

*version 29 March 2006*

## **EUPHIX WORKPLAN 2004 –2007 (2008)**

### **1. Project aim:**

The EUPHIX project aims to design, develop and deliver a *prototype for a sustainable, structured web-based health information system for the European Union*. The system is to provide policy relevant knowledge, information and data on Public Health across the EU, to be integrated in the EU Public Health Portal. EUPHIX is the abbreviation for 'European Public health Information, Knowledge and Data Management System'.

The EUPHIX system serves various target audiences:

- policy makers at European, national and regional level, including the Commission's services;
- public health professionals and academia;
- the media and the better informed general public.

The EUPHIX system will be unique in that it will focus on integrated presentation of health data, information and knowledge within a policy relevant context. Thus, it should contribute to evidence-based policy-making and health-promoting interventions.

The project will build on previous work on European Community Health Indicators (ECHI-1 and ECHI-2 projects) and on experience gained through the development of national web-based health information systems such as the Norwegian Norhealth, the Dutch National Compass and the German GBE.

### **2. Project deliverables:**

The project has the following key deliverables:

1. Structured information content on selected public health issues;
2. A functioning prototype for a web application;
3. A plan for maintaining the system, using expert networks.

These three are further explained below and shown in *figure 1*, with interrelations and important elements.

#### **2.1 Structured information content**

The structured information should cover policy relevant public health issues and policies that address these within and across EU Member States. This information will provide the content of the web application. It will be presented in a structured way through texts, tables, graphs and maps. The information will be based on existing data and publications, and made accessible via predetermined routes and search modalities. This includes:

- a comprehensive design for the content structure ('conceptual tree') of the EUPHIX website;

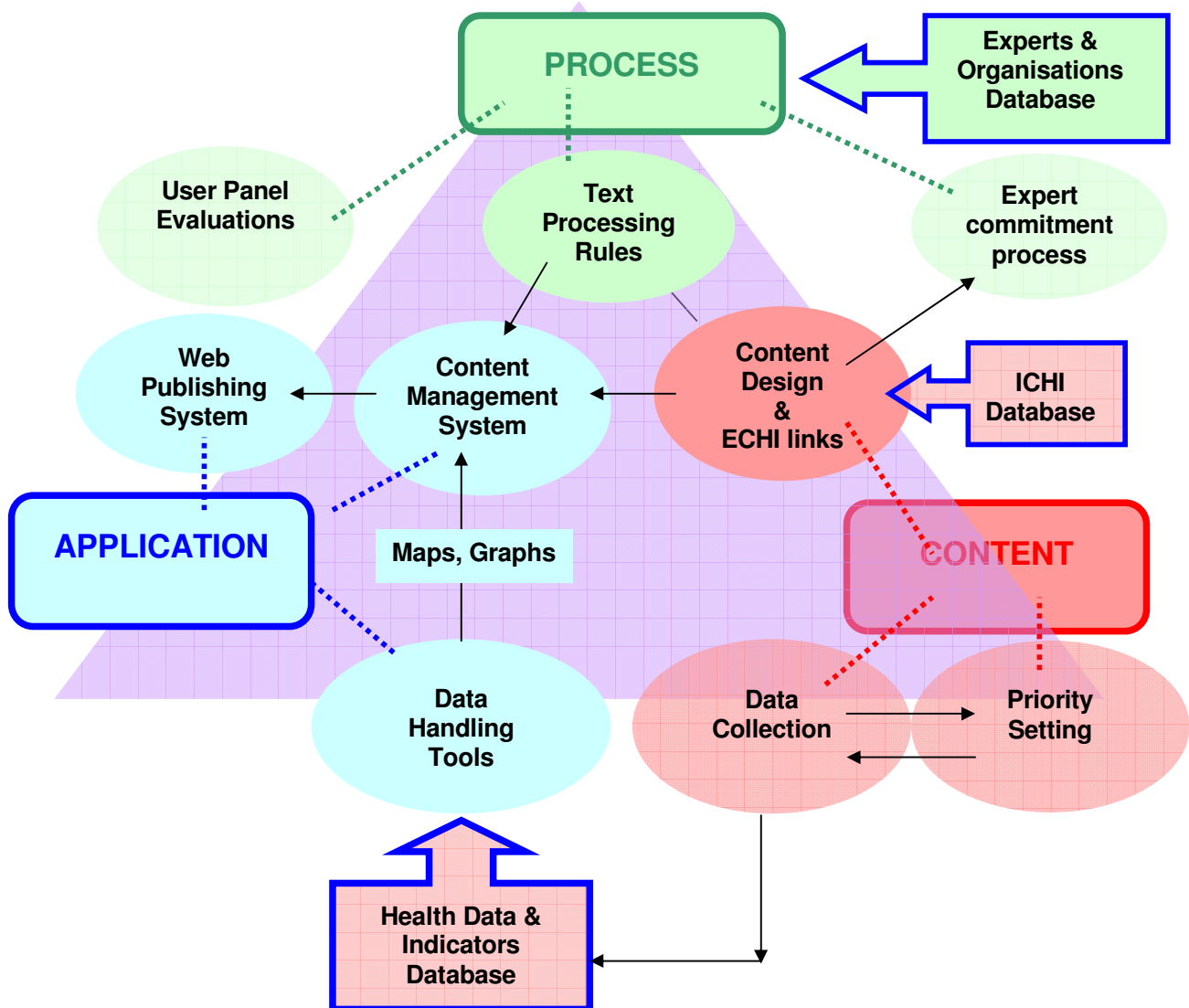
- a protocol for integrating and structuring content matter;
- a design for accessing that content.

## 2.2 Functioning prototype of a web application:

This includes:

- a content management system for filling, updating and expanding the EUPHIX system;
- underlying databases for EU health indicators, health data, meta-data, reports and other types of publications;
- a network of data sources;
- protocols for selecting, acquiring and processing data.

Figure 1: Graphical presentation of the three EUPHIX deliverables and their interrelations



### **2.3 A plan for maintaining the system, using expert networks.**

This refers to a plan for the process for guiding expert networks to contribute relevant public health and policy information into the EUPHIX system, to contribute to EUPHIX' policy relevance, and to provide feed back on its user friendliness. This includes:

- Identifying national and European experts, key institutes, networks, projects and stakeholder organisations in the areas of the various health topics, themes and policies addressed within EUPHIX, in order to incorporate their work into the EUPHIX knowledge base;
- Fostering partnership with relevant collaborative networks and mechanisms within the EU public health programme (NCA, Working Parties, EU Platforms);
- Establishing a network of national and European experts and organisations that will actively contribute textual information as presented via the EUPHIX website;
- Establishing a 'target group panel' of –potential- users, to maximise user relevance;
- Protocols for editing and reviewing expert contributions.

## **3. Project methods: how will the objectives be achieved?**

In order to structure the activities, they have been assigned to four 'Work Packages' (WPC's). WPC 1 includes the project management and co-ordination. WPC's 2-4 correspond to the three project deliverables outlined under section 2.

### **3.1 Work Package 1. Project management and co-ordination; ensuring sustainability**

This work package implies guiding and controlling the adequate realisation of EUPHIX' deliverables and objectives, within the agreed budget and time frame. It includes project co-ordination, ensuring coherence of activities and guiding the system to a sustainable one.

#### *3.1.1 Overall co-ordination*

Co-ordinating activities will focus on:

- overall project co-ordination; this includes supervision of the other work packages and maximising coherence between the work packages (see also 'integrated pilots');
- project planning, particularly as regards timely delivery of project output;
- financial management;
- management of project staff;
- organisation of project meetings; at these meetings, partner organisations will be consulted about project direction and progress, and arrangements will be made as regards their specific input in the project; all in all, six full project meetings (FPM's) are foreseen over the 3-year duration of the project;

- communication with project partners; ensuring partner organisations' are able to contribute their specific expertise; and monitoring collaboration between staff and project partners within the separate work packages;
- managing communication with the Commission; this includes all responsibilities as regards project accountability and reporting;
- external project representation;
- overall accountability for dissemination of project results.

### *3.1.2 Ensuring coherence: management of integrated pilots*

As has been indicated above, ensuring coherence between the Work Packages is dealt with within this WPC. The overall success of EUPHIX will depend on co-ordinated delivery of all objectives and on the project's ability to pull relevant information and expertise across EU member states and expert networks together. The management of 'Integrated Pilots' is an essential instrument in this process. Integrated pilots are subsequent working versions of the intended web application. The word 'integrated' refers to the simultaneous and coherent development of (1) content, (2) technical functionalities and (3) the process of participation by project partners and expert networks.

A limited number of Integrated Pilots will be run at regular intervals, as shown in the timetable (section 4). Experience gathered through the integrated theme pilots will result in further fine-tuning of the structured content, data storage and web application. Thus, as time progresses, new pilots will grow more and more into a well-tested prototype for comprehensive web-based health reporting. Within the separate work packages 2 and 3, specific pilots will be carried out more frequently, as outlined in the respective headings.

### *3.1.3 Ensuring sustainability*

Technically, this will imply that the design, maintenance and update of the system can, in due course, be transferred to the Commission Services or to an organisation appointed by the Commission.

By way of commitment and visibility, this means that EUPHIX should be recognised and be used by European professionals and citizens. For this, it is needed that the content is relevant for policy makers and the public, and that it is made known widely by appropriate means. This can be done by:

- presenting EUPHIX at conferences;
- liaising with and feedback from target group panel;
- developing opportunities for user panel member to champion EUPHIX after the project has ended;
- embedding EUPHIX in EU health portal of the Commission services;
- strategy for transfer of EUPHIX methodology and maintenance.

### 3.1.4 *The role of the project partners (see also Annex 2)*

The project partners will play a special role within EUPHIX. They will, first of all be the first echelon of advice and feedback for the EUPHIX team at RIVM. Next, they can make a significant contribution as regards all three key deliverables, and the respective Work Packages. The extent to which they contribute to each of these deliverables may differ, depending on the specific interests and expertise available within the partner organisation. The project partners have been approached because their organisations have a track record in health information and on that basis are able to contribute to the overall quality of the project.

More specifically, the project partners would:

- Provide advice and feedback on the overall aspects of project development, implementation, progress, relevance and sustainability. This would include advice on topics and themes to choose for development.
- Share their specific expertise on content and/or functional aspects. Project partners are experts on certain public health topics. In that case, they could act as an author or editor of the information provided on this topic via the EUPHIX web site in addition to being a very valuable source of contact/network information.
- Share their expertise on web technology and GIS.
- Share their contacts to help build expertise networks as a key deliverable of the EUPHIX project. These contacts would imply national as well as international networks, including EU-funded projects, professional organisations, and policy-oriented researchers and organisations.

The involvement of the project partners will be the prime responsibility of the project management. They will arrange their connection with the various Work Packages and their specific roles, according to expertise and preferences. This has been worked out further in *Annex 2* to this work plan.

## **3.2 Work Package 2. Content design, development and structure**

### 3.2.1 *Content structure in EUPHIX*

This work package aims to select, gather, analyse, integrate and structure content matter within EUPHIX. There are two guiding principles: (A) EUPHIX wants to present information on the ECHI shortlist indicators, and (B) EUPHIX wants to deal with policy-relevant issues in a comprehensive and integrative manner. The issue of policy relevance implies that information will be included on public health policies, besides information and data on health status and health determinants. In addition, it means that policy considerations will be guiding in selecting the content issues (see also 3.2.4).

In terms of the structure of the website, the principles (A) and (B) are translated into two types of 'content elements', called '*Topics*' and '*Themes*'. This basic structure is given in *Figure 2*.

*Topics* will be concise information packs, presenting basic statistical information on an indicator (or a few related ones), as tables, graphs and maps, plus some explanatory text and relevant links and references. Topics largely coincide with the indicators included in the *ECHI shortlist*, or at least they will use these as a starting point. The topics will be structured largely like the hierarchical tree used in the ECHI project, with some changes and additions related to the anticipated use of EUPHIX. The most apparent addition compared to the ECH list is the inclusion of a section on health policies (see 3.2.4). Otherwise there are some changes in the order of the categories (see *Annex 1* for the entire topic tree).

*Themes*, on the other hand, will be selected as policy-relevant issues. They are usually broader and more comprehensive than topics. Themes will be built as a frame of integrative or analytical text and information, to which a selected set of topics is linked to provide the necessary basic information. Thus, the information presented in a particular theme will encompass more than the sum of the included separate topics. Within the context of themes, health data will be linked with information on prevention measures and information about policy.

*Figure 2* also shows that the required input for all elements is (1) Statistical data, (2) State-of-the-art publications and reports, and (3) Expert input. Finally, it shows the variety of complementary presentation forms used

*Figure 2. EUPHIX content elements, information sources and presentation.*

<b>Indicators and topics</b>	<b>Sources for implementing the content :</b>	<b>Policy-relevant priority themes</b>
Structured in a 'topic tree', having as main groups: <ul style="list-style-type: none"> <li>• Health status</li> <li>• Determinants of health</li> <li>• Health systems/ interventions</li> <li>• Health policies</li> <li>• Demographic factors</li> </ul>	<ul style="list-style-type: none"> <li>• Statistical data</li> <li>• State-of-the art publications &amp; reports</li> <li>• Expert input</li> </ul> <b>Presentation of information :</b> <ul style="list-style-type: none"> <li>• Text</li> <li>• Tables</li> <li>• Graphics</li> <li>• Maps</li> <li>• Links</li> </ul>	Broader issues ; always connected with opportunities for intervention and related policies. Themes include appropriate information from topics (see left)

### 3.2.2 Working out the content: Topics (see also Annex 1)

The topics will form the basic elements of the EUPHIX website. They will be arranged and structured via 'conceptual tree' similar to the one used in structuring the ECHI indicators. However, the structure of the tree will be somewhat amended to allow for a more 'positive' approach to health, rather than to ill-health.

The topic tree will be extended beyond the ECHI indicators by accommodating information on public health policies, and the systems to deliver public health, at member state and EU level. Thus, the 'topic tree' will include the sections: Health status, Determinants of health, Health interventions, Health Systems, Health policies, and Demographic factors (see *figure 1*). Examples of topics are: lung cancer, breastfeeding, outside air pollution, smoking policies).

Gradually, the topics will cover information on an increasing portion of the ECHI shortlist of indicators. They will all be developed according to a similar structured format. A core issue for each topic is to identify the basic data needed to implement the respective ECHI indicators, and to establish the availability of these data and the appropriateness and reliability of the respective data sources.

### 3.2.3 Working out the content: Themes

In collaboration with project partners and DG SANCO, 'themes' will be selected as important public health issues for the EU. The actual choice of priority topics will be supported through the overview of national and EU public health policy priorities that EUPHIX will develop (see 3.2.4). As policy priorities may change over time, a few themes will be chosen at regular intervals during the course of the project.

A framework will be developed to structure comprehensive mapping of information to be included in the themes. This is likely to take the following questions into account:

- What topics should be involved?
- What leading international publications are available?
- What leading cross-national -EU funded- projects and networks have been or currently are involved, and with what key output/result?
- What knowledge is available about – preventive – interventions and their evidence base?
- What knowledge is missing and needs development?
- What can be said about EU competencies in this area?
- What policy approaches to improve health and support prevention can be distinguished at national and EU level as regards this particular theme?
- Can we say anything about their implementation?
- Who are the national and EU experts in this field?
- Who of these can be approached to contribute, edit and/or provide feedback on draft texts?

A format will be developed in order to structure and present information on themes. This format may differ according to the scope of each theme. Thus, themes will allow

for more comprehensive and in-depth reporting than topics. On the other hand, the selected themes will together only include a selection of indicators from the ECHI short list.

#### *3.2.4 Information on public health policies, systems and priorities*

As indicated under 3.2.3, EUPHIX intends to expand public health information beyond the set of ECHI indicators, by compiling and presenting sections on public health policies at EU level and on national public health policies in all 25 member states. In countries where national or federal responsibilities are limited, a regional focus may be adopted. This information will include (1) overviews of general public health policies and (2) policies connected to specific public health problems such as smoking, nutrition, etc.

The general overview will include:

- *Public health responsibilities* and how they are organised within the broader *national health system organisation*;
- Overall public health policy *objectives and priorities*;
- *Analysis and comparison* of different policy approaches.

Information will also be provided on EU responsibilities in the field of public health as well as on selected public health policy initiatives and publications from intergovernmental organisations insofar as these resonate within major EU initiatives.

The more specific issues will cover:

- General information, international comparisons, and reflection *on national policies and priorities* as regards the health topic under consideration;
- When possible and relevant a reflection on the *relation between apparent health status differences and national policy*.

These sections about policy development and implementation will be incorporated at first in the extended ‘topic tree’, and also used to enrich the selected themes.

#### *3.2.5 Collecting and analysing data, reports and expertise.*

Based on the type of questions that will need answering (see above) the most appropriate data, information resources, and experts will be identified and data, reports and publications will be collected. These will then be incorporated in the topics and themes.

Information will be derived from various sources, predominantly EU and other international sources as well as national ones. As regards statistical data, the databases maintained by Eurostat, WHO-Euro and OECD will be central sources. EUPHIX will incorporate existing data and information only. Gaps in data and knowledge may be identified –as reporting these gaps may be policy relevant in itself!-, but the project will not generate new research or data.

Project staff, project partners and/or external experts will analyse the information. Based on that analysis, texts, graphs and maps will be compiled by project staff,

project partners or external experts, and edited. This will be done according to a protocol (see WPC's 3, 4).

Besides the project staff at RIVM, the project partners and external experts will have a prime role in deciding on which are the sources of data and information to be selected for the various topics and themes.

### *3.2.6 Steps in the process of content production.*

For the collection of data and other material needed to build a topic or a theme, the following steps can be identified:

- project staff selects topics and themes, with project partners;
- project staff designs framework for topic or theme;
- experts are identified and approached for producing the topic/theme (either project staff, project partner or external expert);
- contributions are drafted;
- (external) referees (experts) comment on the draft;
- comments are fed back to the experts that have contributed texts;
- contributions are put into the system by staff and/or (later) project partners
- update of the system to be discussed with partners
- comments from 'target group panel', an external group to judge the usefulness of the system.

## **3.3 Work Package 3. Building and implementing the web application**

The aim of this work package is to develop the EUPHIX web application through which all content matter described above will be made accessible in a systematic, logical and integrated way. This includes all characteristics that are needed to gradually update and maintain the system. Work Package 3 will include a series of tasks, as discussed in 3.3.1 through 3.3.6. Technical details will be elaborated later in an Annex.

### *3.3.1 Building the web application*

For the user, the web application should provide the following facilities:

- An opening screen showing the way to the topics, the themes, and to other basic facilities.
- Entry to topics and indicators via a systematic 'topic tree' (see 3.2.2), including text, tables, graphs, and maps.
- Entry to themes, by a separate listing, providing access to the more comprehensive sections, and including topics as described above (see 3.2.3).
- Browse for keywords by a search function.
- Internal links to references, abbreviations and definitions, and to related topics or themes within the system.
- External links toward relevant documents, databases and websites elsewhere.
- Printing facilities.

The web application is based on technology devised for the Dutch Public health information sites 'Nationaal Kompas Volksgezondheid' and 'Nationale Atlas Volksgezondheid'. This includes functionalities to create the lay-out, to edit documents within the system after introduction, and to use internal references to background databases containing literature references, abbreviations and a glossary of definitions. It also has functionalities to represent tables, graphics and maps either 'stand-alone' or (at a later stage) in connection with a separate database containing an underlying data repository. This data repository will be developed especially for EUPHIX.

Technically, the application uses ASP.NET as the internet software and MS SQL server as the database software.

### *3.3.2 Developing the Content Management System*

As indicated above, the Content Management System (CMS) is an editorial tool by which content editors can work on contributions within subsequent versions of the application, before actual release. It implies a workflow system for editing and approval by authorised persons. In connection with other projects at RIVM/VTM (such as Kompas), it is constantly improved to make it more user-friendly. It allows for introduction of tables, graphs, maps as well as the various types of links indicated above.

### *3.3.3 Developing the underlying database*

Normally, topics contain presentation of numerical data and statistics. These are selectively derived (often as aggregates) from existing databases (such as Eurostat, WHO-HFA or OECD health data), from relevant publications or from specific networks, and stored in a data repository designed for EUPHIX. This repository is set up to store data with the appropriate meta-data, and allows for the production of tables, graphs and maps following predefined procedures, which will then be introduced into the CMS.

### *3.3.4 Developing a geographical display tool*

This tool will be linked to the application to add maps that display national and regional health data. Similarly, information about the presence or absence of policies or the implementation of prevention measures will be displayed via this tool. The software used is ArcGIS9.

### *3.3.5 The EUPHIX web application and the EU public health portal.*

It is intended to integrate EUPHIX within the EU public health portal. It has to be investigated which is the most practically feasible solution for this. After the first development phase, it is crucial to work towards the sustainability of the system. For this, it is needed to define the appropriate place of EUPHIX among related web-based information products. Technical solutions for integration or linking EUPHIX to other

web-based systems should follow from this definition and from the state of the art of web technology, and especially the EU public health portal.

### *3.3.6 The EUPHIX Work-in-Progress (WiP) site*

A separate task within this work package is to develop a second web site that will provide information on the organisation and progress of the EUPHIX project as such, while the 'real site' is under construction and not yet generally accessible. The site includes information on the participants, the project objectives, the planning and progress, the meetings, etc. The address is: [www. Euphix.info](http://www.Euphix.info).

## **3.4 Work Package 4. Building expert networks and ensuring expert input**

The aim of this work package is to map existing expertise within and across Member States, develop expert networks that may contribute to EUPHIX, and to guide these experts in the process of contributing textual information and/or feedback. The deliverable of this Work package thus consist of the 'expertise map' and a set of working procedures using and maintaining the expertise network.

### *3.4.1 Mapping the expertise*

EUPHIX will derive its content matter from statistical data (1), reports and publications (2), and from actual expert input (3). This section will discuss work with respect to 1 and 2.

While the project partners may be relatively well equipped to identify and access statistical data (1) linked to ECHI shortlist indicators, some 'data doors' may still need to be opened at national level. In addition, the 'theme' approach requires in-depth understanding and specific expertise, both at cross-national and national level. External experts may help EUPHIX staff and partners to identify reports and publications (2), including work carried out by EU-funded projects and networks. They may also help to highlight groundbreaking national approaches.

Expert advice on public health policy reports (2) is also important, particularly when national structures and policy priorities are concerned. Thus, external expertise will be mapped as regards to:

- national data resources and experts, leading publications and reports;
- national public health policy priorities, and health system organisation;
- expertise at cross-national and European level, including network structures within the Community Public Health Programme, the Working Parties, EU-funded networks and projects, and leading European stakeholder organisations.

The purpose of this mapping exercise is to ensure the project will build on state-of the art knowledge that can be fed into EUPHIX' reports on health, prevention and policy at Member State as well as EU level, and into the compilation of cross-national comparisons.

### 3.4.2 Facilitating textual contributions from external experts.

Expert input (see 3.4.1) is an essential building block for EUPHIX' content. The degree to which external experts can be motivated and facilitated to contribute texts to the content system, may well hold the key to the system's success and sustainability.

Hence, in addition to the mapping of expertise carried out under 3.4.1, a broad range of experts will be approached to actively contribute to the system, for instance by writing or editing texts, compiling overviews or acting as a referee. Structured protocols will be developed to guide the experts in delivering their contribution. External contributions will be visibly acknowledged and the project will have to develop formal procedures to ensure reliability and quality as well as formal acknowledgement of contributions.

An important issue here is *protocol development*. These protocols should outline how experts are selected, how the writing and reviewing is organised, and how the data chosen for the respective contributions are processed by the EUPHIX staff.

## 4. Time frame, milestones, division of tasks

### 4.1 Time table

The contract period for EUPHIX is from July 1, 2004 to June 30, 2007. Since the project in fact only started by March 2005, we will formally ask the Commission for an extension period.

*Table 1* gives the timetable, with activities divided by the Work Packages. Roughly, there will be one Full Project Meeting (FPM) every 6 months. By each FPM, it is anticipated to have a further version of the web application, called 'Integrated Pilot' (see also under 3.1). It is also anticipated that there is a focus on the basic web technology aspects and database functionalities in the first half of the project period, and somewhat more on the production of content, with partners and experts, in the second half. Also in the second half, there will be attention for the links with other EU projects and activities. This is reflected in *table 1*.

Table 1. Time frame for EUPHIX activities in four Work Packages.

Time	WPc1	WPc2	WPc3	WPc4
Year-months	Management, sustainability	Content	Application	Networks
2005/ 4-7	Elaborate project aims; 1 <sup>st</sup> FPM June 9-10	First designs for content structure	First designs for application; writing functional design	Plan for establishing of the expert network
2005/ 8-10	Organise work in RIVM EUPHIX team; employ a broader expertise in RIVM/VTV	Elaborate the basics of EUphact/EUphocus structure	Develop Work-in-Progress (WiP) site	PR activities: leaflet, EUPHA presentation
2005/ 11 to 2006/ 1	Prepare <a href="#">integrated pilot 1.1</a> ; organise next FPM	Prepare pilot application (2 EUphoci, 6 EUphacts)	Prepare pilot application; develop database and map production	
2006/ 2-3	2 <sup>nd</sup> FPM 2-3 February: <a href="#">Integrated pilot (IP) 1.1</a> ; discuss first pilot; expand contacts with DG SANCO	Consolidate pilot with partners, reviewers; select 2 new EUphoci, 5-7 new EUphacts	Consolidate pilot with partners, reviewers	Start building networks and partner co-operation for new EUphacts, EUphoci
2006/ 4-8	Prepare next meeting; work with partners	Start work on new EUphacts/EUphoci; devise publishing procedures	Implement the adapted style sheet. Develop further application tools: database, maps, graphs	Work with partners; establish target group panel
2006/ 9-12	3 <sup>rd</sup> FPM 19-20 October, Luxembourg: <a href="#">IP1.2</a> ; discuss improvements and additions to the first pilot, further plans; expand PR activities. Consider conditions for sustainable maintenance	Implement new EUphoci and associated EUphacts; implement production protocols on editing and reviewing. Select and start on 2 new EUphoci, 6-8 new EUphacts; start work on policy overviews	Implement standards in database; production of tables, graphs, maps. Consider maintenance after end of project	Consult target group panel. Establish inventory of network partners
2007/ 1-4	4 <sup>th</sup> FPM April: <a href="#">IP</a>	Implement new	Adaptations	Continue

	<a href="#">1.3</a> ; discuss system extensions; further plans;	EUpoci and EUpacts; select extra EUpacts to cover (part of) the ECHI shortlist	for maintenance outside RIVM?	involvement of partners, networks
2007/ 5-8	<a href="#">IP 1.4</a>	Have more ECHI shortlist EUpacts covered; draft policy overviews	Prepare for handing over, depending on success application	2nd consultation target group panel
2007/ 9-12	5 <sup>th</sup> FPM November: <a href="#">IP 2.0</a> ; agreement on project finalisation	Last update of EUpacts and EUpoci	Last update of technical improvements	
2008/ 1-6	Prepare final report; final web site release; transfer to SANCO	Consolidation of content	Consolidation	

#### 4.2 Milestones

*Deliverables* are indicated in the columns corresponding to the Work Packages. In the column WPc 1 (management), 5 'integrated pilots' are mentioned. These integrated pilots are available for the EUPHIX team at RIVM and the project partners, but not for the public. These can be roughly described as:

- **IP 1.1:** The web site environment is experimental, content is implemented as drafts, to serve as examples for a first discussion of the structure and content of the application.
- **IP 1.2:** The web site environment is substantially upgraded, the content elements are reviewed, with some extension of topics, as required by the first two themes on smoking and obesity. Some exchange of expertise with project partners has been implemented.
- **IP 1.3:** Limited upgrade of the web site environment; substantial extension of themes and topics, increasingly using the project partners, expert networks and target group panel.
- **IP 1.4:** Consolidation of web site environment; further extension especially of indicator-related topics. Focus on sustainability of the system.
- **IP 2.0:** The final product of the EUPHIX project. A functioning prototype including information on a variety of ECHI shortlist indicators, and a set of policy-relevant health themes; a network of experts is available and procedures for further maintenance are set up.

#### 4.3 Division of tasks

This issue has been touched on in earlier sections and is summarised here, with reference to *table 1*.

The *EUPHIX staff at RIVM* will perform the following tasks:

- Management of the project as a whole (WPc 1)
- Organising the production of content contributions, by using the expert network, for writing and for reviewing (WPc 2).
- Editing the contributions into the application. This includes the production of graphs and maps (WPc 2).
- Producing some content contributions (WPc 2).
- The actual building and maintenance of the application and supporting hardware and software (WPc 3).
- Establishing and maintaining the expert network, producing work protocols (WPc 4).

The *project partners* will be involved in (see also Annex 2):

- Provide feedback and advice on all aspects of the project (all WPc's).
- Advise on the selection of new themes and related topics (WPc 2).
- Share expertise in the realisation of content contributions, by identifying experts, information and data sources, or by writing or reviewing contributions themselves, where appropriate (WPc 2).
- Share expertise in the development of the application, database and GIS software (WPc 3).
- Share expertise and contacts to establish the standing expert network for the maintenance of the EUPHIX application (WPc 4).

In practice, subgroups will be formed among the project partners for these different tasks, along with the WPc's, based on their specific expertise.

Annex 2 gives more details on proposed involvement of project partners.

The *external experts* will be involved for concise tasks such as writing a contribution, with the selection of the appropriate underlying data and information (in consultation with the project staff), or reviewing contributions.

The *contact persons at DG Sanco* will be involved in order to gear the developing application to the expectations, and to related internet developments, especially the EU public health portal.