industry stakeholders and trade associations.

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
Specific objective 2.3a. To provide new data on the nutritional composition of traditional foods for inclusion in national food databases with representative raw ingredients and recipes.	*RA2.3.1:* 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.	*WP2.3.1* - Deliverables: ➢ Report on definition of "traditional", evidence-based records and initial list of traditional foods/recipes of each participating country (M12) ➢ Protocol for recipe recording, collection and preparation of samples (M12) ➢ List of nutrients and bioactive compounds, methods and list of central laboratories for analysis (M18) ➢ Detailed written description of traditional recipes investigated (M18) ➢ Agree plan of work for 18-36 months (M18) *WP2.3.1* - Milestones: ➢ 1st workshop. Establish network for traditional foods across Europe (M3) ➢ 2nd 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) ➢ Identify core partners for analysis (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+).	*Insufficient funds available from EuroFIR to cover all analytes and for all traditional and ethnic foods.* Important to prioritize analytes and foods and seek additional funding from national and other bodies
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.	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)	

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
	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	➢ 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. 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 end-users	*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 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)	*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
		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 of 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 agro-business. 6. Coordinate information on specialised research facilities and training opportunities at all network partners & additional collaborators (link to IA1.1). 7. Co-ordinate and optimise training exchange programmes for the whole network and collaborating centres (links to SAs 3.2, 3.3 & 3.4).	*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 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	*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
		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 targeted to user/stakeholder requirements. *Specific Objective 3.2b: Encourage EuroFIR partners to share knowledge and expertise, and externally to user and interest groupings to maximise the speed of impact of the advances in understanding of food composition databank systems through the network.* *Specific Objective 3.2c: The long-term goal is to 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 competitiveness, but the confidence with which users/stakeholders can apply knowledge-base in their own fields.*	*SA3.2:* 1. Addressing issues of national sensitivities, restrictions of partner language fluency, data protection, disabilities, IT literacy and speed/availability of electronic connectivity, and perceived requirements for information within EuroFIR. 2. Achieving a branding and style guide for EuroFIR that can be implemented by all partners. 3. Setting up links with communication experts within EuroFIR partner organisations to coordinate activities. 4. Assisting in the developing, testing and launching 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 of a given quality threshold to underpin message promulgation to EuroFIR members for onward translation to their stakeholders. 6. Establishing a cascade system to ensure that communication messages are rapidly shared. 7. Using, and developing further, links with 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 national representatives), opinion leaders, educators, researchers and funding	*WP3.2:* Deliverables: ➢ Secure web-based communication platform for EuroFIR partners (with WP 1.1) (M3) ➢ Web Bulletin Board interface for stakeholders world-wide respecting language, expertise levels, gender, ethnicity, disability, data protection and ethical issues (M6). ➢ Planned programme of information dissemination to suit users/stakeholders including one-pagers, syntheses, monthly web features and congress proceedings & resources (M0-18) ➢ Meetings, conferences and congresses of stakeholders and of EuroFIR partners (M0-18) ➢ Report on raising public participation & awareness including audits of dissemination “reach and effectiveness” (M18) ➢ Report on plan for using & disseminating knowledge (M18) Milestones: ➢ Establish steering group to advise on dissemination; provide outline style-guide to underpin dissemination strategy; baseline awareness audit; 1st publicity push with users/stakeholders (M1) ➢ Formalise EuroFIR peer-review process for dissemination (M2) ➢ Start providing non-expert material on	*Key opinion formers won't respond to invitations to attend meetings.* Send summaries of key events through colleagues, professional bodies and trade organisations. *Not reaching those who don't use the internet or don't speak English.* The internet is not the only communication route but by working with organisations such as 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 other media (e.g. radio). *Not attracting international mainstream & technical print & broadcast media.* By making use of AlphaGalileo, communication experts with EuroFIR partner organisations and annual media campaigns and by linking with other FP6 dissemination packages.

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
	agencies. 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.	food composition & databank system issues for use by 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*	*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	*WP3.3:* 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)	*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 some organisations (e.g. food industry).

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
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 system technology and the network's training programme.*	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, 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	<u>Milestones:</u> ➢ Establish WP task force (M1) ➢ Organise workshop for network technology transfer 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. *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.*	*<u>Contributes to SA3.3 & WP3.3</u>*	*<u>Contributes to SA3.3 & WP3.3</u>*	*See above.*

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
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 practice in gender mainstreaming will be undertaken. 3. Objectives will be set for equality and integration and developing methodologies 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	*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 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	*Appropriate mentors not identified.* Use partner contacts and contacts from other FP6 projects. *Lack of uptake of peer support/mentoring.* 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	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
		(M18)	
Strategic objectives 1-5 *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 the first 18 months.* *Specific Objective 8: Organise the open calls, meetings, events and training activities.* *Specific objective 9: Prepare the financial and technical reports for the EC including the approval of the breakdown of costs for the first 18 months.* *Specific Objective 10: Design the next 18 months work programme and contract negotiations with the EC on behalf of the consortium*	*MA4:* 1. Establish EuroFIR organisational structure and its bodies and network management operating procedures. 2. Organisation of the start-up meeting of all core partners including establishing WP teams and training sessions for 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. 5. Establish regular meetings of the HP-L and WP-L in order to initiate concrete links with several WPs in dissemination, training & commercialisation, and relationships with key users/stakeholders. 6. Develop and operate a flexible and optimal internal communication system throughout the network as a prerequisite for integration. 7. Encourage the involvement of SMEs at all levels of the network with an overall target of 15% (or higher) of the 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	*WP4:* 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). ➢ Training course for financial managers of partner organisations (M3) ➢ Final version of manual with SOPs (M4) ➢ 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)	*Management process fails/insufficiently flexible.* Continuous review of network management by SMB; refocus as required annually.

Strategic Objectives	Activities	Deliverables/Milestones [1, 2]	Potential risks/contingency plans
		➢ 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+) ➢ 2nd mid-term external review completed (M18+)	

[1]First 18 months for both Deliverables and Milestones; 18-60 months for milestones only
[2]See 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
CO	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	NCH	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	BFE	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	TTZ	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	CSPO	IT	1	60+

		Oncologia				
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

*CO = Coordinator
CR = Contractor

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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)

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 *scientific validation and exploitation of relationships* between dietary habits, reduced burden of diet-related chronic disease and, thus, *reduced health and social costs*, and (2) *full interpretation and exploitation of research findings* 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 *national database compilers, end-users of the data (e.g. industry, public health nutritionists and European consumers), and policy makers*.

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

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 *harmonisation and standardisation of food composition data*, 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 *health monitoring* within the framework for action in *public health*. 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 *standardisation of data collection methods, food composition tables and analytical methods* (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 "Contribute to achieving sustainable development by increasing its emphasis on encouraging healthy, high quality products, environmentally-sustainable production methods…" [p.31].

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:

Four core partners (BNF, Baigent, Polytec & IDUFIC) 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 1.1, 3.1 & 3.2.
- Collaboration with specific food bioinformatics related technologies (e.g. software development) – WPs 1.5, 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 2.5, 2.6 & 2.7.
- 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.

The links with policy makers, consumer organisations and professional bodies (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:

- *The added value of collaboration to both the scientists and the funders:* 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.
- *The technical support gained from the development of new methods of electronic communication, databanks and common databases:* 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 *lack of up-to-date information* on food composition, and *poor comparability between European countries*, confounds fundamental research in international multi-centre nutritional epidemiology, significantly *reduces the scientific validity of any findings* 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, *this will also limit and hamper intake and risk assessment at the European level necessary as a tool for implementing decisions on food legislation, dietary advice and other actions for the protection of the consumer*.

Food composition information systems in Europe are *incomplete and partially outdated* [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 *comparability of food composition data between existing European national databases is poor; many other data sources are equally incompatible and less generally available.*

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 *limited funding* and on *an ad-hoc basis*. However, this initial *prototype set of recommendations needs to be further tested and extended* to provide a basis for the comparison of compositional values in the various European national food composition databases and their *integration into a consistent, readily available information resource.*

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 *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*.

(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;

[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.

- 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 1.1, 1.2 & 1.5). 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 WP 1.1). 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 and contaminants.

(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 WP 1.1). 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;

- *EuroFIR will strive to link and anchor to other integrated projects and networks*: 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.

- *EuroFIR will create the basis for long-term joint research initiatives to be sustained after the ending of Community funding*: 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.

- *EuroFIR will seek to establish itself as a legal entity* 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)
- Provision of open platform for joint activities and additional of new partners (IA1.2)
- Development of a pan-European quality framework for food composition data (IA1.3)
- Internet development and deployment of databank systems (IA1.4)
- Standards development and deployment (IA1.5)
- Food description and identification (IA1.6)

2) Joint research activities platform (RA) – These four activities are as follows:

- Users and stakeholders requirements (RA2.1)
- Composite, processed and novel foods (RA2.2)
- Traditional and "ethnic minority" foods (RA2.3)
- 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.

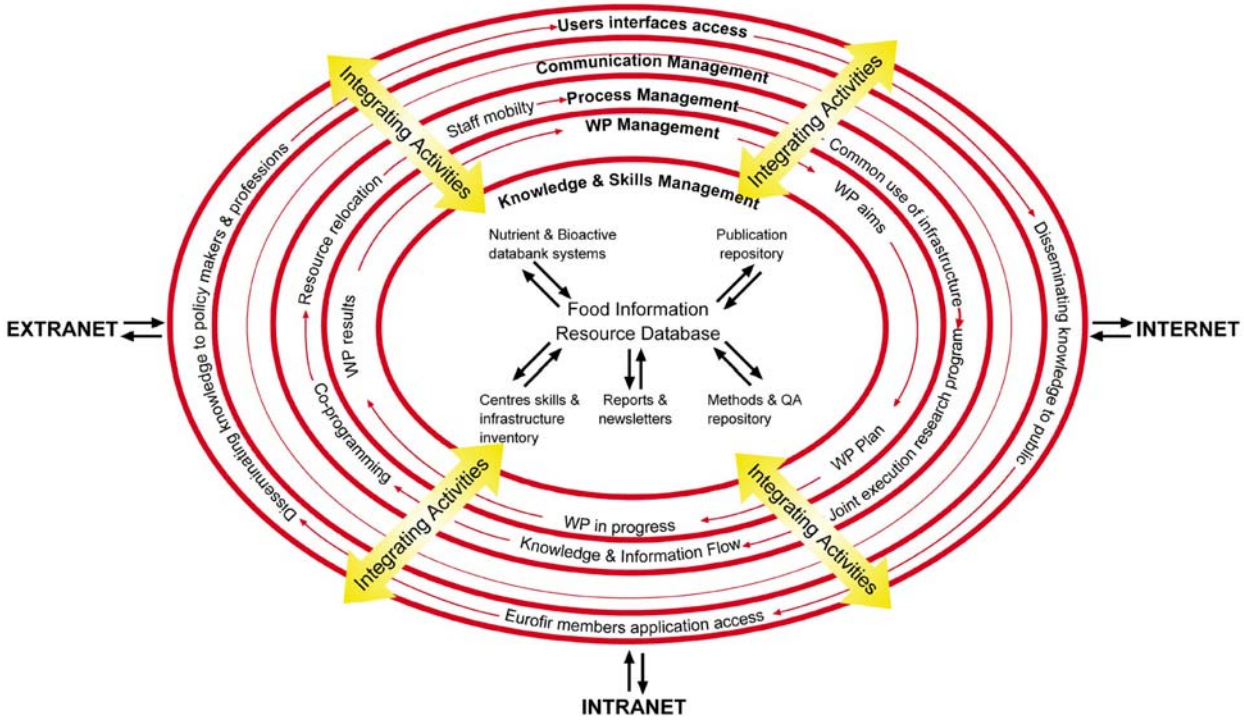
- Network management and coordination (MA1).

6.1 Integrating activities (IA)

6.1.1 Integrated organisation of knowledge and information flow (IA1.1)

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 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 (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.

IA1.1: Integrated organisation of knowledge and information flow
Responsible: IFR, Management Office, DFVF, NKUA, AUA, UiO, BNF & Baigent.
Duration and tasks: M1-60
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.
Deliverables: 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 Provision of an open platform for joint activities (IA1.2)

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: M1-60
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)

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:

This area provides the vital 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), CSL, IRMM, IFR, NUBEL, TUBITAK, UHEL and SLU. 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.

(1) Developing a dialogue with all partners 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 (*Interpretation and implementation of the new standard ISO 17025 by national metrology institutes in Europe; Competitive and Sustainable Growth Programme, FP5; GTC1-1999-2001*). 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) Establishing the quality criteria for all participating centres. 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 *traceability through the entire chain* 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) Promoting an integrated approach to QA 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: Certified Quality System for the development, management and use of food composition databases in Europe
Responsible: INSA, IFR, Management Office, RUG/NUBEL, IRMM, DFVF, UHEL, SLU, TUBITAK, CSL, & Netherlands Metrologic Institute (NMI; sub-contractor)
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).
Dependencies: 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 co-ordination, 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, 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 *did NOT cover all participating EU member states participating in EuroFIR*, 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, NCH, KTL, AFSSA, BFE, UCC, BGU, INRAN, UiO, NFNI, CESNID, Polytec, IDUFIC & International Agency for Research on Council (IARC, subcontractor)
Duration: M1-60
Deliverables: E-community software platform established, newsletters, linked datasets identified & deployed, reports & papers.
Indicators: 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 Standards Development and Specifications (IA1.5)

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:

1. 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 work plan for 18 months onwards 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, NCH, KTL, NKUA, BFE, UCC, BGU, INRAN, UiO, NFNI & CESNID
Duration: M1-60
Deliverables: Reports, draft CEN standard, papers.
Indicators: Number of peer reviewed papers
Resources needed: Budget for workshops, preparation of reports and other documents.

6.1.6 Food Identification and Description (IA1.6)

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 and contaminants 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, contaminants) 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, contaminants) 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).
5. 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, NCH, DFVF, KTL, BFE, NKUA, UCC, BGU, INRAN, CSPO, WU/NEVO, UiO, NFNI, INSA, UVi, CESNID, UGR, FRI, NFA, IceTec, TUBITAK & Polytec
Duration: M1-60
Deliverables: 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.

6.2 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 compounds[2] and identifying requirements of national database compilers and key users across Europe:

- Users and stakeholder requirements (RA2.1)
- Composite, processed and novel foods (RA2.2)
- Traditional and "*Ethnic*" minority foods (RA2.3)
- Bioactive compounds (RA2.4)

These jointly executed research activities form a 3-dimensional matrix, which actively promotes continuous *cross-communication* and *stimulation*. 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 *highly integrated and inter-disciplinary approach* to the NOE. In the following sections, details of the workplan and objectives for the first 18 months 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 Developing food composition data related tools for use with different users and stakeholders groups (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 will be hosted in 5 countries. Prior to the running of these workshops a workshop will be run at the NOE meeting in month 3 with members of the Network of Excellence to establish the format of the workshops and the evaluation methodologies to be used. The final format of the workshop will also be informed by a series of telephone interviews with key informants. A web-based questionnaire to obtain a wider range of stakeholder views is also likely to be developed.

The workshops will be used to consolidate information regarding the extent to, and format in, which food composition data is currently used, and how stakeholders could use these data in the future. Preparations for these events will be carried out by telephone, email, and post to ensure that attendees are able to come to the workshops with the necessary information. Issues to be addressed include the purpose for which users and stakeholders use food composition data (e.g. recipe/menu analysis, to analyse diets in surveys, clinical practice, checking compliance with legislation); food and nutrient coverage; presentation of data; data quality; timeliness and management.

Recommendations for developing the prototype food composition database website(s) for use by various users/stakeholders will be identified. These will be based on the results of the workshops held as part of this WP. The protocols for testing comprehension and acceptability of information derived from the food composition database websites will be further developed, refined, and tested. Prototype food composition database website(s) will be tested with groups of likely users of this type of database in several European countries.

The main tasks will be:

1. To determine the extent to, and format in, which food composition data is used by different target groups.

[2]Possible 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.

2. To determine the appropriateness of, potential acceptability of, and format in which food composition data can be presented to users and stakeholder groups using the Internet.
3. To test consumer acceptability and comprehension of information gained from an Internet-based users/stakeholders oriented food composition data resource.

The key deliverables will be:

1. Protocols for testing users/stakeholders' comprehension and acceptability of information derived from various food composition database websites.
2. Users/stakeholders' comprehension and acceptability of information derived from food composition databank system websites including recommendations on the further development of user/stakeholder oriented food composition database websites.

RA2.1: Developing food composition data related tools for use with different user/stakeholder target groups
Responsible: US, AUA, DFVF, IRMM, BFE, INRAN, FRI, NFA & BNF.
Duration: M1-36
Deliverables: Validated questionnaires, reports & 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 KTL and will have two main objectives.

Firstly, it 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.

The second tasks 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 tasks will be:

1. Establish standard procedures for calculating the composition of prepared and composite foods from their precursors or ingredients.

2. Review of recently reported weight yield and nutrient retention factors, and the formulation of a standard set of factors to be used in the calculation of the composition of composite and processed foods.

3. Define rules for the imputation of compositional data for foods reported as consumed but not represented in present European datasets.

4. 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.

5. 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.

6. 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: KTL, IFR, RUG/NUBEL, DFVF, AFSSA, BFE, INRAN, CSPO, WU, UiO, CESNID, FRI, NFA, 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.

6.2.3.1 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 standardisation 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).

6.2.3.2 "Ethnic Minority" 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, naturally-occurring compounds and contaminants. 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 *specific ethnic populations* including the development of programmes of dietary advice and diet/health information targeted at individual ethnic populations.

The activities and key deliverables are:

- Identity 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, NCH, DFVF, AFSSA, BFE, INRAN, CSPO, NFNI, INSA, UVi, UGR, TUBITAK, BGU, WU, CESNID & other SMEs.
Duration: M1-60
Deliverables: 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 WP 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.

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 specific tasks of this WP will be:

1. To ensure compatibility of the BASIS database to conform to the standard specifications as settled for the EuroFIR databank system.
2. To update and further include additional critically assessed biological and compositional information in the BASIS database.
3. To include both exotic and health food plants in the database.
4. To update the plant and plant part lists in all European languages.
5. To deploy the database in an Internet environment for easy access for the end-users (regulators, consumers, academics, and industry) in order to support the evaluation of genetically modified food plants, other new food plants (and varieties), and for general diet and health considerations of food plants.

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, NCH, UHEL, AFSSA, BFE, 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 IA1.1. 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 18 months, 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)
- Commercialisation 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:

- Feasibility and extent of resource integration – IA1.1;
- Quality management systems – IA1.3;
- Standards Development and Specifications – IA1.5;
- Food classification and description in databases – IA1.6;

- Production and use of food composition data in nutrition (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.

(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 this NOE. 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 NOE 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 NOE 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 on two occasions during the first 18 months as follows.

Science Communication for the Terrified: 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:

Day 1 - Arrive at venue late morning
Introductions and working lunch from 1pm
Coaching sessions until 6 pm
Working dinner 7 pm with speaker*
Day 2 - Working breakfast 8 am and am session
Lunch
Feedback
Close about 3 pm

Coaching will be on a max. 5 delegates: 1 trainer ratio, minimum 3 trainers (one of the IFR trainers will also act as event coordinator/administrator)

The list of possible speakers/trainers will include:

- National science correspondent, possibly from host country (a high calibre contributor is likely to have limited time)
- 1 x non-UK experienced science communicator from within project (e.g. head of PR at TNO)
- 1 x BNF – how to talk to industry
- A radio and/or television crew from the host country to give some hands-on experience
- Catherine Reynolds (IFR) – An overview of why communication is important
- Zoe Dunford (IFR) – communication from the perspective of the media, how to relate to the media
- Dr Siân Astley (IFR) – the scientist's perspective

The first venue will be Wageningen University in the first half of 2005. IFR has started making contact with science journalists and tv/radio crews in the relevant country through networks such as the European Union of Science Journalists' Associations.

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

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) 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 & 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.

6.3.2 Dissemination and Communication (SA3.2)

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 *Communication Strategies*, 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:

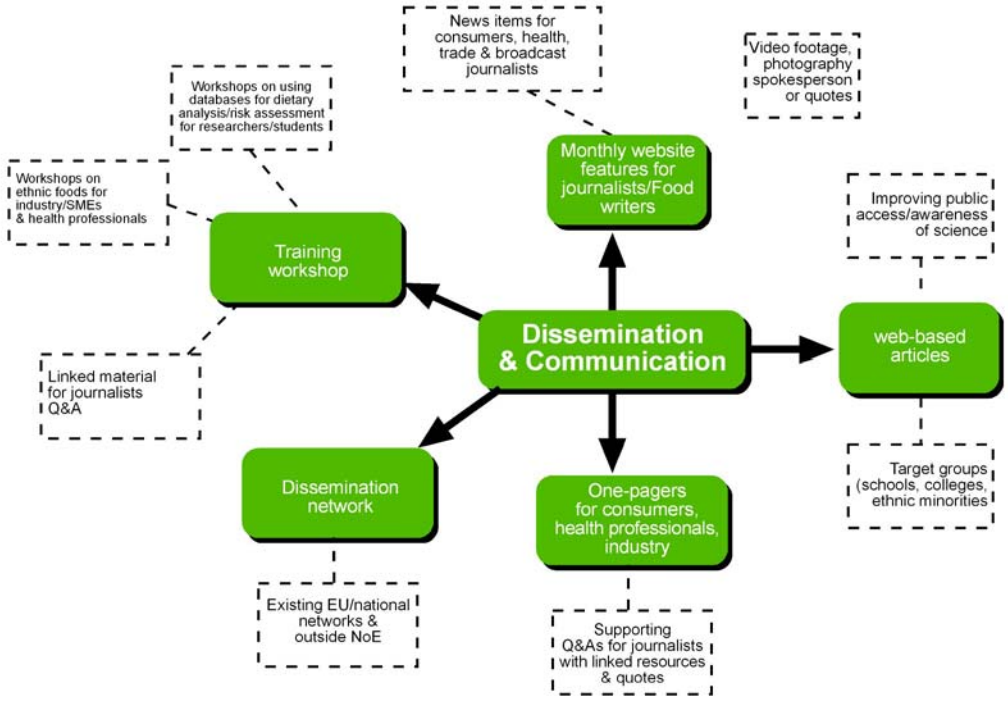
- Research scientists, health professional bodies and associated professionals (e.g. dietitians, public health nutritionists, home economists, GPs and nurses), ENLP;
- The EU agro-food industry and retail groups (e.g. CIAA and individual companies, especially SMEs);
- Policy makers, consumer groups and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

This *multi-stakeholder approach* 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 *to improve public access to, and awareness of science*, in order to improve decision-making.

A dissemination network will be established 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 4[3]. 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.

[3] How to disseminate your European research results, FLAIRFLOW 4, FFE IV.

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 & NCH) 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.

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, AUA, FRI & 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.
Indicators: 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).
Feedback measures: 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 NOE. In particular, the inclusion of SMEs in several WPs and network management will be a primary target for the NOE.

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 NOE 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.
2. 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 18 months):

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 – 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 (Link to 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 *Commercialisation and Durability WP* and through the *Dissemination and Exploitation Committee (DEC), which will also be absed within this WP and chaired by Dr George Chryssochoidis (AUA)***.** 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 *draft business, marketing and dissemination plan.*

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, DFVF, IFR, Management Office, UAG & DEC.
Duration: M1-60
Deliverables:
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, NCH, BFE, INSA, UGR, NFNI, IFR, NKUA, CSPO, BGU, RUG, UHEL, FRI, SLU, TUBITAL, AFSSA, Management Office, UAG & DEC.
Duration: M1-60
Deliverables:
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 and Network Management Board members, (3) Project Co-ordinator; (4) Project Management Office; (5) Horizontal Platforms leaders; (6) Workpackage Leaders; (7) Dissemination and Exploitation Committee members, and (8) 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, HP-L, 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), Horizontal Platform Leaders (HP-L), Workpackage Leaders (WP-L), and Users and Advisory Committee (UAG).

Scientist involved in management	Organisation (country)	Management Role	Other WPs
SMB & HP-L:			
Paul M Finglas	IFR (UK)	SMB, CO, HP-L for P1 & P4	WP-L (1.1, 1.2, 4.1 & 4.2)
Dr George Chryssochoidis	AUA (GR)	SMB, DEC, HP-L for P4	WP-L (3.3)
Dr Anders Møller	DFVF (DK)	SMB, HP-L for P1 & P2	WP-L (1.1, 1.2, 1.5, 1.7, & 1.8)
Dr Maria Antonia Calhau	NIH (PT)	SMB	WP-L (1.3)
Prof Antonia Trichopoulou	NKUA (GR)	SMB	WP-L (2.3)
Dr Wulf Becker	NFA (SW)	SMB, HP-L for P2	WP-L (2.2)
Dr Marja-Leena Ovaskainen	KTL (FI)	SMB, HP-L for P2	WP-L (2.2)
Prof Margaretha Jagerstad	SLU (SW)	SMB, HP-L for P3	WP-L (1.4, 3.1)
Dr Peter Hollman	WU (NL)	SMB, HP-L for P3	WP-L (3.1)
Dr Judith Buttriss	BNF (UK)	SMB, HP-L for P3	WP-L (3.2)
Scientist involved in management	Organisation (country)	Management Role	Other
WP-L:			
Dr Wulf Becker	NFA (SW)		WP-L (1.6)
Dr Jayne Ireland	AFSSA (FR)		WP-L (1.7)
Dr Cornelia Witthöft	SLU (SW)		WP-L (3.1)

Dr Santosh Khokhar	UL (UK)		WP-L (2.3)
Dr Jørn Gry	DFVF (DK)		WP-L (2.4)
Dr Mairead Kiely	UCC (IE)		WP-L (2.4)
Dr Monique Raats	US (UK)		WP-L (2.1)
Dr Maria Antonia Calhau	INSA (PT)		WP-L (1.3)
Janka Porubska (*nee* Pastorova)	FRI (SK)		WP-L (3.2)
Brigid McKeveth	BNF (UK)		WP-L (3.4)

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 responsible 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.

The fact that the co-leaders of the four horizontal platforms are members of the SMB (See organogram in Section 8) ensures that the objectives of the network will match the goals of the JPA, and the management activities will pay particular attention to match these objectives with the agreed milestones and deliverables as set out in the Consortium Agreement.

Furthermore, the SMB will inform each workpackage member, through the 17 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 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, the 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) 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.

Horizontal Platforms Leaders (HP-L)

Their main responsibilities are:

- 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.

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.

Dissemination and Exploitation Committee (DEC)

The head of the DEC will be designated as Dr George Chryssochoidis (Agricultural University of Athens) 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 provisional 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. Provisional list of UAG Members (to be updated at the start of the project and annually thereafter).

Member	Organisation (country)	Representing
Ms Susan Church (Chair)[1, 2]	FSA (UK)	National compiler; diet & health policy body.
Dr Juan Manuel Ballesteros[1]	Spanish Food Safety Agency (AESA; ES)	National food safety agency and national database compiler.
Dr John O'Brien[1]	Food Safety Authority of Ireland (IE)	National food safety agency.
Dr Barbara Burlingamme[1]	FAO (IT)	International database compiler & food policy body.
Dr Joanne Holden[1]	USDA (USA)	International database compiler.
Dr Hettie Schonfeldt[1]	ARC-ANPI (RSA)	International database compiler & researcher.
Ms Rianne Leenen & Ms Annet Roodenburg[1]	Unilever Health Institute (NL)	Food manufacturing industry.
Mr Reg Fletcher[1]	Kelloggs Management Services Europe Ltd (UK)	Food manufacturing industry.
Ms Sophie Holm[1]	CRP (FR)	Drinks and distillers industry.
Prof Gerd Klöck	Biozoon (DE)	Food SME.
Mr Dominique Taeymans[1]	CIAA (BE)	Food industry association.
Dr Laura Contor[1]	ILSI Europe Ltd (BE)	Food industry research and policy association.

Mr Peter Wagstaffe[1]	DG SANCO (BE)	EU regulatory & policy body.
Ms Valérie Rolland[1]	European Food Safety Authority (EFSA; BE)	EU regulatory & policy body.
Dr Gerald Moy[1]	WHO Geneva (CH)	International health policy.
Dr E C Smith[1]	FDA (USA)	Food policy & regulatory body.
Ms Beate Kettlitz[1]	BEUC (BE)	European consumers.
Dr Peter Laursen[1]	DDS (DK)	Researcher (bioactive compounds).
Dr Ann Prentice[1]	HNR (UK)	Researcher (food, diet and health)
Prof Ingrid Ute Leonhauser[1]	UG (DE)	Researcher (Traditional and Ethnic foods).

[1] Possible sub-contractors or third parties (to be agreed; see Appendix A).
[2]will be leaving the FSA at the end of 2004 to become an independent nutrition consultant. An additional representative from FSA will be invited to join the UAG next year.

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, the HP-L 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+).
Deliverables:
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 fora 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.

Outside the network: 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 (www.eurofir.net) 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.

Scientific publication of research results from the network - 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.

EuroFIR Disclaimer: 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.

Dissemination and translation of research to the policy makers - 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 the first 18 months 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 (50/66) and researchers (69/110), 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 *targeted* information on nutrient requirements specifically, and diet and health in general, based on individual needs, of which *gender is a major category.* 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 *creation of an information resource*. 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:

- Identification 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 EU external review of prototype databank system by 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

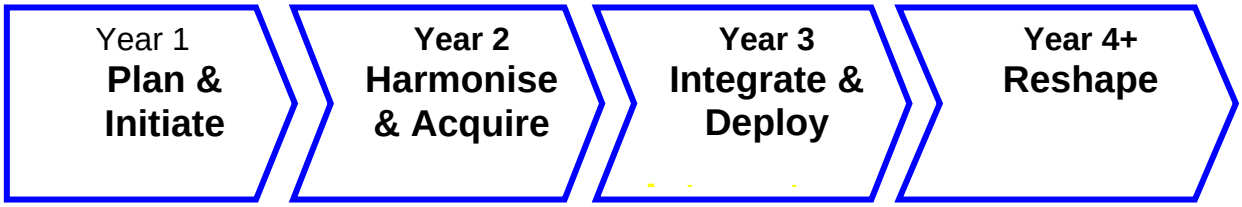
audiences.

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

*Measures to be developed by IA1.2 & SMB.

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.

7.1 Balance score card (BSC)

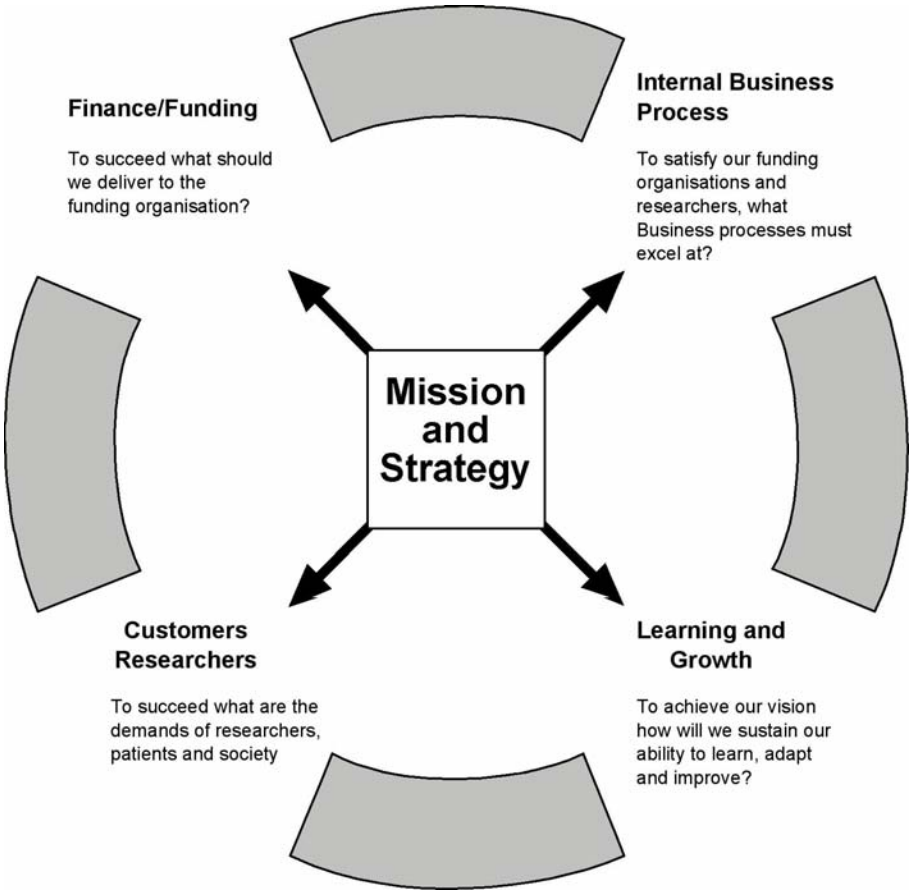
In order to successfully manage the integration of its partners and members, EuroFIR will use an adapted version of the Management technique called *"Balance Score Card" (BSC).* The BSC is more than a tactical or operational measurement system. We are using the measurement focus of the BSC to accomplish 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 *Customer* in this setting is understood to be the *community of researchers as well as the other stakeholders in the field of food composition and public health nutrition*.

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:

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. (3) Number of publications derived from common research projects (WPs) with exchange tools.	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. (2) The Network Manager (PMO) will actively find out the demand for tools not yet offered in the NOE and approach possible sources/ service providers.

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 parameters	Number of joint publications from EuroFIR partners. Increase of joint publications and their IF/CI from EuroFIR partners. Number of joint PhD projects 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. Rate of use of networked nutrient and bioactive databases. Number of hits on Extranet. Growth in the number of attendees to conferences and training courses supported by EuroFIR.

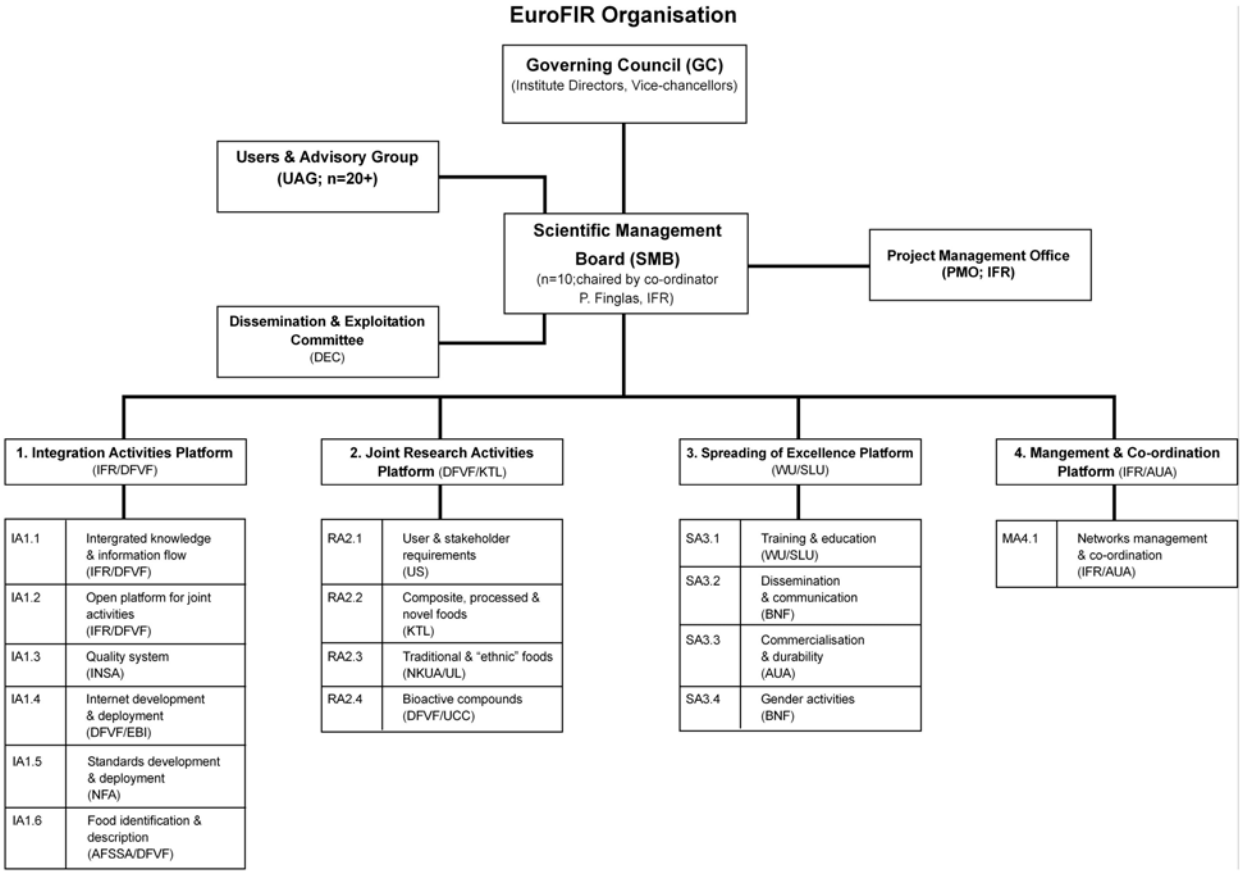
The above indicators will be monitored over the duration of the project for each partner. The Coordinator and PMO will collate all the above indicators into an “overall performance indicator for integration” for each partner. This information will be used to assess the performance of each partner over 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 :



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);
- Horizontal Platform Leaders (HP-L);
- Workpackage Leaders (WP-L).

The NOE's project management will be audited every twelve months by an external consultant. Their report will include any recommendations in how the NOE is managed and be submitted to the GC and SMB.

(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 ten researchers will take responsibility for co-leading one of the FOUR Horizontal Platforms covering *Integration Activities*, *Joint Research*, *Spreading of Excellence* and *Management and Co-ordination Activities*. In addition, two persons responsible for *Dissemination and Communication activities*, and *NAS activities*, will also join the SMB.

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.

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

The PMO supports the SMB and GC within the network and is headed by Mr John Kingsmill (IFR Company Secretary, or his nominated deputy). The head of the PMO 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 (33%)
- Financial officer (100%)
- Contracts/Legal officer (10%)
- Secretarial and support staff (100%)
- Communications support (5%).

(e) NOE Management Body 5: 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.

(f) NOE Management Body 6: 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.

(g) NOE Management Body 7: Horizontal Platforms Leaders (HP-L)

Each HP-L will be responsible for:

- Providing the scientific lead and settle scientific disputes arising within their WP consortia;
- Preparing and promptly submitting draft consolidated technical platform reports to the Co-ordinator (as specified in the Consortium Agreement)
- Attending SMB and GC meetings as required.

(h) NOE Management Body 8: 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.

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:

1. 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 “noticeboard” 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 NOE, 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 NOE 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) - first 18 months

9.1 Introduction – general description and milestones

This section describes in detail the JPA, which is planned for the first 18 months. 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 15 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 (IA1.1-1.6) 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 co-ordinated 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 detail of the milestones and deliverables as described (>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. *The annual meeting of the GC is the focal point of regular strategic network planning*.

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. *The availability of new research funds and grant opportunity will guide the shaping timing of the various research activities*. 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 xx) 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 (18 months)

Milestone no	Milestone title	Delivery/ Achieve date	Nature	Dissemination level
M1.1.1 M1.2.1 M1.3.1 M1.4.1 M1.5.1 M1.6.1 M2.1.1 M2.1.1 M2.4.1 M3.3.1	Hold inaugural meeting to create management team and launch WPs	1	O	RE
M1.1.2	1st phase completed (web-based platform & IT systems tools)	6	O	RE
M1.1.3	2nd phase completed (training, publications/ documents & methods/QA inventories.	15	O	RE
M1.1.4	3rd phase completed (updated IT systems manual & portals for dissemination and communication activities).	18	0	RE
M1.1.5	Update/publish IT systems manual/review and update as necessary	18	R	RE
M1.2.2	Benchmarking of integration status at month 0	3	O	RE
M1.2.3	Launch call for new partners	6	O	PU
M1.2.4	Establish and disseminate improved methodologies, tools and databank systems	12	P	RE
M1.2.5	Benchmarking of status of integration at month 12	15	O	RE
M1.2.6	Integrated JPA for 18-36m	18	R	RE
M1.2.7	Initiate the development and submission of funding bids to national bodies.	18	R	RE
M1.3.2	Establish and disseminate quality system & plan, and QA questionnaires.	7	R	PU
M1.3.3	Establish and disseminate standards and traceability links including QA criteria, quality index and conference code	14	O	PU
M1.3.4	Initiation of audits and PT schemes	18	O	RE
M1.3.5	Plan for the continuation of audit cycle and PT-schemes involving relevant laboratories	18	R	RE
M1.4.2	Databank steering group established	3	O	RE

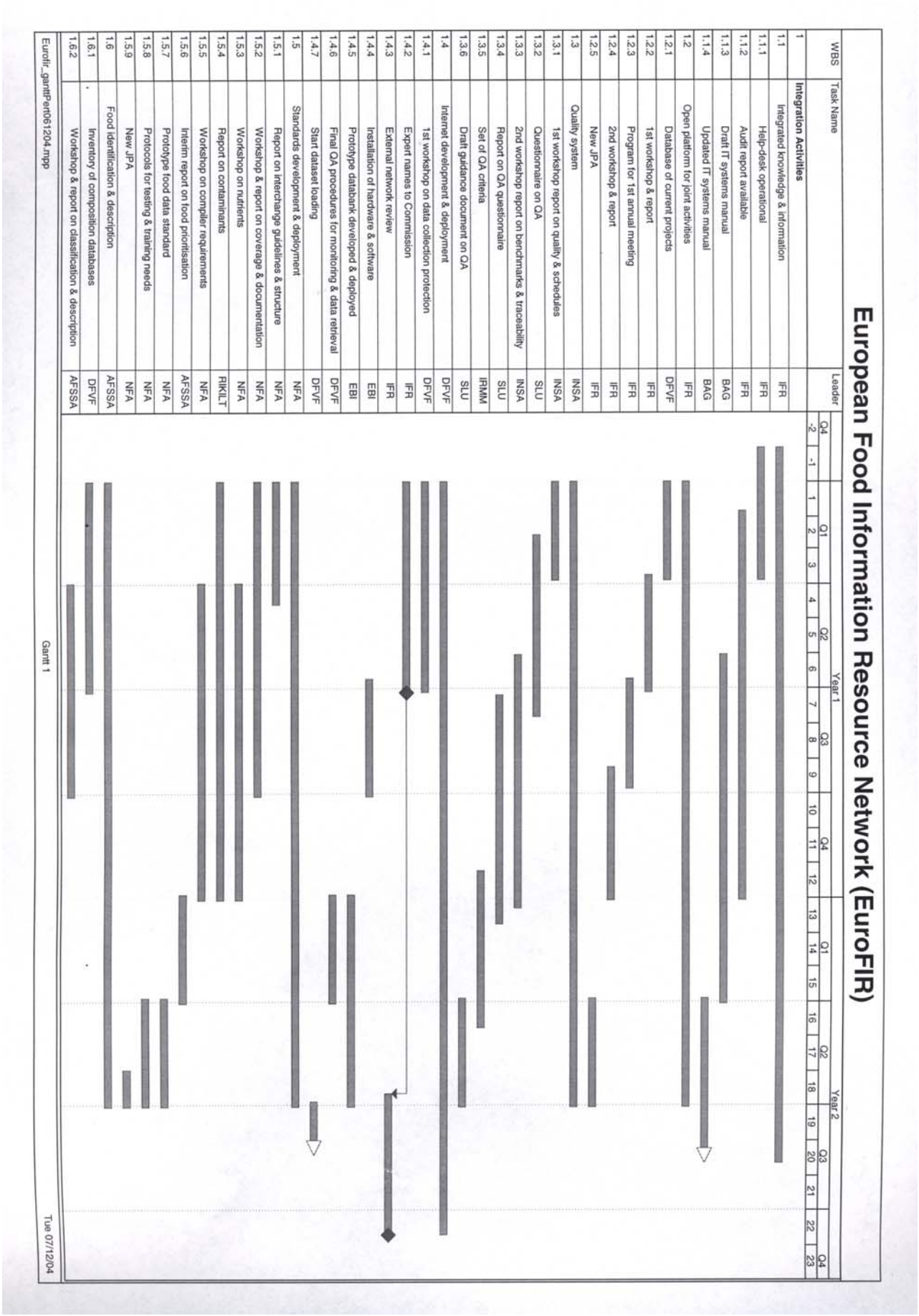
M1.4.3	General structure of databank system established and modified as required	12-18	P	RE
M1.4.4	Consensus on rules for QC and data format and retrieval.	15	R	RE
M1.4.5	Data extraction tools available	18	O	RE
M1.4.6	Plan for databank enhancement and additional resources for month 18 onwards.	18	R	RE
M1.5.2	Establish national compiler networks	3	R	RE
M1.5.3	Complete review on food-derived contaminants	12	R	PU
M1.5.3	A prototype standard for description, documentation and management of food composition data	18	P	PU
M1.5.4	Establish CEN working group for description, documentation and management of food composition databases.	18	R	PU
M1.5.5	Establish plan for food-derived contaminants	18	R	PU
M1.6.2	Proposals for linking foods through existing food classification & description systems	9	R	PU
M1.6.3	Recommendations for food record retrieval using existing description and classification	12	R	PU
M1.6.4	Recommendations for food classification and description systems for use in European food composition databases	15	R	PU
M1.6.5	Prototype food classification and description support facilities and prepare plan for 18-60 months of network	18	P	RE
M2.1.1	Hold inaugural meeting to create management team and launch WP	1	O	RE
M2.1.2	UK stakeholder workshop held.	6	O	PU
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.	18	O	PU
M2.2.2	Collect information on national trends and databases of composite foods and industrial ingredients in each partner	6	R	RE
M2.2.3	Preliminary description of European food brand databases	12	R	PU
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	Establish plans for network with food industry organisations for data change experiments	18	R	PU

M2.2.6	Initiate the development and submission of funding bids to national bodies	18	R	RE
M2.3.1	Establish network for traditional foods across Europe.	3	O	RE
M2.3.2	Initial list of traditional foods & recipes for each country.	12	O	PU
M2.3.3	Start recipe recording and documentation.	13	R	RE
M2.3.4	Identify core partners for analysis	18	R	PU
M2.3.5	Hold inaugural meeting to create management team and launch Workpackage	3	O	RE
M2.3.6	Establish networks for ethnic minority foods across Europe including SMEs	6	O	RE
M2.3.7	Identify core partners for analysis of foods	15	O	RE
M2.3.8	Start collection for ethnic foods	18	O	RE
M2.3.9	Initiate the development and submission of funding bids to national bodies	18	R	PU
M2.4.2	Establish WP networks and agree criteria for data evaluation & assessment	6	O	PU
M2.4.3	Initial lists for health & exotic food plants and start data entry	12	R	PU
M2.4.4	Final major food plant & exotic plant lists, database specifications and final input form	18	R	PU
M2.4.5	Agree future plan and set targets for additional funding	18	R	RE
M3.1.2	Start exchange visits/PhD awards programme	6-18	O	PU
M3.1.3	Implementation of e-learning courses	18	O	PU
M3.1.4	Agree future plan and set targets for additional funding	18	R	RE
M3.2.1	Establish steering group to advise on dissemination; provide outline style-guide to underpin dissemination strategy; baseline awareness audit; 1st publicity push with users/stakeholders	1	RE	R
M3.2.2	Formalised EuroFIR peer-review process for dissemination	2	RE	R
M3.2.3	Start providing non-expert material on food composition & databank system issues for use by partners	3	PU	O
M3.2.4	Launch populated public pages and links; sought initial feedback	9	PU	O
M3.2.5	1st Science & Society meeting held	12	PU	O

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
M3.3.2	Organise workshop for network technology transfer managers and existing EU entrepreneurial programmes	6	R	PU
M3.3.3	Identify pertinent incubators, new venture creation support and entrepreneurship training	18	R	PU
M3.4.1	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.	1	R	PU
M3.4.2	Development of gender questionnaire for initial gender audit.	6	R	PU
M3.4.3	On-going updates at gender fora associated with each project meeting (annual updates).	12	O	PU
M3.4.4	A web and email based forum for dialogue and sharing of good practice	12	O	RE
M3.4.5	Annual assessment of success in meeting gender-informed objectives.	12	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.	18	R	PU
M4.1	Verification of procedures, JPA for M1-18 and budget by GC in their first meeting	3	R	RE
M4.2	Proposal of members of UAG, DEC & GC	3	O	PU
M4.3	Open call for new partners published	6	O	PU
M4.4	Confirmation of all partners to proper auditing procedures	6	R	RE
M4.5	Agreement for JPA for 2nd year	9	R	RE
M4.6	Agreement with new partners to be enrolled by 2006	12	O	RE
M4.7	Agreement of JPA and budget for 2007	18	O	RE

9.2 Planning and timetable

The planning of the various WPs for the first 18 months of the project is described in the GANTT and Pert charts below on pages 91-93 (GANTT 1-3) and pages 95-96 (PERT 1 & 2). The GANNT chart shows the schedule for individual set of tasks for each WP for the first 18 months of the network. The PERT charts show the various interdependencies of each of the WP tasks for the first 18 months of the network.


European Food Information Resource Network (EuroFIR)
WBS
Task Name
Leader
Year 1
Year 2
Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4
-2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
1 Integration Activities IFR
1.1 Integrated knowledge & information IFR
1.1.1 Help-desk operational IFR
1.1.2 Audit report available IFR
1.1.3 Draft IT systems manual BAG
1.1.4 Updated IT systems manual BAG
1.2 Open platform for joint activities IFR
1.2.1 Database of current projects DFVF
1.2.2 1st workshop & report IFR
1.2.3 Program for 1st annual meeting IFR
1.2.4 2nd workshop & report IFR
1.2.5 New JPA IFR
1.3 Quality system INSA
1.3.1 1st workshop report on quality & schedules INSA
1.3.2 Questionnaire on QA SLU
1.3.3 2nd workshop report on benchmarks & traceability INSA
1.3.4 Report on QA questionnaire SLU
1.3.5 Set of QA criteria IRMM
1.3.6 Draft guidance document on QA SLU
1.4 Internet development & deployment DFVF
1.4.1 1st workshop on data collection protection DFVF
1.4.2 Expert names to Commission IFR
1.4.3 External network review IFR
1.4.4 Installation of hardware & software EBI
1.4.5 Prototype databank developed & deployed EBI
1.4.6 Final QA procedures for monitoring & data retrieval DFVF
1.4.7 Start dataset loading DFVF
1.5 Standards development & deployment NFA
1.5.1 Report on interchange guidelines & structure NFA
1.5.2 Workshop & report on coverage & documentation NFA
1.5.3 Workshop on nutrients NFA
1.5.4 Report on contaminants RIKILT
1.5.5 Workshop on compiler requirements NFA
1.5.6 Interim report on food prioritisation AFSSA
1.5.7 Prototype food data standard NFA
1.5.8 Protocols for testing & training needs NFA
1.5.9 New JPA NFA
1.6 Food identification & description AFSSA
1.6.1 Inventory of composition databases DFVF
1.6.2 Workshop & report on classification & description AFSSA
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Gantt 1
Tue 07/12/04

European Food Information Resource Network (EuroFIR)
WBS
Task Name
Leader
Year 1
Year 2
Q4 -2
Q4 -1
Q1 1
Q1 2
Q1 3
Q2 4
Q2 5
Q2 6
Q3 7
Q3 8
Q3 9
Q4 10
Q4 11
Q4 12
Q1 13
Q1 14
Q1 15
Q2 16
Q2 17
Q2 18
Q3 19
Q3 20
Q3 21
Q4 22
Q4 23
1.6.3 Report on food record retrieval AFSSA
1.6.4 Workshop & recommendations for classification AFSSA
1.6.5 Workshop on food classification development AFSSA
2 Joint Reseearch Activities
2.1 User & stakeholder requirements US
2.1.1 1st workshop + report on recommendations US
2.1.2 User Advisory Group established US
2.1.3 2nd workshop + report on recommendations US
2.1.4 3rd workshop + summary & interim findings US
2.2 Composite, processed & novel foods KTL
2.2.1 Inventory of status of composite dishes KTL
2.2.2 Workshop on rules & factors for composite foods KTL
2.2.3 Report on methods to impute nutrient values KTL
2.2.4 Workshop on availability of food industry data TTZ
2.2.5 Plans for months 18-48 on novel ingredients KTL
2.3 Traditional & 'ethnic' foods NKUA
2.3.1 Traditional foods NKUA
2.3.1.1 Report on definitions / country NKUA
2.3.1.2 Protocol for recording, collection & preparation NKUA
2.3.1.3 Lists of compounds & laboratories NKUA
2.3.1.4 Descriptions of traditional recipes NKUA
2.3.1.5 New JPA NKUA
2.3.2 Ethnic foods UL
2.3.2.1 Report on 1st workshop UL
2.3.2.2 Review of Ethnic food research UL
2.3.2.3 Report on 2nd workshop inc. workplan UL
2.3.2.4 Report on 3rd workshop UL
2.3.2.5 New JPA UL
2.4 Bioactive compounds DFVF
2.4.1 1st workshop on work schedule & tasks DFVF
2.4.2 1st User Group meeting UCC
2.4.3 2nd workshop: food lists & data entry DFVF
2.4.4 2nd User Group meeting UCC
2.4.5 3rd workshop: food lists & data entry DFVF
2.4.6 New JPA DFVF
3 Spreading of Excellence
3.1 Training & education WU
3.1.1 Report on specialist workshops & training courses WU
3.1.2 Work plan for exchange training visits SLU
3.1.3 Exchange programme reaches 20% SLU
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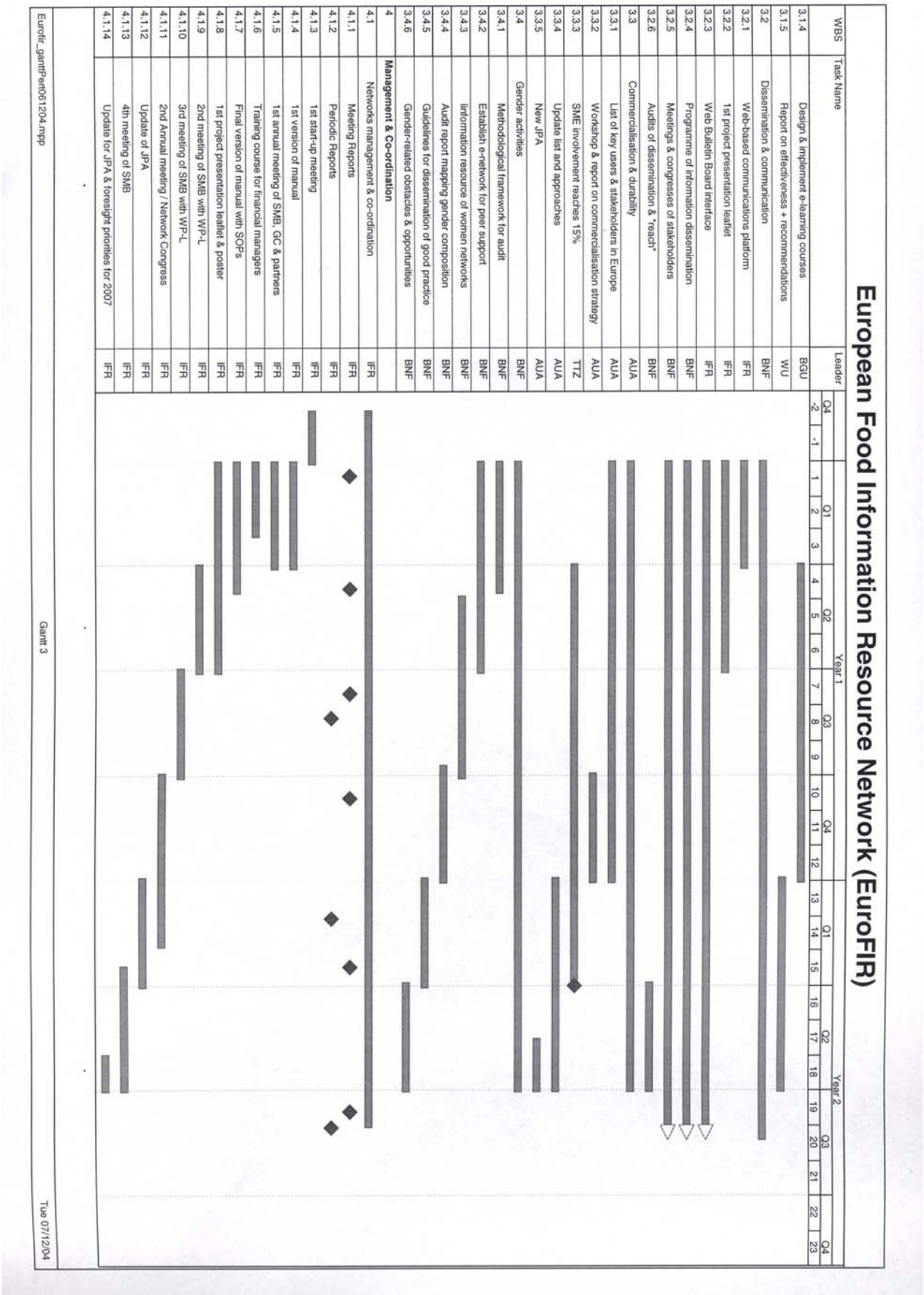
Gantt 2
Tue 07/12/04


European Food Information Resource Network (EuroFIR)
WBS
Task Name
Leader
Year 1
Year 2
Q4 -2
-1
Q1 1 2 3
Q2 4 5 6
Q3 7 8 9
Q4 10 11 12
Q1 13 14 15
Q2 16 17 18
Q3 19 20 21
Q4 22 23
3.1.4 Design & implement e-learning courses BGU
3.1.5 Report on efectiveness + recommendations WU
3.2 Dissemination & communication BNF
3.2.1 Web-based communications platform IFR
3.2.2 1st project presentation leaflet IFR
3.2.3 Web Bulletin Board interface IFR
3.2.4 Programme of information dissemination BNF
3.2.5 Meetings & congresses of stakeholders BNF
3.2.6 Audits of dissemination & "reach" BNF
3.3 Commercialisation & durability AUA
3.3.1 List of key users & stakeholders in Europe AUA
3.3.2 Workshop & report on commercialisation strategy AUA
3.3.3 SME involvement reaches 15% TTZ
3.3.4 Update list and approaches AUA
3.3.5 New JPA AUA
3.4 Gender activities BNF
3.4.1 Methodological framework for audit BNF
3.4.2 Establish e-network for peer support BNF
3.4.3 Information resource of women networks BNF
3.4.4 Audit report mapping gender composition BNF
3.4.5 Guidelines for dissemination of good practice BNF
3.4.6 Gender-related obstacles & opportunities BNF
4 Management & Co-ordination
4.1 Networks management & co-ordination IFR
4.1.1 Meeting Reports IFR
4.1.2 Periodic Reports IFR
4.1.3 1st start-up meeting IFR
4.1.4 1st version of manual IFR
4.1.5 1st annual meeting of SMB, GC & partners IFR
4.1.6 Training course for financial managers IFR
4.1.7 Final version of manual with SOPs IFR
4.1.8 1st project presentation leaflet & poster IFR
4.1.9 2nd meeting of SMB with WP-L IFR
4.1.10 3rd meeting of SMB with WP-L IFR
4.1.11 2nd Annual meeting / Network Congress IFR
4.1.12 Update of JPA IFR
4.1.13 4th meeting of SMB IFR
4.1.14 Update for JPA & foresight priorities for 2007 IFR
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Gantt 3
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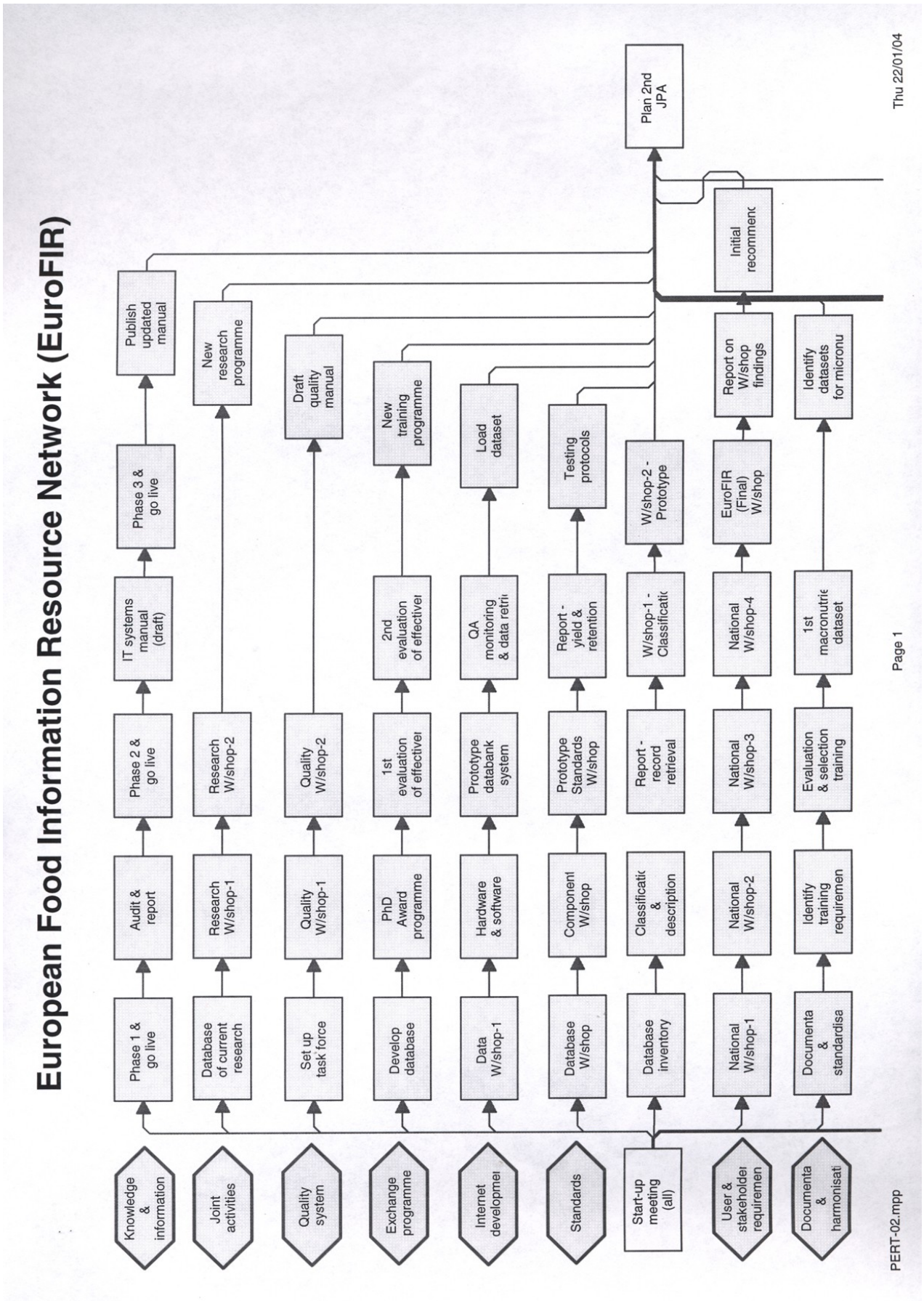
9.3 Graphical presentation of the components

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 first 18 months for the following network meetings and workshops:

Month	Meeting	Duration (days)	Provisional Dates	Provisional Venue
1	SMB, WP-L	2	11-12/1/05	Delft, NL
2	Financial controllers	1	21/2/05	Stansted Radisson Hotel, UK
3	1st Annual[1]	3	14-16/03/05	Lisbon, PT
6	SMB	1.5	15/6/05	Istanbul, TR[3]
9	SMB, HP	3	13-16/9/05	Pretoria, RSA[2]
13	SMB	2	Jan 2006	To be agreed
14-15	2nd Annual	3	27/2-1/3/06	London, UK
15-16	SMB, WP-L	2	June 2006	Athens, GR

[1]Inaugural meeting of EuroFIR
[2]In conjunction with 6th International Food Database Conference; only WP-Ls (maximum number = 17) to be funded from network based on a 3-day meeting in Europe (950 euros maximum contribution towards travel and subsistence costs).
[3]In conjunction with 1st International Food and Nutrition congress “Food Safety and Quality through the Food Chain, 15-18 June 2005, Istanbul.


European Food Information Resource Network (EuroFIR)
Knowledge & information
Joint activities
Quality system
Exchange programme
Internet developmei
Standards
Start-up meeting (all)
User & stakeholder requiremen
Documenta & harmonisati
Phase 1 & go live
Audit & report
Phase 2 & go live
IT systems manual (draft)
Phase 3 & go live
Publish updated manual
Database of current research
Research W/shop-1
Research W/shop-2
New research programme
Set up task force
Quality W/shop-1
Quality W/shop-2
Draft quality manual
Develop database
PhD Award programme
1st evaluation of effectiver
2nd evaluation of effectiver
New training programme
Data W/shop-1
Hardware & software
Prototype databank system
QA monitoring & data retri
Load dataset
Database W/shop
Componen W/shop
Prototype Standards W/shop
Report - yield & retention
Testing protocols
Database inventory
Classificatic & description
Report - record retrieval
W/shop-1 - Classificatic
W/shop-2 - Prototype
National W/shop-1
National W/shop-2
National W/shop-3
National W/shop-4
EuroFIR (Final) W/shop
Report on W/shop findings
Documenta & standardisa
Identify training requiremen
Evaluation & selection training
1st macronutrie dataset
Identify datasets for micronu
Initial recommenc
Plan 2nd JPA
Thu 22/01/04
Page 1
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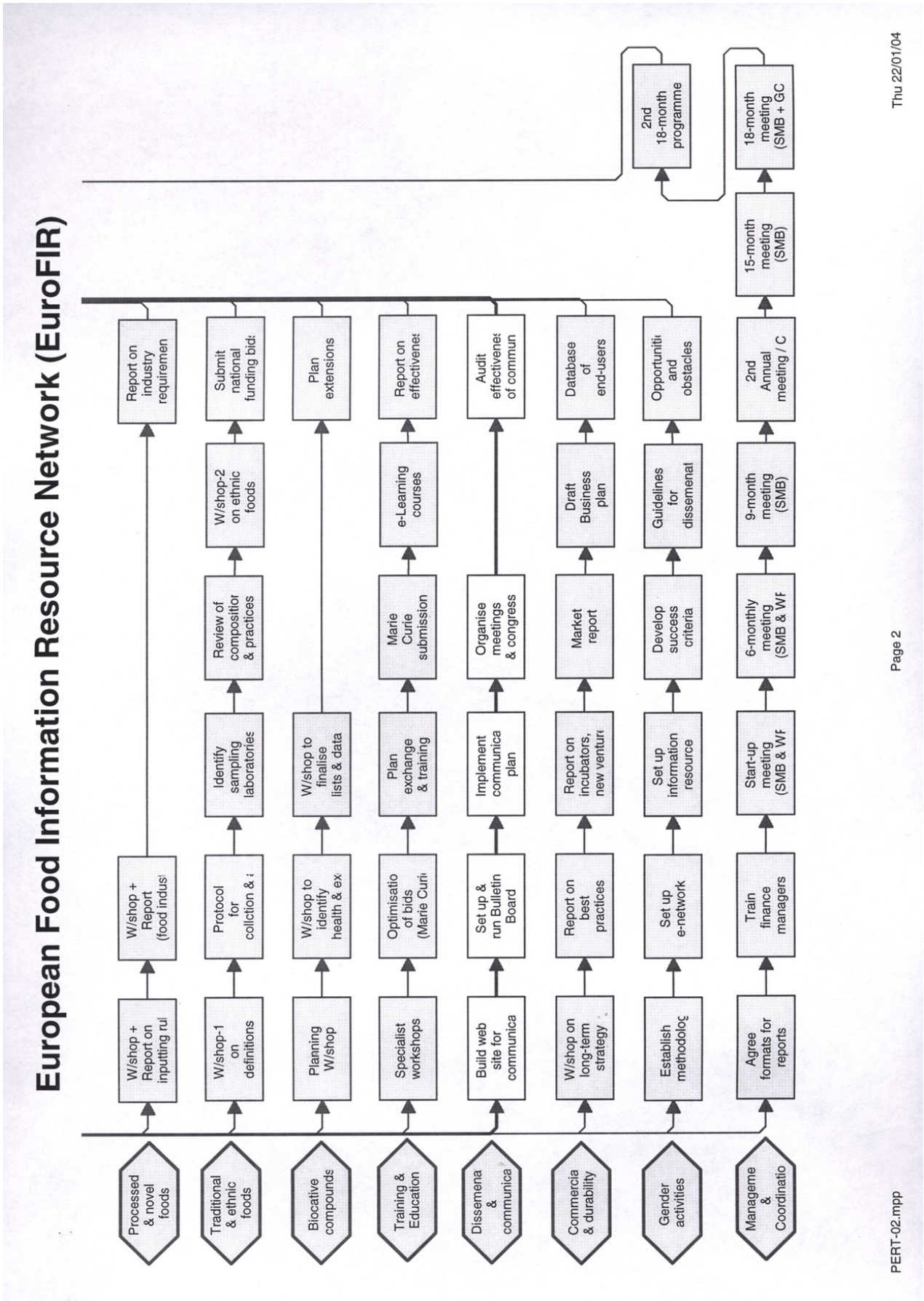
European Food Information Resource Network (EuroFIR)
Processed & novel foods
Traditional & ethnic foods
Biocative compounds
Training & Education
Dissemena & communica
Commercia & durability
Gender activities
Manageme & Coordinatio
W/shop + Report on inputting rul
W/shop-1 on definitions
Planning W/shop
Specialist workshops
Build web site for communica
W/shop on long-term strategy
Establish methodoloc
Agree formats for reports
W/shop + Report (food indus
Protocol for collction & a
W/shop to identify health & ex
Optimisatio of bids (Marie Curi
Set up & run Bulletin Board
Report on best practices
Set up e-network
Train finance managers
Report on industry requiremen
Identify sampling laboratories
Review of compositior & practices
W/shop to finalise lists & data
Plan exchange & training
Marie Curie submission
Implement communica plan
Organise meetings & congress
Market report
Develop success criteria
Start-up meeting (SMB & WF
Submit national funding bid
W/shop-2 on ethnic foods
Plan extensions
Report on effectivenes
e-Learning courses
Audit effectivenes of commun
Database of end-users
Draft Business plan
Guidelines for dissemenat
Opportunitie and obstacles
9-month meeting (SMB)
6-monthly meeting (SMB & WF
2nd Annual meeting / C
15-month meeting (SMB)
18-month meeting (SMB + GC
2nd 18-month programme
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Page 2
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9.4 Workpackage list overview

Work package list
Joint programme of activities (18 months period month 01-18)

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	19.75	1	18	D1.1.1-D1.1.6
1.2	Provision of open platform for joint activities and additional of new partners.	IFR	8.25	1	18	D1.2.1-D1.2.4
1.3	Certified quality system for food composition databases	INSA	27.85	1	18	D1.3.1-D1.3.6
1.4	Internet development and deployment of databank systems	DFVF	58.7	1	18	D1.4.1-D1.4.6
1.5	Standards development and specifications	NFA	52.55	1	18	D1.5.1-1.5.9
1.6	Food identification & description	AFSSA	45.9	1	18	D1.6.1-1.6.5
2.1	Users and stakeholders requirements	US	30.35	1	18	D2.1.1-2.1.3
2.2	Composite, processed and novel foods	KTL	36.7	1	18	D2.2.1-2.2.5
2.3.1	Traditional Foods	NKUA	54.4	1	18	D2.3.1-2.3.5
2.3.2	Ethnic minority foods	UL	26.5	1	18	D2.3.1-2.3.5
2.4	Bioactive compounds	DFVF/UCC	62.7	1	18	D2.4.1-2.4.7
3.1	Training, education & vision	WU/SLU	44.8	1	18	D3.1.1-3.1.5
3.2	Dissemination and communications	BNF	34.3	1	18	D3.2.1-3.2.6
3.3	Commercialisation & durability	AUA	4.75	1	18	D3.3.1-3.3.3
3.4	Integrating and mainstreaming the gender dimension	BNF	11.7	1	18	D3.4.1-3.4.6
4	Management and co-ordination	IFR	36.9	1	18	D4.1-4.12
	TOTAL		556.1			

9.5 Deliverables List (18 months)

Deliverable no	Deliverable title	Delivery/ Achieve date	Nature	Dissemination level
D1.1.1	Help-desk operational	3	O	RE
D1.1.2	Initial draft of IT systems manual available	6	R	RE
D1.1.3	Centre skills & infrastructure inventory	12	D	RE/PU
D1.1.4	Centre training capabilities inventory	15	R	RE/PU
D1.1.5	Publications & documents repository	15	R	RE/PU
D1.1.6	Methods & QA inventory	15	R	RE/PU
D1.2.1	1st EuroFIR workshop & report on optimal research methods & training needs, indicators for integration & new funding initiatives.	3	P	PP
D1.2.2	Programme for 2nd EuroFIR annual meeting/ conference.	9	R	PU
D1.2.3	2nd 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
D1.3.1	1st EuroFIR workshop & report on implementation of quality system and scheduling of workshops and action plans.	3	R	RE
D1.3.2	Questionnaire on QA available on web	7	R	RE
D1.3.3	2nd EuroFIR workshop & report on establishing benchmark standards and traceability links through the food chain	12	R	RE
D1.3.4	Report on QA questionnaires	13	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
D1.4.1	1st EuroFIR workshop and report on data collection & protection	3	R	RE
D1.4.2	Submit six expert names to Commission of initial review at 22 months	6	R	RE
D1.4.3	Installation of hardware and software components	9	O	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	O	RE
D1.5.1	Report on interchange guidelines and data structure	4	R	PU
D1.5.2	EuroFIR workshop & report including inventory of component coverage and level of documentation in existing databases	9	R	PU
D1.5.3	EuroFIR workshop on nutrients to be included in core data sets and nutrients for future analysis	12	R	PU
D1.5.4	Report on plan for food derived contaminants	12	R	PU
D1.5.5	EuroFIR workshop and report on existing documentation and procedures in databases and compiler requirements	15	R	PU
D1.5.6	Interim report on food prioritisation	15	R	PU
D1.5.7	A prototype food data standard focusing on identification, expression, calculation and documentation of food component data	18	P	PU
D1.5.8	Protocols for testing the standards for various component collections and report for testing recommendations and compiler support and training needs,	18	R	PU
D1.5.9	Plan for next 18-36 months period.	18	R	RE
D1.6.1	Inventory of European food composition databases and tables	6	R	PU
D1.6.2	EuroFIR workshop & report on current food classification & description systems and mechanisms for linking foods from these different sources	9	R	PU
D1.6.3	Report on food record retrieval using existing description and classification	12	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
D2.1.1	1st workshop held & report including recommendations	6	R	PU
D2.1.2	2nd workshop held & report including recommendations	12	R	PU
D2.1.3	3rd workshop held & overall report on key objectives 1-3.	18	R	PU

D2.2.1	Basic inventory of the status in management of composite dishes in FCDB	9	R	PU
D2.2.2	EuroFIR workshop on rules and factors for imputing data for composition of composite and processed foods	12	R	PU
D2.2.3	Report on methods to impute nutrient values for composite and processed foods	12	R	PU
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
D2.3.1	1st workshop report on definition of "traditional", evidence-based records and initial list of traditional foods/recipes of each participating country.	3	R	PU
D2.3.2	2nd workshop & report including protocol for recipe recording, collection and preparation of samples.	15	R	PU
D2.3.3	List of nutrients and bioactive compounds; methods and list of central laboratories for analysis.	18	R	RE
D2.3.4	Detailed written description of traditional recipes and foods investigated.	18	R	PU
D2.3.5	Agree plan of work for 18-36 months	18	R	RE
D2.3.6	Report on 1st workshop & updated workplan.	3	R	PU
D2.3.7	Critical review of composition of ethnic foods including information on methods of domestic food preparation and eating practices	12	R	PU
D2.3.8	Report on 2nd EuroFIR workshop & prioritisation of "*ethnic*" foodstuffs for analysis and detailed protocol for the collection and storage of samples for analysis	12	R	PU
D2.3.9	Report on 3rd workshop & list of ethnic foods to be collected.	18	R	PU
D2.3.10	Agree plan of work for 18-36 months	18	R	RE
D2.4.1	1st EuroFIR workshop & report covering organisation of work, allocation of tasks and establishment of WP teams.	3	R	PU
D2.4.2	1st Users Group meeting and recommendations	4	R	RE
D2.4.3	2nd EuroFIR workshop & report covering lists for selected health & exotic food plants, status of data assessment/entry & specifications, and biological data input form.	15	R	PU
D2.4.4	2nd Users Group meeting and recommendations for additional funding	15	R	RE

D2.4.5	Report covering final food plant lists and status of health plants list; specifications for database deployment and data entry status.	18	R	PU
D2.4.6	Future plan for activities including plant source materials for food flavourings, continuation of selected health food plants and input of biological data	18	R	RE
D3.1.1	Report of specialist workshops and training courses driven by WPs	3	O	RE
D3.1.2	Policy paper on optimisation of existing bids for Marie Curie actions & EuroFIR criteria for training exchanges/PhD awards	6	R	RE
D3.1.3	Workplan for implementation of exchange training visits & PhD awards programme	6	R	RE
D3.1.4	Design and implement e-learning courses	12	O	RE
D3.1.5	Consensus report on effectiveness of training activities and recommendations for 18 months onwards.	18	R	PU
D3.2.1	Secure web-based communication platform for EuroFIR partners (with WP 1.1)	0-3	P	RE
D3.2.2	1st project presentation leaflet & poster.	6	R	PU
D3.2.3	Web Bulletin Board interface for stakeholders world-wide respecting language, expertise levels, gender, ethnicity, disability, data protection and ethical issues.	0-18	P	PU
D3.2.4	Planned programme of information dissemination to suit users/stakeholders including one-pagers, compilation booklet of one-pagers, syntheses, monthly web features, bulletin board updates and congress proceedings & resources	0-18	R	PU
D3.2.5	Meetings and congresses of stakeholders and of EuroFIR partners	0-18	O	PU
D3.2.6	Audits of dissemination “reach and effectiveness”	0-18	O	RE
D3.3.1	List of key users and stakeholders in each country	6	R	RE
D3.3.2	EuroFIR workshop & report and action list to develop a long-term strategy for commercialisation of the output of the network	12	R	RE
D3.3.3	Update list of users and stakeholders and action plan for next 18 months	18	R	RE
D3.4.1	Methodological framework for auditing the current state of gender balance and sensitivity.	4	R	PU

D3.4.2	Provide an e-network distribution list of gender specialists for mutual peer support and mentoring.	6	O	PU
D3.4.3	Develop an information resource of the relevant national and European networks of women scientists.	9	O	PU
D3.4.4	An audit report mapping the initial gender composition and distribution of research teams for circulation to managers and decision makers in the project	12	R	PU
D3.4.5	Generally applicable guidelines for the dissemination of good practice in gender issues.	15	R	PU
D3.4.6	Produce documentation of the gender-related obstacles and opportunities experienced by researchers.	18	R	PU
D4.1	1st start up meeting of SMB and WP-l (January 2005)	1	O, R	RE
D4.2	1st version of manual with SOPs including formats for technical and financial report distributed for discussion and agreement	3	O, R	RE
D4.3	1st Annual (start-up) meeting of SMB, GC and all partners – JPA and budget agreed; minutes prepared and circulated (March 2005)	3	O, R	PU
D4.4	Training course for financial managers of partner organisations	3	O, R	RE
D4.5	Final version of network management manual with SOPs	4	O, R	RE
D4.6	1st project presentation leaflet & poster presentation available	6	O, R	PU
D4.7	2nd meeting of SMB with WP-L; minutes prepared and circulated (June 2005)	6	O, R	RE/PU
D4.7	3rd meeting of SMB with WP-L; minutes prepared and circulated (September 2005)	9	O,R	RE/PU
D4.8	2nd Annual meeting/Network Congress; proceedings prepare and circulated	14	O, R	RE
D4.9	Proposal for admission of new partners	12	O	RE
D4.10	Update of JPA for 2006	15	O	RE
D4.11	4th meeting of SMB: minutes prepare and circulated (March 2006)	18	O, R	RE
D4.12	Update for JPA 2006 and foresight of priorities for 2007	18	R	RE

9.6 Work package description (18 months period, months 01-18)

WP 1.1: Integrated organisation of knowledge and information flow

Work package number	1.1	**Start date or starting event:**				1	
Activity Type	IA						
Participant id	**IFR**	DFVF	AUA	NKUA	UiO	BNF	BAG
Person-months per participant:	**8.4**	1	0.75	1	1	1.5	6.1
Total person months:	19.75						

Objectives

To establish the network's IT web-based communication platform and IT systems and tools to enable the integrated organisation of knowledge and information flow. Thus, it will enable the network to:

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

Description of work

This WP will work closely with the other integrating WPs in this platform (IA1.2-1.6), and WPs in spreading of excellence (RA3.1-3.4) and overall network management and co-ordination (MA1).

The first phase will be to establish the web-based communication platform and associated IT system tools (e.g. discussion forum, chat-room, e-learning) and this will be undertaken by Baigent in close collaboration with IFR, DFVF and Polytec. Other partners in this WP will be involved in assessing the platform and providing and collating information for filling the various areas of the platform. As part of this activity, the following sub-tasks will be required:

- To establish the authorities for specific partners and WP folders (e.g. authority to post documents and to access, view, comment, edit/modify or delete documents and folders in various workspaces.
- Mechanisms will be set up to keep all partners informed of activity in the workspaces (e.g. daily/weekly/ monthly reports to be sent by email to inform partners of new items in their area of the workspace.
- A shared group calendar will be set up to schedule meetings and deadlines.
- Systems to transfer information/documents from the provate EuroFIR's intranet to the public website side will be established by designating "secure folders" within the workspaces where documents cleared by the SMB/DEC for publication or transfer to the public website side can be deposited.
- To explain the organisation of the IT communication platform and to train all partners in its use of the system at a one-day training session organised as part of the inaugural start-up meeting. The PMO will provide back-up support to all partners thereafter, if required.

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 (link to 3.1).
- *Publications & documents repository* for the research results and findings, all reports, newsletters and other documents.
- *Methods and QA repository*: the methods used to generate food composition data, together with the QA used to demonstrate data quality and consistency (link to WP 3.1).

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). 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		
D1.1.1	Month 3	Help-desk operational.
D1.1.2	Month 6	Initial draft of IT systems manual available.
D1.1.3	Month 12	Centre skills & infrastructure 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 15	Methods & QA inventory.

Milestones	**and expected result**
M1.1.1	Month 1: Hold inaugural meeting to create management team and launch WP
M1.1.2	Month 6: 1st phase completed including web-based platform & IT system tools.
M1.1.3	Month 15: 2nd phase completed including training, publications/documents and methods/QA inventories.
M1.1.4	Month 18+: 3rd phase completed including update IT systems manual and portals for dissemination & communication activities.

WP 1.2: Integrating research activities and addition of new partners (18 month period, months 1-18)

Work package number	1.2	**Start date or starting event:**				1	
Activity Type	IA						
Participant id	**IFR**	IRMM	DFVF	UHEL	UiO	NKUA	UL
Person-months per participant:	**1.8**	0.45	1	1	1	1	1
Participant id	UCC						
Person-months per participant:	1						
Total person-months:	8.25						

Objectives

1. 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 (link to WP 1.1).
2. To ensure an integrated and cross-platform coordination and communication of joint research activities; co-programming of research projects within the network and to identify new collaborative projects. This includes efficient communication at HP level.
3. Establish EuroFIR specific criteria to monitor the degree of integration, and to provide annual updates on this degree of integration.
4. To identify and recruit new network partners for specific activities or tasks, and advise on IPR issues (link to WP 3.3).
5. To establish an appropriate differential costs system that makes visible all costs by the respective partners on EuroFIR and EuroFIR related work.
6. To identify and obtain new funding for joint research activities linked to the JPA.

Description of work

This WP will be jointly led by IFR/DFVF. Baigent will provide the expertise needed to develop the IT web-based communication platform developed in WP1.1. The other partners listed will form the working group and be involved in testing & developing the website, assisting in identifying/visiting new partners to join the network, and preparing joint research proposals for additional funding.

- The proposed intranet as provided by Baigent will be further developed to serve the needs of the EuroFIR community and the following will be developed after the formal start of EuroFIR:
    - development of work flow monitoring tools, including a personalized agenda
    - integration of structured data (spreadsheets) within EuroFIR databank systems
    - incorporating instant messaging
    - incorporation of various communication and exchange tools
- A key issue for EuroFIR is that in year 1 and 2 communication between the WP-Ls is properly established. In order to realize this, these partners will have to pay extra visits to other partner institutions/scientific gatherings.
- Based on the first draft with 'Examples for NoE indicators of integration' concise indicators will be formulated and agreed upon during the 1st Network Board meeting (January 2005).
- The position of the team leaders at each core centre will be strengthened. The team leaders will prepare in year 1 clear time plans for the execution of EuroFIR activities within their own institution. This process will result in clear self-auditing procedures. The indicators for the quality of integration and performance as listed in chapter 7 will be used to identify the degree of integration achieved at the level of each partner institution.
- EuroFIR will initiate a considerable number of meetings and workshops. In order to streamline this and to make efficient use of resources each year an Annual EuroFIR week will be organized and the first and second meetings will take place in Lisbon (Month 3) and London (Month 14/15). During this event, progress meetings of work packages, workshops, seminars, Network Board meeting and Governing Council meeting will be held.
- Establish dialogue with project managers involved across Europe in the design of differential cost

systems.

The Co-ordinator and the above partners will meet at least every six months (or more regularly as required) to:

- Review access to and information on existing research projects in the field of food composition databank systems within EuroFIR.
- Review performance indicators and integration status.
- Identify and exchange optimal research methods, models and tools to underpin research activities within the JPA.
- Identify opportunities from existing research programmes that are not being fully realised, where additional expertise drawn from within EuroFIR could lead to real opportunities for collaboration in specific areas.
- Prioritise research programmes to form the basis of new joint research projects within EuroFIR.
- Review new funding initiatives and future targets for additional network funding.
- Establish core training sites of scientists, where technologies will be optimised as accessible sites for application of the expertise (Link to WP 3.1).
- Carry our recruitment missions to identify potential new core partners to join the network and manage the call for new partners.

Deliverables		
D1.2.1	Month 3	1st EuroFIR workshop & report on optimal research methods and training needs, EuroFIR set of indicators for integration & new funding initiatives.
D1.2.2	Month 9	Draft program for 2nd EuroFIR annual meeting/conference (link to WP3.2).
D1.2.3	Month 15	2nd EuroFIR workshop & report on prioritised programme of common research topics, guidelines for the 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.

Milestones	**and expected result**
M1.2.1	Month 1: Hold inaugural meeting to create management team and launch WP.
M1.2.2	Month 3: Benchmarking of integration status at month 0.
M1.2.3	Month 6: Launch call for new partners.
M1.2.4	Month12: Establish and disseminate improved methodologies, tools and databank systems
M1.2.5	Month 15: Benchmarking of status of integration at month 12.
M1.2.6	Month 18: Integrated JPA for 18-36m.
M1.2.7	Month 18: Initiate the development and submission of funding bids to national bodies.

WP 1.3: Development of a pan-European quality framework for food composition data (18 month period, months 1-18)

Work package number	1.3	**Start date or starting event:**				1	
Activity Type	IA						
Participant id	**INSA**	SLU	CSL	IRMM	IFR	RUG/ NUBEL	TUBITAK
Person-months per participant:	**16**	1.5	3	0.45	0.9	2	1
Participant id	UHEL	DFVF	AFSSA				
Person-months per participant:	1.5	1	0.5				
Total person-months:	27.85						

Objectives

1. To ensure a common understanding of quality management systems among the network partners of the requirements of quality assurance, by analysts, compilers and users of food composition databank systems.
2. To establish a sound and coherent leadership approach of the relationship between quality, food science and food composition databank systems.

Description of work

This WP establishes the vital Quality infrastructure necessary for the long- term viability of the EuroFIR network and will be undertaken by a team consisting of INSA, NMi (a sub-contractor), CSL, IRMM, IFR, RUG/NUBEL, TUBITAK, UHEL and SLU. CSL is the Co-ordinator of the current FAPAS proficiency schemes for food analysis laboratories. Four tasks are planned to be executed in a logical sequence taking into account interdependencies and thereby creating a sound basis for the QA preparation, implementation and audit cycle and PT-schemes that need to be continued 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.

(1) Developing a dialogue with all partners to ensure that there is a global consensus on 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, and systematic approach developed, within the EU INITIATION project (*Interpretation and implementation of the new standard ISO 17025 by national metrology institutes in Europe; Competitive and Sustainable Growth Programme, FP5; GTC1-1999-2001*)

INSA will coordinate & organise the meetings and workshops; NMi will bring in its expertise gained as Coordinator of the INITIATION project to establish strategy to plan the core document. CSL will establish the plan for PT Schemes; IRMM will establish the strategy plan on SOP; IFR will engage in dialogue with research activities and update website; NUBEL will produce the questionnaire on QA/QC; TUBITAK will produce a cross reference table on organizational requirements; UHEL will produce a cross reference table on technical requirements (nutrient and bioactive compounds) and SLU a cross reference table on general technical requirements.

(2) Implementing a quality system for all participating centres consistent with the criteria adopted in Task 1. This will be achieved through a set of network workshops (twice a year) where each core partner will make a presentation of their quality system. Discussion, evaluation and future action plans for improvements and harmonisation will be considered and consensus reached.

INSA will coordinate and organise the meetings and workshops; NMi will guide the workflow according to the approach as applied in the INITIATION project and taking into account actual progress in EuroFir and new insights obtained by all partners. TUBITAK will process input from members on organizational requirements; UHEL will process input from members on technical requirements for nutrient and bioactive compounds and SLU will process input from members on general technical requirements.

(3) *Establish benchmark standards* for addressing the linkage between quality and food composition databank systems that will be relevant through *traceability chain* of food analysis and food composition data (e.g establishing Quality Index and Confidence Code). Traceability in this respect means "back to all relevant documents – from farm to fork" (as defined in ISO 9001), as well as Metrological traceability "back to SI units" (as defined in ISO 17025). INSA will coordinate the activities; NMi wil focus its contribution on metrological traceability and the other partners will contribute on the benchmark standards with respect to the ISO 9001 aspects ("from farm to fork"). CSL will prepare a list of PT-schemes linked to benchmark standards; IRMM will prepare a list of SOPs in harmonisation with benchmark standards; and other partners will prepare for team meetings and workshops.

(4) *Promoting an integrated approach* for laboratories producing data, or compiling databases, by providing guidance for the organisation of regular audits and proficiency testing (PT) schemes. This task will be elaborated in cooperation with research activities. INSA will coordinate the activities; NMi will provide guidance for the audit cycle and organisation of the PT-schemes. This cycle will be the core element throughout the full duration of the project involving the relevant laboratories. Other partners will produce the draft guidance document on QA.

Deliverables		
D1.3.1	Month 3	1st EuroFIR workshop & report on implementation of quality system and scheduling of workshops and action plans.
D1.3.2	Month 7	Questionnaire on QA.
D1.3.3	Month 12	2nd EuroFIR workshop & report on establishing benchmark standards and traceability links through the food chain
D1.3.4	Month 13	Report on QA questionnaire.
D1.3.5	Month 16	Set of QA criteria
D1.3.6	Month 18	Prepare draft guidance document on QA for food composition laboratories and national database compilers.

Milestones	**and expected result**
M1.3.1	Month 1: Hold inaugural meeting to create management team and launch WP
M1.3.2	Month 7: Establish and disseminate quality system and plan, and QA questionnaires
M1.3.3	Month14: Establish and disseminate standards and traceability links including QA criteria, quality index and confidence code
M1.3.4	Month 18: Initiation of audits and PT schemes
M1.3.5	Month 18: Plan for the continuation of the audit cycle and PT-schemes involving relevant laboratories.

WP 1.4: *Internet development and deployment of EuroFIR databank systems* (18 month period, months 1-18)

Work package number	1.4	**Start date or starting event:**				1	
Activity Type	IA						
Participant id	**DFVF**	EBI	IFR	RUG/ NUBEL	NCH	KTL	BFE
Person-months per participant:	**12**	16	2.7	1	1.5	1	1
Participant id	AFSSA	UiO	NFNI	UCC	BGU	INRAN	IDUFIC
Person-months per participant:	1	1	1	1	1	1	6
Participant id	CESNID	IceTec	Polytec				
Person-months per participant:	1	1.0	9.5				
Total person-months:	58.7						

Objectives

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 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		
D1.4.1	Month 6	1st EuroFIR workshop and report on data collection & protection
D1.4.2	Month 6	Submit six expert names to Commission for initial review (at 22 months).
D1.4.3	Month 9	Installation of hardware and software components
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	**and expected result**
M1.4.1	Month 1: Hold inaugural meeting to create management team and launch WP.
M1.4.2	Month 3: Databank steering group established.
M1.4.3*	Month12-18*: General structure of databank system established and modified as required
M1.4.4	Month 15: Consensus on rules for QC and data format and retrieval.
M1.4.5	Month 18: Data extraction tools available
M1.4.6	Month 18: Plan for databank enhancement and additional resources for month 18 onwards.

*A plan for the external assessment of the EuroFIR databank system will be made available to the EU at 6 months including the names of suitable non-EuroFIR experts.

WP 1.5: Standards Development & Specifications (18 month period, months 1-18)

Work package number	1.5	**Start date or starting event:**			1		
Activity Type	IA						
Participant id	**NFA**	IFR	GUT	RUG/ NUBEL	UGR	NCH	DFVF
Person-months per participant:	**6**	1.8	1.5	1.5	1.5	1.5	2
Participant id	KTL	AFSSA	BFE	FRI	NKUA	UCC	BGU
Person-months per participant:	1.5	6	1.5	1.5	1.5	1.5	0.75
Participant id	INRAN	CSPO	UVI	UiO	NFNI	INSA	CESNID
Person-months per participant:	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Participant id	TUBITAK	RIKILT	IDUFIC	IceTec			
Person-months per participant:	1.5	1.5	7.5	1.5			
Total person-months:	52.55						

Objectives

1. 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.
2. Establish national compiler network for Identifying foods to be prioritized in EuroFIR.
3. To define standard representations for compositional data, necessary documentation and quality criteria for their comparison and evaluation.
4. 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.
5. Providing recommendations on the current strengths, gaps and priorities for harmonizing nutrient databases in EuroFIR
6. To establish plan for the extension of work to the food-derived contaminants.

Description of work:

This WP will coordinate its work with other integrating WPs (1.4 & 1.6) and RA (2.2). The first step is to identify and describe requirements for nutrients that will be included in the core datasets. NFA will coordinate the work, arrange workshops and prepare reports. IDUFIC will assist in preparing reports, prepare draft standards and protocols. RIKILT will be responsible for work on contaminants. Other partners will contribute in the preparing draft standards and protocols and with national food composition data, and join each of the working groups for the five sub-tasks below.

Workshops will be organised with national data compilers, nutritionists and food chemists (ie with both EuroFIR partners and outside participants) in order to define core components to be included. In addition, the following will be agreed: definition of standard representations for compositional data, calculation of derived components, necessary documentation and quality criteria, identification of components of specific interest, or for which data are missing for future analysis.

A prototype standard for description, documentation and management of food composition data will be elaborated based on workshops and existing guidelines and practices. Testing and application of updated guidelines on selections of datasets of various components will be conducted. The availability of existing and/or new data on yield and nutrient retention factors will be reviewed, together with methodology for identifying the factors to use in a particular calculation. Sets will be identified for standard factors related to component, food, cooking or other processes.

Five main tasks are planned:

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

- Review in general the guidelines on the format and content of interchange files;

- Review the guidelines and the delivered information for method documentation and propose improved guidelines;
- Review the guidelines for source documentation and references (both published and unpublished) and propose improve guidelines;
- Report on the existing tools available for data management, including user comments, and propose a prioritised list of enhancements or alternatives.

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

- Compile a comprehensive list of possible groups and individual components, with notes on the usefulness of their data, their relation to food groups, and aspects relating to the collection, evaluation and harmonisation of their values;
- Review & extension of the Eurofoods system of component identifiers;
- Define the criteria for prioritisation;
- Report on prioritisation of components for review in EuroFIR generally and in specific work packages, e.g. WP 2.1.

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

- Identify relevant studies;
- Define common criteria of food classification, identification, other variables of stratification (e.g. age categories, geographical regions, etc..) as well as format to export comparable information in all consumption datasets;
- Test different statistical models to identify foods to be prioritized in EuroFIR;
- Report on prioritisation of foods for review in EuroFIR.

Task 4: Set up the national compiler network and evaluate the candidate EUROFIR data sets (led by DFVF)

- Establish national compilers working group/network;
- Identify 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;
- Identify needs of national compilers for training and other support, including software tools, and develop the resources to meet these requirements;
- Collaborate with selected compilers to test recommendations (e.g. as prepared in WP2.1) and support facilities during the preparation of demonstration data sets;
- Finalise all arrangements to enable documentation and standardisation of national nutrient databases to commence after the 18 month period;
- Provide recommendations on the current strengths, gaps and priorities for harmonising nutrient databases in EuroFIR.

Task 5: Establish plan for food-derived contaminants (led by RIKILT)

- Establish scope of the activity, e.g. what are food-derived contaminants (acrylamide, hetrocyclic amines PAH etc.), and does it also include agricultural residues (pesticides) and environmental contaminants (dioxins, heavy metals);
- Identify any compatibility and potential coding (CODEX-coding) issues between EuroFIR and other data sharing activities for contaminants like GEMS-food, EU-project SAFE foods, and Joint Research Center including most samples are taken as primary agricultural products (wheat) and not as food as eaten (bread);
- Feasibility of on going data sharing and data presentation (common format of data) and quality aspects of data (e.g. analytical methods, sampling);
- Sort of data needed to be compatible with probabilistic risk assessment;
- Preparation of 12-month report outlining recommendations for continuing food-derived contaminants work.

Sub-contractors – Dr Philip Verger (INRA): Assisting in the preparation of recommendations for food-derived contaminants (Task 6).

Deliverables		
D1.5.1	Month 4	Report on interchange guidelines and data structure.

D1.5.2	Month 9	EuroFIR workshop & report including inventory of component coverage and level of documentation in existing databases.
D1.5.3	Month 12	EuroFIR workshop on nutrients to be included in core data sets and future analysis.
D1.5.4	Month 12	Report on plan for food-derived contaminants.
D1.5.5	Month 15	EuroFIR workshop and report on existing documentation and procedures in databases and compiler requirements.
D1.5.6	Month 15	Report on food prioritisation (interim).
D1.5.7	Month 18	A prototype food data standard focusing on identification, expression, calculation and documentation of food component data.
D1.5.8	Month 18	Protocols for testing the standards for various component collections and report for testing recommendations and compiler support and training needs.
D1.5.9	Month 18	Plan for next 18-36 months period

Milestones	**and expected result**
M1.5.1	Month 1: Hold inaugural meeting to create management team and launch WP
M1.5.1	Month 3: Establish national compiler networks.
M1.5.3	Month 12: Complete review on food-derived contaminants.
M1.5.4	Month 18: A prototype standard for description, documentation and management of food composition data
M1.5.5	Month 18: Establish CEN working group for description, documentation and management of food composition databases.
	Month 18: Establish plan for food-derived contaminants.

WP 1.6: Food identification & description (18 month period, months 1-18)

Work package number	1.6	**Start date or starting event:**			1		
Activity Type	IA						
Participant id	**AFSSA**	DFVF	GUT	RUG/ NUBEL	UVI	NCH	KTL
Person-months per participant:	**8**	3	1	1.5	1.5	2	1.5
Participant id	BFE	NFA	NKUA	UCC	BGU	INRAN	IFR
Person-months per participant:	1.5	1.5	1.5	1.5	1	1.5	1.8
Participant id	CSPO	WU/ NEVO	UiO	NFNI	INSA	CESNID	UGR
Person-months per participant:	1.5	0.6	1.5	1.5	1.5	1.5	1.5
Participant id	FRI	TUBITAK	Polytec	IceTec			
Person-months per participant:	3	1.5	1.5	1.5			
Total person-months:	45.9						

Objectives

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:

1. Recommend a standard food classification and description system for use in European food composition databases.
2. Develop prototype food classification and description support facilities, such as a concordance of terminology, linking to existing national and international systems (e.g. CODEX Alimentarius).
3. 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.
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 (in collaboration with WPs 1.6/2.4).
5. Develop EuroFIR resources for supporting the use of the food classification and description systems in database compilation and information retrieval.

Description of work:

The first phase will be to investigate food classification and description systems currently used in the European national data banks. A first task will be to create a network of food composition experts from the list of core partners and associated partners in the project (Appendix A). The WP will update the Inventory of European Food Composition Databases and Tables (Cost Action 99 publication, 2000), with additional countries and including databases on bioactive substances. This work will include an inventory of food identification methods used and provide a basis for proposing linking mechanisms. This task will be undertaken by AFSSA in close collaboration with the other national and regional food composition database managers in the project.

The second phase will be to test the aptitudes of different description and classification procedures for food record retrieval. The WP will then propose a common food identification system for use in European food composition databases.

The WP will provide partners with training in food classification and indexing to assure a common vocabulary and methodology. This task will be undertaken by AFSSA in close collaboration with DFVF
Partner Polytec (SMI) will develop prototype support facilities to enable participants to test and refine the

recommendations, in view of their incorporation in the European standard.

This phase will require collaboration with several other WPs in the network:

- *Data documentation and harmonisation (WP 1.5)* and Internet development & deployment (*WP1.4*) to create linking mechanisms between food consumption databases and food composition databases for the retrieval of food records.
- *Users and stakeholders (WP 2.1)* to determine the appropriateness of the proposed food indexing system for users and stakeholders.
- *Composite, processed and novel foods (WP 2.2)* to obtain information on branded food products and market trends, to propose a classification/description system for these complex foods, and to interrelate terms describing processing applied to foods.
- *Traditional and Ethnic Minority Foods (WP 2.3)* to identify these foods in a systematic way in order to include them in the European food information platform..
- *Bioactive Compounds (WP 2.4)* to identify specific plants and plant parts in food composition databases.

The Work Package will investigate and specify the support users require in identifying standardised food description, naming and grouping terms for database compilation and information retrieval. This will provide a basis for prototype support resources, such as a concordance with existing systems, implemented on the EuroFIR website.

Third phase:
The testing and collaboration will almost certainly identify requirements for improvements and enhancements to the existing food classification and description systems used with composition and consumption records. The adequacy of current food thesaurus terms for food linking between composition and consumption records, and any necessary improvements to the structure or content of description and classification systems will be reported. These activities will be co-ordinated by AFSSA/DFVF.

The WP's recommendations on food identification will be transmitted to *Standards Development and specifications (WP 1.5)* to integrate these in the definition of standard representations for compositional data.

Deliverables		
D1.6.1	Month 6	Inventory of European food composition databases and tables
D1.6.2	Month 9	EuroFIR workshop & report on current food classification & description systems and mechanisms for linking foods from these different sources
D1.6.3	Month 12	Report on food record retrieval using existing description and classification
D1.6.4	Month 15	EuroFIR workshop & draft recommendations for standard food classification and description systems for use in European food composition databases
D1.6.5	Month 18	EuroFIR workshop on development of prototype food classification and description support facilities

Milestones	**and expected result**
M1.6.1	Month 1: Hold inaugural meeting to create management team and launch WP
M1.6.2	Month 9: Proposals for linking foods through existing food classification & description systems
M1.6.3	Month 12: Recommendations for food record retrieval using existing description and classification.
M1.6.4	Month 15: Recommendations for food classification and description systems for use in European food composition databases
M1.6.5	Month 18: Prototype food classification and description support facilities and prepare plan for 18-60 months of network.

WP 2.1: *Developing food composition databank systems and related tools for use with various users and stakeholders* (18 month period, months 1-18)

Work package number	2.1	**Start date or starting event:**			1		
Activity Type	RA						
Participant id	**US**	IRMM	BNF	DFVF	BFE	INRAN	FRI
Person-months per participant:	**18**	2.6	1.5	0.75	1.5	1.5	3
	NFA						
	1.5						
Total person-months:	30.35						

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 the appropriateness of, potential acceptability of, and format in which food composition data can be presented to users and stakeholders using the Internet.
3. To test user and stakeholders' acceptability and comprehension of information gained from a Internet-based food composition databank systems.

Description of work:

US will organise the workshops with support from BNF and IRMM and NKUA. DFVF will provide advice and support. Workshops with representatives from national stakeholder groups (nutritionists, dieticians, health promoters, medical practitioners, policy makers/government, academic researchers, food industry (e.g. caterers, manufacturers, retailers), media) and representatives from key individuals and organisations representing consumers will be hosted in three European countries across Europe in the first 18 months (UK, Slovakia & Italy). The workshops will be used to consolidate information regarding the extent to, and format in, that food composition data is currently used by these various users and stakeholder groups, and how these data could be used more effectively in the future.

Preparations for these events will be carried out by telephone, email, and post to ensure that attendees are able to come to the workshops with the necessary information. Issues to be addressed include the purpose for which consumers use food composition data (e.g. on food labels, in the media, in publications for consumers with specific dietary needs (e.g. slimming, allergies/intolerance), the range of food and nutrients, and the format in which the information is used (e.g. books, leaflets, web databases). The work will build on the methods used in a UK Food Standards Agency-funded stakeholder review of The Composition of Foods in the UK.

Recommendations for developing the prototype food composition database website(s) for use by various users/stakeholders will be identified. These will be based on the results of the workshops held as part of this WP. The protocols for testing comprehension and acceptability of information derived from the food composition database websites will be further developed, refined, and tested. Prototype food composition database website(s) will be tested with groups of likely users of this type of database in several European countries.

Deliverables		
D2.1.1	Month 6	1st workshop held & report on recommendations and findings
D2.1.2	Month 12	2nd held & report on report on recommendations and findings
D2.1.3	Month 18	3rd workshop held & overall report on objectives 1-3 above.

Milestones	**and expected result**
M2.1.1	Month 1: Hold inaugural meeting to create management team and launch WP
M2.1.2	Month 9: UK stakeholder workshop held
M2.1.3	Month 18: 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.

WP 2.2: Composite, processed and novel foods (18 month period, months 1-18)

Work package number	2.2	**Start date or starting event:**		1			
Activity Type	RA						
Participant id	**KTL**	RUG/ NUBEL	IFR	WU/ NEVO	AFSSA	BFE	DFVF
Person-months per participant:	**9**	1	1.8	0.9	1.5	1.5	1
Participant id	INRAN	CSPO	UiO	CESNID	FRI	NFA	TTZ
Person-months per participant:	3	1.5	1.5	1.5	2	1.5	4
Participant id	IceTec	ILSI	TUBITAK				
Person-months per participant:	1	3	1				
Total person-months:	36.7						

Objectives

1.Specify standard procedures for the calculation of the composition of prepared and composite foods from thei ingredients or 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, database compilers and consumers (see WP 1.6 above), and specific activities to improve the quality and timeliness of composition data.
3. Define industry requirements and establish guidelines for the effective incorporation of industry data in databank systems.
4. Identify activities to improve the quality and timeliness of composition data within national database compilers.

Description of work

This WP will be led by KTL and TTZ and the following overall tasks are planned:

- To carry out an inventory of processes for composite dishes among partners with FCDB
- Establish standard procedures for calculating the composition of prepared and composite foods from their ingredients or constituents.
- Review of recently reported yield and nutrient retention factors, and the formulation of a standard set of factors to be used in the calculation of the composition of composite and processed foods.
- Define rules for the imputation of compositional data for foods reported in consumption data but for which analytical data is insufficient in present European datasets.
- Disseminate guidelines for European discussion together with WP 2.1 within EFSA, national food control authorities and food industry organisations
- Investigate the general availability of composition data 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 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 and concept for food manufacturers to enter their own data in European food composition database.

KTL is responsible for collecting national data, writing summaries and proposals. TTZ is responsible for network with food industry corporations (e.g. CIAA, BLL, ILSI) as follows:

- Identification of lacking/missing analytical data, and mapping for better analysis of composite and processed foods including nutrients and bioactive compounds.
- Guideline dissemination including contacts to European multipliers (industrial organisations & authorities),

displays at international food and ingredient fairs and possible workshops with underpinning demonstrations for food analysis and process techniques.
- Gathering updated information on trends in processed and novel foods and exploitation of R&D projects for novel food ingredients.
- Investigate composite food data transfer from industry to national compilers and food industry requirements especially with representative partners from fish industry, bakery products and chilled/frozen convenience foods (link to WP3.3).

Other partners are responsible for identifying suitable national data, assisting in the formulating of guidelines and consulting national food legislation authorities and food manufacturers.

Deliverables		
D2.2.1	Month 9	Basic inventory of the status in management of composite dishes in FCDB
D2.2.2	Month 12	EuroFIR workshop on rules and factors for imputing data for composition of composite and processed foods.
D2.2.3	Month 12	Report on methods to impute nutrient values for composite and processed foods
D2.2.4	Month 17	EuroFIR workshop & report on framework for the incorporation of food industry data.
D2.2.5	Month 18	Plans for 18-48 months of WP work covering trends in novel ingredients and analytical needs to obtain satisfactory compositional data

Milestones	**and expected result**
M2.2.1	Month 3: Hold inaugural meeting to create management team and launch WP
M2.2.2	Month 6: Collected information on national trends and databases of composite foods and industrial ingredients in each partner
M2.2.3	Month 12: Preliminary description of European food brand databases
M2.2.4	Month 18: Establish and disseminate improved methods and protocols on imputing data for composite dishes together with WP 2.1
M2.2.5	Month 18: Establish plans for network with food industry organisations for data change experiments
M2.2.6	Month 18: Initiate the development and submission of funding bids to national bodies

WP 2.3: Traditional and Ethnic Minority foods (18 month period, months 1-18)

WP2.3.1: Traditional Foods

Work package number	2.3.1	**Start date or starting event:**		1			
Activity Type	RA						
Participant id	**NKUA**	UVI	GUT	NCH	DFVF	BFE	RUG/NUBEL
Person-months per participant:	**18**	3	2.5	4.5	1.5	2.5	2.5
Participant id	INRAN	CSPO	NFNI	INSA	UGR	CESNID	TUBITAK
Person-months per participant:	2.5	2.5	4	1.5	1.5	2.5	2
Participant id	IFR	IceTec					
Person-months per participant:	0.9	2.5					
Total person-months:	54.4						

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.

Description of work:

This WP will be divided into three main tasks, which will be led by NKUA:

- Definition of the term “traditional” and recipe selection
- Recipe recording and sample collection
- Sample preparation and analysis

All participants 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. The countries involved are: Greece, Austria, Denmark, Bulgaria, Germany, Italy, Poland, Portugal, Spain and Turkey.

Definition of the term ‘traditional” and recipe selection

- Preparatory work to collect the necessary data for the implementation of the 1st workshop (e.g. review of national regulations on the term “traditional”, list of foods considered traditional in each participating country);
- Implementation of the 1st workshop to define the term “traditional”;
- Bibliographic review per participating country to document the traditional character of foods and recipes according to the defined term “traditional” and collection of consumption data in order to prioritise recipe selection. Historical and folkloric reviews may be assigned to relevant ethnological networks;
- Establish evidence-based records demonstrating traditional identity of the traditional foods of each participating country;
- Implementation of the 2nd workshop to select the representative traditional recipes from the established documented list, which will be investigated per country based on food consumption data (a minimum of 2 recipes per participating country will be identified).

Recipe recording and sample collection

- 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.
- Each recipe will be reproduced in the laboratory in order to prepare multiple samples. The number of samples, as well as the number of repetitive analyses, will be according to the recommendations developed in WP 1.5.

Preparation of samples for nutritional analyses.
- Define standard methods to be used for nutritional analyses in conjunction to WP 1.6.
- Identify central laboratories for analysis for given list of nutrients and bioactive compounds. Central laboratory analysis will provide comparative data. Core partners of the network have already expressed an interest in undertaking specific chemical analysis.
- Preparation of samples for analysis through freezing and freeze-drying procedures.
- Distribute samples to central laboratories for analysis.

Each phase of activity will be assessed by all WP partners.

Deliverables		
D2.3.1	Month 3	1st workshop report on definition of "traditional", evidence-based records and initial list of traditional foods/recipes of each participating country.
D2.3.2	Month 15	2nd workshop report including protocol for recipe recording, collection and preparation of samples
D2.3.3	Month 18	List of nutrients and bioactive compounds, methods and list of central laboratories for analysis
D2.3.4	Month 18	Detailed written description of traditional recipes investigated.
D2.3.5	Month 18	Agree plan of work for 18-36 months

Milestones	**and expected result**
M2.3.1	Month 3: Establish network for traditional foods across Europe.
M2.3.2	Month 12: Initial list of traditional foods & recipes for each country.
M2.3.3	Month 13: Start recipe recording and documentation.
M2.3.4	Month 18: Identify core partners for analysis.

WP 2.3.2: Ethnic Minority foods (18 month period, months 1-18)

Work package number	2.3.2	**Start date or starting event:**				1	
Activity Type	RA						
Participant id	**UL**	DFVF	CESNID	BGU	AFSSA	WU/ NEVO	
Person-months per participant:	**18**	1.5	2	2	1.5	1.5	
Person-months per participant:							
Total person-months:	26.5						

Objectives
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.

Description of work:

UL will lead this sub-WP. Eight core partners above and one sub-contractor [Prof Leonhauser, University of Giessen, Germany] have been identified and will be required to contribute to the following tasks:

- Participation in one day meeting [March 2005 linked to 1st NOE meeting] followed by two workshops [months 12 (linked to annual meeting) and 16].
- Identifying and prioritising the list of food samples and ethnic minority groups.
- Collecting recipe information and samples from their respective countries.

UL (with the assistance of all other WP partners) will prepare a critical review of composition of ethnic foods on the basis of literature. The composition of ethnic foods and individual dietary ingredients will be collected on the basis of literature data and compositional databases. Information on significance of ethnic food market, ethnic minorities' food habits and review of activities related to nutrition and health in EU member states will be collected. The initial information will be made available to project website and discussed at the 1st workshop at month 12.

The above information will be used to plan and hold a two-day invited workshop [month 16] that will serve to:

- Define "*ethnic*" [e.g. foods consumed by ethnic minority] and "ethnic" [e.g. ethnic foods consumed by mainstream populations] and publicise the importance of these foods in the project and in the European marketplace.
- Identify priority populations and list of foods. A preliminary report relating the composition of the key dietary ingredients to health/disease on the basis of literature review will be presented as a supporting document.
- To bring together core partners and subcontractors who will be involved in the collection of food samples, recipe information, analysis of samples.

Following prioritisation of samples, recipe information on retail and domestic foods will be gathered by all partners; for retail products ingredients information from the labels, for takeaway, restaurant foods, and food prepared in the home by ethnic populations will be gathered using combination of methods [interviews and questionnaires]. At this stage the information will be available for only a limited number of foods for agreeing on the feasibility of the methods of collection.

The collection of retail samples will be collected with the help of SMEs, [for instance a major supplier of Indian foods in the UK will contribute to samples as a core partner with UL]. Homemade foods will be produced in the laboratory according to the recipe information or purchased from the participants selected for interviews or

questionnaires. A limited number of samples will be prepared for agreeing on the feasibility of the method of sample preparation.

The Nutrients and other bioactive compounds to be analysed will in the main be common to other areas of the network (see WP 2.2 & 2.4 & 2.3.1). Methods selected would be agreed within the programme and this aspect of the project would afford opportunities for training and information spreading.

Sub-contractors – Authentic Food Company, UK [SME] and other similar industries will be identified by the WP partners.

Deliverables		
D2.3.6	Month 3	Report on 1st workshop & updated work plan.
D2.3.7	Month 12	Critical review of composition of ethnic foods including information on methods of domestic food preparation and eating practices
D2.3.8	Month 12	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.
D2.3.9	Month 16	Report on 3rd workshop & list of ethnic foods to be collected.
D2.3.10	Month 18	Agree plan of work for 18-36 months

Milestones	**and expected result**
M2.3.5	Month 3: Hold inaugural meeting to create management team and launch WP.
M2.3.6	Month 6: Establish networks for ethnic minority foods across Europe including SMEs.
M2.3.7	Month 15: Identify core partners for analysis of foods.
M2.3.8	Month 18: Start collection for ethnic foods.
M2.3.9	Month 18: Initiate the development and submission of funding bids to national bodies.

WP 2.4: Bioactive compounds (18 month period, months 1-18)

Work package number	2.4	**Start date or starting event:**			1		
Activity Type	RA						
Participant id	**DFVF**	UCC	IFR	GUT	UVI	UHEL	AFSSA
Person-months per participant:	**12**	15	14	1.5	1.5	1.5	0.5
Participant id	BFE	NCH	INRAN	RIKILT	Polytec	NFNI	NFA
Person-months per participant:	1.5	1.5	1.5	1.5	1.7	1.5	1.5
Participant id	SLU	TUBITAK	IceTec	UL			
Person-months per participant:	1.5	1.5	1.5	1.5			
Total person-months:	62.7						

Objectives

1. To ensure compatibility of the BASIS database to conform to the standard specifications as settled for the EuroFIR databank system.
2. To update and further include additional critically assessed biological and compositional information in the BASIS database.
3. To include both exotic and health food plants in the database.
4. To update the plant and plant part lists in all European languages.
5. To deploy the database in an Internet environment for easy access for the end-users (regulators, consumers, academics, and industry) in order to support the evaluation of genetically modified food plants, other new food plants (and varieties), and for general diet and health considerations of food plants.

Description of work:
This WP will be led by DFVF with close support from UCC and IFR. Two workshops are planned for the first 18 months. Close collaboration with work undertaken in WPs 1.4-1.6 in order to ensure compatibility of the BASIS database to the EuroFIR databank systems. In particular, the team will ensure that the development and implementation is entirely consistent and compatible with the nutrient databanks.

The first workshop will take place within the first 3 months of the network starting and will define the specific tasks to be allocated during the first 18 months to the biological and compositional evaluators (about 22 scientists). These tasks will include priority setting and time scheduling for the identification and inclusion of new exotic food and health plants. Furthermore the operational sub-network between the data evaluators and the three participating centres (DFVF, IFR and UCC) will be established. These centres will be responsible for collecting and disseminating scientific papers and reports to the evaluators. The data will be critically assessed accordingly to the quality criteria and guidelines developed in the current EU BASIS project. The critically assessed data will be transferred directly to the database by means of electronic input forms. In addition, detailed checks of the bibliographic database searches will be performed in order to ensure proper data handling and entry into the database. The first workshop report will cover:

- Organisation of work and allocation of tasks
- Development of exotic food plant list
- Updating BASIS plant list including plant parts
- Proposal for updating data structures and software in order to prepare for future EuroFIR databank deployment
- Initiate input of compositional data and electronic input form on critically assessed biological data

The second workshop will take place at ca 15 months and will discuss/agree:
- Initiate development of a list of selected health food plants
- Review of progress on exotic food plant list and updating BASIS plant list & parts
- Status of data entry of bioactive compound data into database
- Status of input form on biological data
- Specifications for implementation of the BASIS database into the EuroFIR databank system

To ensure the relevance and applicability of the bioactive data that is incorporated to the EuroFIR databank, UCC will establish a Data's User's Group (ca 10 advisers)(in addition to the overall UAG) to advise the strategic direction of this WP. This User's Group include members of the scientific community, EFSA, DG SANCO, the food industry and consumer groups and two meetings of the group are scheduled at 3 and 15 months. Two meetings of the UAG is envisaged and will take place with the main workshops. The first meeting will advise the WP leaders on priorities for compounds and data for inclusion to BASIS in the initial phase, and the second meeting will (1) review achievements to date, (2) provide advice on the future direction of the WP and (3) potential applications of the database and hence possible supplementary funding.

Sub-contractors – Individual data evaluators and botanical experts (see Appendix A.2 for full list).

Deliverables		
D2.4.1	Month 3	1st EuroFIR workshop & report covering organisation of work, allocation of tasks and establishment of WP teams.
D2.4.2	Month 3	1st Users Group Meeting and recommendations.
D2.4.3	Month 15	2nd EuroFIR workshop & report covering lists for selected health & exotic food plants, status of data assessment/entry & specifications, and biological data input form.
D2.4.4	Month 15	2nd Users Group Meeting and recommendations for additional funding.
D2.4.5	Month 18	Report covering final food plant lists 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, continuation of selected health food plants and input of biological data.

Milestones	**and expected result**
M2.4.1	Month 1: Hold inaugural meeting to create management team and launch WP
M2.4.2	Month 6: Establish WP networks and agree criteria for data evaluation & assessment
M2.4.3	Month 12: Initial lists for health & exotic food plants and start data entry.
M2.4.4	Month 18: Final major food plant and exotic food plant lists, database specifications and final input form for critically assessed biological data.
M2.4.5	Month 18: Agree future plan and set targets for additional funding.

WP 3.1: Training, education and vision to postgraduates and young scientists (18 month period, months 1-18)

Work package number	3.1	**Start date or starting event:**				1	
Activity Type	SA						
Participant id	**WU**	SLU	AUA	BGU	IFR	UHEL	AFSSA
Person-months per participant:	**12.6**	9	7	7.5	5.7	1	1
Participant id	DFVF						
Person-months per participant:	1						
Total person months:	44.8						

Objectives
To *promote knowledge, skills development and vision* in food composition research within the network, and across Europe through a coherent set of closely inter-related training and education activities, and to *promote gender equality in training opportunities and uptake*. These activities will bring a *high level of integration* of existing and new training activities to this field. In particular, we will:

1. Coordinate information on specialised research facilities and training opportunities at all network partners and additional collaborators (link to Wp1.1);
2. 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 SA WPs 3.2-3.4 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 first 18 months. Feedback will be sought at an early on the suitability of the training provided (See WP 3.4).

(1) Specialised workshops and training courses (led by WU): The following workshops have already been identified for the first 18 months:

- Production and use of food composition data in nutrition (3-weeks; organised by WU);
- Plant Food Analysis and Data Handing (3-weeks; organised by WU)
- Quality management systems (WP 1.3; INSA).

(2) Optimisation of existing Marie Curie Training Sites (led by SLU): The network will optimise existing EU Marie Curie Actions among the core partners and identify others that could be developed (outside the NOE). The ambition of the consortium is to gear, optimise and promote these ongoing 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. Gender issues will be taken into consideration in these submissions.

(3) Exchange training visits including PhD-fellowship awards (led by SLU): The exchange training visits will be available to doctoral students, postdoctoral fellows and research staff affiliated to the network (internal students), and training visits for junior scientists not affiliated to the network (external students). Agreement via a policy paper on the balance between supporting internal and external students and support offered by each training centre will be an early priority for this WP. The PhD award programme will make available a certain number of PhD fellowships for key research activities, or extending existing PhD students. These fellowships will require dual-centre working and are only open for nationals from other countries as the centres where the research will be executed. This programme will contribute enormously to the integration of research activities.

(4) Other training at symposia and conferences (led by SLU): Training for undergraduates, postgraduates and junior scientists will be also be organised in the form of symposia and training courses.

***(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 made available. The first course to be offered will be *"Science Communication for the Terrified"*:

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:

Day 1 - Arrive at venue late morning
Introductions and working lunch from 1pm
Coaching sessions until 6 pm
Working dinner 7 pm with speaker*

Day 2 - Working breakfast 8 am and am session
Lunch
Feedback
Close about 3 pm

Coaching will be on a max. 5 delegates: 1 trainer ratio, minimum 3 trainers (one of the IFR trainers will also act as event coordinator/administrator)

The list of possible speakers/trainers will include:

- National science correspondent, possibly from host country (a high calibre contributor is likely to have limited time)
- 1 x non-UK experienced science communicator from within project (e.g. head of PR at TNO)
- 1 x BNF – how to talk to industry
- A radio and/or television crew from the host country to give some hands-on experience
- Catherine Reynolds (IFR) – An overview of why communication is important
- Zoe Dunford (IFR) – communication from the perspective of the media, how to relate to the media
- Dr Siân Astley (IFR) – the scientist's perspective

The first venue will be Wageningen Univesrity in the first half of 2005. IFR has started making contact with science journalists and tv/radio crews in the relevant country through networks such as the European Union of Science Journalists' Associations.

6) Design and implementation of e-learning courses and information exchanges for world-wide access (led by BGU): Special e-learning tools will be designed and developed to provide valuable educational and training procedures for disseminating knowledge across Europe and beyond. The training courses outline above will be developed into appropriate e-learning modular courses using funds from the network. Other topics include: nutritional epidemiology – introduction & advanced with emphasis on statistical methods; diet and disease risk; nutrigenomics (Link to FP6 NuGO NOE), and preparing nutrition-related papers for publication. 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) Annual Network Congress (BNF/IFR): 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 (Link to WP4). This will be organised and funded from WP 3.2.

Deliverables		
D3.1.1	Month 3	Report of specialist workshops & training courses driven by WPs.
D3.1.2	Month 6	Policy paper on optimisation of existing Marie Curie actions & criteria for EuroFIR training exchanges/PhD awards
D3.1.3	Month 6	Report on implementation of exchange training visits & PhD awards programme.
D3.1.4	Month 12	Design and implement e-learning courses.
D3.1.5	Month 18	Consensus report on effectiveness of training activities and recommendations for 18 months onwards.

Milestones	**and expected result**
M3.1.1	Month 1: Hold inaugural meeting to create management team and launch WP.
M3.1.2	Month 6-18: Start exchange visits/PhD awards programme.
M3.1.3	Month 18: Implementation of e-learning courses.
M3.1.4	Month 18: Agree future plan and seek additional funding.

WP 3.2: Dissemination and communication (18 month period, months 1-18)

Work package number	3.2	**Start date or starting event:**		1			
Activity Type	SA						
Participant id	**BNF**	IFR	FRI				
Person-months per participant:	**31**	1.8	1.5				
Total person months:	34.3						

Objectives

1. Transfer activity outcomes into active use by users/stakeholders, at appropriate stages and using concepts and approaches tightly targeted to user/stakeholder requirements (Link to WP 2.3)**.**
2. Encourage EuroFIR partners to share knowledge and expertise, and externally to user and interest groupings to maximise the speed of impact of the advances in understanding of food composition databank systems generated through the network.
3. The long-term vision is to increase not only awareness among target user/stakeholder groups of the impact of the application of databank systems to improve diet and health research, well-being and industrial competitiveness, but the confidence with which users/stakeholders can apply the knowledge-base in their own fields (Link to WP 3.3).

Description of work:

This WP will contribute towards integration via spreading of excellence and be led by BNF (an SME). IFR (link to WP1.1. and EuroFIR website) and FRI (dissemination and networking in C/E countries) will provide support. To this end, the dissemination activities will include:

- Addressing issues of national sensitivities, restrictions of partner language fluency, data protection, disabilities, IT literacy and speed/availability of electronic connectivity, and perceived requirements for information within EuroFIR.
- Achieving a branding and style guide for EuroFIR that can be implemented by all partners.
- Setting up links with communication experts within EuroFIR partner organisations to coordinate activities.
- Assisting in developing, testing and launching a public website for EuroFIR communications and linking the EuroFIR site to all relevant sites (Link to WP 1.1).
- Establishing a mechanism based on achievement of a given quality threshold to underpin message promulgation to EuroFIR members for onward translation to their stakeholders.
- Establishing a cascade system to ensure that communication messages are rapidly shared.
- Using, and developing further, links with 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 national representatives), opinion leaders, educators, researchers and funding agencies.
- Specific activities, including the use of specialist communication streams, targeted at SMEs, and the annual media campaign.
- Planning and delivering innovative communication approaches to citizens for whom the Internet is the NOT the key information provider.
- Supplying information to attract international mainstream and technical print and broadcast media including bulletin board, one-pagers, synthesis reports, monthly website features, congress proceedings and other resources and video footage.
- Coaching members (including students) in communication skills.
- Organisation of the annual congress/network meeting including session on Science in Society.

Sub-contracting – external dissemination audit by SME.

Deliverables		
D3.2.1	Month 0-3	Secure web-based communication platform for EuroFIR partners (with WP 1.1)
D3.2.2	Month 6	1st project presentation leaflet
D3.2.3	Month 0-18	Web Bulletin Board interface for stakeholders world-wide respecting language, expertise levels, gender, ethnicity, disability, data protection and ethical issues.
D3.2.4	Month 0-18	Planned programme of information dissemination to suit users/stakeholders including 4 one-pagers/year, one compilation booklet of one-pagers, 2 syntheses/year, monthly web features, Bulletin board updates and congress proceedings & resources
D3.2.5	Month 0-18	Meetings and congresses of stakeholders and of EuroFIR partners
D3.2.6	Month 15-18	Audits of dissemination “reach and effectiveness”

Milestones	**and expected result**
M3.2.1	Month 1: Establish steering group to advise on dissemination; provide outline style-guide to underpin dissemination strategy; baseline awareness audit; 1st publicity push with users/stakeholders
M3.2.2	Month 2: Formalised EuroFIR peer-review process for dissemination
M3.2.3	Month 3: Start providing non-expert material on food composition & databank system issues for use by partners
M3.2.4	Month 9: Launch populated public pages and links; sought initial feedback
M3.2.5	Month 12: 1st Science and Society meeting held
M3.2.6	Month 18: 1st dissemination review & report to SMB.
M3.2.7	Month 18: 1st External audit of dissemination effectiveness and awareness completed.

WP 3.3: Commercialisation and durability (18 month period, months 1-18)

Work package number	3.3	**Start date or starting event:**			1		
Activity Type	SA						
Participant id	**AUA**	IFR	DFVF	TTZ			
Person-months per participant:	**1.25**	1	0.5	2			
Total person months:	4.75						

Objectives

1. To identify the initial indicators for the assessment of the ability of EuroFIR databank systems to sustain and survive independently in financial terms after the initial funding period by the EC and the necessary actions to ensure this.

Description of work:

This WP will be led by AUA and TTZ with support from DFVF & IFR. Close collaboration with WPs 2.1 and 3.2 envisaged. The first 18 months will consist of setting the scene for the longer term with the network's internal technology transfer experts drawing on existing EU entrepreneurial networks and proposing ideas towards an eventual market and business research strategy for a defined set of end users/stakeholders. Two initial tasks are planned:

1. Network consultations (undertaken by AUA & TTZ) – Consultation with other subgroups, committees and existing EU entrepreneurial networks (e.g. PAXIS, *Pilot Action of Excellence on Innovative Start-ups*, http://www.cordis.eu/paxis/src/home.htm; PANEL, *Providing Access and Networks of Entrepreneurial Links*, http://www.cordis.eu/paxis/src/panel.htm; KNIFE, *Knowledge Needs of Investment and Finance for Entrepreneurs,* http://www.knife.ie) will take place from the launch of the network. This consultation will need to consolidate and crystallize the work carried out in other WPs into a meaningful business plan. For this purpose, a series of consultation and feedback mechanisms will be established to ensure information flow of input into the business planning process. Network consultation will carry on throughout the duration of this WP and include:

- Workshops to communicate and debate the business plan (AUA)
- Electronic services to support the ongoing debate (AUA/IFR)
- Continuous communication with the consortium members from the beginning of the network (AUA, TTZ & DFVF)
- Review and input from external parties and experts (AUA & TTZ)
- Identifying consensus and conflict of opinion (AUA & TTZ)

2. Review of comparable service offerings and organisations (Undertaken by AUA & TTZ) – 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.

Sub-contractors – Business development consultancies and commercial database suppliers (SMEs).

Deliverables		
D3.3.1	Month 6	List of key users and stakeholders in each country.

D3.3.2	Month 12	EuroFIR workshop & report and action list to develop a long-term strategy for commercialisation of the output of the network.
D3.3.3	Month 18	Update list of users and stakeholders and action plan for next 18 months.

Milestones	**and expected result**
M3.3.1	Month 1: Establish WP task force
M3.3.2	Month 6: 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.

WP 3.4: Gender activities (18 month period, months 1-18)

Work package number	3.4	**Start date or starting event:**		1			
Activity Type	SA						
Participant id	**BNF**	NCH	BFE	INSA	UGR	NFNI	IFR
Person-months per participant:	**4**	0.5	0.5	0.5	0.5	0.5	1.2
Participant id	NKUA	CSPO	BGU	RUG	UHEL	FRI	SLU
Person-months per participant:	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Participant id	TUBITAK	AFSSA					
Person-months per participant:	0.5	0.5					
Total person-months:	12.2						

Objectives

1. Audit the gender balance within the project, with particular emphasis on women's roles.
2. Collate sex-disaggregated statistics (both within the project team and in the research) in accordance with current European Commission recommendations.
3. 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. 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. The prerequisite to promoting gender equality is obtaining adequate and consistent information at the outset. A gender information audit will be the first stage of the promotion of gender equality. Protocols for gender impact assessment have been developed under FP5, and these will be evaluated and applied in this project. On-going monitoring is as important as the initial 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 - A framework will be developed to audit the gender information within the project team. Key questions relate to the numbers and proportions of women researchers, and what their roles and responsibilities are; indicators of horizontal segregation (i.e., issues relating to the distribution of researchers of each sex in different fields of research), and of vertical segregation (representation of each sex at different levels of responsibility and status); and of measures of fairness in treatment and opportunity and measures of success. This process will involve an information meeting at the project inception, and a questionnaire-based survey on the key questions with scope for feedback. The focus of EuroFIR is the creation of an information resource. The exploitation and dissemination activities of the resource will require the consideration of gender. Existing gender impact assessment protocols will be adapted.

Activity 2: Collation and promotion of information on good practice in gender mainstreaming - Assessment of working conditions by questionnaire and identification of both obstacles to full participation, and representation, and of opportunities for greater participation and promotion. Consideration will be given of the timing of meetings to suit those with caring responsibilities, and identification of suitable child care facilities for meetings. Inclusion of women as observers at senior management meetings in order to promote interest and confidence in attaining management roles. Dissemination of equal opportunities policy message; of information on good practice across all partners; of schemes for improving gender balance (direct and indirect) will be included.

Sub-contracting: Gender expert advice and consultancy (as necessary).

Deliverables		
D3.4.1	Month 4	Methodological framework for auditing the current state of gender balance and sensitivity.
D3.4.2	Month 6	Provide an e-network distribution list of gender specialists for mutual peer support and mentoring.
D3.4.3	Month 9	Develop an information resource of the relevant national and European networks of women scientists.
D3.4.4	Month 12	An audit report mapping the initial gender composition and distribution of research teams, for circulation to managers and decision-makers in the project.
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.

Milestones	**and expected result**
M3.4.1	Month 1: 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.
M3.4.2	Month 6: Development of gender questionnaire for initial gender audit.
M3.4.3	Month 12: On-going updates at gender fora associated with each project meeting (annual updates).
M3.4.4	Month 12: A web and email-based forum for dialogue and sharing of good practice.
M3.4.5	Month 12: Annual assessment of success in meeting gender-informed objectives.
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.

WP MA4: Network management and co-ordination (18 month period, months 1-18)

Work package number	MA4	**Start date or starting event:**				1	
Activity Type	MA						
Participant id	**IFR**						
Person-months per participant:	**36.9**						
Total person months:	36.9						

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 18 months a range of activities will focus on *establishing the systems for efficient management* (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. Work will be carried out in close collaboration between Co-ordinator, SMB and PMO.

The main objectives are therefore to:

1. Install flexible and adequate network management for the first critical 18 months of EuroFIR
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 the first 18 months
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 18 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:

1. *Establishment of organisation structure and its bodies and network management operating procedures* – The PMO within IFR will be established at least three months in advance of the start of the project. The GC, SMB, DEC, UAG and PMO will be established by the Co-ordinator. The Network Management procedures will be made available in the form of a manual. An important aspect of this will be to collect/collate the progress reports and the annual reporting from the respective WPs, to prepare an update of the JPA from these reports and to use the reporting top shape the communication and dissemination process.

2. *Organisation of the start-up meeting of all core partners* – This will be held at the IFR and will include the following sessions:

- "start-up" of WP teams to organise and initiate work
- "start-up" of SMB meetings covering likely issues dissemination & IP, "open-call" procedures and selections for sub-contractors and new partners, organisational bodies and procedures, and 1st Network Congress Programme
- "start-up" general meeting of all consortium partners
- Training sessions in financial management & IT-web based communication software

3. *Organise flexible meeting structure* – This will involve organisation of:

- A training course for financial managers in partner institutions, in which the formats and the procedure for the production and submission of financial and audit reports will be explained
- The twice a year SMB meetings, the annual network congress, the annual GC and UAG meetings
- The platform meetings as required (see below)
- Open calls for sub-contractors and new partners as necessary

In contrast to the normal meeting schedule, the first SMB meeting will be organised in a "tripartite way" – (1) a 1-day WP-steering group meetings linked to (2) a 2-day joint WP-L and SMB meeting, linked to (3) a 1-day SMB meeting. Since this will be the first "real-life" network meeting, this will allow for early and adequate implementation and steering correction.

4. *Technical and financial reporting to the EC* – These will include: 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); second 18 months JPA and associated budget forecasts, and administration and preparation of minutes of the GC and UAG meetings.

5. *Research & Action Platform co-ordination* – In order to harmonise efforts between the various WPs, regular meetings (at least once every 3 months) of the RAP-L and WP-L will be held. These network teams will aim to establish a relationship with key users/stakeholders. These platforms will initiate concrete links with one or more WPs (e.g. dissemination, training, commercialisation) as appropriate.

6. *Internal communication* – special attention will be given to the optimal and flexible internal communication, as a prerequisite for integration.

7. *SME Involvement* – The SMB will decide a strategy to include SMEs in the various WPs. Specific tasks have already been identified in many of the WPs above (see Section B.9 for funds allocated to SMEs).

8. *Creation of partner commitment* – In the first year of EuroFIR, all partners will be visited 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 and Platform Groups will rotate among the partnering Institutes.

9. *Interaction with funding bodies* – In order to be successful, EuroFIR will have to be maintained with continued and increasing funding (apart from the grant for integration). Although this is the task of 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 acquainted with the concept of the Network of Excellence, and to exploit its potential.

Sub-contractors – Project management & financial audits by SMEs (Cambridge Strategic Management, UK).

Deliverables		
D4.1	Month 1	1st start-up meeting of SMB & WP-L (January 2005).
D4.2	Month 3	1st version of manual with SOPs including formats for technical and financial report distributed for discussion and agreement.
D4.3	Month 3	1st Annual (start-up) meeting of SMB, GC and all partners – JPA and budget agreed; minutes prepare & circulated (March 2005).
D4.4	Month 3	Training course for financial managers of partner organisations
D4.5	Month 4	Final version of network management manual with SOPs.
D4.6	Month 6	1st project presentation leaflet & poster presentation available.
D4.7	Month 6	2nd Meeting of SMB with WP-L; minutes prepare & circulated (June 2005).
D4.8	Month 9	3rd meeting of SMB with WP-L; minutes prepare & circulated (September 2005).
D4.9	Month 14	2nd Annual meeting/Network Congress; Proposal for admission of new partners from 2006; proceedings prepared & circulated.
D4.10	Month 15	Update of JPA for 2006.
D4.11	Month 15	4th Meeting of SMB; minutes prepare & circulated (March 2006).
D4.12	Month 18	Update for JPA 2006 and foresight of priorities for 2007.

Milestones	**and expected result**
M4.1	Month 3: Verification of procedures, JPA for M1-18 and budget by GC in their first meeting.

M4.2	Month 3: Proposal of members of UAG, DEC & GC.
M4.3	Month 6: Open call for new partners published.
M4.4	Month 6: Confirmation of all partners to proper auditing procedures.
M4.5	Month 9: Agreement of JPA for 2nd year agreed.
M4.6	Month 12: Agreement with new partners to be enrolled by 2006.
M4.7	Month 18: Agreement of JPA and budget for 2007-08.

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 Management activities**	TOTAL per PARTICIPANT
	Integrating Activities	Jointly executed research activities	Spreading of Excellence activities		
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
Participant 4 (NUBEL)*	0	0	0	0	0
Participant 5 (IRMM)	3	9	0	0	12
Participant 6 (NCH)	17	20	2	0	39
Participant 7 (DFVF)	67	56	5	0	128
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
Participant 12 (BFE)	13	23	2	0	38

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	0	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
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
Participant 39 (IDUFIC)	45	0	0	0	45
TOTAL per ACTIVITY Type	703.3	706.3	320	123	1852.6
Overall TOTAL efforts					**1852.6**

*NUBEL man efforts included in RUG

10.2 Efforts for the first 18 months of the project, months 01-18

Project Number - FP6 513944 (EuroFIR)

	Participant 1 IFR	Participant 2 GUT	Participant 3 RUG	Participant 4 NUBEL*	Participant 5 IRMM	Participant 6 NCH	Participant 7 DFVF	Participant 8 KTL	Participant 9 UHEL
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	8.4	0	0	0	0	0	1.0	0	0
WP1.2: Integrating research activities and addition of new partners	1.8	0	0	0	0.45	0	1.0	0	1
WP1.3: Development of a pan-European quality management system.	0.9	0	2.0	0	0.45	0	1	0	1.5
WP1.4: Internet development and deployment of EuroFIR databank systems	2.7	0	1.0	0	0	1.5	12	1.0	0
WP1.5: Standards development & specifications	1.8	1.5	1.5	0	0	1.5	2	1.5	0
WP1.6: Food identification & description	1.8	1	1.5	0	0	2	3	1.5	0
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users	0	0	0	0	2.6	0	0.75	0	0

and stakeholders									
WP2.2: Composite, processed and novel foods	1.8	0	1.0	0	0	0	1.0	9	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	0	0	0	0	0	1.5	0	0
WP2.4: Bioactive compounds	14	1.5	0	0	0	1.5	12	0	1.5
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	5.7	0	0	0	0	0	1	0	1.0
WP3.2: Dissemination and communication	1.8	0	0	0	0	0	0	0	0
WP3.3: Commercialisation and durability	1.0	0	0	0	0	0	0.5	0	0
WP3.4: Gender activities	1.2	0	0.5	0	0	0.5	0	0	0.5
TOTAL JPA	**43.4**	**6.5**	**10.0**	**0***	**3.5**	**11.5**	**38.25**	**13**	**5.5**

Consortium Management Activities									
WP4: Network management and coordination	36.9	0	0	0	0	0	0	0	0
TOTAL Cons. Management	**36.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

TOTAL per PARTICIPANT	**80.3**	**6.5**	**10.0**	**0***	**3.5**	**11.5**	**38.25**	**13**	**5.5**

Overall TOTAL EFFORTS									

* NUBEL efforts are included in RUG

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	Participant 10 AFSSA	Participant 11 IceTec	Participant 12 BFE	Participant 13 ILSI	Participant 14 TTZ	Participant 15 NKUA	Participant 16 AUA	Participant 17 UCC	Participant 18 BGU
Joint Programme of Activities									
Integrating activities									
WP1.1: Integrated organisation of knowledge and information flow	0	0	0	0	0	1.0	0.75	0	0
WP1.2: Integrating research activities and addition of new partners	0	0	0	0	0	1.0	0	1.0	0
WP1.3: Development of a pan-European quality management system.	0.5	0	0	0	0	0	0	0	0
WP1.4: Internet development and deployment of EuroFIR databank systems	1.0	1	1.0	0	0	0	0	1.0	1.0
WP1.5: Standards development & specifications	6.0	1.5	1.5	0	0	1.5	0	1.5	0.75
WP1.6: Food identification & description	8	1.5	1.5	0	0	1.5	0	1.5	1.0
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users and stakeholders	0	0	1.5	0	0	0	0	0	0
WP2.2: Composite, processed and novel foods	1.5	1	1.5	3	4	0	0	0	0
WP2.3.1: Traditional foods	0	2.5	2.5	0	0	18	0	0	0
WP 2.3.2 Ethnic Minority	1.5	0	0	0	0	0	0	0	2.0

foods									
WP2.4: Bioactive compounds	0.5	1.5	1.5	0	0	0	0	15	0
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	1	0	0	0	0	0	7.0	0	7.5
WP3.2: Dissemination and communication	0	0	0	0	0	0	0	0	0
WP3.3: Commercialisation and durability	0	0	0	0	2	0	1.25	0	0
WP3.4: Gender activities	0	0	0.5	0	0	0.5	0	0	0.5
TOTAL JPA	**20**	**9**	**11.5**	**3**	**6**	**23.5**	**9.0**	**20**	**12.75**

Consortium Management Activities									
WP4: Network management and coordination	0	0	0	0	0	0	0	0	0
TOTAL Cons. Management	0	0	0	0	0	0	0	0	0

TOTAL per PARTICIPANT	**20**	**9**	**11.5**	**3**	**6**	**23.5**	**9.0**	**20**	**12.75**

Overall TOTAL EFFORTS									

	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	1.0	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	0	0	0	0	16.0	0	0	0
WP1.4: Internet development and deployment of EuroFIR databank systems	1.0	0	0	1.0	1.0	0	0	1.0	0
WP1.5: Standards development & specifications	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5
WP1.6: Food identification & description	1.5	1.5	0.6	1.5	1.5	1.5	1.5	1.5	1.5
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users and stakeholders	1.5	0	0	0	0	0	0	0	0
WP2.2: Composite, processed and novel foods	3	1.5	0.9	1.5	0	0	0	1.5	0
WP2.3.1: Traditional foods	2.5	2.5	0	0	4.0	1.5	3.0	2.5	1.5
WP 2.3.2 Ethnic Minority foods	0	0	1.5	0	0	0	0	2.0	0

WP2.4: Bioactive compounds	1.5	0	0	0	1.5	0	1.5	0	0
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	0	0	12.6	0	0	0	0	0	0
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	0.5	0	0	0.5	0.5	0	0	0.5
TOTAL JPA	**12.5**	**7.5**	**15.6**	**7.5**	**10.0**	**21.0**	**7.5**	**10.0**	**5.0**

Consortium Management Activities									
WP4: Network management and coordination	0	0	0	0	0	0		0	0
TOTAL Cons. Management	0	0	0	0	0	0		0	0

TOTAL per PARTICIPANT	**12.5**	**7.5**	**15.6**	**7.5**	**10.0**	**21.0**	**7.5**	**10.0**	**5.0**

Overall TOTAL EFFORTS									

	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	1.5	0	0	0	0
WP1.2: Integrating research activities and addition of new partners	0	0	0	0	0	0	0	1.0	0
WP1.3: Development of a pan-European quality management system.	0	0	1.5	1.0	0	0	3.0	0	0
WP1.4: Internet development and deployment of EuroFIR databank systems	0	0	0	0	0	16	0	0	0
WP1.5: Standards development & specifications	1.5	6	0	1.5	0	0	0	0	0
WP1.6: Food identification & description	3	1.5	0	1.5	0	0	0	0	0
Jointly executed research activities									
WP2.1: Developing food composition databank systems and related tools for use with various users and stakeholders	3.0	1.5	0	0	1.5	0	0	0	18
WP2.2: Composite, processed and novel foods	2.0	1.5	0	1	0	0	0	0	0
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	0	18	0
WP2.4: Bioactive compounds	0	1.5	1.5	1.5	0	0	0	1.5	0
Spreading of Excellence activities									
WP3.1: Training, education and vision to postgraduates and young scientists.	0	0	9.0	0	0	0	0	0	0
WP3.2: Dissemination and communication	1.5	0	0	0	31	0	0	0	0
WP3.3: Commercialisation and durability	0	0	0	0	0	0	0	0	0
WP3.4: Gender activities	0.5	0	0.5	0.5	4.0	0	0	0	0
TOTAL JPA	**11.5**	**12.0**	**12.5**	**9.0**	**38.0**	**16**	**3.0**	**20.5**	**18.0**

Consortium Management Activities									
WP4: Network management and coordination	0	0	0	0	0	0	0	0	0
TOTAL Cons. Management	0	0	0	0	0	0	0	0	0

TOTAL per PARTICIPANT	**11.5**	**12.0**	**12.5**	**9.0**	**38.0**	**16**	**3.0**	**20.5**	**18.0**

Overall TOTAL EFFORTS									

	Participant 37 BAG	Participant 38 RIKILT	Participant 39 Polytec	Participant 40 IDUFIC	TOTAL ACTIVITIES
Joint Programme of Activities					
Integrating activities					
WP1.1: Integrated organisation of knowledge and information flow	6.1	0	0	0	19.75
WP1.2: Integrating research activities and addition of new partners	0	0	0	0	8.25
WP1.3: Development of a pan-European quality management system.	0	0	0	0	27.85
WP1.4 Internet development and deployment of EuroFIR databank systems	0	0	9.5	6	58.7
WP1.5 Standards development & specifications	0	1.5	0	7.5	52.5
WP1.6 Food identification & description	0	0	1.5	0	45.9
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	30.35
WP2.2: Composite,	0	0	0	0	36.7

processed and novel foods					
WP2.3.1: Traditional foods	0	0	0	0	54.4
WP2.3.2 Ethnic Minority foods	0	0	0	0	26.5
WP2.4: Bioactive compounds	0	1.5	1.7	0	62.7
Spreading of Excellence activities					
WP3.1: Training, education and vision to postgraduates and young scientists.	0	0	0	0	44.8
WP3.2: Dissemination and communication	0	0	0	0	34.3
WP3.3: Commercialisation and durability	0	0	0	0	4.75
WP3.4: Gender activities	0	0	0	0	11.7

Consortium Management Activities					
WP4: Network management and coordination	0	0	0	0	36.9
TOTAL Cons. Management	0	0	0	0	36.9
TOTAL per PARTICIPANT	**6.1**	**3.0**	**12.7**	**13.5**	**36.9**
TOTAL JPA	**213**	**210.65**	**95.55**	**36.9**	**556.1**

Overall TOTAL EFFORTS					**556.1**

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	*EURO*FIR

Number of researchers and doctoral students to be integrated. Maxium allowable EC contribution

Participant n°	Participant short name	Number of researchers to be integrated			Number of doctoral students to be integrated in the network			Maximum allowable EC contribution for project duration
		Female	Male	Total	Female	Male	Total	
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	NCH	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	BFE	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	
27	UGR	1	2	3	1	0	1	
28	FRI	2	1	3	1	0	1	
	Sub-totals	48	34	82	31	10	41	

Please use as many copies of form A3.2 as necessary for the number of participants	***Form A3.2 page***	***1***	***of***	***2***

Proposal Number	**513994**	Proposal Acronym	*EURO*FIR

Number of researchers and doctoral students to be integrated. Maximum allowable EC contribution

Participant n°	Participant short name	Number of researchers to be integrated			Number of doctoral students to be integrated in the network			Maximum allowable EC contribution for project duration
		Female	Male	Total	Female	Male	Total	
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	
Total		64	46	110	37	13	50	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.

Proposal Number	**513944**	Proposal Acronym[2]	EuroFIR

Estimated breakdown of the requested EC contribution per reporting period			
Reporting Periods	**Month x – Month y**	**Requested Grant for Integration**	
		Total	**In which first six months**
Reporting Period 1	M1 – M12	3,500,000	1,750,000
Reporting Period 2	M13 – M24	3,000,000	1,500,000
Reporting Period 3	M25 – M36	2,000,000	1,000,000
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	11,160,000
Estimated costs for the first 18 months	4,926,822

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	Acrylamide content	Experience in participation in

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	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.	monitoring database (about 3500 assessed entries). Electronic databases on methods for the detection of feed additives, and functional foods.	several Shared Cost Actions. Core research funding through the EC. Capacity in statistical interpretation of results, i.e. collaborative trials and proficiency tests.
6. NCH	Experience in food composition analysis (macronutrients; micronutrients; biologically active compounds – flavonoids, carotenoids, melatonin). Experience in food safety analysis (toxic elements, pesticides, mycotoxines). Experience in validation of food chemical analysis methods and accreditation.	Food Composition Database – Bulgarian Food Composition Tables (762 foods & 54 parameters). Database for flavonols, flavones and catechins in Bulgarian fruits, vegetables and wines. Data for carotenoids in foods. Data for contaminants in foods.	Knowledge on quality control and quality assurance. Information on national total diet study (nutritents, contaminants and additives). Analysis and development of new formulas for dietary supplements and functional foods. Member CEECFOODS network.
7. DFVF	Research on food composition, food consumption, food analysis and bioactive substances. Research on Bioactive substances, especially toxic constituents.	Manager for Danish Food Composition database version 6.0. Bioactive plant foods information system with electronic input forms version 3.2.	Research to promote safe and healthy foods, to promote healthy food habits and prevent food related diseases in humans. Food safety in relation to chemistry, toxicology and microbiology. Epidemiology and risk assessment. Diagnostic surveillance. Nutrition and food related diseases in humans. Scientifically based advisory services to the Danish authorities.
8. KTL	Aggregated data from Finnish National FINDIET 2002 study. Data model and data structures for food composition database. Data model, data structures and software for presentation of food information at the internet. Basic food composition data for food items from Finnish food composition database Fineli, release 4, 2004.	Manager for Finnish food composition data bank Fineli^{R}. In-house software for management of FCB Fineli. In-house software for using FCDB Fineli in dietary surveys.	
9. UHEL	Knowledge about planning and carrying out food composition studies. Developed and validated methods for food components especially bioactive compounds. Experience and		Funding from national source to carry out research in this field. Experience of participating in EU projects, COST actions and the NEODIET project and for the evaluation of food composition data.

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	know-how for the evaluation and validation of analytical methods for food research.		
10. AFSSA	Aggregated data from French national dietary survey (1998-1999).	Aggregated data from 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 includes food composition, database management, meat science & traditional foods, processing technology and microstructure.	Manager of Icelandic food composition database involving the co-operation between six Institutes in Iceland concerning the database.	IceTec has participated in several EU projects, especially in the field of food processing and fish technology.
12. BFE	Projects include the assessment of food components and new processing techniques (e.g. high pressure or osmotic treatment, biopreservation using protective bacteria). Further approaches comprise the enhancement of food quality and hygiene by means of processing, evaluation of physiological benefits of conventional and novel or genetically modified food, consumer behaviour and attitudes towards food and nutrition.	Manager of database on German food composition includes 11,000 foods and dishes. For each food, about 140 nutrients are given. The data base is currently being upgraded and extended	The Federal Research Centre for Nutrition and Food is a research centre affiliated with the Federal Ministry of Consumer Protection, Food and Agriculture. It carries out research in the fields of nutrition and food sciences, with special emphasis on vegetables and fruit, and of nutritional behaviour.
14. TTZ	Research results on bioactive compounds & innovative food ingredients of putative health benefit as well as specific malnutrition issues granted by the work in NUTRI-SENEX. Research results on processing technologies and quality impact. Analytical methods for many food components, Experience in data-mining (esp. classification, clustering esp. k-means, nearest-neighbour, principal component analysis, statistical evaluation and prognosis with	Experience in web-based data base applications, semantic data integration; research results and experience from bio-informatics problems.	Contact network in the food industry (over 500 SMEs, industrial players, RTDs). Established experiences and networks for fund rising and optimisation of bids.

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	Matlab and Maple).		
15. NKUA	Framework for the systematic investigation of traditional foods and analytical data on the composition of traditional Greek primary and composite food.	Data from the "Composition tables of foods and Greek dishes" including the composition of 114 Greek dishes, estimated through the UNIDAP software. The composition refers to energy as well as 27 nutrients. The DAFNE (Data Food Networking) databank, with information on the daily food availability in 16 European countries (www.nut.uoa.gr). The DAFNE food classification scheme, for grouping food data of 16 European countries under common food groups.	Experience of participating in other EU projects, including co-ordination. Experience of collaboration with Greek SMEs and the Greek food industry. Experience of collaboration with the Greek agri-food and culinary sector. Educational experience on public health nutrition. Experience in working on the compilation of the EPIC nutrient database (ENDB), in particular documenting, standardizing and applying quality control to the Greek data.
16. AUA	Knowledge and material developed in Greek regarding new venture establishment training of agronomists, food scientists and technologists in Greece. Knowledge base regarding entrepreneurship in the area of agronomy, food science and technology. Knowledge in the area of business plan development and commercialisation for agronomy, food science and technology areas.	Software engine application developed for advanced customization of business plans' marketing, financial and production related computations, metrics' assessment and reporting.	
17. UCC	Experience and know-how on the evaluation, compilation/construction and application of composition data for bioactive constituents, particularly phytoestrogens and carotenoids in foods. Know-how in the identification of foods and their description Know-how in the compilation and analysis of National food consumption databases.	Database of phytoestrogens and carotenoids in foods; The compilation and analysis of National food consumption and recipe databases.	1. Experience on collaboration with food industry and the agri-food sector. 2. Experience in working on FP5 and FP6 projects, both past and current, and links with key personnel in these projects.
18. BGU	Food composition and public	In-house Israeli food	Give on-line lectures to EuroFIR

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	health research experience. Experience related compilation of recipes and complex and ethnic-specific dishes. Development of quantitative dietary assessment methodologies for "western" and "shared plate" eating habits. Experience of linking food 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.	composition database for over 1450 common foods such as bread, milk, fruits, vegetables etc. Data entry systems for a variety of dietary assessment methods.	members, European Universities and educational institutions.
19. INRAN	Considerable experience in planning and carrying out Food consumption surveys in the context of food data management, issues concerning food description, food coding and aggregation. Experience on bioactive compounds and analytical studies on composite Italian dishes.	Italian food composition database. Database on isoflavone and lignan content of European food (on behalf of the Venus consortium – EU project no. FAIR – CT98-4456).	
20. CSPO	Statistical analyses of large epidemiological databases (in particular case-control and prospective studies, EPIC Italy and EPIC Europe). Contacts with the USDA Nutrient Data Laboratory and with US leading nutritional epidemiologists. Experience in linking food composition data to food frequency questionnaires and to other dietary assessment instruments. Experience in running intervention trials. Compilation of food composition databases, in particular with information gathered from different sources and on missing information for specific micro-nutrients.	Assistance in the compilation of multicultural databases (10 EU countries involved in ENDB) and understanding different food traditions. Databases – latest version of the “Food composition database for epidemiological studies in Italy (approx. 1000 items and 70 nutrients).	Experience in working on other European projects (EPIC, COST action 99 and 927), US based projects (Physician Health Study and Nurses’ Health Study); Experience with Italian (e.g. AIRC) and International funding agencies (e.g. WCRF). Experience in working on EPIC project, for the compilation of the EPIC nutrient database (ENDB), in particular documenting, standardizing and applying quality control to the Italian data and co-ordinating activities related compilation of recipes and complex dishes.
21. WU	Know-how on compilation of food composition databases (Dutch Food Data Base	Experience in training in design & use of databases.	Experience of working on other European projects (EPIC, COST action 99, COST action 927).

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	(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.	Know-how on compilation of multicultural databases (10 EU countries involved in ENDB) and understanding different food traditions.	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	Manager of Polish database covering over 800 food products	

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	specialized equipment for food analysis.	and dishes. Software to calculate 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.	Databases of food (four editions, the last	Opportunities to collaborate with anthropologists and gastronomy

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	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.	with 1,100 foods, analytical and bibliographic). Nutritional software for nutrition assessment and diet design.	experts for traditional recipes in Spain
28. FRI	Food analysis. Scientific experiences in mycotoxins analysis mainly focused on fumonisins and ochratoxin A. Evaluation of acrylamide and kinetic studies related to its generation and occurrence in foodstuffs. Irradiated spices determination and influence of irradiation on volatile compounds profile of species as well as anti-oxidative 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.	Aggregated data from Slovak food composition database available in printed form and DBFS form (1400 foods, cca 300 food characteristics) available. In-house software for recipe calculation, assessment of dietary consumption.	Experience of working in other EU projects, management of the CEECFOODS sub-regional food composition database.
29. NFA	Food analysis. Evaluation of food composition data. Extensive toxicological expertise in genotoxic substances, naturally occurring toxins and other substances in foods, nutritional and antinutrional factors, and GMOs in food. Special competence in analysis of nutritional and other components of foods, especially vitamins and trace elements using certified methods.	Data from Swedish food composition database. System development, web applications and database maintenance.	Experience of working in EU and other international projects (FP5, FP6, COST 99, EPIC, EFCOSUM).
30. SLU	Advanced methods to assess nutrient bio-availability.	Databases for publications via SLU-	Collaboration in EC projects (FLAIR, BCR-MAT, FP5, FP6,

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
	Advanced analytical equipments. Scientific and analytical excellence on (a) lipids – cholesterol and phytosterols, lipid oxidation & products; (b) starch and dietary fibre composition; (c) acrylamides in cereals; (d) vitamins – tocopherols, tocotrienols, folates and vitamin B12; (e) bioactive compounds – phenolics, lignan, alkylresorcinols and avenanthramides.	library. Computer techniques in course teaching, training & e-learning. Software for HPLC education, statistics, reference database (e.g. folates). Software for LC and GC equipment control.	COST 99 & 919) and with industry & governmental authorities. Track record of fund raising via TMR-Marie-Curie, other EC-programmes (see above), national research councils & industry. Track record of training of under-, post- & graduates (all genders & nationalities).
31. TUBITAK	Laboratory accreditation (EN ISO/IEC 17025). Know how on quality management system in food laboratories. Experience in internal quality control, method validation and measurement uncertainty. Experience in energy and nutrient analysis (vitamins, minerals, fatty acids, artificial, sugars & sweetener, organic acids etc.) by instrumental analysis methods. Experience on contaminant analysis (e.g. mycotoxins & heavy metals). Traditional foods data collection, sampling and nutrient analysis.	Database on composition of hazelnuts.	Good relations with Turkish Food industry. Organiser of the International Food and Nutrition Congress (July 2005).
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,	

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
		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 stakeholder research and extensive stakeholder contacts.	University of Surrey stakeholder networks and databases.	Experience of working in other EU projects, including coordination, UK government and research council 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.

Partner	Methods & food analysis	Databases & computing software.	Other related knowledge & related experience
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 inter-conversion 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.	

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.