RAND EUROPE

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND HOMELAND SECURITY
TRANSPORTATION AND INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

Jump down to document

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

Browse Books & Publications

Make a charitable contribution

For More Information

Visit RAND at www.rand.org

Explore RAND Europe

View document details

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see RAND Permissions.

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL REPORT

Interim Evaluation of the Public Health Programme 2003-2008

Final Report

Wija J. Oortwijn, Tom Ling, Judith Mathijssen, Maureen Lankhuizen, Amanda Scoggins, Christian van Stolk, Jonathan Cave

Prepared for the European Commission

RAND EUROPE

The research described in this report was prepared for the European Commission. The opinions expressed in this study are those of the authors and do not necessarily reflect the views of the European Commission.

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2007 RAND Corporation

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2007 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
Westbrook Centre, Milton Road, Cambridge CB4 1YG, United Kingdom
RAND URL: http://www.rand.org/
RAND Europe URL: http://www.rand.org/randeurope
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Contents

Executive summary **3**

CHAPTER 1 **Introduction** **9**
1.1 Context of evaluation 9
1.2 Objectives of evaluation 10
1.3 Outline of report 11

CHAPTER 2 **Methodology** **13**
2.1 Introduction 13
2.2 Methods used 16
2.2.1 Desk research 16
2.2.2 Survey of project leaders 16
2.2.3 Interviews 17
2.2.4 Analysis of data archives and databases 18
2.3 Difficulties and solutions 19
2.4 Methodological limitations 20

CHAPTER 3 **Results** **23**
3.1 Introduction 23
3.2 Relevance 23
3.2.1 Results from survey 23
3.2.2 Results from interviews 24
3.2.3 Results from desk research 25
3.2.4 Summary 29
3.3 Effectiveness 30
3.3.1 Results from survey 31
3.3.2 Results from interviews 33
3.3.3 Results from desk research 35
3.3.4 Summary 38
3.4 Efficiency 39
3.4.1 Results from survey 39
3.4.2 Results from interviews 39
3.4.3 Results from database analysis 42
3.4.4 Summary 46
3.5 Consistency and complementarity 47

3.5.1 Results from interviews....47
3.5.2 Results from desk research....48
3.5.3 Involvement of new Member States in the PHP....53
3.5.4 Summary....62
3.6 Acceptability....63
3.6.1 Results from interviews....63
3.6.2 Summary....64
3.7 Monitoring....64
3.7.1 Results from survey....64
3.7.2 Results from interviews....65
3.7.3 Summary....65
3.8 Success of Programme in enhancing the effectiveness of surveillance, control and response to health risks and threats that cannot effectively be tackled by Member States alone....66
3.9 Success of Programme interventions in encouraging citizens to take better decisions about their health....73
3.10 Effectiveness of incorporation of health policy considerations across Community policies....75
3.11 Success of Programme in tackling health determinants....80
3.12 Success of Programme in helping the public health system to reduce the incidence of disease and injury....85
3.13 Success of Programme in achieving synergies between national health systems 87
3.14 Success of Programme in generating and disseminating more and better health information to citizens, health experts and policy–makers....92

CHAPTER 4 **Conclusions and recommendations....94**
4.1 Introduction and Context....94
4.2 Conclusions and recommendations....96
4.3 Summary of recommendations for a new Public Health Programme....108
4.3.1 General recommendations for a new Health Programme....112

References....113

Appendices....122
Appendix 1: Results of survey....124
Appendix 2: Interview respondents....144
Appendix 3: Dissemination activities....150
Appendix 4: Network analysis....164
Appendix 5: European science network....182
Appendix 6: Efficiency of processes....184
Appendix 7: Use of financial resources....194

Executive summary

A coherent and coordinated health strategy was first put forward by the European Commission in May 2000. This built on the experience of eight separate health programmes. A key part of the new strategy was a Public Health Programme (PHP) and this was adopted in September 2002 (referred to as the 'Programme Decision')[1]. It was to run from January 2002 until December 2008. In keeping with Commission requirements, the Health and Consumer Protection Directorate General (DG SANCO) invited RAND Europe to conduct an Intermediate Evaluation of the Public Health Programme in February 2005.[2] The purpose of this evaluation is to provide an evaluation of the PHP at this interim stage and to contribute to thinking about the future delivery of the PHP and to the new Health Programme currently being developed by the Commission. The evaluation of the PHP is foreseen in Article 12 of the Programme Decision and aims to assess a) the impact achieved on health in the European Union; b) the efficiency of resource use; and c) how consistently and how well the Programme complements other relevant Community programmes, actions and initiatives.

The PHP aims to "to contribute towards the attainment of a high level of physical and mental health and well–being and greater equality in health matters throughout the Community, by directing action towards improving public health, preventing human diseases and disorders, and obviating sources of danger to health with a view to combating morbidity and premature mortality, while taking gender and age into consideration".[3] To deliver these the PHP supports activities such as conducting research, building networks, coordinating health activities, sharing experiences, and educating and disseminating relevant information and knowledge to improve health by preventing diseases and disorders and protecting health. The programme's initial budget allocation of 312 million Euros was increased to 354 million Euros to accommodate the 10 new Member States in 2004.

Approach to evaluation

Evaluation is central to supporting accountability and effective learning. RAND Europe is committed to supporting evaluation of this kind. However, it is worth noting that there are significant barriers to be overcome, and limitations to recognise, in conducting an evaluation of

[1] Decision No 1786/2002/EC of the European Parliament and of the Council of 23 September 2002. OJ No L 271, 09.10.2002.

[2] S12.425930

[3] Decision No 1786/2002/EC of the European Parliament and of the Council of 23 September 2002 adopting a programme of Community action in the field of public health (2003–2008). Official Journal of the European Communities (L 271/1 of 9.10.2002).

the sort presented here. First, the broad objectives of the PHP are subject to the influence of many factors over which the Commission has little or no control. Consequently, measuring the impact of the PHP is constrained since its actions are often mediated by the actions of independent organisations. Second, the PHP objectives do not always have measurable performance indicators, requiring a more qualitative interpretation. Third, the counter–factual (i.e. what would have happened in the absence of the PHP) is hard to specify not least because what might have happened in the absence of the PHP is hard to estimate. On the one hand, we have assessed whether the PHP has helped to deliver its intended objectives (such as greater synergy, coordination of efforts and so on) but on the other hand it is at least plausible that some of these things might have happened without the PHP. Finally, changes in (inter)national health policy generally cannot be causally attributed to single activities funded within the PHP, which lacks the leverage needed to independently deliver this because of its relatively modest scale.

This evaluation therefore triangulates evidence from a variety of sources to produce a reasoned set of conclusions and recommendations. The evidence base includes desk research, a survey of 59 project leaders, interviews with 84 key stakeholders (Commission officials, project and proposal leaders, representatives of interest groups, international organisations and national health authorities), a network analysis, and database analysis.

What we found

Perceived to be relevant

Those working closely with the PHP share a perception that projects it funds are relevant to the aims of the PHP, and that these aims help to meet the needs of European citizens. It achieves this by contributing to the production of new knowledge and to information sharing, addressing health problems over which national governments have limited traction, and creating opportunities to pool resources for mutual benefit. It has also supported more coordination of efforts, in part through forums, conferences, websites and other means of linking organisations and individuals. And it has stimulated networks and partnerships which included new and accession countries, international organisations, and other NGOs. All of the intended areas for action were funded and many had significantly more applications than could be funded. The projects that were funded were not only relevant to the aims of the PHP but were also adequately monitored against these aims.

Complicated priorities

The PHP brought together existing activities into a Programme. Its priorities therefore partly reflected its historic origins. It also reflected the Programme Decision. Priorities were also shaped by the aim of coordinating the PHP's activities with other EC policies and activities (with DG Research, for example). Priorities were further influenced by the need for co-financing and the need for partnerships that drew upon participants from a range of Member States. This complicated set of influences produces de facto priorities which may be entirely justified but which might not reflect precisely the needs of stakeholders or the needs of EU citizens.

A conservative portfolio of activities

The objectives of the PHP are delivered through annual work plans. These identify the areas of work to be accomplished and the delivery of this work is sufficiently monitored. Invitations to Tender and Calls for Proposals are generally over-subscribed and proposals and tenders meeting acceptable standards are awarded. To be clear, the general aims of the individual projects studied

(i.e. a representative sample of 59) were all compatible with the Programme Decision. However, it was often difficult to measure performance against these wider purposes of the PHP because of the limited use of (quantitative or qualitative) intermediary measures which could chart the progress of each project against the wider aims of the PHP. Open competition is a well established mechanism in securing tenders and proposals for securing value for money for the funder. However, this mechanism may also encourage more conservative, less ambitious, and less innovative proposals. This tendency is reinforced by the need to put together partnerships and to secure co-financing. The result is that the funding modalities might make it hard for the PHP to meet its more innovative or pro-active needs to provide it with a more balanced portfolio.

A need for legacy plans

The findings show that there is a widespread perception amongst stakeholders that PHP will reduce health risks by health promotion, disease prevention or health protection and improved surveillance. These anticipated results can be sustained through the strong networks PHP has both helped to constitute and has been part of. They can also be sustained through the information systems supported by the PHP (such as shared health measurements in the Member States). However, projects do not have specific legacy plans to support the sustainability of the benefits they produce.

A clear presence on the international stage

Amongst international organisations and stakeholders, the PHP has helped to establish (or at least not prevented) a widely shared view that it is appropriate for public health action to be organised at the European level. It has also established a clear presence on the World Wide Web, in international forums, and on the websites of international partners. This is important because the successful delivery of the PHP depends upon co–operation and agreement with international organisations and stakeholders.

Communicates well to 'inner circle' but perhaps not to wider potential audience

The PHP seeks to achieve its objectives in part through influence. Its influence is strengthened by providing not only funding but also profile and prestige for award holders, access to new partners and better access to information (e.g. via the Public Health EU–portal). In turn, this higher profile supports the dissemination of findings and the spread of good practice. However, there is an 'inner circle' of stakeholders who are very aware of the work of the PHP but a wider potential audience that may be missed. These are unlikely to be interested in 'generic' messages about the PHP but may be very interested in more specific messages, tailored to their particular public health interests.

Supports the work of Member States but not always their highest priorities

The PHP is in a position to do a number of things that add value to national policies in areas where national governments find it difficult or inefficient to take effective action on their own account. Despite such opportunities, consistency and complementarity with Member States is limited by three factors. First, the information collected and used by Member States on public health varies (although initiatives such as the PHP and OECD sponsored system of health accounts help limit this difference) and the categories used for data collection and evaluating impact also differ. Indeed, what is included as 'public health' varies in different national systems. Second, the capacity of Member States to participate in agenda–setting and in delivering public health gains varies. Third, priorities vary. For example countering inequality might be given a

higher priority in some states than in others. Policy makers from Member States reported that they supported and accepted the rationale for European intervention in public health. Interviewees suggested focusing on a smaller number of high profile issues known to be relevant to the concerns of Member States. However, this needs to be interpreted with care because what might be high profile and acceptable in one Member State might not be so in another.

Some complementarity with other Commission policies and actions

The PHP aims to not only provide complementarity with Member States but also with other Community policies and actions. Achieving complementarity across Community programmes faces barriers including the EC financial mechanisms that limit synergies between programmes. Some stakeholders stated that the extent to which the PHP interacts with other EC activities is small and that more horizontal information exchange is needed (e.g. in the field of quality of water and structural funds for health system development). However, in other areas there is quite some interaction between different programmes such as bioterrorism, pharmaceuticals and health information technologies.

Recommendations

The overall picture, then, is one of a Programme that has pulled together a more disparate set of activities and established a recognised position for public health at the European level. This is considered to be a legitimate and complementary role. The PHP is seen by stakeholders to manage its affairs efficiently. It is, at this interim stage, delivering the programme of work identified in its annual work plans. However, this is a good time for building on these achievements by:

- developing sharper priorities that are driven by stakeholder expectations and citizens needs as well as meeting policy goals and high standards of probity;
- monitoring its activities against not only the aims of each project but also the overall aims of the Programme Decision;
- communicating its priorities and actions more crisply to stakeholders, and targeting tailored messages to members of the wider public health committee.

Understanding what is required to deliver this would be facilitated by developing a logic model capable of tracing the precise causal relationships that are anticipated to connect the Programme activities to its intended outcomes. Logic models are commonly used evaluative techniques that allow a graphic representation of the "theory of action" – what is invested, what is done, and what are the outcomes. Logic models are one potential method of evaluation. The visual representation of the "theory of action" is easy to understand for all stakeholders, not just those with experience in evaluation. This allows a shared understanding of the project between all the stakeholders involved in the project and can surface unspoken disagreements and confusions. Thus, they can benefit organisations well beyond the production of a standard evaluation framework.

Our recommendations are more fully listed in Chapter 4 but they are summarised below. We have directed these recommendations to the programme, management and project levels. In our view this applies to both the final stages of the existing PHP and to considerations about any future programme of this sort.

Summary of Recommendations

	Recommendations
Programme	• Develop a more needs-driven prioritisation process e.g. roadmap • Make use of Delphis and other horizon-scanning exercises • Give the PHP a sharper, less complex profile and focus on areas with a high impact and high concern (including a concern to Member States) • Develop logic models for understanding the mechanisms to achieve intended outcomes • Use project-level feedback to report against Programme priorities as well as project priorities and draw these together into a Programme-wide 'dashboard'
Management	• Develop new funding modalities to encourage greater adventurousness and balance the current incentives towards a more conservative set of proposals • Work with projects to develop legacy plans to strengthen sustainability • Require, as part of the final evaluation, and exploit the findings of, bibliometric analyses of impact of PHP projects • Work with projects to target dissemination on particular stakeholders • Maintain and strengthen existing links with international bodies and develop a clear division of labour
Project	• Manage and limit the number of proposals to be assessed • Consider using indirect competition • Consider using closed competition • Consider using informal competition • Pro-actively support the development of innovative research teams through residential events • Address and reduce the risks of high turnover of project officers • Simplify application procedure • Require projects to monitor their progress against PHP priorities

CHAPTER 1 Introduction

1.1 Context of evaluation

The European Union (EU) has gradually become more active in health, especially with the entry into force of the Maastricht (1992) and Amsterdam (1998) Treaties that have given the European Community 'competence' and legal responsibility in the field of public health. Before the European Summit of 1991, health was not an explicit concern of the European Community. After the Summit, a specific chapter on health was included in the Treaty of Maastricht, emphasising that public health is an area of community concern.[4]

The Public Health Programme (PHP) is part of an evolving approach to public health taken by the EU. It has built on the lessons of the eight actions in the field of health prior to 2003 and in turn it has contributed to a new programme of Community action in the field of health (2007–2013). Furthermore, there has been an evolution during the life of the PHP. This context is relevant and important to this evaluation.

As defined in the Treaty of Maastricht and enhanced by the Treaty of Amsterdam a high level of health protection is one of the goals that must be ensured in EU policies and actions.[5] In addition, there is a role of the EU in assisting Member States to co–ordinate their action and collaborate on health, taking joint action with Member States on 'threats to public health', especially where these have a cross–border dimension, and for standard setting and regulating in specific areas such as pharmaceuticals, medical devices, blood products and organs for transplantation.

In relation to this, the European Commission (EC) presented a Communication on the Framework for Action in the Field of Public Health as an initial strategy document to develop work on public health in 1993. This led to the adoption and implementation of eight separate action programmes (health promotion, health monitoring, communicable diseases, cancer, rare diseases, injury prevention, pollution related diseases and drug prevention).[6] A coherent and co–

[4] Hospital Committee of the European Community (1993). *Hospital services in the E.C. organisation and terminology*. Leuven: Ceuterick.

[5] Deloitte (2004). European Commission – Health and Consumer Protection DG. *Final Evaluation of eight Community Action Programmes on Public Health*. Diegem: Deloitte. Available at: http://europa.eu.int/comm/health/ph_programme/evaluation_en.htm (visited 15 May 2006).

[6] A description of the previous programmes can be found on: http://europa.eu.int/comm/health/ph_overview/previous_programme/previous_programme_en.htm (visited 15 May 2006).

ordinated approach to health policy was first set out in the EC health strategy put forward in May 2000. As a key component of the health strategy, the European Parliament and the Council adopted a new consolidated Community action plan for public health in 2002, the PHP.

The PHP runs from 2003–2008 and aims to 'contribute towards the attainment of a high level of physical and mental health and well–being and greater equality in health matters throughout the Community, by directing action towards improving public health, preventing human diseases and disorders, and obviating sources of danger to health with a view to combating morbidity and premature mortality, while taking gender and age into consideration'.[7] The PHP seeks to deliver its aims through an integrated and inter–sectoral strategy. This includes developing links with relevant Community programmes, other international organisations, and Member State governments to promote synergy and avoid overlaps. The first two years of the Programme principally involved laying down the foundations for a comprehensive approach with three priorities: health information, health threats,[8] and health determinants.

In the beginning of 2005, the Commission adopted a Health and Consumer protection Strategy and a proposal for a European Parliament and Council Decision creating a new Community programme for Health and Consumer protection 2007–2013. This was built on the health strategy (2000) and the PHP, taking into account the results of the reflection process on health and the development of consumer policy. However, following the European Council budgetary discussion in the end of 2005, the proposal needed to be revised. The new proposal for a European Parliament and Council Decision establishing the Community Programme for Health 2007–2013 is currently discussed by Council and Parliament in view of its adoption. The new Programme focuses solely on health and there is a separate proposal for consumer protection.[9]

As described in Article 12 of the Programme Decision, the PHP should be externally evaluated with regard to the implementation and achievements. RAND Europe was asked to support DG Health and Consumer Protection of the EC to evaluate the first three years of the PHP 2003–2008 with regard to its effectiveness in relation to the objectives expressed in the Programme Decision (1786/2002/EC). The evaluation should provide insights for delivering the remaining years of the Programme and preparing for the 2007–2013 Programme.

1.2 Objectives of evaluation

The objectives of the interim evaluation are to assess:

1. The impact achieved on health in the EU
2. The efficiency of resource use

[7] Decision No 1786/2002/EC of the European Parliament and of the Council of 23 September 2002 adopting a programme of Community action in the field of public health (2003–2008). Official Journal of the European Communities (L 271/1 of 9.10.2002).

[8] At the EU level, different types of health threats are distinguished: 'anticipated threats' such as pandemic influenza or 'unforeseen threats' such as an epidemic similar to SARS. Source: Activities of the European Union. Summaries of Legislation. *Preparing for an influenza pandemic and other health threats*. Available at: http://europa.eu/scadplus/leg/en/cha/c11541a.htm (visited 22 June 2006).

[9] Overview of health policy, available at: http://ec.europa.eu/health/ph_overview/overview_en.htm (visited 14 August 2006).

3. How consistently and how well the Programme complements other relevant Community programmes, actions and initiatives.

These objectives are translated into the following (summative) evaluation questions (and related evaluation criteria):

- **Relevance:** To what extent are the policy's objectives pertinent in relation to the evolving needs and priorities in the policy field (or of the target population)?
- **Effectiveness and sustainability:** To what extent have the policy's impacts contributed to meeting near–term and long–term policy objectives?
- **Efficiency:** How economically have the various inputs been converted into outputs (and outcomes)?
- **Consistency:** To what extent are consistency and complementarity ensured between policy actions and other policies and activities?
- **Acceptability:** To what extent do the policy's intended or unintended impacts concur with the interests of stakeholders?

These criteria are specified in the evaluation requirements of the Terms of Reference (contract SANCO C1/FS (op) D(2005) 310880, 14 December 2005). The related evaluation questions are addressed by retrospective analysis, i.e. this report provides an analysis of desk research and the results of the survey and an overview of the results of the interviews and the database analysis to answering the evaluation questions. This evaluation will also explicitly consider the implications of the evidence and analysis of forward–looking, formative questions that drill down into the meaning of sustainability (see Chapter 2, Table 1). The evaluation will not focus on the success of individual projects/activities that were funded within the Programme, but on the Programme as a whole with other activities such as calls for tender, dissemination activities, legislative and political input. The evaluation is also expected to contribute to learning both to better understand the impact of the existing Programme and to consider future action.

1.3 Outline of report

In this report we detail the work of the interim evaluation which started after acceptance of the Inception report (April 2006), in which our detailed methodology was presented.[10] In Chapter 2, we describe our methodology that has been followed to address each of the evaluation questions and we report the difficulties and methodological limitations that we encountered in executing the interim evaluation. The results, addressing the summative and the formative questions are presented in Chapter 3. In the final chapter (Chapter 4), we will present conclusions and recommendations.

[10] http://europa.eu.int/comm/health/ph_programme/eval2003_2008_en.htm

CHAPTER 2 Methodology

2.1 Introduction

The main data collection methods used are *desk research, a survey of project leaders, interviews with a variety of stakeholders, analysis of data archives and analysis of the project database* (i.e. portfolio analysis). In this Chapter, we provide a concise overview of the methodology used to answer the evaluation questions (Table 1).

Table 1. Linking evaluation questions to methods of data collection

Evaluation criteria addressed by summative evaluation questions, stated in the Terms of Reference	Desk research	Survey	Interviews	Portfolio analysis	Analysis of data archives
Relevance					
1. To what extent does the current Programme address the needs of stakeholders and the EU citizens?	X	X	X	X	
2. How can a model identifying the mechanisms for arriving at Programme policy be designed and used, signalling how specific actions would lead to outputs, how the real impact are achieved and identifying how the Programme objectives address the needs of stakeholders?	X	X	X		
Effectiveness and sustainability					
3. To what extent are the objectives set in the Programme Decision and annual work plans achieved?	X	X		X	
4. To what extent do the results achieved through the provisions of financial support for specific projects contribute to the achievements of the objectives of the Decision?	X	X	X		
5. Are the results sustainable in the mid– and long term, i.e. after the funding granted by the EU has ceased?	X	X	X		

Evaluation criteria addressed by summative evaluation questions, stated in the Terms of Reference	Desk research	Survey	Interviews	Portfolio analysis	Analysis of data archives
6. To what extent are the results of projects thoroughly disseminated to relevant stakeholders, including citizens, public health practitioners, policy–makers, researchers?	X	X			X
7. To what extent does the Programme complement national policies?	X	X	X		
8. Have sufficient and well functioning/pragmatic synergies been created with international organisations?	X	X	X		
Efficiency					
9. Do the selection, assessment, evaluation and management processes, starting from the call for proposals until the final reporting on selected and co–financed individual projects ensure satisfactory outcomes of the actions?	X	X	X		X
10. Are the whole Commission selection and management processes carried out by its services in a cost–effective way?	X	X	X		X
Consistency and complementarity					
11. To what extent is consistency and complementarity ensured between actions implemented under the current Programme and other EU policies and activities?	X		X		X
Acceptability					
12. To what extent do stakeholders accept public health policy in general and the way in which the Programme implements this policy?	X		X		
Monitoring					
13. Does the current monitoring system deliver the necessary information to support a sound implementation of the Programme?	X	X	X		

Evaluation criteria addressed by formative evaluation questions to consider future action	Desk research	Survey	Interviews	Portfolio analysis	Analysis of data archives
Sustainability					
A. How successful is the current Programme in enhancing the effectiveness of surveillance, control and response to health risks and threats that cannot effectively be tackled by Member States alone? What are the reasons for success or lack of success and what implications do they have for future activities?	X				
B. How successful have Programme interventions been in encouraging citizens to take better decisions about their health and what implications does this have for future action?				X	X
C. How effectively are health policy considerations incorporated across Community policies? What does this tell us about achieving this more effectively in the future? What implications does this have for future action?	X		X		
D. How successful has the current Programme been in tackling health determinants? What are the barriers and facilitators to successful delivery? What implications does this have for future action?	X			X	X
E. How successful has the current Programme been in helping the public health system reduce the incidence of disease and injury? What are the barriers and facilitators to successful delivery? What implications does this have for future action?	X		X	X	X
F. How successful has the current Programme been in achieving synergies between national health systems? What are the barriers and facilitators to successfully achieving this? What implications does this have for future action?	X		X		X
G. How successful has the current Programme been in generating and disseminating more and better health information to citizens, health experts and policy–makers? What are the barriers and facilitators to successful dissemination? What implications does this have for future action?	X		X	X	X

2.2 Methods used

In the sections below, we specify the activities performed per method of data collection.

2.2.1 Desk research

We used several documents and sources to direct our evaluation (to addressing *evaluation questions 1–13* and *formative questions A, C–F* as stated in Table 1 above). For this purpose, we have reviewed:

- Annual work programmes
- Calls for proposal
- Calls for tender
- Proposal documentations
- Programme Decision
- Literature on dissemination
- Commission guidelines on dissemination
- Public health policy documents of international organisations (e.g. Organisation for Economic Co–operation and Development (OECD) and World Health Organization (WHO))
- Project database
- Analysis of references to the PHP on other portals
- Identification of the number of projects that have a project website
- Programme statements with regard to addressing the stakeholder and citizen needs
- EC and national public health policies
- Literature on sustainability
- Guidelines on monitoring.

2.2.2 Survey of project leaders

Project leaders of activities funded within the Programme during the years 2003–2005 were surveyed. The key areas addressed by the survey include general information about projects funded within the PHP; satisfaction with PHP; programme management; project follow–up by the Commission; importance of PHP; contribution to the objectives; dissemination of research findings; capacity building and sustainability; use of research findings in public health policy; application of research findings in public health practice; and broader impact on public health/the health care sector. These topics specifically address *evaluation questions 3–8 and 13*.

The survey was set up as an electronic survey and made available at www.phpsurvey.org. Two potential participants of the Programme (Prof. HD Banta, WHO consultant, France and Dr J. Asua, Head of Public Health Policy, Basque Government (Public Health), Spain), tested the survey before its official launch. Both experts had some minor comments that were included in the final version of the survey. In addition, we prepared a mandate letter that was finalised by the acting Director of DG SANCO, Directorate Public Health and Risk Assessment (Dr G.

Gouvras). This mandate letter was sent as an attachment to an invitation letter addressing all project leaders (both resulting from call for tenders and call for proposals) funded within the Programme.

All project leaders were invited to participate in the survey. We aimed to receive a minimum response of 50 completed surveys (which amounts to a response rate of about 30%). Finally, we received 59 completed surveys (response rate of 37%)[11] that were fed into the evaluation (see Appendix 1 for an overview of survey respondents).

The survey data is quantitatively (SPSS) and qualitatively assessed, and presented in Appendix 1. In Chapter 3, we synthesized the data from the survey in answering the summative evaluation questions.

2.2.3 Interviews

With the interviews we addressed *evaluation questions 1–2, 5, and 7–13* and *formative questions C, E–G* (see Table 1 above). The interview protocol is partly based on the interview questions used in the former evaluation by Deloitte[12] (to support learning across the evolution of public health policies). This protocol was tailor–made for each stakeholder group to be interviewed (representative sample of project leaders of granted projects;[13] proposal leaders of rejected proposals; directly involved officials of DG SANCO and committee members; officials of other DGs; National Health Authorities; international organisations (e.g. WHO); and interest groups, including EU agencies (e.g. European Monitoring Centre for Drugs and Drugs Addiction).

Before inviting stakeholders for an interview, the draft interview protocol has been tested by two (potential) stakeholders of the Programme: Professor H.D. Banta, WHO consultant, France and Dr Tamara Wanker, Dutch Ministry of Health, Department of International Affairs and representative of national focal point in the Netherlands. Both experts made some comments and relevant additions that have been included in the final protocol. The final protocol was sent to DG SANCO for final approval.

The stakeholders to be interviewed were selected in collaboration with DG SANCO. The invitation sent for an interview was also accompanied by a mandate letter of DG SANCO, that we prepared and that was finalised by the acting Director of DG SANCO, Directorate Public Health and Risk Assessment (Dr G. Gouvras). In total we planned 84 interviews. In Table 2, we provide an overview of the number of planned, performed and declined or redirected interviews per stakeholder group (see Appendix 2 for an overview of the persons interviewed).

[11] In general, response rates for online surveys range from 2%–30% (http://en.wikipedia.org/wiki/Statistical_survey).

[12] Deloitte (2004). European Commission – Health and Consumer Protection DG. *Final evaluation of eight Community Action Programmes on Public Health.* Diegem: Deloitte. Available at: http://europa.eu.int/comm/health/ph_programme/ evaluation_en.htm (visited 15 May 2006).

[13] What constitutes a representative sample has been described in detail in the Inception report of April 2006. Available at: http://ec.europa.eu/health/ph_programme/documents/evaluation/inter_evaluation_en.pdf

Table 2. Performed, declined and redirected interviews

Stakeholder group	Planned and performed	Interviews declined	Interviews redirected
Commission officials and Programme committee members	15	7	4
National health authorities	15	7	3
Representatives of international organisations	5	1	1
Representatives of interest groups, European agencies and of academics	5	0	3
Project leaders[14]	37	5	7
Proposal leaders[15]	7	7	0
Total number of interviews	84	27	18

The interviews were either performed face–to–face or by telephone. The notes of the interviews were summarised per question and sent back to the interviewee for verification. After verification, the data from the interview notes were analysed (qualitatively and quantitatively) per stakeholder group and per question. In Chapter 3, we provide the results of the interviews performed (the interview notes per stakeholder group are available upon request).

2.2.4 Analysis of data archives and databases

The analysis is used to answer summative *questions 9 and 10*, focusing on efficiency of the PHP. We analysed the project database (CIRCA, available at: http://forum.europa.eu.int/Public/irc/sanco/Home/main?index) for 53 selected projects (i.e. the representative sample) to:

- Determine the budget per project: type of costs, variance in project budgets

[14] 37 out of 53 selected projects (expected response rate: 70%) that are considered a representative sample (see Inception report, Available at: http://ec.europa.eu/health/ph_programme/documents/evaluation/inter_evaluation_en.pdf).

[15] 7 out of 10 selected proposals (expected response rate: 70%) that are considered a representative sample (see Inception report, Available at: http://ec.europa.eu/health/ph_programme/documents/evaluation/inter_evaluation_en.pdf).

- Calculate the ratio between the numbers of hours worked on administration versus actual work on public health
- Determine the source and amount of co–funding of the projects
- Determine the output of the projects
- Determine engagement of Member States by means of analysis of network of institutions across the PHP and geographic networks within projects.

In Chapter 3, we provide the results of the analysis focusing on financial leverage of the PHP.

2.3 Difficulties and solutions

We had to face a number of technical problems during the evaluation. Below we specify the limitations and how we addressed them during the evaluation.

Survey

Contact details of survey invitees:

- The email addresses of the projects have been retrieved from the project database available on the DG SANCO website. However, we could not find contact details and email addresses for several projects granted in 2003 and 2004. We therefore asked DG SANCO, and they provided the necessary information.

Technical problems of survey:

- Three respondents reported technical problems while filling in the survey but these were resolved and have not led to invalid responses.
- Technical issues were experienced with some of the questions (e.g. no data was collected on two sub questions). These questions were not included in the analysis.

Time to complete the survey:

- Although piloted, filling out the survey took more time than expected. This might have discouraged project leaders from completing the survey.

Timeliness of the survey:

- Many respondents commented that aspects of the survey were difficult to answer because of the early stage of development of their project. It is therefore recommended to see the analysis as a baseline measurement. Measuring payback of the projects is recommended after the projects/activities have been finished (i.e. at least 24 months).

Interviews

Contact details of some of the potential interviewees:

- Retrieving potential interviewees from international organisations (OECD, WHO) and other stakeholders (e.g. European Centre for Disease Prevention and Control, European Environment Agency) who have expertise relating to the PHP was quite time–consuming. We therefore asked DG SANCO to verify the list of potential interviewees.

Participation in interviews:

- Invitations to an interview were declined in a few cases (see Table 2 above). Potential interviewees, including those receiving EC funding are, however, not obliged to participate in evaluation processes that do not require an unreasonable amount of time and cost. To enhance co–operation, we asked for a mandate letter from DG SANCO.

Project database (portfolio analysis)

- The quality and availability of data was an issue when reviewing the project database. For example, some of the projects were not yet started as they were still in the negotiation phase and the database does not include evaluation reports for 2003 projects. In addition, the labels for cost categories changed (e.g. 'administrative costs' were labelled as 'other costs' in 2005), which made it difficult to get a clear picture of the relative importance of administration in total costs of the selected projects.

2.4 Methodological limitations

Evaluations very often draw upon monitoring data in order to identify input, processes and outputs. As the Commission recognises monitoring is a continuous and systematic process carried out during the duration of an intervention, which generates quantitative data on the implementation of the intervention, but not usually on its effects. The intention is to correct any deviation from the operational objectives, and thus improve the performance of the programmes as well as facilitate subsequent evaluation.[16]

Monitoring, as OECD has argued, is 'a continuous function that uses the systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds'.[17]

DG SANCO, both before and, more recently, through, the PHP has actively supported the monitoring of public health. It has done so both directly to projects it funds and indirectly through supporting monitoring and evaluation activities in international organisations, Member States and Candidate Countries (see below, Chapter 3). A 'clear evaluation process and an understandable description of the expected results' is a clearly stated priority for selecting projects.[18]

Therefore the PHP contributes directly and indirectly to the monitoring and evaluation arrangements relating to public health. However, *programme evaluation* raises acute problems arising in particular from the need to attribute outcomes to the particular activities marshalled as part of the Programme.[19] Addressing this problem requires monitoring data which is structured

---

[16] European Commission, Budget (2005). *Evaluation of EU activities. An introduction*. Brussels: European Commission. Available at: http://ec.europa.eu/budget/evaluation/pdf/eval_short_guide_en.pdf

[17] OECD (2002). *Evaluation feedback for effective learning and accountability* Paris: OECD.

[18] http:///ec.europa.eu/health/ph_programme/projects/projectsen.htm (visited 27 Deeember 2006).

[19] Perrin, B. (1998). Effective use and misuse of performance measurement. *American Journal of Evaluation*, 19 (3): 367–369.
Perrin suggests 'A programme may fail to meet its performance targets because the programme theory is wrong (in which case it should be replaced with something else) but it may also fail to do so for a variety of other reasons, such as:

around the particular logic, or logics, of the whole Programme (as distinct from monitoring the individual parts). This would create a ready source of data to support ongoing improvement and learning, and periodic evaluation.

However, the development of such an approach to monitoring is costly and time–consuming and its practice is still in its early stages of development.[20] Its costs could only be justified if it provided identifiable efficiencies and improvements. Such a framework would focus on, for example, evidence of how health information was being used and the effectiveness of networking and if the framework was providing value for money, there would be evidence of how these data were used as part of the strategic management of the Programme. This would also provide evaluators with Programme–wide data on the specific mechanisms intended to deliver benefits for European citizens and so overcome at least some of the problems of attribution identified in this evaluation.

The approach adopted in our evaluation recognises that there is a substantial problem of attribution (i.e. the ascription of a causal link between observed changes and a particular programme) at the heart of this evaluation. The intended outcome of the PHP activities is the improvement of public health services with consequential health benefits for European citizens. However, although DG SANCO has direct control over its own activities, it can only be held to account for how well it uses its own resources to influence and inform other stakeholders to promote improvement. Even so, stakeholders of the EC rightly want to have an evidence–based judgement of the extent to which its activities have borne fruit. For example, the PHP hopes to influence thinking on public health at 'all levels of society'. The impact on individual citizens' attitudes and behaviour are, however, not measurable. For example, although we believe that the outputs of PHP activities related to alcohol consumption have a positive leverage effect on EU alcohol policy–making, we have found no solid evidence on the extent of their impact. This calls for an evaluation framework with sound and quantifiable indicators to measure programme outcomes. The problem of attribution is not unique for the PHP. Also, multiple mechanisms on different levels (macro, meso and micro) are available to improving the quality of care – and the multiple barriers to delivering and evaluating such improvements.[21]

The problem of attribution is exacerbated by the problem of the counter–factual (i.e. what would have happened in the absence of the PHP). In experimental models this is dealt with by having a control to compare the performance of one group with the intervention with an otherwise similar group without it. There is no meaningful control group for the PHP. Alternatively, an evaluation might use a 'before and after' analysis. However, there are too many other policies and interventions (or too many secular influences) to allow evaluators to separate out the independent impact of the PHP. Indeed, given the pressures to take action on an international level in Europe

---

inappropriate targets or measures which are not identifying other possible programme outcomes; faulty management or implementation; under (or over) funding, unique circumstances (e.g. an Employment training programme during a recession or when the only employer in a single–industry town closes); the right programme in the wrong situation (e.g. effective for some (but not all) of the types of clients it has been serving); measurement of outcomes attempted too soon or at the wrong time, faulty statistics, and so on.'

[20] See Kusek, J.Z. and Rist, R.C. (2004). *Ten steps to a results–based monitoring and evaluation system.* Washington DC: The World Bank.

[21] Leatherman, S. and Sutherland, K. (2003). *The quest for quality in the NHS: a mid term evaluation of the ten year quality agenda*. London: The Stationery Office.

to address emerging health threats and exploit the new opportunities then in the absence of the PHP, there would undoubtedly have been efforts (either elsewhere in the Commission or in other international bodies) to address some of the aims of the PHP.

Therefore the impact of the PHP cannot helpfully be estimated by assuming that, in its absence, nothing would have happened. A more appropriate counter–factual might therefore be thought to be either a differently structured PHP or a differently structured institutional architecture for delivering the aims of the PHP. This, inevitably speculative, approach might provide useful insights but it is based on challengeable assumptions about what might have happened.

These methodological limitations do not mean that an evaluation is impossible. We address these through a multi–method approach (often referred to as 'triangulation') involving the combination of several streams of research which corroborate and support each other. This may not permit certainty and precision but it can deliver informed and sound judgements. We concur with the comment (made in a slightly different context) that 'A substantial collection of problem–solving success stories, accumulated over time, none of them claiming causality, constitute a compelling public account of intelligent resource allocation and agency effectiveness'.[22]

There is a further contextual limitation to the evaluation. At the heart of an evaluation is an analysis of why intended results were or were not achieved. In general, this is easier where the intended results are specific, measurable, attributable and time specific. In a complex intervention, which intends to inform and influence change (of other organisations), it is understandable that the Programme does not have a rigid set of performance indicators, laid down at the start of the Programme and left unchanged for long periods or even the whole life of the Programme. This allows the Programme to be responsive and co–operative, gaining great benefits from co–ordinating efforts and sharing knowledge. However, it also means that there is no limited, quantitative and rigid set of performance criteria against which the Programme could be measured.

Taking the methodological limitations into account, we have – following existing guidelines for evaluation for public health programmes[23] – carefully evaluated different parts of the Programme and put them together in compelling ways. In the next Chapters we describe our findings and conclusions with regard to the effectiveness of the PHP.

[22] Sparrow, M.K. (2000). The regulatory craft controlling risks, solving problems and managing compliance. Brookings Institution Press.

[23] http://www.worldbank.org/oed/oed_approach_summary.html

CHAPTER 3 Results

3.1 Introduction

In the following sections we describe the results with regard to the summative (sections 3.2 –3.7) and formative (sections 3.8 – 3.14) evaluation questions (see Chapter 2, Table 1). The synthesised evidence from the interviews, survey, desk research and database analysis is provided in subsections, while more detailed information can be found in the Appendices.

3.2 Relevance

The issue of relevance has been addressed by two evaluation questions:

1. To what extent does the current Programme address the needs of stakeholders and the EU citizens?

2. How can a model identifying the mechanisms for arriving at Programme policy be designed and used, signalling how specific actions would lead to outputs, how the real impact are achieved and identifying how the Programme objectives address the needs of stakeholders?

The PHP seems to be relevant to the needs of stakeholders and European citizens to the extent that it meets their real and high priority health needs, and that these needs could not have been better met in other ways. The PHP seeks to meet these needs in three distinct ways: to improve health information and knowledge for the development of public health; to enhance the capability of responding rapidly and in a co–ordinated fashion to threats to health; and to promote health and prevent disease through influencing health determinants across all policies and actions.

The results are based on the survey and the interviews. In addition, we analysed the information and dissemination materials available on the PHP website and also references to the PHP on various external organisation websites to determine the success of the PHP in generating and disseminating more and better health information to citizens, health experts and policy–makers (see Appendix 3 for more detail).

3.2.1 Results from survey

Evidence from the survey (see Appendix 1 for more detail) shows that most respondents (n=41, total respondents: n=53) consider *the strategic orientation of the Programme to be responsive to priorities* and 'addresses many of the public health issues across Europe,' other respondents mentioned areas that need to be emphasised by the Programme, such as drug addiction, cancer screening programmes, and policy and implementation. This was also seen in the interviews, in which we addressed several issues of relevance as described below.

3.2.2 Results from interviews

In the interviews we asked about awareness and knowledge of the PHP's targets and objectives, whether international organisations and national health authorities effectively are involved, the extent to which the PHP addresses relevant target groups and whether target groups benefit from the PHP.

Awareness and knowledge of the PHP's targets and objectives and of the parties involved (e.g. WHO, OECD) seems to be positively related to the level at which the stakeholder groups operate and the level of interaction with the EC. For instance, representatives of national health authorities and international organisations are well informed about the PHP. This often occurs through direct interaction with the EC (by attending working group meetings, or being high level and/or Programme committee members). The same applies to organisations that operate at national level in Member States. For individual organisations involved in projects or proposals we found that the awareness varies somewhat. Some have read the PHP documentation and checked the EC website, whereas others have attended PHP information days. All interviewed stakeholders are aware of information of PHP provided on DG SANCO's website and through newsletters. However, from the interviews we conclude that the level of awareness on the PHP's targets and objectives is higher when interaction with the EC increases (e.g. information days, Programme committee meetings).

The awareness of specific activities started under the PHP is smaller. All stakeholders are by and large aware that the projects are presented on the website, yet specific knowledge of the projects is often superficial due to the large number of projects, or is restricted to a small number of projects in the own area of expertise. The Programme committee members annually receive an overview of selected PHP projects but several members expressed the need for being more regularly informed on the status and outcomes of PHP projects and calls for tenders (e.g. on CIRCA or DG SANCO website).

In general commission officials, national health authorities, international organisations, interest groups and project leaders believe *the effects of the PHP meets health challenges in Member States, at least in a broad sense*. For example, PHP priorities aligned or overlapped with national priorities. However, because of its design and short time frame the Programme is not always able to tackle emerging health issues or rapidly changing health priorities in Member States.

The Programme addresses stakeholder and citizen needs according to the interviewees. However, the definition of *relevant* differs across and within stakeholder groups with respect to groups that are targeted and groups that should be targeted (e.g. universities, NGOs, national health authorities, centres of excellence, public health institutes and citizens). Stakeholders questioned whether target groups are being addressed adequately:

- Needs could only be met if the objectives are envisaged.
- Successfully addressing stakeholder and citizen needs requires appropriate dissemination channels. Although Programme outputs are addressing relevant stakeholder groups, the majority of the interviewed stakeholders opinion that dissemination of the outputs can be improved to address a wider relevant target audience, including European citizens.
- European solidarity needs to increase otherwise the Programme will not be able to meet its overall objective.

- It is not possible to address all stakeholder and citizen needs given the current budget of the Programme and lack of sufficient human resource capacity at DG SANCO.
- There is too much emphasis on topics rather than on impact. Importantly, measuring impact of activities requires the development and use of concrete targets and indicators. Given its potential implications for the PHP, it is our opinion that this should be further developed.

The majority of interviewees believe that *all target groups are to some extent benefiting from the Programme in general or from its activities in particular*. Important benefits mentioned were: network creation, exchange of knowledge and good practices, collaboration on a European level and capacity building. Further responses regarding the extent to which these groups are benefiting were mostly based on individual and specific examples. For instance, activities in the field of prevention of alcohol abuse resulted in more networks and better informed NGOs, governments and professional bodies. Other successful areas include health indicator development and surveillance of communicable diseases. However, most of the respondents thought it was hard to describe the extent to which target groups are benefiting from the Programme because relevant outcome indicators are lacking or because it is just too early to tell.

There are several factors influencing whether stakeholders benefit from the PHP: governance to disseminating results and implementing activities, political discussions with regard to the co–ordination and actions undertaken to improve the Programme's transparency, the strategic level of activities and target groups addressed.

To further maximize Programme benefits for stakeholder and citizen needs, DG SANCO may have to set priorities and objectives as well as formulate clear expectations and indicators ex ante. Also, it could improve consultation procedures with Member States, international organisations and representative organisations. Other suggestions include: involving national competence centres in disseminating outputs and partnerships with national ministries and NGOs in order to develop national outreach activities.

3.2.3 Results from desk research

It should be clear that the PHP is mainly driven by policy inputs from institutions and Council guidelines. The problem of translating policy into priorities has been well described in the literature.[24] Priority setting involves identifying problems of concern or relevance to policy–makers, translating these problems into activities, setting priorities between these activities, communicating the priorities and monitoring and reviewing the activities undertaken. It is known that the context in which priorities are being set is crucial to the approach taken. In general the procedure involves six steps:

1. Clarifying goals and responsibilities
2. Choosing a general approach, method, and criteria for priority setting
3. Establishing advisory mechanisms and relations with external bodies
4. Establishing arrangements to support and manage the procedure

[24] Henshall, C.H., Oortwijn, W.J., Stevens, A., Granados, A. and Banta, H.D. (Eds) (1997). Priority setting for health technology assessment: theoretical considerations and practical approaches. In: EUR–ASSESS report. *International Journal of Technology Assessment in Health Care*, 13; 2: 144–185.

5. Defining a timetable and cycle of activity

6. Evaluating and developing the procedure (resulting in Programme changes, the agendas of collective events and the emergence of new action domains)

Approaches to priority setting can vary in the extent to which the procedure is explicit and systematic, the extent to which external input and advice is accepted or actively sought, the relative weight given to the views of policy–makers and other stakeholders, the extent to which the procedure is transparent and the effort and resources devoted to the procedure. In this respect, systematic monitoring of the Programme as a whole is important. Monitoring is essential to a programme that actively engages with public health problems – especially because of its influence on different policy areas (e.g. nutrition and physical activity). The Programme therefore needs to be responsive horizontally with parallel efforts in other DGs and Member States, and in interaction with other international organisations such as the WHO. It also needs to be responsive vertically, looking for and responding to signals from, e.g. researchers and health practitioners to develop a public health research agenda.

In addition, dissemination activities are of relevance to increase awareness of public health matters. To determine the success of the PHP in generating and disseminating more and better health information to citizens, health experts and policy–makers we analysed the information and dissemination materials available on the PHP website and also references to the PHP on various external organisation websites. Web resources are increasingly being utilised to promote the diffusion and exchange of information.[25]

DG SANCO – PHP website

Following results of a DG SANCO web survey,[26] the vast majority of DG SANCO websites (including public health) users are from trade and industry or government. However, there were also high numbers of academics, NGOs and members of the public. The main reason for use is to keep track of legislation. Areas for improvement include: navigation system of the site; dates posted on website updates; access to information about the process of legislation – i.e. whether things are with the European Parliament or the Council and changes/amendments that have been made; more language versions of more pages; more interactive information exchange, for example through forums; and availability of more contact details. In addition, DG SANCO continuously collects information about, e.g. the number of visits of the websites, top 10 of most visited pages, and top 10 search phrases (per month).

The PHP website (http://ec.europa.eu/health/ph_programme/programme_en.htm) organised its dissemination materials under eight major headings: overview of health policy; Programme 2003–2008; health information (HI); health threats (HT); health determinants (HD); enlargements; international co–operation; and risk assessment.

Information provided within 'Programme 2003–2008' included legal background of PHP; National Focal Points; Budgets of PHP; the Executive Agency for the PHP objectives, budget and next stages; information on how to apply for funding (including calls for tenders, proposals,

[25] Youstif, N.H. and Bonait, M. (2000). North and South: bridging the information gap. *The Lancet,* Sep 16; 356(9234): 1034–1035.

[26] Results of user survey for website of DG SANCO, May 2006. Open from 5 May to 6 June 2006. Number of respondents: 138. European Commission: Internal document.

and expressions of interests); and descriptions of projects funded under the current PHP and eight previous public health programmes. Additional project information was also provided, e.g. criteria for selecting/financing projects and priority areas.

Table 3 provides a summary of the types of dissemination material. The Programme 2003–2008 Work Plan is downloadable in 19 languages. The site provides project descriptions within three strands (health information, health determinants, and threats to health) sorted by year, and lists previous PHP programmes and associated projects. The website provides approximately 120 links under the eight major headings which link to other web pages within PHP; other Directorates; external organisations (e.g. WHO, European Centre for Disease Prevention and Control (ECDC)); and other portals including the Public Health EU–portal, EU platform on diet and physical activity, and 'Help–for a life without tobacco' campaign. The site also has a facility which allows subscribers to receive latest information by e–mail on what is new on the website. The PHP website is available in 11 languages–English, Danish, German, Finnish, Sweden, French, Italian, Spanish, Greek, Dutch and Portuguese.

Table 3. Types of dissemination material on PHP website (including PHP 2003–2008 web pages)

Dissemination material	PHP website	PHP 2003–2008	
Speeches	approx. 90 1999–present	6 2000–2003	The majority in English only. Four speeches available in three other languages –Danish, Italian and French.
Press releases	approx. 185 2003–2006	8 2001–2005	The majority available in multiple languages (up to 10). Word search facility.
Events	Upcoming: 2 Past: 77		Links provided to websites. In some cases summary reports could be downloaded.
Publications	approx. 50	1 Programme 2003–2008	Overview of health policy (6); Programme 2003–2008 (1); HI (10); HT (7); HD (24); Enlargement (1); and Risk assessment (scientific opinions and former scientific committees opinions).
Key documents	approx. 260 1999–2006	16 1999–2006	Organised under eight headings. Available in multiple languages.
Newsletters	approx. 100 issues 2000–2006		Most newsletters published in French and English. Newsletters include Health and Consumer Voice; Consumer Voice; EC Public Health Information Network (EUPHIN); EU Injury prevention; EURSAFE Alert; EU European Network for Workplace Health Promotion; Eurodis (European Organisation for Rare Diseases); Rare Diseases Task Force; HELP News; and Working Party Lifestyle and other Health Determinants.
Legal documents	approx. 80 1989–2006		Available in multiple languages under eight major headings.

References to PHP on other portals

To determine the success of the PHP in generating and disseminating more and better health information to citizens, health experts and policy–makers we analysed the references to PHP on the following websites:

- OECD (http://www.oecd.org)
- WHO (http://www.who.int/en/) and WHO Regional Office for Europe (http://www.euro.who.int/)
- Public Health EU–portal (the official public health portal of the European Union), available at http://ec.europa.eu/health-eu/index_en.htm
- Public health fora (e.g. European Health Forum Gastein, available at http://www.ehfg.org/).

We searched the *OECD website* search engine for references related to the PHP. No results were retrieved when we searched 'Public Health Programme 2003–2008'. There were 29 hits using 'DG Health and Consumer Protection', 13 hits for 'DG SANCO', and only four hits for 'DG SANCO and public health'. There was no direct links to the PHP website. The retrieved material was not necessarily linked to projects funded through the PHP and consisted of list of documents including list of participants, workshop report, evaluation report, case studies and meetings minutes. The OECD website was available in English and French.

We also searched for references related to PHP on WHO (http://www.who.int) and WHO Regional Office for Europe (http://www.euro.who.int/). PHP was highly visible on the *WHO Regional Office for Europe website.* 'DG SANCO' resulted in 705 hits using the search engine on the website. 'DG SANCO Public Health Programme 2003–2008' resulted in four hits, in which one was a direct link to Health Evidence Network (HEN) web page (http://www.euro.who.int/HEN). The HEN is financed under the PHP. DG SANCO is mentioned under 'network members' and 'sources of evidence'. HEN provides a direct link to DG SANCO's PHP website and provides contact details. In addition HEN lists 67 health topics and provides one to six EC and DG SANCO reports under each health topic. Searching DG SANCO within the HEN search engine resulted in 620 hits. The HEN site also provides news and events (e.g. ongoing projects, upcoming events, and recent press releases) from HEN technical members (which includes DG SANCO). HEN also had a link to the Public Health EU–portal. The WHO Regional Office for Europe website was available in four languages – English, French, German, and Russian.

'DG SANCO' retrieved 1220 pages from the main *WHO search engine* (http://www.who.int). 'DG SANCO Public Health Programme 2003–2008' resulted in 185 pages. The pages included direct links to the PHP website under the three strands (health determinants, health threats, and health information), and links to HEN on WHO Regional Office for Europe website. Other references included eurohealth issues, scientific publications, and working group reports. The WHO was available in six languages – Arabic, English, Chinese, French, Russian and Spanish.

'DG SANCO' retrieved zero pages from the *Public Health EU–portal*, and DG Health and Consumer Protection retrieved six. 'Public Health Programme 2003–2008' resulted in 36 documents. The PHP was also highly visible via the Public Health EU–portal. For example the home page of the portal has 'Health in the EU link', which includes links to policies, programmes, research, prevention and promotion, EC health indicators and statistics. Links to

EU activities (which may incorporate the PHP) are also referenced under each major heading on the portal (my health; my lifestyle; my environment; health problems; care for me; and health in the EU). The Public Health EU–portal was only available in English. The Public Health EU–portal describes the PHP and provides multiple links to the PHP website pages. Hence the substance of information available for download is held on the PHP website.

We also searched the website of the *European Health Forum Gastein* (EHFG), which is 'a platform for discussion for the various stakeholders in the field of public health and health care'. The EHFG was set up in 1998 as a joint initiative of a member of the Austrian Parliament and the European Commissioner for Health and Consumer Protection. Since 1998, the EHFG meets during an annual event. Using the term 'Public Health Programme 2003–2008' resulted in no hits. There were 9 pages referring to 'DG Health and Consumer Protection' of which 8 pages relate to the 2006 conference. Only 8 hits for 'DG SANCO and public health' were found, all referring to the 2006 conference. We have not found direct links to the PHP website.

In summary, the highest visibility of the PHP was on WHO Regional Office for Europe website via the Health Evidence Network pages and the Public Health EU–portal. These pages provided a description of the PHP and provided direct links to the PHP website and have downloadable reports on over 67 health topics. There was relatively low visibility of PHP on the OECD and EHFG websites. Most of the websites were available in multiple languages, except the Public Health EU–portal, which was only available in English. This may be because the site was only launched in May 2006. The websites provide a vast array of information and materials, which was usually downloadable in multiple languages besides English. Key limitations of using the web to disseminate information are: that the web is not really an end to end dissemination way, that only those people that access the Internet can be reached, and it is difficult to know what quality assurance procedures the information has been subjected to.

3.2.4 Summary

Relevance of the PHP is underlined

Evidence from our interviews with key stakeholders shows there is a broad perception that the Programme is relevant. This is important because a widespread perception that the PHP was not relevant would be likely to significantly limit its impact. Also, the majority of surveyed project leaders of activities funded within the Programme during the years 2003–2005 (43/53) thought that the Programme is responsive to the priorities and health needs across Europe. We also identified a wider, but more amorphous, body of arguments in favour of the relevance of the aims of the PHP, including dissemination tools to increase awareness of the PHP.

What works?

The World Health Organization (WHO), Organisation for Economic Co–operation and Development (OECD), and professional bodies representing international public health views such as the European Public Health Alliance, Health Action International and the Standing Committee of European Doctors recognise the value of addressing new and developing threats arising from, for example, population movement, more porous borders for foodstuffs and diseases and the emergence of new diseases and the re–emergence of old diseases. Direct implications include intensified trans–border health risks, increased movement of goods and people and widened inequalities between nations. Opportunities are seen to arise from information sharing, addressing health problems over which national governments have limited traction and the

opportunity to pool resources for mutual benefit. According to the interview respondents the PHP can contribute to these opportunities. Furthermore, the Public Health EU–Portal is regarded as an important tool to increase awareness about the PHP.[27] However, based on the interviews we conclude that the level of awareness on the PHP's objectives and targets is positively related to the level of interaction with the EC. In other words, the level of awareness tends to be higher if interaction increases (e.g. information days, Programme committee meetings, working group meetings).

What can be improved?

Whilst there is a strongly, widely shared, articulated view that the PHP is an appropriate response to the emerging international threats and opportunities in public health, survey respondents and interviewees also identified ways in which relevance of the PHP could be enhanced. These included making the objectives and success indicators of the PHP more explicit and recognising the diversity of what is considered to be relevant for public health differs for different stakeholders in different parts of Europe (i.e. cultural differences). Although stakeholders generally believe that the strategic orientation of the PHP is responsive to priorities, it could be more responsive in tackling emerging health issues or rapidly changing health priorities in Member States. Our analysis of the participation of representative organisations from across the Member States also suggests that the PHP is seen to be either more relevant, or more accessible, to some Member States. Also, size of the PHP's budget and capacity of staff at DG SANCO are not sufficient to address all stakeholder and citizen needs.

3.3 Effectiveness

Effectiveness of the PHP has been addressed by the following evaluation questions:

3. To what extent are the objectives set in the Programme Decision and annual work plans achieved?

4. To what extent do the results achieved through the provisions of financial support for specific projects contribute to the achievements of the objectives of the Decision?

5. Are the results sustainable in the mid– and long term, i.e. after the funding granted by the EU has ceased?

6. To what extent are the results of projects thoroughly disseminated to relevant stakeholders, including citizens, public health practitioners, policy–makers, researchers?

7. To what extent does the Programme complement national policies?

8. Have sufficient and well functioning/pragmatic synergies been created with international organisations?

Measuring the effectiveness of a programme such as the PHP faces formidable barriers. First, the broad objectives of the PHP are subject to the influence of many factors over which the Commission has little or no control. Consequently, measuring the independent influence of the PHP may be hard. Second, the objectives may not have measurable performance indicators. Third, the prioritisation of the different aspects of the PHP may be unclear. Finally the counter–

[27] http://ec.europa.eu/health-eu/index_en.htm

factual (i.e. what would have happened in the absence of the PHP) may be hard to specify. Consequently, we draw upon the expert judgement of stakeholders who can be expected to have valuable insights into the effectiveness of the PHP, we infer from the documentary evidence of stakeholders and the Commission, we analyse the statistical data, and we draw upon the wider literature on public health. This provides a basis for triangulating evidence where there is no single 'proof' but a body of evidence that produces a compelling case.

3.3.1 Results from survey

Results from the survey indicate that the *content of annual work plans is generally perceived as clear* by project leaders (n=38, total respondents: n=54, see Appendix 1 for more detail). Only four respondents made comments, mainly emphasising that the plans were broadly defined and not specific enough (evaluation question 3). The average rating of how projects helped to achieve the objectives set in the Programme Decision and annual work plans was high (evaluation question 4). Examples of how objectives were achieved are: improving information and knowledge for the development of public health (e.g. training of epidemiologists); providing data on the resistance and spread of antibiotic resistance; and informing health professionals and helping national authorities to implement project outcomes (e.g. supporting ministries of Health in organising seminars to disseminate project results). These findings were also found in the interviews.

Approximately half of respondents (n=25, total respondents: n=49) expected changes in decisions undertaken by ministries of Health, including public health reporting; adjustments in regional health management; training; adoption of guidelines; sharing of best practice; evidence–based decision–making; supporting health promotion in workplaces; increased use of health impact assessments; and increased funding in specific areas. In terms of concrete policy actions an equal percentage of respondents (n=18, total respondents: n=47) reported no change or did expect a change, such as colour photographs on cigarette packets; invitation policies for population–based screening; changes in training courses; establish think tank on AIDS; national campaigns for antibiotic use; law for infectious diseases; regulations on public health reporting activities; restructuring of the Institute of Health and Information Statistics; and regulation on emissions on building materials. *In terms of effects on policies approximately half of respondents (n=25, total respondents: n=47) expected to have an influence* (i.e. use of project results in policy–making) at the local, national, and EU levels. Particular policies mentioned included vaccination policies and surveillance protocols, and good practice guidelines. *Also, it was expected by more than half of the respondents that the behaviour of public health practitioners and managers will be influenced* (e.g. through training and educating health professionals; improved and ongoing collaborations and partnerships; increased use of health impact assessments; use of environmental health information; public health reporting; and through the adoption of guidelines). These issues require a careful evaluation of whether a) such an effect was really evident and attributable to the projects, and b) whether they resulted in improved health outcomes.

Also, project leaders respondents were asked whether the PHP enhanced the impact of the project (evaluation question 5). Respondents (n=36, total respondents: n=51) mentioned *several ways the Programme has enhanced the impact of the project*, including finding partners and publication of the project and projects' recommendations on the website. On average respondents felt the Programme had facilitated networks of public health stakeholders. In addition, just over half of the (n=30, total respondents: n=53) projects were a follow–up activity of a former PHP or another EU–funded activity. With regard to capacity building, the majority of respondents (n=37, total respondents: n=50) stated that participation in the project had *not* led to formal or

practical qualification for members of the project team or target group. In addition, just over half of respondents (n=27, total respondents: n=48) stated that the project findings, methodology or theoretical developments had *not* generated follow–up activities. *Almost half of respondents (n=24, total respondents: n=51) thought that the project and its results would be sustainable once the financing support of the PHP is stopped*. Respondents commented that sustainability could be achieved through several methods; dissemination (e.g. public health reporting); continued collaboration and networking with partners and other organisations; training; and additional funding. This issue has been further addressed during the interviews (section 3.3.2).

With regard to *dissemination activities* (evaluation question 6), it is known that a critical component of the dissemination process is the medium through which the exchange is based. In addition to the medium, it is also important to direct the information to the right audience, at the right time, on the right issues, and in a way that is well received. The process of decision making and thus disseminating/receiving/processing new information/ideas (or influencing others) is inherently political and involves judgment and considerable strategic planning. Factors to be considered include: knowing who to target, knowing when to target, knowing how to target, and engaging in implementation analysis[28] (see Appendix 3 for more detail).

The results of the survey showed that the most common publications that were generated in the PHP were articles and other forms. Other publications mentioned included newsletters; press conferences; annual reports; presentations at international conferences; reports; Internet; handbooks; training manuals; posters; radio; TV; newspapers; and lectures. In addition, respondents were asked which factors strongly (positively or negatively) influence the outcome of the project. Most respondents suggested more than one factor, of which the most important factor was the level of funding, followed by levels of exchange and networking and specific audience. Regarding actively involving stakeholders during the lifetime of the project and in disseminating the results, the majority of the respondents mentioned that they did this. A wide range of stakeholders were mentioned by respondents, including Ministries of Health, project partners, national counterparts, national coalitions, community advisory boards, WHO, scientific leaders, managers, administrators, policy–makers and national focal points in all Member States, service providers, service users, universities, health workers, NGOs, patient organisations, hospitals, and national institutes.

Regarding the relative attractiveness of PHP over funding through national programmes the survey showed either *positive or negative views*. Two respondents stated that national programmes do not allow projects with a large number of beneficiaries; don't sufficiently promote pan–European co–operation; and tend to be 'too political'. On the other hand, respondents thought communications with national programmes are more 'clear' and 'helpful', and funds are easier to obtain.

Two questions in the survey addressed the question 'to what extent has the Programme synergies with international organisations?' (evaluation question 8). The survey respondents (n=27, total respondents: n=53) indicated that *the Programme moderately overlaps with other activities of national and/or international organisations.* Organisations mentioned included WHO, Council of Europe and World Marrow Donor Association (WMDA). The latter is mentioned because of the

[28] Gauld, R. (2004). *Public health and government in New Zealand*. Discussion paper for the Public Health Advisory Committee. Dunedin: Public Health Advisory Committee.

European focus on regulation of blood products, human tissues and organs (which is currently managed by DG SANCO C6, Health Measures). In addition, the respondents mentioned (n=38, total respondents: n=53) that the *Programme is considerable complementary to other activities of national and/or international organisations*. Organisations mentioned include national authorities, WHO, Council of Europe and WMDA. In both questions, a respondent commented that the extent of complementary/overlap may depend on national policies and may change over time. Another respondent stated that the Programme 'enhances other national activities in the same field.'

3.3.2 Results from interviews

In the interviews we addressed the following issues: whether the annual work plans support the Programme's objectives, the most important outcomes of the PHP, whether indicators have been collected to measure success, whether the results of one or more projects directly have been used, sustainability of activities and synergies with national health policies, including opportunities for new and applicant Member States.

The majority of the project leaders believe that the *annual work plans support the Programme's objectives*. Positive comments on the annual work plans include that work plans provide good orientation, are well structured, have an accessible timeframe to achieve objectives and have well specified objectives with regard to research needs.

Stakeholders are *generally not aware of indicators that have been collected to measure the success* of the PHP. As a result comments about the Programme's success by stakeholders are quite subjective or (in the case of project and proposal leaders) focus on project outputs. However, the importance of developing performance indicators was often expressed by different stakeholder groups. In terms of measurable indicators at project level several project leaders suggested that these should be taken up in the terms of reference.

Four stakeholder groups (project leaders, proposal leaders, representatives of interest groups and national health administrations) mentioned that the following *improvements could be made with regard to dissemination activities of the PHP*:

- Improve the quality and frequency of information on PHP projects and activities (e.g. through the website, CIRCA, the Public Health EU–Portal and bi–annual or annual meetings where participants disseminate results to relevant stakeholders).
- Disseminate Programme outputs in different EC languages to reach all relevant stakeholders and to increase their visibility and impact.
- DG SANCO should improve monitoring with regard to the dissemination of information arising from PHP activities.
- Create more forums where academia can meet policy decision makers.
- Improve information flows on outputs between DG SANCO, national governments and health practitioners.
- Organise high level events with media attention that bring together different stakeholders for specific health topics.
- Foster public acceptance and awareness of new and ongoing public health regulations through providing multi–sectoral information.

A representative sample of PHP stakeholders was asked during the interviews whether they believe the PHP anticipates long–term effects and to what extent these are already visible. *By and*

large the majority of stakeholders agree or hope that the Programme will accomplish effects, but the impact and sustainability of these effects are questioned. First, long term effects can only be expected if the activities have a backbone with the Programme's strategy and objectives (e.g. enhanced level of public health in Europe). If the PHP lacks political focus and is not forthcoming to public health needs, the Programme will be just another research activity. Second, impact is expected to depend on the sustainability built into projects and other activities, which requires the systematic use of sustainability indicators. Subsequently, how these effects are measured will influence the shaping of policies. Third, network development is another key element in the sustainability of PHP results. Fourth, the extent to which PHP outputs will feed into the policy decision making process is of importance, especially since the majority of Programme participants are researchers and health professionals and not political decision makers. Several stakeholders consider the lack of use of such indicators and lack of vision major barriers for assessing the Programme's impact.

Anticipated long–term effects that were mentioned include sustainable health systems, coherent health policies between Member States, more comparable health data, common approaches to health threats, continued work and lobbying in the field of diabetes, improvements in national health legislation and improvement of services in the field of HIV/AIDS, European alcohol control regulations and directives and strengthened control of infectious diseases along with nutrition and obesity.

Stakeholders also observed effects that are already becoming visible. It should be emphasised that most of these effects cannot only be attributed to the PHP as they are also being influenced by contributions from other actors such as other DGs, WHO, OECD and NGOs. Examples of observable effects include: development of a common EU view on public health effects, increased involvement of experts in public health issues, harmonisation of European health indicators and statistics, development of common responses to health threats, improved control of communicable diseases, increased uptake of the health impact assessment approach and strengthened collaboration between Member States (especially between new and old Member States), changing attitudes of European citizens towards smoking in public areas and the workplace, decreasing incidence of lung cancer and cardiovascular diseases, improved Member State actions to improve health agencies, strategic implementation of health policies, a better understood link between social inclusion and health inequalities and a shift in focus from disease control to health prevention, development and dissemination of good practices (e.g. documents and guidelines), use of electronic medical records in several Member States, improvements in E–health, the codification and classification of rare diseases.

The majority of stakeholders mention that the *PHP has positive opportunities for new Member States* (e.g. tackling health inequalities, shifting emphasis to health prevention and promotion instead of investment in healthcare services). However, a major bottleneck or threshold is their relative limited experience with the complex application and co–funding procedures. Also, these countries often need a longer time frame to adjust to regulations due to institutional barriers and conflicts in timing.

Most of the stakeholders, excluding proposal leaders, believe that the *PHP created added value to national health policies of Member States, including new and applicant Member States* (e.g. networking between national health authorities, HIV/AIDS prevention policies, alcohol labelling, responses to emergent diseases and patient involvement). Yet there is no system available for identifying and assessing these activities. Commission officials and national health authorities

suggested that involvement of Member States is often too formal and that there needs to be a more dynamic interplay with the EC. Also, we should keep in mind that there are differences between national health services and policies.

Also, the majority of stakeholders expect projects to continue to function and to produce results beyond the support of the PHP. It is recognised that this depends on the type of project/activity, organisation and availability of new sources of funding. Still without funding from the PHP, it will be more difficult to set up and continue projects. Reasons that were mentioned include the fact that public health is poorly subsidised at the national level in the first place. This is more imminent for new Member States. In any case, *without PHP funding projects are likely to be continued on a more fragmented level* (e.g. national or regional level). It was pointed out that the added value of the PHP is to improve co–operation at European level. Without the funding to set up European–wide networks this objective is not likely to be achieved. Organisations will then limit their co–operation to a small number of (well–known) network partners.

Stakeholders brought forward the following facilitators and *suggestions for improving the impact and sustainability of the PHP*:

- The Commission should define areas of concern in the long run. For these topics funds could become available for 5–10 years instead of three years, which may lead to more sustainable outcomes.
- The Programme should focus on the overall socio–political agenda and vision of the EU. Health is a driver for all other policies–it should be marketed in such a way so its impacts can be much bigger.
- The Commission could enhance sustainability of the Programme in providing Directives on specific health topics to Member States.
- Rapidly changing health needs in Europe require more flexible programme structures and networks. The broadness of the PHP has led to a lot of fragmented and occasional work in public health in Europe, which makes it hardly feasible to create long–term effects.
- DG SANCO should find a better balance between its organisational structure and Programme financing.
- DG SANCO should provide more guidance at the end of an activity related to dissemination and/or implementation of actions.
- Incorporation of sustainability into the Programme activities for measuring impact is desirable.
- Increase the use of health impact assessment (HIA) in the EU. Currently, HIA is in its infancy and only institutionalised in a few Member States. Proper use of HIAs should result in anticipated health effects and the avoidance or reduction of negative health effects.
- In measuring effects it is suggested to make a distinction between impact on national health authorities and impact on EC health policies.
- Evaluate the impact of PHP projects and other activities after 5 years.

3.3.3 **Results from desk research**

We have also performed a literature review with regard to sustainability and monitoring activities to assess the extent to which the results of the PHP activities are sustainable.

Sustainability and monitoring of the PHP

In our analysis we have not found solid evidence that DG SANCO systematically monitors the PHP activities by making use of health impact assessment and evaluations to assess the ex–post impacts of policies. DG SANCO has monitoring mechanisms (e.g. interim project evaluations, project progress reports, client meetings) in place but these are not effectively used. Evidence shows that these mechanisms have been used for elements of the Programme but there is no evidence on systematic monitoring for the PHP as a whole. Although routine data collection takes place in health reporting (Health Information strand) and this should be continued intensively in the new PHP, there has been no systematic routine collection of data covering the whole logic of intervention (see also section 2.4).

Most of the actions supported by the PHP relate to the development of health indicators, which can be used for measuring sustainability in public health. These actions contribute to the EC's aim to produce comparable information on health and health–related behaviour of the population (e.g. data on lifestyles and other health determinants), on diseases (e.g. incidence and ways to monitor chronic, major and rare diseases), and health systems (e.g. indicators on access to care, on quality in the care provided on human resources, and on financial viability of health care systems).[29]

An example is the development of a set of European health indicators, initiated through the European Community Health Indicator (ECHI) projects, whose results have been widely disseminated. The ECHI–1 and ECHI–2 projects have been financed by former PHP (1998–2002) under the Health Monitoring Programme and have developed a comprehensive set of indicators, in close co–operation with many of the other projects run under that programme. The list of European Community Health Indicators will serve as a basis for the European health information and knowledge system, including their operational definitions. By June 2006, the list included approximately 400 items/indicators. In order to prioritise the work for harmonisation of EU Member State's data collection, the Commission extracted a shortlist of 40 indicators for the following categories (between brackets the number of indicators)[30]:

- Demographic and socio–economic factors (8)
- Health status (14)
- Determinants of health (5)
- Health services/health promotion (13).

Under the current and the future Public Health Programmes the work on indicators and data collection will be conducted in co–ordinated Working Parties and Task Forces that will create a prototype for the future health monitoring system. The tasks of the Working Parties will cover all phases involved in data management: the analysis of data needs in their respective area, definition of indicators and quality assurance, technical support for national efforts, data collection at EU level, reporting and analysis and promotion of the results. The action will be the start of the further development of the appropriate structures for health monitoring. Of utmost importance is therefore the collaboration and close co–ordination with Eurostat.

---

[29] Network of Competent Authorities on Health Information (2004). *Strategy on European Community Health Indicators (ECHI). The* '*Short List*'. Luxembourg: Network of Competent Authorities on Health Information.

[30] http://ec.europa.eu/health/ph_information/dissemination/echi/echi_en.htm

The overview of sustainable public health indicators, and evaluation of changes herein since 2000, is presented in Table 4 below.

Table 4. Sustainable health indicators

Indicators	EU–25	EU–15
Healthy life years	*	+/-
Human health protection and lifestyles		
- Overweight people	*	*
- Resistance to antibiotics	*	*
- Cancer incidence rate	*	*
- Present smokers	*	*
- Suicide death rate	+	+
- Serious accidents at work	*	+
Food safety and quality		
- Salmonellosis incidence rate	+	+
Chemicals management		
- Production of toxic chemicals	*	-
Health and environment		
- Population suffering from noise and from pollution	*	+

+ = favourable change; +/- = no or little change; - = unfavourable change; and * = insufficient data to evaluate progress

Source: Eurostat, Measuring progress towards a more sustainable Europe – Sustainable development indicators for the European Union – Data 1990–2005, 13 December 2005

The main indicator 'healthy life years' is defined as the number of years that a person is expected to continue to live in a healthy condition. It is based on age–specific prevalence (proportions) of the population in healthy and unhealthy conditions and age–specific mortality data. A healthy condition is defined by the absence of limitations in functioning/disability.

The remaining indicators are arranged in four sub–themes, reflecting the three health–related objectives of the strategy, with an additional sub–theme on health and the environment.

- *Human health protection and lifestyles.* A further indicator on work with a high level of job strain or stress has yet to be developed.
- *Food safety and quality* includes the salmonellosis incidence rate as a proxy for deaths due to infectious food–borne diseases. Additional indicators need to be developed covering dioxins and PCBs in food and feed; heavy metals, and mercury in particular, in fish and shellfish; and pesticides residues in food.
- In *chemicals management* chemicals production is a proxy for an indicators on the consumption of chemicals.
- In *health risks due to environmental conditions*, the indicator 'population affected by noise and pollution' is a proxy for exposure to pollution and noise having an influence on public

health. Additional indicators need to be developed on population exposure to airs pollution by ozon, and monetary damage of air pollution as a percentage of GDP.[31]

3.3.4 Summary

The PHP is perceived as an effective programme by key stakeholders

The content of annual work–plans and funded activities (evaluation questions 3 and 4) are seen to contribute to the overall objectives of the PHP (although the selection process of projects is less clear to stakeholders and whether (current) health challenges are reflected in the annual work plans are questioned). However, some find it hard to indicate main outcomes because the PHP funds a broad range of (apparently loosely related) activities in different Member States.

What works?

By supporting projects and other non–project–based activities, the PHP provides not only funding but also profile and prestige, access to new partners and better access to information (e.g. via websites of projects and the Public Health EU–portal[32]). All of this supports the dissemination of findings and the spread of good practice (evaluation questions 5 and 6). However, we encountered significant variations in dissemination practices. At least some of these differences are not peculiar to public health in general or the PHP in particular but reflect wider characteristics of the research communities in each country (e.g. language hurdle).

Looking across the Member States as a whole, as most of the activities funded are still underway, project leaders can only estimate the impact of their work on policy and practice. Also, project leaders identified several ways the Programme has successfully enhanced the impact of their work. These include finding partners, publishing findings and recommendations on the EC's website and facilitating development of networks of public health stakeholders. Half the projects are a follow–up to previous PHP activities suggesting that expertise and knowledge is used to inform future activities.

What can be improved?

Several respondents noted that the effectiveness of the Programme depends in part upon intensive co–operation between EC and Member States on a regional and local level as well as co–ordination of Community programmes. It also depends upon close co–operation with other international bodies (such as OECD and WHO) and other key stakeholders (e.g. with regard to health information access, monitoring and reporting) (evaluation questions 7 and 8). Effective co–ordination of public health issues would therefore be key to delivering the added value of the PHP (e.g. with regard to patient mobility, health threats and obesity). Tailoring messages for each Member State, managing relationships with other international bodies and stakeholders requires sufficient skilled staff who remain in post long enough to develop the tacit knowledge which is important in sustaining networks and partnerships.

[31] Eurostat (2005). *Measuring progress towards a more sustainable Europe – Sustainable development indicators for the European Union – Data 1990–2005*. Luxembourg: Eurostat.

[32] http://ec.europa.eu/health-eu/index_en.htm

3.4 Efficiency

Efficiency measures how economically resources are used to deliver results. This involves understanding how knowledge and information is generated, and how knowledge is communicated and used. The following evaluation questions were addressed in the evaluation:

9. Do the selection, assessment, evaluation and management processes, starting from the call for proposals until the final reporting on selected and co–financed individual projects ensure satisfactory outcomes of the actions?

10. Are the whole Commission selection and management processes carried out by its services in a cost–effective way?

In our analysis we paid particular attention to the efficiency of Commission selection and management process since this is an area of activity over which the Commission has more direct control.

3.4.1 Results from survey

Respondents of the survey were asked to rate general items of the Programme, including application procedures, project administration and project payment arrangements (see Appendix 1 for a more detailed analysis). Comments (n=17, total respondents: n=53) regarding *application procedures* concerned the on–line nature of applications (time–consuming, very bureaucratic, and instructions are obscure). Also, the time window between the call for proposals and the deadline for submissions was perceived as very short. In the application procedure often mixed terminology is used, which confuses the applicants. Respondents suggested to increasing telephone support and availability of EC staff to answer specific questions. In addition, concerns (n=15, total respondents: n=54) were raised regarding *project administration*, namely that the process was 'complex', 'bureaucratic', and 'too heavy' (e.g. a lack of specified reporting requirements for either technical or financial reports, a lot of paper work is required, and slow feedback on submitted reports to the EC). Other respondents commented on funding gaps and delays in signing contract agreements. The majority of comments were, however, raised regarding changes in administrative staff and staff having limited knowledge on field topics. A couple of concerns were voiced regarding the lack of transparency on legal and financial issues. Regarding *project payment arrangements* positive (n=20) and critical comments (n=17, total respondents: n=53) were made: delays had been experienced in receiving interim and final payments and some respondents commented that the scheme was either time–consuming or difficult to manage. A couple of respondents mentioned that the Programme was transparent and poses no problems for all collaborating parties.

3.4.2 Results from interviews

Stakeholders by and large agree that the *available budget within the PHP is not sufficient*. The broad scope of the Programme either requires more funding or a more focused strategy for proper allocation of the budget (e.g. efficient implementation of the budget and stopping those projects that are not effective). Also, the PHP seems to encourage activities involving as many (applicant) Member States and EFTA/EEA countries as possible, resulting in high project co–ordination costs. There should be a better balance between the number of activities and the geographic scope taken into consideration. Criticism was expressed about the co–funding system because often the total costs exceed the amount of funding provided for eligible costs.

The majority of the project and proposal leaders indicated a *preference for calls for tender or a combination of both calls for tender and proposals.* Stakeholders are aware that both clearly have their own objectives and advantages. According to interviewees, calls for proposals are more competitive, innovative, less restrictive and they facilitate networking compared to calls for tender. However, calls for tender are more focused on key topics, more clearly described and incorporate less risk in terms of inefficient allocation of financial resources.

Most project and proposal leaders reported that they have used their own network for finding projects partners. DG SANCO did in most cases not play a role in this process. In the few cases that DG SANCO provided support this was perceived as positive. A couple of respondents expressed their desire for a central database of partners which is considered to be very useful (e.g. finding project partners by entering key words).

The current application procedure results in a myriad of projects and bears the risk that marginal projects are being selected. In this respect, stakeholders suggest the following improvements: simplifying the application procedure, creating more time between the publishing of calls for proposals and deadline for proposal submission and better trained staff. Improvements with regard to the selection include more transparency with regard to the selection criteria. An overriding problem is that the Programme scope is broad and lacks clear priority setting. Also the use of at least two external reviewers is suggested because doubts were expressed about the knowledge of internal reviewers. In addition, the results of interviews indicate that it helps potential applicants to 'test the waters' before submitting proposals. By discussing the information and criteria regarding application up front with EC staff, potential applicants get a better idea about whether the proposed activity/activities meets the (general) requirements for selection. It is ultimately up to applicants to get acquainted with the application procedures and meeting the selection criteria (i.e. going down a learning curve). Still, the EC can facilitate the subsequent submission process.

With regard to the evaluation procedure most project leaders noted that it is *not clear how projects will be evaluated*. Therefore it was suggested to have meetings with the project officer after submission of intermediate and final deliverables. In addition, project evaluation criteria should be stated in the terms of reference and the contract should specify under which conditions DG SANCO has the right to stop a project.

Generally, the projects leaders are *satisfied with the reporting procedures*, which are perceived as clear and acceptable although being detailed and formalistic. However, a few comments were received on the complicated and labour–intensive procedures for producing financial reports and long feedback times. One respondent suggested the use of more clear and concrete reporting templates.

All stakeholders made suggestions to *improve the PHP programme management*:

- Member states have a *more* dynamic interplay with the EC. For example the PHP should foster feedback from Member States through networks of competent authorities; increase number of expert working groups; involve Member States in preparing policy documents; and hold annual European conferences on specific health issues.
- DG SANCO should help Member States develop capacity by funding infrastructural requirements.

- Mobilise resources within the EC to ensure the PHP increases its involvement and links with other DG's, such as DG INFSO, DG Environment, and DG Employment (e.g. workplace health promotion), and Eurostat.
- Ensure that public health is strategically addressed in other EC policies and programmes at all levels ('health in all policies').
- Provide more time for the Programme committee to consult on annual work plans.
- Increase coherence between EC public health strategies and national public health strategies, which requires better co–operation between the EC and national health authorities.
- A more explicit mandate for public health is required (relative to the Amsterdam treaty) to ensure the public health agenda is put forward in Europe.
- Work closely with international organisations, such as WHO and OECD.
- Increase the engagement of local stakeholders across Europe.
- Increase the availability of human resources to manage the PHP more effectively.
- Improve the communication between the three strands of the Programme, and between project officers and expert groups.
- Health impact assessment needs more attention at all policy levels.
- DG SANCO should be better represented at high level events related to public health.
- Increase the recognition of Centres of Excellence as reference points.
- National governments should be encouraged to take a more supportive role towards the Programme (e.g. national focal points).
- Increase emphasis on the sustainability of project outcomes. A first step would be to develop a framework and indicators for measuring sustainability.

All stakeholders, with the exception of Commission officials, mentioned the following *improvements with regard to the financial and application procedures:*

- Launch long–term sustained cross–financing to encourage cross–fertilisation between programmes.
- Increase the use of calls for tenders with 100% funding. However, this requires more efficient procurement procedures and the development of a good contextual framework on public health to support this.
- Increase the flexibility of funding mechanisms and reduce the level of co–financing.
- More calls for tender to address prioritized public health issues and increase participation from organisations with limited financial resources.
- Improve monitoring mechanisms to assess whether allocated budgets are well spent.
- Simplify the application forms especially for organisations from new and applicant Member States and NGOs. An expression of interest phase could also help simplify the application procedure and make it less time–consuming.
- Proposals should also be evaluated on their potential benefits for countries that are not participating. Otherwise DG SANCO should require broader Member State involvement to establish a more unified approach to address health issues (e.g. obesity).
- DG SANCO could improve the Programme structure and organise clarification meetings for its stakeholders, to make the PHP more accessible for organisations that have limited or no experience with the Programme.
- Reduce bureaucratic language at EC level.

- Organise in addition to the annual PHP information day smaller scale meetings on theme level where participating organisations from different Member States can express interest in specific themes and subscribe to the Programme.
- DG SANCO should ask applicants whether and how they expect to implement the anticipated results in order to better judge the sustainability of these results.

3.4.3 Results from database analysis

In terms of answering evaluation questions 9 and 10, specifically the success rates, reasons for rejections, and outputs and outcomes are reviewed. With regard to outputs and outcomes we undertook an analysis of outputs and outcomes of the selected projects (n=53) during 2003–2005 in the database (see also Chapter 2 for the rationale to use a representative sample of projects). One limitation was that evaluation reports (containing management data such as success rates) were only available for the years 2004 and 2005.

In terms of outcomes, the main finding was that the project fiches did not contain much specific information about outcomes (e.g. long–term enhancement of public health or targets aimed at the improvement of public health). This observation raises some questions: whether projects are connected to the long–term outcomes of the PHP and whether the PHP should develop or clarify specific long–term outcomes (or related indicators). Rather, the project fiches/database clearly focus on outputs (e.g. establishment of networks of professionals, development of databases and to a lesser extent capacity building and prevention campaigns).

In the following sections, we provide results of the success rates and reasons for rejections (for a more in–depth analysis, see Appendix 6), as well as findings regarding programme management.

Success rates

Success rates vary over the years 2004 and 2005 and between the strands of the PHP. The overall success rates of proposals was 32.5% in 2004 and 25.8% in 2005 while the overall number of proposals in 2005 (n=235) was somewhat higher compared to the overall number of proposals (n=218).

Success rates vary between the three strands of the PHP. For the two–year period studied, the success rate for Health Determinants (HD) is 25.4%, the rate for Health Information (HI) is 27.4%, and the rate for Health Threats (HT) is 43.9%. HT has a low number of proposals which is probably due to the fact that only government agencies can perform these studies, while there is little room for NGOs to apply.

Reasons for rejection

We undertook a detailed analysis of the reasons given in the evaluators' reports on why projects were rejected for the years of 2004 and 2005. The average number of reasons for rejection per proposal across the strands and 2004 and 2005 is 2.33. Of the reasons mentioned, 13% related to 'finance issues', 55% to 'general EC requirements' and 32% to particular quality issues. This analysis *indicates that the overall quality of the proposals suffers mainly because proposal leaders are insufficiently aware of the generic EC requirements for participating in the PHP*. This finding is underlined by Commission officials who we have interviewed at this stage of the interim evaluation. The Commission officials mentioned that the application forms are complex, especially when applying for the first time.

Implementing the budget

The PHP intends to allocate the operational budget in a balanced way between the three objectives of the Programme: health information, rapid reaction to health threats and addressing health determinants unless particular public health emergencies arise, justifying a reallocation of resources. In practice, this means that each of the three strands receives around one–third of the operational budget annually.[33] Table 5 below gives some descriptive statistics based on a statistical analysis of the budgets, i.e. amount of funding, in the selected sample of approved PHP projects over the period 2003–2005 (n=53). These figures indicate that the allocation of the operational budget across strands in 2003–2005 on average follows the balanced allocation by and large. The respective percentages are 27, 34 and 38. Hence, the EC meets its intention to have a balanced allocation of the operational budget.

Table 5. Descriptive statistics by strand

	Health information (n=20)	Health threats (n=9)	Health determinants (n=24)
Mean budget	888,639	1,110,401	1,266,765
Standard deviation	443,322	681,234	1,020,867
Minimum budget	150,784	444,809	144,380
Maximum	1,871,147	2,255,995	4,153,716

The figure below shows that the distribution of the budgets of the 53 selected projects across different sizes of budget is representative for the distribution of the entire sample of approved projects.

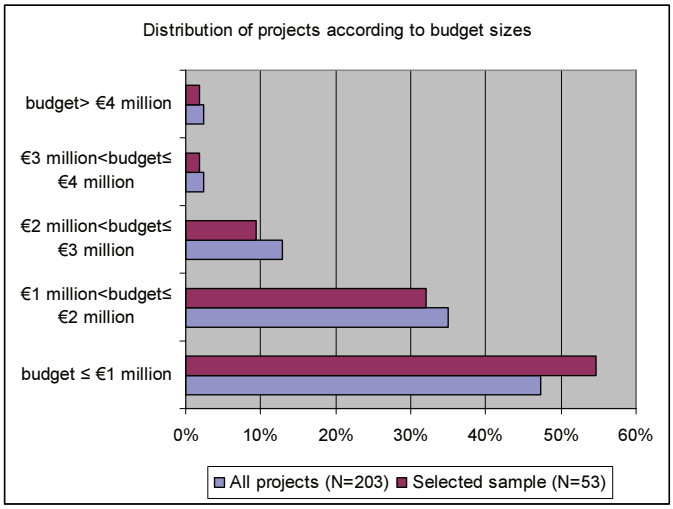


Figure 1. Distribution of budgets according to sizes for the 53 selected projects and the entire sample of approved projects

In addition to a balanced allocation of resources between objectives this evaluation also bears out the issue of a balanced allocation of resources between modalities of support.

[33] For instance, in 2003 the allocation was: Health Information: 33% of the operational budget 2003, Health Threats: 35% of the operational budget 2003 and Health Determinants: 32% of the operational budget 2003.

In general, it seems desirable for the PHP to use various support modalities, such as direct grants, tenders, and grants through calls of proposals. These different support modalities are linked to different action lines. The flexibility of different funding mechanisms could give an organisation instruments to the day–to–day needs and maintenance of the European public health agenda as well as fund ongoing activities as well as be responsive to developing a research agenda (i.e. addressing Programme priorities). In this last case, a grant is a tool that allows a programme to be vertically responsive to signals from researchers and practitioners. For instance, a call for tenders might not be able to fully anticipate bottom–up innovations or developments in the public health field relevant to the European agenda the way an open call for proposals might produce or capture. Moreover, the use of different funding mechanisms also means DG SANCO can spread the risks for the PHP associated with funding.[34] An open call for proposals gives less certainty about the outputs and outcomes of a programme than a call for tenders might.

The balance between certainty and uncertainty needs to be carefully managed. An annual monitoring of the outputs of projects in the PHP seems key in determining the distribution between the support modalities. The Programme needs to know what kind of outputs and outcomes it can expect from its financing. Nevertheless, we know from evidence of the sample of activities examined that the way in which projects are linked to the wider outcomes of the PHP is currently not systematically given in the database or assessed. Monitoring is key in this respect, giving a better indication on the link between the risks (financial or programmatic) taken and returns achieved and also the link between effectiveness and efficiency of programming.

However, differences between support modalities can be exaggerated. Normally 'calls for proposals' control for uncertainty by having have clear guidelines on eligibility, the strands and foci of research, and the way proposals will be evaluated.[35] The different rates for co–funding by the Commission[36] and the criteria for selection raise the question to what extent the nature of the 'calls of proposals' creates expectations in the public health community, whereby the incentives and priorities of the PHP determine how applicants seek funding. Anticipation by applicants as how to structure their proposals may affect productivity and lessen the leverage of the PHP. Here, the certainty of the application procedure and the co–funding arrangements could limit bottom–up innovation and affect the overall effectiveness of the Programme. This might not just affect the type of proposals submitted but also how networks of researchers are put together, e.g. networks with experience of Commission procedures would have a distinct advantage. Evidence of such anticipation of what the Commission will fund would be a concentration of projects around a certain funding size or a clustering of types of projects around an indicative size. Though the evaluation showed clear budgetary variations between the strands, the relatively small sample did not allow a further systematic assessment whether types of projects were likely to be clustered around a certain size. Nevertheless the point of possible anticipation raises some broader questions. For instance, whether the Commission should have variable co–financing or whether

[34] Similar to optimal portfolio theory, an optimal distribution of resources in terms of risk management and optimising returns is linked to diversification between different assets.

[35] See for instance criteria attached to the 'call for proposal 2006', http://ec.europa.eu/health/ph_programme/howtoapply/proposal_docs/call2006_en.pdf (visited October 2006).

[36] Commission co–funding of projects is to some extent fixed at 60% (unless a project has a specific added value to the Community, in which case projects can be co–funded up to 80%; or unless co–funding would displace other types of funding, in which case co–funding can be less than 60%).

the commission should provide incentives for specific proposal or networks (e.g. new member–states)?

Furthermore, the question posed above on 'anticipation' underlines the importance of the horizontal responsiveness of the PHP to take into account parallel efforts in the Member States, international organisations, and efforts led by other large funders. This question also implies that DG SANCO could take into account how the Programme:

- complements other support by providing additional resources to ongoing activities
- complements other support by re–orientating research and dissemination
- substitutes for other support by freeing up resources to pursue other research objectives
- crowds out other support.

We did not have data to assess this systematically. However, DG SANCO could take this information into account for further evaluations.

Costs for administrative and technical support

We have looked at the resources within the PHP spent on technical and administrative assistance and support. Table 6 compares the budget for technical and administrative assistance and support expenditures in 2003–2005 with the operational budgets.

Table 6. Comparison of budgets

	2003 [a]	2004 [b]	2005 [c]
Operational budget (million)	45.5	53.7	53.7
Technical and administrative assistance (million)	5.4	7.6	7.8

[a] Excluding additional appropriations resulting from contributions from candidate countries and EFTA/EEA countries.
[b] Including additional appropriations resulting from contributions from candidate countries and EFTA/EEA countries.
[c] Including additional appropriations resulting from contributions from candidate countries and EFTA/EEA countries.

Technical and administrative costs represent 11.9% of operational outlays in 2003 up to 14.5% in 2005. These percentages are not exceptional for programmes in which implementation involves project selection and management, support and communication activities.[37] The development of benchmarks in the context of the evaluation of the PHP has a number of important limitations. These range from finding suitable comparators to selecting appropriate benchmark levels. In terms of finding comparators, benchmarked programmes or organisations would have to share important institutional and programmatic characteristics with DG SANCO in order to compare like for like. Given the unique position of DG SANCO, the analysis mostly precludes the use of national government bodies, for which the study team most readily found relevant data. Similarly, establishing appropriate benchmark levels is not always easy for programmes or organisations. For instance, from our experience with (evaluation of) *technology* policy instruments, we have seen management costs range between 3% on the lower end of the

[37] For instance, implementation costs in the SKO/SKB, a Dutch programme to promote technology transfer, were 15% of the operational costs (subsidy) in 2002.

scale up to 15% on the higher end.[38] On the other hand UK Research Councils are required to limit administrative and technical spending to 5% of overall funding.[39] The other extreme is the Canadian Foundation for Health Services Research that spends 50% on administration and technical matters.[40] Thus, the range for administrative costs can be large, reflecting the differences in the strategies and missions of organisations and definitions used. The question then becomes what benchmarks and comparisons are useful and appropriate. A benchmark analysis of the PHP was beyond the scope of this evaluation. Benchmarks used in this evaluation are more anecdotal and indicative. However, a targeted benchmark exercise (e.g. around administrative costs or success rates of applications) with carefully selected comparators may prove useful for DG SANCO in the future.

In addition, we examined at what cost the objectives of the PHP are achieved. The analysis is (therefore) concerned with an examination of financial resources in a selected sample of projects for the years 2003–2005 (n=53), as described in the Inception report of April 2006.[41] The necessary information was obtained from the CIRCA database for projects. In particular we have addressed the following aspects: budget per project and variance; type of costs, including ratio between cost of administration and cost of actual work on public health; percentage EC funding per strand; and source and amount of co–funding. For a more in–depth analysis, see Appendix 7.

3.4.4 Summary

Project selection and administration procedures are perceived as inefficient

Anxieties were expressed by project leaders about how projects were selected and administered. These included a perception that the application procedure was unnecessarily time–consuming and difficult, the turnaround time for proposals was too short, and the terminology was confusing. However, there was satisfaction with reporting procedures and the transparency of payment arrangements.

What doesn't work?

The project administration was perceived to be overly complex and bureaucratic, the turnover of administrative staff added to problems, and the lack of expertise at DG SANCO was said to hinder synergies. In addition, the overall quality of proposals suffers because proposal leaders are either insufficiently aware of EC requirements for participating in the PHP or they lack the capacity to demonstrate that they do so. Furthermore some project leaders reported delays in payment.

---

[38] See e.g. Technopolis (2001). *An international review of methods to measure relative effectiveness of technology policy instruments*. Amsterdam: Technopolis; and Technopolis (2002). *Interdepartementaal beleidsonderzoek innovatiebeleid – Eindverslag beoordeling evaluaties.* Amsterdam: Technopolis.

[39] Research Councils UK (2003). *Research Councils' UK efficiency plans: Background and measurement methodology*. Swindon: Research Councils UK. Available at: http://www.rcuk.ac.uk/cmsweb/downloads/rcuk/documents/efficiencymethodology.pdf.

[40] Canadian Foundation for Health Services Research (2006). *Annual Report 2005*. Ottawa: Canadian Foundation for Health Services Research.

[41] http://europa.eu.int/comm/health/ph_programme/eval2003_2008_en.htm

What can be improved?

The efficiency of the proposal and tender processes could be improved as applicants perceive the procedures as time–consuming and difficult, mainly because the turnaround time for proposals is too short. Also, the efficiency with which knowledge is disseminated is hard to gauge. Our analysis shows that when maximising benefits of the PHP in each network, with each Member State, and with each NGO would depend upon a keen understanding of each audience and how they used such knowledge and a consequential dissemination strategy. Although projects are expected to have a dissemination strategy we have seen only limited evidence of a coherent communication strategy from the outcomes of the PHP, tailored to meet the needs of different stakeholders. Where there is a high level of demand for Programme outputs this is not a problem (for example the European Public Health Alliance and WHO take an active interest in the outputs of the PHP). However, where such demand is not apparent (with New Member and Accession States, for example) this is more problematic. One practical way forward would be to focus on strengthening and responding to information needs from stakeholders rather than focusing on pushing information. Taking into account the needs of the target audience will result in better distribution of reliable, relevant and usable information.

3.5 Consistency and complementarity

The PHP, on a budget of some 55 million euros annually aims to improve the collection of data, the exchange of information, and our understanding of how EU policies affect health. It also has specific strategies for addressing the health impact of nutrition, physical activity, tobacco and so forth. These are aims that it shares with a number of international organisations with a European dimension. It is therefore appropriate that the Commission should seek to develop links between the PHP and these international bodies in pursuit of improved value for money and enhanced impact. This issue has been addressed by the following evaluation question:

11. To what extent is consistency and complementarity ensured between actions implemented under the current Programme and other EU policies and activities?

We asked Commission officials and Programme committee members about the extent to which the PHP interacts with other EC activities (for an overview of DG SANCO's joint activities with other DGs see section 3.10). In addition, stakeholders were asked about the extent to which the PHP is consistent with national policies (see section 3.3.2). Furthermore, we reviewed public health policy documents of the international organisations Organisation for Economic Co–operation and Development (OECD) and the World Health Organization (WHO), who are the main collaborators in the PHP. Also, we analysed the capacity of Member States to participate in the PHP.

3.5.1 Results from interviews

Commission officials and Programme committee members reported that interaction with other EC activities is observed, but that the level of interaction with some DG's should be increased. DG Research is mentioned to have a strong relationship with DG SANCO. However, according to the interviewees, DG SANCO should interact more with DG Employment, DG Environment, DG Regional Policy and DG Development (relating to structural funds for health system development in new and applicant countries). Examples to improve the relationship between DG SANCO and other DG's include attending each other's expert and committee

meetings for overlapping areas. Also, interviewees mentioned that health issues are being addressed through fragmented activities and this should be better aligned as well as the inclusion of public health in other policy areas. One way to improve this is by better and formal communication (e.g. improved consultation).

3.5.2 Results from desk research

OECD and WHO are key partners with DG SANCO in delivering public health benefits for EU citizens

Globalisation has major implications for public health policy–makers and practitioners.[42,43] Direct implications include intensified trans–border health risks role for action at EU level, increased movement of people and goods, and widened inequalities within and between nations (role for analysis at EU level). Indirect implications include the opportunities and challenges posed by global telecommunications and information networks, environmental degradation, and the human rights frameworks embedded in international conventions and international justice. There are also a number of opportunities for taking preventive public health action which suggest international co–operation. These opportunities include for example action on diet, obesity, alcohol, tobacco and physical activity.

At the same time as this increased pressure for action at the EU level, the same pressures have been felt by other international organisations with a remit to address European public health issues. This has created the opportunity for securing synergies and limiting duplication through collaborating with such international organisations. Consequently, acting on the requirement to co–operate with third countries and international organisations under Article 152 of the EC Treaty, the PHP has included co–operation with EFTA/EEA and associated countries, candidate countries, third countries and international organisations. The PHP should be evaluated, among other things, by its ability to collaborate effectively with such bodies in order to leverage benefits for citizens in line with its objectives.

Associated with globalisation, we have seen the growing importance of significant international bodies that together contribute to the international governance of public health. In addition to the EC, therefore, there are a number of international organisations with responsibilities relating to public health in the EU area. Conceptually, these responsibilities might be divided into: standard–setting, researching, influencing and co–ordinating public health action. Given the particular mandate given to the EC on public health, and the division of power amongst these international organisations, there is often a need for persuasion, influence and alliance–building. Often this is also associated with the need for compromise and consensus. At best this can deliver enhanced benefits through ensuring complementarity and consistency. At worst it can lead to finding the 'lowest common denominator' and institutional turf–wars.

There are therefore significant barriers facing the PHP but also potentially great benefits. As we will see, the benefits have been pursued by the PHP through at least two main avenues. The first is the creation of an evidence base both through supporting activities and through the PHP's strategy on European Community Health Indicators. Second, through international public health

[42] Frenk, J., Sepulveda, J., McGuiness, M. and Knaul, K. (1997). The future of world health: The new world order and international health. *British Medical Journal,* 314; 7091: 1404–1412.

[43] Dodgson, R., Lee, K. and Drager, N. (2002). *Global health governance: A conceptual review.* LSHTM Discussion Paper no 1. London: London School of Hygiene & Tropical Medicine.

advocacy,[44] where the PHP is simultaneously the target of advocacy (for example on tobacco control or baby milk action), the conduit for other advocacy organisations to make their case (for example, the European Public Health Alliance), and advocate of change (supporting action on obesity and diet).

The Commission and the PHP in particular have strong links to the Commission-established European Health Forum, a consultative forum for non governmental organisations to be informed and consulted on health policy developments. The Forum meets bi-annually with some fifty leading European organisations represented. There is also an annual general conference for wider debate, called the EU Open Health Forum. Finally there is a Virtual Forum containing all relevant documentation and providing opportunities for discussion. In addition, the PHP has lest systematic relationships with a range of other organisations operating at the international level, such as the Association of European Cancer Leagues, the European Heart Network, and the International Diabetes Federation. However, the most important linkages with international bodies are with the OECD and WHO.

Organisation for Economic Co–operation and Development

The Organisation for Economic Co–operation and Development (OECD) comprises thirty member countries with a shared commitment to democratic government and market economies. It has developed and continuing relationships with a further seventy countries, with a variety of NGOs, with other international bodies, and with civil society. The European Commission enjoys a unique status of 'full participant' under the founding convention of the OECD effectively granting the Commission all the powers of membership except the right to vote. The relevance of the OECD to the Commission's public health activities has been limited but important. Until the mid–1980s, OECD was interested in social policy only in relation to employment issues. Since then, however, OECD surveys and discussions have included health, pension, and education policy. Issues directly relevant to the PHP (for example, on smoking and obesity) are now given prominence by OECD. OECD publicity was used to question whether this was sufficient in the context of such public health problems as obesity.[45] For example the OECD Forum Conference in Paris considered a range of themes directly relevant to the PHP and brought together speakers from the EU, OECD countries, World Trade Organization and OECD officials.

Evidence of collaboration between OECD and the EC is extensive with a search on the OECD website showing 158 references to the European Union. On closer inspection these references are more typically with other parts of the Commission (especially DG Employment, Social Affairs and Equal Opportunities). There were thirteen specific references to DG SANCO. The OECD therefore is relevant to the delivery of PHP objectives but primarily through a higher level engagement with issues such as obesity where its guidelines (for example the OECD Guidelines

[44] Public health advocacy is the strategic use of news media, meetings, discussion forums etc. to change policies, laws, standards, funding and self–regulation rather than aiming to change individual behaviour in the first instance (although this may well be the ultimate outcome). Such changes might include tobacco bans or agreements to limit advertising to children. For a more limited and state–centric definition, see McKee, M., Gilmore, A.B., and Schwalbe, N. (2005). International co–operation and health. Part 2: making a difference. *Journal of Epidemiology and Community Health*, 59: 737–739.

[45] www.oecd.org/documentprint/0,2744,en_2649_33729_356265856_1_1_1_1,00; and also see www.oecd.org/health/ healthataglance (visited 1 June 2006).

for Multinational Enterprises) and influence help to build a credible and practical case for international public health action. The OECD offers only a very limited opportunity to directly shape policy in the Member States. However, the OECD is influential in a broader sense, as an important part of an international 'epistemic community', where beliefs about normative values and causality are created giving rise to a shared language and similar priorities.[46] The critical role played by the OECD in this respect is in supporting the creation of a statistical base for comparing public health action and measuring outcomes across Member States. This is important in supporting an evidence–base for public health in general and the PHP in particular. For example, in May 2000 the OECD published a manual *A System of Health Accounts* which aims to establish the boundaries and basic categories of health care allowing for more direct comparisons and contrasts between countries to be made and, ultimately, to support efforts to identify best practice. As outlined below, the PHP has had, as one of its objectives, the development of a system of health indicators and data collection that would lead to European–wide health indicators with agreed definition, methodology of collection and use. The OECD is a partner in this process.

Co–operation between the European Commission and OECD on public health matters focuses on two areas. First, developing health care quality indicators, data on the economics of health, and cost effectiveness of prevention, issues related to the mobility of health professionals and support for the System of Health Accounts. Second, engaging in discussion and debate to shape wider international thinking about public health issues.

We can see below that the PHP has made considerable progress towards its strategic aim of producing European Community Health Indicators (see also section 3.3.3). We can also see that the Commission in general, and to a lesser extent PHP in particular, has actively sought to support and shape the OECD's own data collection. Both of these should be regarded as successful outcomes. However, having achieved this, it might now be important to ensure the lowest level of duplication of activity and the highest level of synergy between these two data collecting organisations. We have also seen that the PHP has played an active role with the OECD in public health advocacy. Desk research on this suggests that such activity has been often responsive and opportunistic (for example, speaking at conferences). Irrespective of the cause, OECD's growing emphasis on including public health outcomes in its country studies is complementary to the aims of PHP. The extent to which it is a consequence of the PHP is impossible to identify. However, as an important aim of any public health programme, DG SANCO may wish to develop a prioritised and coherent communications strategy to identify how it will collaborate with OECD in its public health advocacy.

World Health Organization

The World Health Organization (WHO) was created in 1948 by Member States of the United Nations to be a specialised agency with a mandate for health. Its mission is to reduce the burdens of disease and poverty and to support access for all to a responsive health care system. WHO has a strongly regional structure and the regional office for Europe is located in Copenhagen. The WHO Regional Office for Europe addresses a range of topics relevant to the aims of DG

[46] Haas, P. (1992). Introduction: epistemic communities and international policy co–ordination. *International Organisation,* 46 (1): 1–35.

SANCO[47] in general and the PHP in particular. The WHO Regional Office for Europe and the PHP therefore share a set of stakeholders, aims and dependencies in common. There are 14,700 references to the EU on the WHO European Regional Office website and 1,270 to DG SANCO, suggesting more institutional interlocking on public health matters than is the case with OECD.

In its early years, WHO focused primarily with combating communicable diseases. In the 1960s, reflecting wider changes in the international health policy community, these activities were extended to include improving access to health services in poor rural populations, combating childhood disease through improved use of technologies, and an expanded immunisation campaign. However, following the 1979 joint WHO/UNICEF conference in Alma Ata, Health for All (HFA) (first adopted by WHO in 1977) was adopted and later endorsed by the UN General Assembly in 1981. Marking a shift towards advocacy, as well as analysis, HFA was to be delivered through a radical commitment to social justice, equity, self–reliance, appropriate technology, decentralisation, community involvement, inter–sectoral collaboration and affordable costs. No country adopted this programme entirely but the Alma Ata agreement both reflected and helped to frame the international public health agenda for the following decades. The PHP is relevant to both the more 'traditional' public health aims of combating communicable diseases and the more recent aims associated with HFA. The Commission also shares WHO concerns about the importance of environmental determinants of health and many of these are contained with the EU Strategy on Environment and Health established in 2003 and the subsequent European Environment and Health Action Plan 2004–2010.

WHO, then, has a function in setting standards, in providing technical advice on medical matters, and in advocating changes in health policy and policies designed to address the major determinants of health. WHO is therefore a legitimate and important focus for PHP influence. Indeed, the European Commission and WHO have a long–standing relationship. This is based on exchanges of letter in 1972, 1982 and 2000 and High Level Meetings in 2001, 2002, 2003 and 2004. At a technical level, meetings between senior officials from the two organisations have taken place since 2001. Areas of co–operation include: generating authoritative evidence for practitioners and policy–makers to improve health and health determinants; developing methodologies for monitoring and surveillance to improve and prioritise interventions; strengthening communicable disease surveillance; exchanging information on the evaluation of the determinants of public health; promoting health research and technological development; co–operating with other agencies to deal with emergencies such as natural disasters; and seconding staff for improved mutual understanding.

The potential for synergies between international organisations is demonstrated by the example of obesity: the Public Health action Programme has funded a series of activities on diet and obesity and DG SANCO has led the establishment of the EU Platform but the convergence of recommendations and expert judgements concerning nutrition, obesity and physical activity has been crucial to the successful establishment of the platform. This work has been shared by WHO and Member States and illustrates the importance of a well–developed evidence base to support public health action. A Network of Experts on Nutrition and Physical Activity advises the Commission itself. The impact of the Platform is, at the time of writing, not yet known. There is

[47] www.euro.who.int/ (visited 1 June 2006).

also to be a WHO European Ministerial Conference on Counteracting obesity in November 2006.

There are significant other examples of EU/WHO co–operation on public health issues. The Health Evidence Network (HEN) has been funded by DG SANCO and is an important source of information and a mechanism for accessing expertise. Another example is the Health Inequalities Summit of October 2005 that brought together the EU and other international experts, including the OECD and WHO.

Developing international health indicators

An important contribution of the PHP is to strengthen the evidence base supporting public health action. The PHP was given a key objective of establishing and operating a sustainable health monitoring system to produce comparable information on health and health–related behaviour of the population, on diseases and on populations. It was anticipated that this would be achieved through international co–operation. The PHP has supported the development, co–ordination and delivery of indicators and data collection. A general strategy and approach on health indicators was presented to the Network of Competent Authorities in July 2003 and this has led to the strategy on European Community Health Indicators (ECHI) (see also section 3.3.3). This has arisen from, and continues to draw upon, the collaboration between DG SANCO and Eurostat, DG Research, OECD and WHO. They are designed to complement, and not duplicate, WHO health statistics. This strategy is helping to provide a timely, relevant and accurate evidence base to support public health action. An illustration of the international dimension to creating international health indicators would be the 2003 report *The health status of the European Union*[48] with a steering group of representatives from all Member States, the WHO and the Commission, drawing on experts largely from Commission–supported projects and drawing on the resources of key international data collecting organisations – Eurostat, OECD and the European Regional office of the WHO. DG SANCO, along with partner institutions from eleven Member States, has also supported the WHO European Centre for Environment and Health in co–ordinating the project 'Implementing Environment and Health Information System in Europe: ENHIS'. The aim is to create a comprehensive information and knowledge system to generate and analyse environmental health information. This will both contribute to the European Community Health Information system and contribute to the evidence base for health policies in the European Region of the WHO. The first meeting in 2005 was attended by 66 participants including representatives from the relevant agencies in Member States, DG SANCO, the European Commission Joint Research Centre, the European Environment Agency, the European Child Safety Alliance, in addition to representative from the WHO.

In summary on international collaboration, amongst stakeholders and the wider public health community there is a wide agreement that concerted action at the international level is needed if growing health risks are to be averted and opportunities to be seized. This has led to a situation in which there are shared, overlapping and mutual interests among international organisations. The Commission, DG SANCO in particular, has played an important role in supporting the development of an evidence base and created the opportunity for collaboration and discussion. In

[48] European Commission. Health and Consumer Protection (2003). *The health status of the European Union. Narrowing the health gap.* Brussels: European Commission.

their turn, as part of this 'epistemic community' both the OECD and WHO have taken actions which support the aims of the PHP. This has largely been achieved through voluntary collaboration and inter–agency co–operation. Whether this successful collaboration has been achieved because of the direct actions taken by the PHP is hard to say but there is substantial evidence of apparently successful interactions between DG SANCO and WHO in particular.

The opportunity in the future to exploit these connections for the benefit of European citizens appears to be considerable. However, it would be worth reflecting on the specific and distinct contribution that the PHP makes to the actions of large–scale organisations that are already committed to working in this area of public health. For example, the EU Platform on Diet, Physical Activity and Health is an important attempt to encourage self–regulation, with a strong evidence base, for the benefit of citizens. DG SANCO with its relationship to consumers and issues such as labelling, is uniquely well–placed to support self regulation in this area. However, it will be important to monitor this sort of activity, in particular to understand the potential benefits of, and limits of, self–regulation as a key instrument for improving public health. On the one hand, this is attractive in areas of highly complex interventions intended to change behaviour. On the other hand, co–ordinating a range of organisations with distinct and clearly articulated interests will be challenging. Whatever the learning from this, however, future public health activities should build on the successful construction of an international community of shared values and evidence and identify a clear logic of action that will lead to real benefits.

3.5.3 Involvement of new Member States in the PHP

To ensure consistency and complementarity with Member States it is important to understand the capacity of Member States to participate in the PHP. For this purpose we have performed

- an analysis of partnerships in proposals submitted for funding to DG SANCO in 2005 and
- a network analysis on the networks within PHP projects in a selected representative sample of projects for the years 2003–2005 (n=53).[49]

The network analysis has been done at two levels: at the country level and at the level of organisations. Below we present the main conclusions from the network analysis. Details are presented in Appendix 4.

Partnership of new Member States in proposals

We know that 'geographical coverage' is an important evaluation criterion in funding proposals.[50] The analysis showed that partnerships, which are led by institutions from the EU–15 and incorporate institutions from new Member States (NMS), represent about 57% of total proposals, nearly 70% of successful proposals in 2005 and 53% of rejected proposals. Such partnerships have a success rate of 32%. Partnerships, which are led by institutions in NMS and incorporate partners from the EU–15, represent a smaller number of proposals, about 5%. Their proposals represent 7% of accepted proposals and 4% of rejected proposals. The success rate at 36% is slightly higher than for partnerships in which EU–15 institutions take the lead (32%). When partnerships either consist of only EU–15 institutions or NMS institutions success rates tend to be much lower. When EU–15 institutions take the lead without incorporating NMS

[49] Although we acknowledge that the sample used for this analysis is rather small, it provides some insights in the level of involvement of different Member States.

[50] Note that the selection process also seeks to favour projects with better dissemination plans.

partners the success rate in 2005 was 18%. The weight of these proposals was 34% of the total and 38% of rejected proposals across the strands of the PHP. When NMS institutions take the lead without incorporating institutions from the EU–15, the success rate is 0%. The proportion of these proposals to the total is 3%.

An analysis of the evaluation scores suggest that proposals, which have NMS lead institutions and EU–15 institutions score slightly higher than proposals which have EU–15 lead institutions and NMS partners (57 to 55 for rejected proposals and 90 to 84 for accepted proposals).

Looking at specific partnerships in 2005, all NMS participate (overall proposals) in the various strands of the PHP. Malta and Cyprus participate the least. Poland, Hungary the Czech Republic and Slovenia seem to participate the most. However, in general, there seems to be a relatively even spread in terms of participation between NMS. There is not much difference between the geographical spread of accepted proposals and the spread of rejected proposals. This lack of difference seems to indicate that the EC encourages relatively broad groups of partnerships. Therefore, in the category 'accepted proposals', the distribution between NMS seems relatively even and it does not appear that certain countries are over– or under–participating (particularly for 'accepted proposals'). This analysis cannot make this determination for specific institutions. This determination can be made by examining the project fiches of the 'accepted proposals'.

The analysis also looked at the main reason (not all) for rejection of proposals involving NMS, either as partners or as leads. The two dominant reasons seem to be 'planning' (given in 20 proposals) and 'scope of research' (given in 13 proposals). Geographical coverage is given as the main reason for rejection in six rejected proposals.

The analysis suggests that chances of success in PHP increase when a partnership includes EU–15 and NMS and are the highest where NMS institutions take the lead and incorporate EU–15 institutions (though not as frequent as when EU–15 institutions take the lead). We further analysed the involvement of NMS in a network analysis.

Involvement of new Member States in PHP networks: Country level

We began by reviewing the *direct linkages between countries*. One can take the number of linkages that a country has to be an indicator of its centrality: a country is more central in the network the more linkages it has. For this purpose we simply counted the number of times that (organisations in) one country co–operated with (organisations in) another country.

The results are summarised in a matrix presented in Table 7.[51] There are two things to note about the matrix. First of all, there is a distinction between countries which 'provide' the project leaders, i.e. the applicants, and countries in which project (associated) partners reside (*destination*). The former are considered the *origin* of the link or co–operation (read as rows in Table 7), the latter are considered the *destination* (columns). Second, countries can have more than one link with other countries. For instance, there are nine links from Belgium to Italy. This indicates that there are nine relations between project leaders located in Belgium and associated partners in Italy. The existence of multiple (or *valued*) linkages between countries is due to the fact that some countries have more than one organisation participating in the PHP.

[51] We derived the geographical pattern in the selected sample of PHP projects on the basis of the contact details of the project partners provided in the proposal database.

Table 7 indicates that within the selected sample of projects (n=53) there are 17 applicant countries (origin), mainly from the 'old' Member States such as Austria, Belgium, Denmark, France and Germany and some new Member States such as Estonia, Latvia, Poland and Slovak Republic. Origin countries with the largest number of partnerships are Belgium (93), UK (88), Germany (87) and The Netherlands (83), probably because they have a long tradition in public health.[52] Hence, organisations in these countries are often project leaders/applicants in the selected projects or are lead partners in projects involving many partners (see also the network analysis at the organisational level). One can conclude from this that Belgium, Germany, The Netherlands and the UK are central countries in the network.

[52] We note that in the case of Belgium, the high out–degree is probably misrepresented as many EU–based organisations have an address in Brussels (e.g. European Heart Network) but are by no means Belgian. Belgian organisations should be truly Belgian. Similarly the Danish organisations include WHO Europe and the Swiss WHO Headquarters.

Table 7. Valued linkages across network – countries

		A	B	B	C	C	D	E	F	F	G	G	H	I	I	I	L	L	L	M	T	N	P	P	R	S	S	S	T	S	U
1	Austria	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0
2	Belgium	3	2	2	2	5	4	1	3	5	6	2	2	1	4	9	3	0	1	1	3	2	3	3	3	2	2	4	1	4	9
3	Bulgaria	0	0	4	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
4	Cyprus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Czech Republic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Denmark	1	2	1	0	1	2	0	2	1	3	1	4	0	1	3	0	1	0	1	2	0	3	0	1	2	2	3	1	1	4
7	Estonia	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	1	0
8	Finland	2	2	1	1	1	2	1	1	2	2	2	1	2	1	3	1	0	2	1	3	2	1	1	1	2	1	3	0	2	2
9	France	0	1	0	0	1	2	0	0	2	4	0	2	0	0	4	0	0	0	0	1	0	1	0	0	0	3	0	0	1	
10	Germany	5	7	1	1	3	2	4	3	2	5	3	4	2	4	5	1	0	1	2	5	0	2	2	4	1	3	3	1	2	7
11	Greece	1	0	1	1	3	1	0	1	1	2	2	0	0	0	1	1	0	0	1	1	0	1	0	0	0	3	0	0	1	
12	Hungary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Iceland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Ireland	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Italy	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
16	Latvia	0	1	1	0	1	0	1	0	0	0	1	1	0	0	0	0	1	0	0	1	0	1	1	1	0	0	0	0		
17	Lithuania	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Luxembourg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Malta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	The Netherlands	2	5	1	0	3	3	2	5	4	4	3	3	0	3	5	2	1	0	0	3	4	2	3	2	2	2	5	1	7	6
21	Norway	0	0	0	0	0	2	1	1	0	1	1	0	1	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	1	0
22	Poland	0	1	1	0	1	0	0	1	1	2	0	1	0	0	2	1	0	0	0	2	0	1	0	2	0	0	1			
23	Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Romania	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Slovak Republic	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
26	Slovenia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Sweden	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	UK	4	5	0	1	1	4	2	3	6	5	4	1	3	4	3	3	0	2	2	5	2	3	5	0	2	3	4	1	5	4

Organisations in Germany and the UK also frequently feature as associate partners in projects led by organisations from other countries (destination). Organisations in Italy and Spain also participate a lot in PHP projects. This may be due to the fact that collaborations including 'southern' partners tend to have a higher success rate.

In Figure 2 we give a graphical representation of the network for the representative sample of the 53 projects.

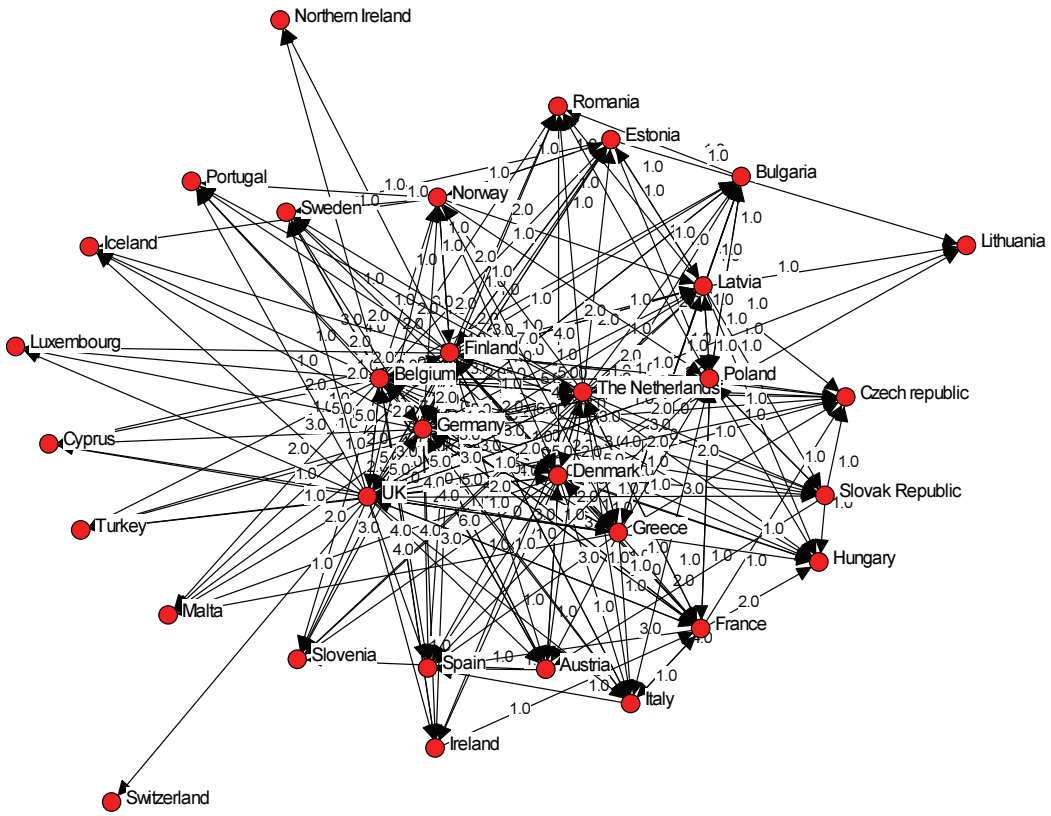


Figure 2. Graphical representation of network of representative sample (n=53)

Next we examined the **structure** of the network. The structure of the network determines how easy/difficult is it to disseminate information and knowledge across the entire network *even if countries are not all directly related*. For this purpose we looked at the extent to which the network is made up of sub–groups or *cliques* (see Appendix 4 for a more detailed network analysis).

Starting with defining a clique as a group consisting of 3 countries that have all possible ties present among themselves,[53] we allowed groups to be expanded to include as many countries as possible. Using software for social network analysis we found 30 such cliques (see Table 3 in Appendix 4 for an overview). The largest clique is composed of 11 countries.[54] All smaller cliques share some overlap with some part of the core. Where cliques overlap, mobilisation and knowledge diffusion may spread rapidly across the entire network; where they do not, information and knowledge may be 'locked in' in one group and not diffuse to the other. We are interested in the extent to which cliques overlap and what countries connect different groups. We can examine this by looking at the co–membership matrix (Table 8). The matrix indicates the

[53] This means the members are all linked directly. If we allow cliques to be countries that are linked more indirectly, e.g. linked by one intermediate country, the number of cliques falls to three. Allowing two intermediate countries, i.e. allowing a distance of three steps, all countries are interlinked (see results on geodesic distance).

[54] Belgium, Denmark, Finland, France, Germany, Greece, Italy, The Netherlands, Poland, Spain and UK.

number of times that two countries are in a clique together. It appears from the table that Belgium (noting again this result may be biased – see note 50), Finland, Germany, The Netherlands and the UK share membership of a clique with most other countries and do so at least once. These countries are also very 'close' in the sense that they share memberships in over 20 cliques between them. On the other hand, Cyprus, Iceland, Lithuania, Luxembourg, Malta, Portugal and Turkey are only in a few cliques with other countries. As mentioned above, a clique was defined as sub–sets consisting of at least three countries.

The 'new' Member States, Czech Republic, Estonia, Hungary, Latvia, Poland, Slovak Republic and Slovenia appear to be well embedded in the network of selected projects. They are included in quite a number of sub–groups. By and large the same applies to the candidate countries Bulgaria and Romania.

To what extent did the PHP funding contribute to the forming of new networks, i.e. involving new Member States?

A comment made in the interviews was that without PHP funding one would not have set up a EU–wide network; one would have done things with the usual (smaller number of) partners. In this sense, the PHP may have in fact contributed to expanding existing networks and establishing new linkages with new Member States. The comment above is illustrative of networking theory. In the latter co–operation or networking is seen to be path dependent. People co–operate more (easily) with persons they already know or have worked with before. This principle is illustrated by Wagner and Leydesdorff (2003).[55] They compare the European science network in 1990 and 2000 (Appendix 5 gives a graphical representation of the science networks). Wagner and Leydesdorff (2003) find that overall regional science networks have expanded (more players involved) and have become more interconnected (more linkages). Moreover, the growth of linkages has been largest between countries that already had a robust network in 1990. However, within the context of this evaluation we have not been able to establish whether linkages with new Member States in the network of selected PHP projects *as a whole* existed prior to the implementation of the Programme, or are in fact new linkages. In a future PHP this could be studied by monitoring of the growth and composition of networks.

[55] Wagner, C. and Leydesdorff, L. (2003). *Mapping global science using international co–authorships: A comparison of 1990 and 2000*. In: J. Guohua, R. Rousseau, W. Yishan (Eds), Proceedings of the 9th International Conference on Scientometrics and Informetrics. Dalian: Dalian University of Technology Press: 330–340.

Table 8. Clique Co–Membership Matrix

		A	B	B	C	C	D	E	F	F	G	G	H	I	I	L	L	L	M	T	P	P	R	S	S	S	T	S	U
1	Austria	-	4	0	0	0	4	0	4	0	4	1	0	0	0	0	0	0	0	4	0	0	0	1	1	1	0	1	4
2	Belgium	4	-	4	1	4	16	2	29	4	29	10	3	1	1	8	0	1	1	25	15	1	2	5	2	2	1	3	25
3	Bulgaria	0	4	-	0	0	2	0	4	0	4	2	0	0	0	2	0	0	0	4	4	0	2	0	0	0	0	0	0
4	Cyprus	0	1	0	-	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5	Czech Republic	0	4	0	0	-	2	0	4	1	4	2	0	0	0	2	0	0	0	4	4	0	0	2	0	0	0	0	4
6	Denmark	4	16	2	0	2	-	0	15	4	16	6	2	0	1	0	1	0	1	16	8	0	1	3	1	2	1	2	14
7	Estonia	0	2	0	0	0	0	-	2	0	2	0	0	0	0	2	1	0	0	3	1	0	0	0	0	0	0	1	2
8	Finland	4	29	4	1	4	15	2	-	4	28	10	3	1	1	8	0	1	1	24	15	1	2	5	2	2	0	3	24
9	France	0	4	0	0	1	4	0	4	-	4	2	1	0	1	0	0	0	0	4	3	0	0	0	0	1	0	0	4
10	Germany	4	29	4	1	4	16	2	28	4	-	10	3	1	1	8	0	1	1	25	15	1	2	5	2	2	1	3	25
11	Greece	1	10	2	1	2	6	0	10	2	10	-	0	0	1	3	0	0	1	8	7	0	0	0	0	2	0	0	8
12	Hungary	0	3	0	0	0	2	0	3	1	3	0	-	0	0	1	0	0	0	3	3	0	0	2	0	0	0	0	3
13	Iceland	0	1	0	0	0	0	0	1	0	1	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15	Italy	0	1	0	0	0	1	0	1	1	1	1	0	0	-	0	0	0	0	1	1	0	0	0	0	1	0	0	1
16	Latvia	0	8	2	0	2	0	2	8	0	8	3	1	0	0	-	1	0	0	9	7	0	1	2	1	0	0	0	6
17	Lithuania	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	-	0	0	2	0	0	0	0	0	0	0	0	0
18	Luxembourg	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	1
19	Malta	0	1	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	1
20	The Netherlands	4	25	4	0	4	16	3	24	4	25	8	3	0	1	9	2	0	0	-	15	1	2	5	2	2	1	3	21
22	Poland	0	15	4	0	4	8	1	15	3	15	7	3	0	1	7	0	0	0	15	-	0	2	4	0	1	0	0	11
23	Portugal	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	-	0	0	0	0	0	0	1
24	Romania	0	2	2	0	0	1	0	2	0	2	0	0	0	0	1	0	0	0	2	2	0	-	0	0	0	0	0	0
25	Slovak Republic	1	5	0	0	2	3	0	5	0	5	0	2	0	0	2	0	0	0	5	4	0	0	-	0	0	0	0	5
26	Slovenia	1	2	0	0	0	1	0	2	0	2	0	0	0	0	1	0	0	0	2	0	0	0	0	-	0	0	0	2
27	Spain	1	2	0	0	0	2	0	2	1	2	2	0	0	1	0	0	0	0	2	1	0	0	0	0	-	0	0	2
28	Turkey	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	-	0	1
29	Sweden	1	3	0	0	0	2	1	3	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	-	3
30	UK	4	25	0	1	4	14	2	24	4	25	8	3	1	1	6	0	1	1	21	11	1	0	5	2	2	1	3	-

Underlying the involvement of countries in PHP is the propensity to network of individual organisations. Next, we turn to the involvement of new Member States in PHP networks by looking more closely at the organisational level.

Involvement of new Member States in PHP networks: Organisational level

As mentioned before, 'geographical coverage' is an important evaluation criterion in funding proposals. Out of the selected sample of projects (n=53), 37 projects have at least one participant from a new Member State and 17 projects have at least one participant from candidate countries.[56] These figures indicate that organisations from new Member States are represented in 70% of the selected projects in the period 2003–2005.

Table 9 gives the number of organisations from new Member States and candidate countries as a number of the total number of organisations participating in the 53 selected projects.

Table 9. Participation of new Member States and candidate countries in representative sample of projects

Total number of organisations from new Member States	148 (32% of total 461)
Total number of organisations from candidate countries	36 (8% of total 461)

NMS = Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia

Candidate countries = Bulgaria, Romania, Turkey

Looking at the number of organisations from new Member States that are lead partners in projects, we find that o*nly a small number of the selected projects are led by organisations from new Member States and candidate countries*. Of the 53 selected projects, only five projects have lead partners from new Member States (Estonia, Latvia, Slovak Republic and Poland) and one project is led by a candidate country (Bulgaria). We have explored these six projects in more detail with respect to *budget size and geographic composition* of the network within these projects. Table 10 below presents the basic data.

Budget size

With respect to budget size we compared the projects led by organisations from new Member States and candidate countries to projects led by organisations from the EU–15 (i.e. we compared the budgets for the projects from new Member States and candidate countries to the average for all 53 selected projects across the years 2003, 2004 and 2005 (see Table 2 in Appendix 7). We found that all projects in Table 10 below belong to the relatively smaller (below average) projects of the selected projects funded in the same year. The budget for the Bulgarian project in fact represents the minimum for the selected projects funded in 2004.

[56] Some projects have both, which explains why the sum can exceed 53.

Table 10. Characteristics of projects led by organisations from new Member States and candidate countries

	Country of lead partner	Lead organisation	Number of partners in project	Characteristics of network	Budget (in respective year)	Year of funding	Strand
1	Slovak Republic	Institute of Health Information and Statistics	4	3 of the 4 partners are from new Member States	636,500	2003	HI
2	Poland	COI (Centrum Onkologii)	0		974,300	2003	HI
3	Poland	Nofer Institute of Occupational Medicine	5	2 of the 5 partners are from new Member States, 2 are from candidate countries	286,525	2004	HD
4	Estonia	University of Tartu	7	3 of the 7 partners are from new Member States, the other partners are predominantly 'Nordic' (Finland, Norway, Sweden)	341,231	2004	HD
5	Latvia	Health Promotion State Agency	11	7 of the 11 partners are from new Member States, 2 are from candidate countries	257,797	2005	HD
6	Bulgaria	Medical University Sofia	8	5 of the 8 partners are from Bulgaria too, 1 is from a new Member State	150,784	2004	HI

As pointed out before, there are differences in the budgets of selected projects across strands. We therefore also compared the budgets for the projects led by organisations from new Member States and candidate countries to the averages per strand (see Table 3 in Appendix 7). We found that, with the exception of project 2 (led by COI), all projects are below the average of their respective strands. The Bulgarian project once again represents the minimum for the selected projects, this time in terms of its strand. Hence, we conclude that *projects led by organisations from new Member States and candidate countries are generally speaking relatively small in terms of budget*.

A reason for the small size of projects in terms of budgets and the small number of new Member State and candidate country project leaders is given in the interviews. Stakeholders mentioned that a major bottleneck in the involvement of organisations from new Member States is their relatively limited experience with the complex application and co–funding procedures.

We can corroborate the point of *experience* through additional analysis of the networks. First of all, we found that the lead organisations in the six projects from the new Member States and applicant countries discussed here are all very well 'networked'. Without exception, the lead organisations are participants in several other projects. Some organisations, e.g. the Nofer Institute of Occupational Medicine, the University of Tartu and the Health Promotion State Agency, participate in a considerable amount of projects: between 7 and 13 projects.[57] Second, the lead organisations in projects funded in 2004 and 2005 were associated partners in previous, i.e. 2003, projects.[58] These results suggest that *for organisations to be a lead partner in PHP projects they typically need a certain level of experience* (this is also confirmed by the interviews). This experience can either be in terms of experience with co–operation and having established a prior network, or in terms of having experience with participating in EU programmes.

Geographic composition

Concerning the geographic composition of the network in the projects led by organisations from new Member State and candidate country, Table 10 indicates that the associated *partners in these projects are predominantly* organisations *from new Member States and candidate countries as well*. Still, lead organisations from new Member States and candidate countries do not only seek co–operation with partners from the same area. Our scan of the call for proposals database indicated that the lead organisations of the six projects are also associated partners in one and even several other projects. On the other hand, speaking again in terms of a learning experience, it may then be useful that these organisations pull in other organisations from new Member States and candidate countries. This may serve as a channel for transferring experience to organisations that are more on the 'periphery'.

The EC may facilitate (organisations from) new Member States as they go down the learning curve. In section 3.4.2, we pointed out that by discussing the information and criteria regarding application procedures with EC staff (e.g. during information days), potential applicants could get a better idea about whether their proposed activities meet the criteria for selection. This may facilitate the subsequent submission process and may eventually increase the chances of success of proposals. Such discussions could be especially useful for first time applicants such as organisations from new Member States.

3.5.4 Summary

There is a need for concerted action in the field of public health

Amongst stakeholders and the wider public health community there is a wide agreement that concerted action amongst international organisations and national governments are an appropriate response to growing and new public health threats arising from globalisation. This has led to a situation in which there are shared, mutual, and overlapping interests amongst international organisations (such as OECD and WHO), national governments, and across a range of Community programmes (e.g. with DG Research, DG INFSO). Each of these

[57] We have done a rough crosscheck by looking at lead organisations from EU–15 in the selected sample of 53 projects. Within these projects, 15 lead organisations from EU–15 (37%) participate in more than one of the selected 53 projects. Considering these 53 projects represent only 6% of the 900 proposals submitted in the 2003–2005 calls for proposals, this percentage is quite high. Hence, lead organisations from EU–15 also participate in many projects which lend credibility to our point that lead organisations in general are well networked.

[58] Excluding projects in the 2003 call for proposals.

organisations has an obligation to take action to avoid overlaps and maximise synergies in the public interest.

What doesn't work?

Achieving consistency and complementarity with Member States and Community programmes faces three barriers, including the EC financial mechanisms that limit synergies between programmes. First, the information collected and used by Member States on public health may be very different and the categories used for data collection and evaluating impact vary. Indeed, what is included as 'public health' varies. Second, the capacity of Member States to participate varies with new Member States, in particular, tending to follow the lead of Member States with a greater capacity to drive the agenda of the PHP. Third, incentives vary, in particular on controversial topics such as reproduction and sexual health. Equally, the public health agenda enjoys a variable political profile across Member States.

What can be improved?

Some stakeholders stated that the extent to which the PHP interacts with other EC activities is small and that more horizontal information exchange is needed (e.g. in the field of quality of water and structural funds for health system development). However, in other areas there is quite some interaction between different programmes such as health systems and bioterrorism, pharmaceuticals and health information technologies. In some areas there are obvious overlaps (e.g. health information), and the Commission should play a clearer role to take advantage of these overlaps.

3.6 Acceptability

Acceptability refers to the extent to which key stakeholders accept public health policy in general and the Programme as implemented and is addressed by the evaluation question:

12. To what extent do stakeholders accept public health policy in general and the way in which the Programme implements this policy?

3.6.1 Results from interviews

Interviewees from *all stakeholders recognise the role of national governments in public health policy*. In a European context coherence and co–operation between national governments should be strengthened in the context of arising pan–European health issues (e.g. patient mobility, communicable diseases). At the same time developing and implementing public health programmes in the Member States should remain the sole domain of national health authorities (subsidiarity of Member States).

In addition, there is *general agreement across all stakeholder groups about the rationale for the PHP* to stimulate co–operation and co–ordination in health across Europe in order to harmonise practices, to foster the same quality of health care in all Member States and to develop common responses to health threats. Still with respect to the implementation of the Programme's rationale, interviewees are more reserved (see section on effectiveness).

3.6.2 Summary

The rationale for European intervention in public health is widely accepted and supported

Not only interviewees suggest this but statements from international partners (OECD and WHO in particular) and NGOs support this as well. However, interviews with policy–makers from the Member States suggest that the Commission needs to take a stronger stance on public health issues.

What works?

Health challenges in the EU need a co–ordinated approach. This is an issue for the Health Strategy that includes the PHP as a tool. The PHP has evaluated the impact of EU policies on health, developing joint actions with other EC activities, and supporting European agencies in the field of public health (e.g. ECDC).

What can be improved?

Findings include the view that the PHP could be improved by focusing on more immediate concrete and more in–depth activities that are a concern to several Member States (e.g. obesity, accidents, HIV and avian flu). In this respect the PHP could serve as a more effective link between national governments and the EC. However, the Commission is aware that interventions are received differently within and between Member States. There are political sensitivities especially when dealing with interventions between Member States and not all Member States are open to interventions (e.g. guidelines that may limit national competence).

3.7 Monitoring

In the evaluation we have asked about how well the current monitoring system of the Programme functions addressing the following evaluation question:

13. Does the current monitoring system deliver the necessary information to support a sound implementation of the Programme?

3.7.1 Results from survey

The majority of the respondents (n=27, total respondents: n=48) believed that *the monitoring and evaluation of projects is adequate* (e.g. in terms of frequency, project officers' expertise, and issues addressed – see Appendix 1 for more detail). Monitoring frequency was perceived as sufficient especially given the amount of administration. Three respondents mentioned staff were very supportive. Three respondents commented that whether the interaction with project officers was successful depends on whom you interact with. Other concerns raised by respondents included high staff turnover; lack of decision–making authority given to project officers; and low response due to personnel shortage or overburdened officers. With regard to possibilities for improving monitoring and evaluation of projects, the option of more self–assessment procedures was mentioned most often. One suggestion was that DG SANCO could provide a generic tool for self–assessment. For useful self assessment methodologies applicable to the public health sector we

refer to the empowerment evaluation[59] as used in the evaluation guidelines of the Swiss Federal Office of Public Health (SFOPH).[60] These guidelines have been developed to help staff of the FOPH and its external partners to reflect on what needs to be included when planning an evaluation of projects or programmes. Empowerment evaluation is a form of self–evaluation that fosters improvement and self–determination. The method is being used throughout the world and in such areas as substance abuse prevention, HIV/AIDS prevention and individuals with disabilities.

A couple of other respondents mentioned self–assessment procedures would need to be easy and applicable, and not time–consuming or bureaucratic. Respondents were also asked how monitoring activities should take place (e.g. phone, meetings, and visits). Most respondents suggested more than one means of how monitoring activities should take place, and the most common suggestions were meetings, visits and phone.

3.7.2 Results from interviews

Most *project leaders consider programme management for the monitoring of projects sufficient, but improvements can be made.* The most important suggestions include:

- More consultative meetings with project officers would be useful for monitoring projects.
- Quicker feedback to questions (e.g. submission of amendments with regard to project partners).
- Increase of human resource capacity because feedback and co–ordination of activities are not optimal. Working parties should improve the co–ordination between projects/activities and involve project leaders in exchanging information.
- Decrease the frequency of staff rotation (e.g. one project leader noted that his project had to deal with three different project officers).
- Commission staff should attend conferences and meetings and invite project leaders to meetings to report on progress.
- More feedback on reports.

3.7.3 Summary

Monitoring of programme activities is adequate

The survey and interview results suggest that the monitoring and evaluation of the projects is generally considered to be adequate and monitoring frequency was perceived as sufficient.

What does not work?

Interviewees felt that feedback and monitoring activities were hampered by a lack of human resource capacity.

What can be improved?

One suggestion to improving the monitoring system was that DG SANCO could provide a generic and 'easy to handle' tool for self–assessments. Also, DG SANCO officials could play a

[59] Fetterman, D.M., Kaftarian, S.J., and Wandersman, A. (1996). *Empowerment evaluation: Knowledge and tools for self–assessment and accountability*. Thousand Oaks, CA: Sage.

[60] Swiss Federal Office of Public Health (1997). *Guidelines for evaluation for health programme & project evaluation planning.* Bern: Swiss Federal Office of Public Health.

more active and communicative role in monitoring activities making use of consultative meetings. Finally, human resource capacity for monitoring purposes should be increased because feedback and co–ordination of activities are not perceived as optimal.

3.8 Success of Programme in enhancing the effectiveness of surveillance, control and response to health risks and threats that cannot effectively be tackled by Member States alone

The success of the PHP in enhancing the effectiveness of surveillance, control and response to health risks and threats that cannot effectively be tackled by Member States alone was studied by means of data collection and analysis through a case study, which is an issue in at least eight EU countries: avian influenza (bird flu). The case study focus on analysing learning mechanisms: on the long term, functioning of learning mechanisms (e.g. diffusion), responses to different types of threats (strategies undertaken), type of responses given, EC role in learning mechanisms, lessons learned by DG SANCO (e.g. strategies followed, centralising knowledge).

Avian influenza

The need to develop a European action plan to combat pandemic influenza outbreaks by the end of 2002 was strongly emphasised during a conference at the end of 2001.[61] This was two years before the avian influenza virus outbreak was reported in South–East Asia. The Avian influenza outbreak in Vietnam in January 2004 was the most serious and most international outbreak of its kind ever reported.[62] The virus spread to the EU in February 2006. In July 2006, several wild birds were confirmed to have died of avian influenza in 13 EU Member States. Based on the conference in 2001, EU legislation and action plans were developed and are currently in place. In particular, the threat of avian influenza became part of the PHP.

Learning mechanisms

Within the framework of the PHP, the EC supported several projects over the years 2003–2005. Those projects that address the threat of avian influenza enhance the capability of responding rapidly and in a co–ordinated fashion to health threats: EISS[63] and EpiNorth[64] in 2003; in 2004 they include a Basic Surveillance Network of 28 European Countries; and in 2005 they include a Europe–wide pandemic influenza vaccine coverage, and the projects EpiSouth,[65] and FLUSECURE.[66]

---

[61] European Commission (2001). *Influenza pandemic – Europe has to be prepared*. IP/01/1686, 28 November 2001. Brussels: European Commission.

[62] European Commission (2006). *Avian Influenza*. Special Eurobarometer 257. Luxembourg: European Commission.

[63] The European Influenza Surveillance Scheme. Available at: http://www.eiss.org/index.cgi (visited 5 October 2006).

[64] EpiNorth – A framework for communicable disease surveillance, communication and training in Northern Europe, 2004–2006. Available at: http://www.epinorth.org/ (visited 5 October 2006).

[65] Network for communicable disease control in Southern Europe and Mediterranean countries. Available at: http://ec.europa.eu/health/ph_projects/2005/action2/action2_2005_full_en.htm (visited 6 October 2006).

[66] FLUSECURE: Combating flu in a combined action between industry and the public sector in order to secure adequate and fast vaccine interventions in Europe. Available at: http://ec.europa.eu/research/health/influenza/proj15_en.html (visited 6 October 2006).

The aims of the EISS include contributing to the exchange and co–ordination of information by aggregating, interpreting and making available clinical and virological data on influenza activity in Europe, especially at the beginning of the epidemic ('timely reporting'), and strengthening and harmonising where appropriate, epidemiological and virological methods. Currently all 25 Member States are covered by EISS.[67]

The Basic Surveillance Network of 28 European Countries collects data on communicable diseases in the EU in which existing surveillance data from national databases are transferred to a common database. It aims to enlarge the network to cover the 10 new Member States as well. In addition the project aims to provide a system of quality control to provide a high quality database to the ECDC.

The EpiNorth project aims to improve communicable disease control and communication in Northern Europe and across the border to Russia by publishing a peer reviewed bilingual (English/Russian) journal and an annual report. In addition, the project aims to maintain a guide to the vaccination programmes in Northern Europe. Furthermore, it aims to train professionals in communicable disease epidemiology.[68]

The aims of the Europe–wide pandemic influenza vaccine coverage[69] include identifying the national influenza stakeholders and establish an integrated network. Nine networks will work in close collaboration and exchange experiences and methodologies thereby increasing vaccine coverage and awareness in the Member States involved. This programme is focussed on six selected Member States forming the bases for future full coverage of all Member States.

The Network for Communicable Disease Control in Southern Europe and Mediterranean Countries (EpiSouth) is similar to EpiNorth in its setup and is primarily focussed on Southern Europe. It aims to provide training in field/applied epidemiology, Cross–border epidemic intelligence, tools to increase the preparedness to cross–border emerging zoonotic infections, and assess the potential for using vaccination to prevent outbreaks of avian flu derived from migrant population and immigrants.

FLUSECURE aims to provide a European network of public health institutes. This network should form the basis for a public private partnership enabling the production and manufacturing of the most effective pandemic vaccine in the shortest possible time in sufficient quantity for the EU population.

Not only does the PHP provide means to support projects that enable learning mechanisms to be available for the long term, it also provides means for the diffusing of knowledge. Several projects that enhance the capability of responding rapidly and in a co–ordinated fashion to health threats

[67] http://ec.europa.eu/health/ph_projects/2003/action2/action2_2003_02_en.htm

[68] http://ec.europa.eu/health/ph_projects/2003/action2/action2_2003_12_en.htm

[69] Europe–wide pandemic influenza vaccine coverage: good epidemic vaccination practice by establishing integrated national stakeholder networks. Available at:
http://ec.europa.eu/health/ph_projects/2005/action2/action2_2005_full_en.htm (visited 4 October 2006).

have been supported during the years 2003–2005. These include EPIET,[70] EXTENDED EPIET,[71] and a European training programme for infectious disease emergencies.

EPIET aims to diffuse knowledge by providing a complement to the theoretical training that most epidemiologists receive in an academic setting in the EU. In particular it supports EPIET fellows for two years during which they undergo a two year field assignment devoted to practical epidemiological training. It aims in part to establish a pool of experts available to respond to public health threats in and beyond EU. This project has been extended by the EXTENDED EPIET project. The EXTENDED EPIET project involves the 25 European Member States, Norway, Romania, Bulgaria, Switzerland and the WHO. The project will train 30 fellows' epidemiologists and 60 supervisors/trainers. After their training they will provide the core epidemiologist, educated with similar techniques that will constitute an essential part of the response capacity to public health threats in the EU. Within the context of other threats such as biothreats induced by sampling, handling and transport of specific high threat pathogens, the European Training for Infectious Disease Emergencies project aims to develop a common European core curriculum in English for emergency care clinicians, nurses and other health care workers. It aims to set up a seed of trainers that are able to spread their knowledge to other trainers so as to provide for a sustainable network of certificated EU trainers of emergency care professionals for the recognition and management of infectious disease emergencies.

Strategies undertaken

Not only does the EC stimulate efforts by the EU Member States to address the threat of avian influenza, in addition, the EC undertakes their own strategies to address this threat. These strategies often take the form of Directives that the Member States are required to adopt in their own legislation often before a specified time.

The Directive issued on 19 May 1992[72] defines Community control measures to be applied in the event of an outbreak of avian influenza in poultry. This directive was to be put into force by the Member States before January 1993. In the Directive of 20 December 2005,[73] new measures were established that are required to be put into force by the Member States in July 2007. It was explicitly stated in the Directive of 2005 that the measures from 1992 should be 'reviewed in the light of recent scientific knowledge on the risks of avian influenza for animal and public health, development of new laboratory tests and vaccines and the lessons learnt during recent outbreaks of this disease in the Community as well as in third countries'.[74] On 17 February 2006, the Commission adopted a decision concerning certain protection measures in relation to highly

[70] EPIET – European programme for intervention epidemiology training, Cohort 9. Available at: http://ec.europa.eu/health/ph_projects/2003/action2/action2_2003_11_en.htm (visited 4 October 2006).

[71] EXTENDED EPIET – European programme for intervention epidemiology training – A capacity building project for alert and response in Europe. Available at: http://ec.europa.eu/health/ph_projects/2004/action2/action2_2004_10_en.htm (visited 4 October 2006).

[72] Council Directive 92/40/EEC of 19 May 2002 introducing Community measures for the control of avian influenza (OJ L 167, 22.6.1992, p. 1).

[73] Council Directive 2005/94/EC of 20 December 2005 on Community measures for the control of avian influenza and repealing Directive 92/40/EEC (OJ L 10/16, 14.1.2006).

[74] Council Directive 2005/94/EC of 20 December 2005 on Community measures for the control of avian influenza and repealing Directive 92/40/EEC (OJ L 10/16, 14.1.2006).

pathogenic avian influenza in wild birds in the Community.[75] This decision was based on the outbreak of avian influenza in Greece, Italy and Slovenia.

However, other actions and legal acts at the community level deal primarily with the human health risks posed by influenza viruses. These concerns in particular the ECDC,[76] the recommendations issued by the Commission on Community influenza pandemic preparedness and response planning, the EWRS[77] and the establishment of the above mentioned EISS. The ECDC has been set up with Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004.[78] The mission of the ECDC is to identify, assess and communicate current and emerging threats to human health from communicable diseases. It is funded entirely out of Community funds. It was set up in part to improve the coverage and effectiveness of existing dedicated networks between Member States for the surveillance of communicable diseases on which Community actions should be built.[79] Already before the establishing of the ECDC, the Network on Communicable Diseases started work in 1999. It currently consists of two pillars. The first pillar concerns the EU–wide surveillance of Communicable Diseases. The EISS is part of the first pillar of the communicable diseases network. The EUEWRS is the second pillar. The early warning and response system of the Community network is reserved for events that affect the Community, such as outbreaks of avian influenza. It is primarily concerned with collecting and exchanging all necessary information on these events. The generation of information on these events is reserved for the surveillance systems in place. The EISS started as part of the PHP. Currently the ECDC is primarily concerned with the EISS as it is part of the Network on Communicable Diseases. This shows that various tasks formerly part of the PHP are now part of the ECDC.

As part of the EISS, national influenza preparedness plans have been or currently are drafted. In March 2004, the European Commission has drafted a working document on Community influenza pandemic preparedness and response planning.[80] The EC drafted this document in collaboration with the Communicable Disease Surveillance and Response Network Committee, the WHO, and the European Medicines Evaluation Agency (EMEA). This document should serve as a launch pad for a debate on co–ordinating preparedness against influenza and on recommendations that can be made in this respect. It states that the EU should improve co–ordination and communication between the Member States and with the WHO. The WHO has

[75] Commission Decision of 17 February 2006 concerning certain protection measures in relation to highly pathogenic avian influenza in wild birds in the Community and repealing Decisions 2006/86/EC, 2006/90/EC, 2006/91/EC, 2006/94/EC, 2006/104/EC and 2006/105/EC (OJ L 48/28, 18.2.2006).

[76] The European Centre for Disease Prevention and Control (ECDC) is established by Regulation (EC) No 851/2004 of the European Parliament and of the Council.

[77] European Union early warning and response system. Available at: https://webgate.cec.eu.int/ewrs/

[78] Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 establishing a European centre for disease prevention and control (OJ L 142/1, 30.4.2004).

[79] Decision No 2119/98/EC of the European Parliament and of the Council of 24 September 1998 setting up a network for the epidemiological surveillance and control of communicable diseases in the Community (OJ L 268/1, 3.10.1998).

[80] Commission of the European Communities (2004). Commission working document on Community influenza pandemic preparedness and response planning. COM(2004)201 final. Brussels: European Commission.

drafted a similar document. In addition, member countries have set up influenza preparedness plans. Only two Member States of the EU25 lack such a plan.[81]

In order to pool all relevant information on public health, DG SANCO recently published an online public health portal of the European Union.[82] It aims to keep everyone interested in public health, such as health professionals, administrations, policy–makers and stakeholders, up to date with policies and decisions taken at European, national and international level. In addition, the portal provides expert users with access to statistical databases relevant to public health. Influenza plays a large role on this web portal. It provides various links to sources on influenza, including an influenza summary page, a separate section on avian influenza and a section on influenza research.

Furthermore, the PHP will support a European Network on Mathematical Modelling (NEMO). The aim of the Network will be to develop and improve mathematical models, which would help to predict and simulate the behaviour and development of infectious diseases and their effect on society. As part of this network, DG SANCO runs MedISys (Medical Intelligence System), a project that aims to reinforce the network for surveillance of communicable diseases and the early detection of bioterrorism activities. It uses online electronic information sources and its objective is to detect rapidly, track and assess threats so that advance warning could be provided before official confirmation or news break out. It monitors health related websites and media every 20 minutes, and analyses the information to rapidly identify potential threats to public health.

Types of responses given by the EC

Though the H5N1 avian influenza (AI) virus has existed since 1996, the true crisis in Asia started in early 2004 with the almost simultaneous declaration that the disease was killing hundreds of thousand of chickens and ducks in more than ten countries. In response, the European Commission offered help to Vietnam in January 2004.[83] Subsequently, the EU commissioner for DG SANCO agreed to suspend imports of pet birds to provide maximum assurance following a detailed discussion with the Member States of the emerging situation in South East Asia after a suspension of import from Thailand.[84] On 3 February 2004, the Member States agreed to

[81] National pandemic influenza plans currently available on the Internet: http://www.ecdc.eu.int/Influenza/National_Influenza_Pandemic_Plans.php

[82] http://ec.europa.eu/health-eu/about_en.htm.

[83] European Commission (2004). *European Commission offers help in avian influenza crisis to Vietnam*. IP/04/64, 6 January 2004. Brussels: European Commission.

[84] European Commission (2004). *EU suspends imports of pet birds from South East Asia*. IP/04/123, 28 January 2004. Brussels: European Commission; European Commission (2004). *Commission suspends EU poultry imports from Thailand after avian influenza outbreak*. IP/04/95, 23 January 2004. Brussels: European Commission; Commission Decision of 6 February 2004 concerning certain protection measuring in relation to avian influenza in several Asian countries (OJ L 36/59, 7.2.2004). This Decision was amended several times following the evolution of avian flu in Asia: 29.07.2004 (Decision 2004/572/EC) prolonging measures, 21.08.2004 (Decision 2004/606/EC) extending measures to Malaysia, 15.12.2004 (Decision 2004/851/EC) prolonging measures, 10.03.2005 (Decision 2005/194/EC) prolonging measures and lifting the ban on Japan and South Korea, 21.05.2005 (Decision 2005/390/EC) extending measures to North Korea, 19.08.2005 (Decision 2005/619/EC) extending measures to Kazakhstan and Russia.

prolong the suspension of import of poultry products.[85] As a result of the outbreak of avian influenza, the European Commission adopted a paper on how to respond to a pandemic, based in part on WHO definitions of pandemic threats.[86] Part of its aims was to give Member States guidance for improving their own preparedness plans against influenza.

Based on experience from recent epidemics and scientific knowledge, the EC adopted a proposal to set up the best possible system to prevent new outbreaks of avian influenza.[87] Experience at that time showed that legislation then was sufficient to contain low pathogenic strains of avian influenza. By adopting this proposal, Member States will be able to introduce and reinforce surveillance and control measures against the low pathogenic viruses, aiming to prevent virus mutation and highly pathogenic forms of the disease in a coherent system. It is clear that early detection and rapid action is essential for limiting the extent of any outbreak of avian flu. In this context, The Commission asked the Member States to step up surveillance and proposed to make financing available in order to facilitate this effort in August 2005.[88]

On Monday 10 October 2005, the Commission sent two experts to Romania to investigate a possible outbreak of avian flu. Subsequently, this outbreak was confirmed and the EC banned import of poultry from Romania, similarly as it had done for the import of poultry from Turkey.[89] Subsequently, outbreaks of the avian influenza virus were detected in Cyprus, Greece, Italy,[90] Slovenia[91] and Bulgaria.[92] In the EU Member States, the respective governments imposed a protection zone and a surveillance zone in accordance with the Commission Decision of 17 February 2006.[93] Based on this directive, Member States are obliged to inform the EC immediately after the detection of the outbreak. In addition, Member States are obliged to regularly provide both the EC and the other Member States with information on the epidemiology of the disease. Import of poultry from Bulgaria was banned. Subsequently, avian

---

[85] European Commission (2004). *Avian influenza outbreak in Asia: Member States agree to prolong import embargo on poultry products*. IP/04/160, 3 February 2004. Brussels: European Commission.

[86] European Commission (2004). *Influenza and how the EU should respond to a pandemic*. IP/04/432, 31 March 2004. Brussels: European Commission.

[87] European Commission (2005). *Avian influenza: Commission proposes updated measures aimed at preventing epidemics*. IP/05/501, 28 April 2005. Brussels: European Commission.

[88] European Commission (2005). *Avian influenza: Commission asks Member States to step up surveillance*. IP/05/1068, 25 August 2005. Brussels: European Commission.

[89] European Commission (2005). *Avian influenza in Romania: Presence of virus confirmed*. IP/05/1276, 13 October 2005. Brussels: European Commission.

[90] European Commission (2006). Avian *influenza confirmed in wild swans in Italy: Italian authorities applying precautionary measures*. IP/06/157, 13 February 2006. Brussels: European Commission.

[91] European Commission (2006). *Avian influenza H5 confirmed in a swan in Slovenia: Slovenian authorities implement the same measures as in Greece and Italy*. IP/06/154, 13 February 2006. Brussels: European Commission.

[92] European Commission (2006). *Avian influenza: Highly pathogenic H5N1 virus confirmed in Bulgaria*. IP/06/156, 13 February 2006. Brussels: European Commission.

[93] Commission Decision of 17 February 2006 concerning certain protection measures in relation to highly pathogenic avian influenza in wild birds in the Community and repealing Decisions 2006/86/EC, 2006/90/EC, 2006/91/EC, 2006/94/EC, 2006/104/EC and 2006/105/EC (OJ L 48/28, 18.2.2006).

influenza was either confirmed or expected in other countries, such as Sweden, Poland and Denmark.[94] Recently, the Spanish government adopted the measures specified in Commission Decision 2006/115 to prevent further spread of avian flu.[95]

Conclusions

There are learning mechanisms in place that should provide a consistent source of information that should enable policy–makers to establish effective measures that address the threat of avian influenza. These vary from establishing databases with up–to–date knowledge on avian influenza and the training of professionals in a co–ordinated fashion. Furthermore, a bilingual (English/Russian) research journal has been established for the primary purpose of providing scientific knowledge to health care professionals. A drawback of this journal is that it is focussed on providing improved communicable diseases control and communication only in Northern Europe. A similar project covering the Southern part of the Community is in place as well. At present there does not appear in place a mechanism that provides a link between the two programmes, without relying on the EC or the ECDC.

To provide full vaccine coverage currently six Member States have been selected to provide the initial seed. These Member States will provide the seed for full coverage in the future. As part of the aim to make available all relevant information to those interested in public health, DG SANCO launched the Public Health EU–portal.[96] Avian influenza has a dominant place in this portal (i.e. separate page on influenza).

The strategy undertaken by the EC in the above mentioned Directive of December 2005 is based on recent scientific knowledge and lessons learned from recent outbreaks. Furthermore, based on the outbreaks in February 2006, a new Directive was adopted. This is a clear sign that the EC is learning from developments, both from science and events. The EC has initiated the establishment of the ECDC, the EWRS and the EISS. As part of the IESS, national preparedness plans are or have been drafted. Only two of the 25 Member States currently lack such a plan. It is an essential part for the exchange of crucial information on outbreaks of avian influenza that can affect the Community. Crucial information on avian influenza is displayed on a special web portal monitoring relevant websites every 20 minutes. Furthermore, in case of an outbreak with the Community, Member States are required to inform both the EC and other Member States.

---

[94] European Commission (2006). *Avian influenza H5 in two dead wild ducks in Sweden: Swedish authorities applying precautionary measures*. IP/06/243, 28 February 2006. Brussels: European Commission; European Commission (2006). *Avian influenza confirmed in two dead swans in Poland: Polish authorities applying precautionary measures*. IP/06/266, 6 March 2006. Brussels: European Commission; European Commission (2006). *Avian influenza confirmed in a wild bird in Denmark: Danish authorities applying precautionary measures*. IP/06/317, 15 March 2006. Brussels: European Commission.

[95] European Commission (2006). *Avian influenza H5N1 confirmed in a wild bird in Spain: authorities applying precautionary measures*. IP/06/969, 7 July 2006. Brussels: European Commission.

[96] http://ec.europa.eu/health-eu/index_en.htm

3.9 Success of Programme interventions in encouraging citizens to take better decisions about their health

The extent to which information supplied via the Programme is useful to and used by citizens, the direct results can be sustained over time and used to leverage progress in other issues is assessed by access to and use of information provided or disseminated by the Programme. This is based on reviews of the effectiveness of public health information programmes (e.g. collecting and providing information on best practice.[97]

We encountered that most *activities operated under the PHP are only indirectly aimed at the citizen*. In fact, we found that many activities are targeted at the professional community – capacity building and exchange of knowledge and best practice – or policy–makers (knowledge and strategic analysis). This picture also emerges from the interviews. In response to the question 'does the Programme address stakeholder and citizen needs?' the professional community and health officials are mentioned more often than European citizens. Hence the impact of the PHP on citizens does not appear to be directly targeted at citizens.

This moves the focus beyond the direct impacts of the Programme to the leverage of the Programme. In other words, to the extent that information supplied via the Programme is useful to and used by citizens. Overall, dissemination plans are taken well into account in the PHP. It is one of the criteria applied in the evaluation of proposals. As a follow–up of the plans mentioned in the proposals, we analysed how many of the selected projects 2003–2005 (n=53) actually have a project website. We found that 70% of the selected projects 2003–2005 had active project websites. Nevertheless, closer inspection of those sites indicates that the information supplied is mainly for the professional community and policy–makers. For instance, the majority of dissemination materials included technical publications such as books and scientific articles, workshop papers, reports (including project results), presentations, policy documents, training manuals or training courses and conference documents. In addition to this, we doubt that citizens would come across project websites unless they were aware of the project.

The focus on effective dissemination is based upon a growing recognition that distribution of information does not guarantee adoption or use. It is important to customize the use of the different dissemination products, channels and activities accordingly. In this respect, the Public Health EU–Portal[98] has elements to it that are aimed at the citizen level. The question then is whether (the health information on) the portal has an impact on the healthy behaviour of citizens. In order to make a robust assessment of the impact on citizens' behaviour, one would have to undertake a user survey, consisting of

- a quantitative assessment: number of visits to the site if possible with breakdown of geographic origin and type of visitor (citizen, policy–makers, health professionals, other)
- a more qualitative assessment of citizens' opinion of the information supplied on the portal (usefulness) and the extent to which the information encourages them to make better decisions about their health.

[97] Information presented at the Information Day 2006. Available at: http://ec.europa.eu/health/ph_programme/howtoapply/infoday_2006/ev_20060222_co02_en.pdf

[98] http://ec.europa.eu/health-eu/index_en.htm

This is beyond the scope of the current evaluation. Hence, we cannot say much about the portal's *actual* success in encouraging citizens to take better decisions about their health.

Nevertheless, we can present some observations. First, the Public Health EU–portal links primarily to EU health policies, research and statistics. This is rather technical information, which is not customised to citizens. On the other hand, we found that e.g. the link to the European Code against Cancer[99] provides useful and accessible recommendations about the do's and don'ts to reduce the risk of cancer. This kind of information is most useful for individual citizens and may be strengthened in the future to increase the uptake of PHP information. A second problem with the portal to date is that the site is only available in English, although we realise this may be due to the recent launch of the portal and will be amended in the near future.

We conclude that currently the PHP is largely targeted at the professional health community and policy–makers. This is also true for the dissemination of information provided by the PHP. In order to reach the European citizen and to encourage him to take better decisions about his health, *information needs to be more customised, i.e. be made accessible and non–technical.*

Before leaving this section we point out two other issues that need to be taken into account with regard to the success of the PHP in encouraging healthy behaviour by citizens. The first relates to the problem of *attribution*. How much of the change in behaviour of European citizens can be attributed to the PHP? Global or general evidence of healthy behaviour provides little information, since programme, and policy interventions in general, do not work in isolation. In other words there is no one–on–one correlation between an intervention and the behaviour it seeks to affect. All this implies that one would have to develop specific performance indicators with respect to citizen behaviour linked to and operationalised by the Programme. As argued elsewhere in this evaluation, indicators that can be directly attributed to the performance of the Programme are currently lacking.

Second, changing people's behaviour is a complex process a priori. This imposes high demands on intervention programmes. For intervention programmes to be effective, the *motivational* stadium of the target group should be taken into account. This can be illustrated by the case of interventions aimed to increase physical activity. The 'stage of change' model[100] describes the different phases of peoples' motivation. Behaviour towards physical activity is dynamic (see Figure 3). People can only change their behaviour persistently if they successfully pass through the successive stages. Each stadium is characterised by its specific change facilitating processes.

[99] http://www.cancercode.org/

[100] Prochaska, J., Velicer, W.F. and Rossi, J.S. (1994). Stages of change and decisional balance for twelve problem behaviours. *Health Psychology*, 13: 39–46.

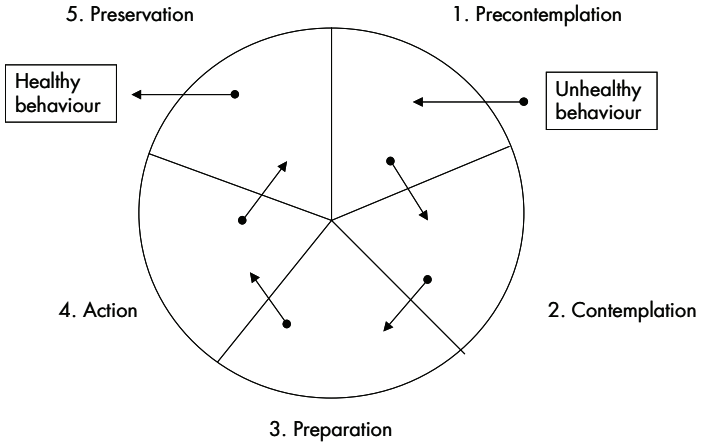


Figure 3. Stages of change in motivation
Source: Proschaska, Velicer and Rossi (1994).

3.10 Effectiveness of incorporation of health policy considerations across Community policies

The EU is facing important health challenges: ageing population, lifestyle related diseases linked with obesity and tobacco consumption, increasing infection rates of serious communicable diseases (HIV/AIDS, SARS). The specific added value that EC co–operation can bring to this area is specifically: e.g. through health (and health inequality) proofing all policies to improve population health, minimise the current wide health inequalities and reduce the burden of disease by tackling the factors that determine health. But achieving good health is not an issue for health ministers and health specialists alone. If the EU is to help enable good health for all, it must address the behavioural, social and environmental factors that determine health. This implies a need to promote health through all Community policies.

The Treaty (Article 152) clearly stipulates that all Community actions and activities shall contribute towards a high level of health protection. A number of specific steps implementing this objective has been set out in the Commission's May 2000 Communication on the health strategy of the European Community.[101]

We have evaluated how effectively health policy is mainstreamed across all Community policies. In addition, we assessed what this information tells us about achieving this more effectively in the future.

Joint activities with other DGs

DG SANCO shares health interests across a range of Community programmes. Interviews with Commission officials (section 3.5.1) show that DG SANCO interacts with other DGs (e.g. DG INFSO, DG Research). However, the extent to which the PHP interacts with other EC activities could be strengthened, especially with DG Employment and Social Affairs, DG Environment and with DG Regional Policy and Development. In other words, this requires more horizontal

[101] Commission of the European Communities (2000). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the regions on the health strategy of the European Community. COM(2000)285 final (2000/0119 COD). Brussels: European Commission.

information exchange (e.g. in the field of quality of water and structural funds for health system development) and more formal communication.

Joint approaches are important tools to ensure that health concerns are being properly addressed from the beginning. Initiatives have been developed e.g. on health and the environment, health and social policy, health telematics, research on life sciences and health policy or health and pharmaceuticals policy.[102] Below we specify several examples of existing joint activities between different DGs.

DG Information Society

DG SANCO collaborates closely with DG INFSO to deliver health–related actions specified under eEurope initiative, which was launched by the Commission in 1999. In relation to health the primary objective of the initiative is to develop an infrastructure (connecting citizens, practitioners and authorities on–line) of user–friendly, validated and interoperable systems for health education, disease prevention and medical care.[103] The policy actions specified under the Health Online chapter include:

- Ensure that primary and secondary healthcare providers have health telematics infrastructure in place including regional networks.
- Best practice in electronic health services in Europe identified and disseminated, bench–marking criteria set.
- Establish a set of quality criteria for health–related websites.
- Establish health technology and data assessment networks.
- Publish a Communication on 'Legal Aspects of e–Health'.

The eEurope 2005 Action Plan sets Member States a number of targets. In parallel, the Commission is working at the European level on a number of e–Health related topics. Direct interaction with DG SANCO is observed with regard to the e–Health action plan[104] to improve access, quality and effectiveness of health services, including activities related to electronic medical records, health information networks, online health services and health telematics. Joint activities are undertaken within the health information strand of the PHP, which include further development using sophisticated information technologies and dissemination of health information and data. One of the most visible actions is the recently launched Public Health EU–portal,[105] which complements the existing European Commission Public health website. The creation of this portal is an initiative undertaken under the PHP. Another initiative concerns the e–Health High Level Conferences, which have been organised annually since 2003. These kinds of events are totally aligned with both Public Health and e–Health Action Plans. The activities contribute to improved health information and knowledge for the development of public health

[102] http://ec.europa.eu/health/ph_overview/other_policies/joint_action_en.htm

[103] Communication on a Commission initiative for the special European Council of Lisbon, 23 and 24 March 2000, eEurope – An information society for all.

[104] Commission of the European Communities (2004). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the regions. e–Health – making health care better for European citizens: An action plan for a European e–Health area (SEC(2004)539). COM(2004) 356 final. Brussels: European Commission.

[105] http://ec.europa.eu/health-eu/index_en.htm

and are consolidated European meeting spaces from where to build common approaches to shared challenges. The conferences are a successful way of fostering and exchanging best practices between European policy–makers, experts and other stakeholders in e–Health as well as a unique dissemination opportunity for innovative processes and implementations.

DG Environment

Concerted actions with DG ENV are addressed by the action line on public health actions to address wider determinants of health. The Commission has adopted on 11 June 2003 a Communication on the Community's strategy for health and the environment.[106] The strategy proposes to develop actions to tackle specific diseases such as asthma and respiratory allergies or to better prevent health from environmental risks such as pesticides residues. But the new strategy will also set up permanent monitoring and reporting systems to identify new emerging threats and to assess the health impact of the actions implemented at Community and national level. The action plan on environment and health[107] is a good example of a co–ordinated approach to a major public health issue. The plan proposes an integrated information system on environment and health as well as a co–ordinated approach to human biomonitoring between Member States to render the assessment of the environmental impact on human health more efficient.

Joint actions are undertaken in the following key areas:

- *Health and environment* (e.g. outdoor and indoor air pollutants quality, noise, and water quality contamination): the PHP supports the establishments of networks to analyse the existing scientific knowledge and to assess the consistency and the progresses made in the implementation of the Community's Health and Environment legislative framework.
- *Injury prevention:* DG SANCO has taken a number of initiatives to reduce the frequency of injuries due to accidents and violence and have been particularly successful in reducing road fatalities, workplace accidents, chemical accidents and consumer product–related injuries. Activities with regard to injury prevention and safety promotion are based on experience gained within the framework of the Injury Prevention Programme which started in 1999 and ended in 2003 when the PHP came into force. The major directions for injury related actions under the current PHP are determined in the Commission Communication on 'Actions for a Safer Europe' and in the Proposal for a Council Recommendation on the prevention of injuries and the promotion of safety. Both documents have been adopted by the Commission in June 2006.

DG Employment and Social Affairs

Health protection at the workplace is largely regulated by EU legislation. The EU action in health and safety at work has its legal basis in Article 137 of the EU Treaty. The Commission communication 'Adapting to change in work and society: a new Community strategy on health

---

[106] Commission of the European Communities (2004). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee. The European Environment and Health Action Plan 2004–2010. COM(2004)416 final. Brussels: European Commission.

[107] Commission of the European Communities (2004). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee. The European Environment and Health Action Plan 2004–2010. COM(2004)416 final. Brussels: European Commission.

and safety at work 2002–2006' outlines the options for further action to make workplaces across Europe safer and healthier. The EU and WHO have also put considerable effort into developing health promotion at the workplace.

A European Network for Workplace Health and Promotion was developed based on the EU's first PHP. In the current PHP safety and health at the workplace is still a priority area within the health determinant strand. DG SANCO and DG Employment co–operate in the field of protecting the health and safety of workers exposed to electric, magnetic and electromagnetic fields (EMFs) and waves from radio telecommunications and low voltage devices.

The PHP promotes health in the workplace through strengthening networking and collaboration between relevant organisations, building on identified models of good practice for workplace health promotion in the private and public sectors, developing implementation strategies that focus on a sustainable development of health in the workplace and enhancing implementation across economic sectors. An example is the Workplace Health Promotion project (health determinant strand, 2004), which aims to increase quality of working life through increase of equal opportunities for promotion of health at work. The assurance of equal opportunities of European workers regarding health at work requires activities concerning national health policies and strategies, and the collaboration between public health and occupational health systems and other actors at workplaces.

DG Research

Joint actions with DG Research are e.g. addressed through the sixth framework programme (FP6), which facilitates applied and fundamental research. Research on health sciences is being addressed through the thematic priority 'Life sciences, genomics and biotechnology for health' whereas research on health policy is undertaken in Scientific Support for Policies (SSP) in the area of 'Providing health, security, and opportunity to the people of Europe'. The indicative budget for the 'Life sciences, genomics and biotechnology for health' priority amount EUR 2514 million for the period 2002–2006, including up to EUR 475 million for cancer–related research. The objective of this area is to help Europe exploit unprecedented opportunities for generating new knowledge and translating it into applications that enhance human health.

All policy research activities funded by the SSP programme 'Providing health, security, and opportunity to the people of Europe' will complement and take into account actions launched under the PHP and the work carried out under the priority area 'Life sciences genomics and biotechnology for health'. Key research areas in the field of health are:

- Health determinants and the provision of high quality and sustainable health care services and pension systems (in particular in the context of ageing and demographic change).
- Public health issues, including epidemiology contributing to disease prevention and responses to emerging rare and communicable diseases, allergies, procedures for secure blood and organ donations, non–animal test methods.
- Quality of life issues relating to handicapped/disabled people (including equal access facilities).
- Environmental health risks.

Health impact assessments

Health impact assessment (HIA) is an effective means in both mainstreaming health and evaluating how other policies affect health (i.e. health in all policies).[108] DG SANCO developed a practical guide for Commission services to evaluate their proposals from a health point of view. The toolkit contains a simple checklist which could be used for screening of proposals for possible health impacts and background material useful for putting discussions on HIA in a broader perspective.[109]

Despite that HIA has already made considerable contribution to better public decision–making, and with further development it has the potential to make even greater contribution, there is no sound and solid evidence on the systematic use of HIA across Community services. For HIA to become even more useful there is a need to strengthen the logic used for predicting consequences of decisions, to improve estimates made of the magnitude of outcomes and to develop forms of participation that meet the needs of relevant actors. EC policy–makers should become more acquainted with HIA and health impact assessors should develop better understanding of the policy–making process. It is questionable if health in all policies could become a reality without HIA or some similar approach.[110]

Implications for future action

Evidence from our document review supports the findings from interviews with Commission officials that joint actions and co–operation on health issues across Commission services is overall fragmented should be further strengthened. DG SANCO has a co–ordination function with regard to health issues. It is recommended to increase cross–policy co–operation, horizontal approaches and initiatives to mainstream health in all policies, to tackle specific health determinants and major diseases and to co–ordinate programmes between DGs. Equally important is the institutionalisation of HIA or a similar approach to both mainstream health and evaluate how other policies affect health.

Although horizontal co–ordination between several DGs is observable, there is a general demand for the Commission to co–ordinate better and inform more effectively on all European Community related health issues to avoid overlaps and improve synergies. Further co–ordinated action plans linking health with other policy areas should be developed to exploit synergies and focus efforts. The fragmented approach to health issues would end by reintegration of the policy areas of public health, health and safety at work, social affairs, environmental health and enlargement. In the context of enlargement the EU's Structural Funds (social and regional assistance programmes) should strengthen their focus on bridging health gaps within and between EU countries.

---

[108] Byrne, D. *Enabling good health for all – A reflection process for a new EU health strategy*, 15 July 2004. Available at http://europa.eu.int/comm/health/ph_overview/strategy/health_strategy_en.htm (visited 6 September 2006).

[109] European Commission, Health & Consumer Protection Directorate–General (2001). *Ensuring a high level of health protection–A practical guide*, Luxembourg, 17 December 2001.

[110] Finnish Ministry of Health and Social Affairs (2006). *Health in all policies–Prospects and potentials*, Finland.

3.11 Success of Programme in tackling health determinants

The physical, social and cultural environment in which people live and the way in which people behave, influence the state of health in Europe and the means for European citizens to stay healthy. Factors that are found to have the most significant influence on health are called determinants of health. Figure 4 distinguishes between five categories of determinants, as conceptualised by Dahlgren and Whitehead.[111] Whilst some of these determinants (age, sex and hereditary factors) are not susceptible to changes, other determinants are (e.g. individual lifestyle, working conditions). Important interrelationships between these determinants can be found: living and working conditions, or social and community influences, may have effects on individual lifestyle factors such as drinking habits, smoking and physical activity.

The PHP has as one of its primary aims to promote health and prevent disease through addressing health determinants across all policies and activities. Tackling major health determinants (e.g. alcohol dependence, smoking, obesity, drug use) are of great potential or reducing the burden of disease and promoting the health of the general population. Analysis of funded programmes demonstrated that the emphasis on health determinants has increased in the first three years of the Programme. In 2003, 28% of funded projects operated under the health determinant strand increasing to 37% in 2004 and 45% in 2005.

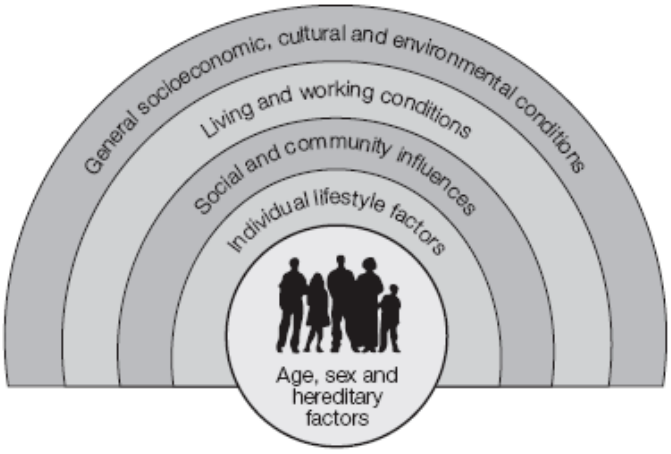


Figure 4. The determinants of health
(Adopted from: Ministry of Social Affairs and Health Finland (2006), Health in all policies – Prospects and potentials, Finland)

Given the widespread activities of the PHP in tackling health determinants we have decided to highlight and provide a more in–depth analysis on its activities relating to tackling alcohol dependence. The reason for highlighting alcohol dependence as a case study is the number of

[111] Dahlgren, G. and Whitehead, M. (1991). *Policies and strategies to promote social equity in health*. Stockholm: Institute for Future Studies.

severe problems in the European Union that are linked to alcohol consumption (i.e. harmful effects of alcohol use and the rise of drunkenness among young people in many Member States).

Although figures are declining, Europe still has one of the highest per capita alcohol consumptions in the world (see Figure 5). In established market economies such as the EU, the burden of disease and injury attributable to alcohol is estimated to be situated between 8% and 10%. The increase in alcohol consumption even goes beyond negative effects on public health. Hence, the social dimension also needs to be taken into consideration because of its influence on violence, hooliganism, crime, family problems, social exclusion, problems at the workplace and drink driving. All these areas require political action, particularly with regard to adolescents and children. Member states agreed on the need for a joint alcohol strategy at Community level, beyond individual efforts to tackle alcohol dependence.

We analysed available data on the incidence and prevalence of alcohol consumption, as well as mortality/morbidity data on alcohol dependence. The first level of assessment is whether risk factors are getting worse or better. In addition, we assessed the degree to which the Programme activities are aligned with, or have an influence on, these changes.

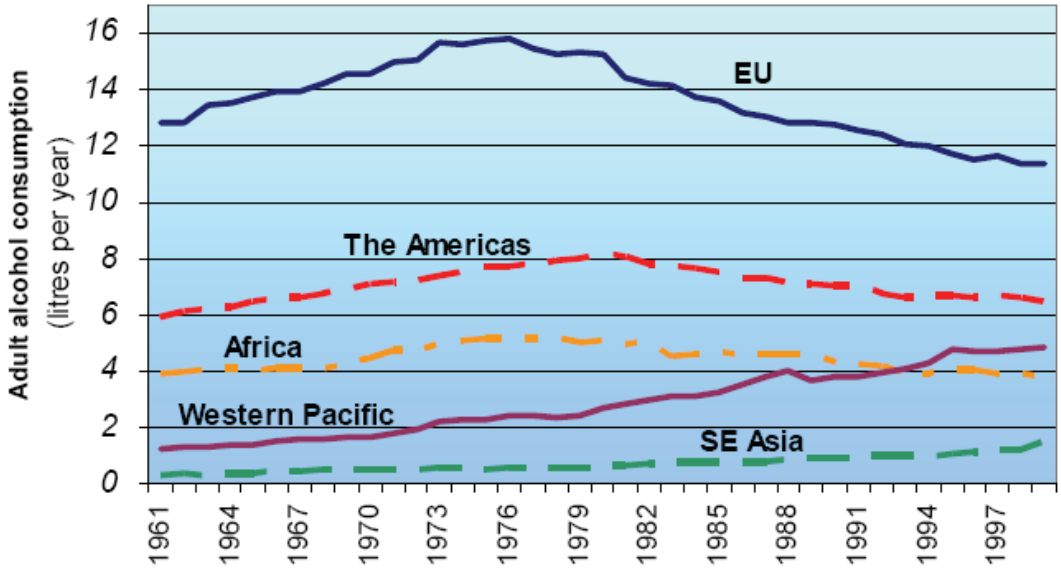


Figure 5. Adult alcohol consumption in Europe and the world
Sources: Global status report on alcohol (WHO, 2004)[112]–EU figures are taken from WHO Health for All Database and WHO Global Alcohol Database. Averages are population weighted.

The development of alcohol consumption in Europe from 1965–2003 is charted in Figure 6. The countries of the EU differ considerably in terms of the amount and composition of alcohol consumption. This variation is shown in Figure 7. The countries have been ranked in order of beer consumption as so to reveal any patterns that may exist. Heavy and hazardous drinking account for only 15.5% of adults, but it still concerns 58 million Europeans. Alcohol is responsible for the premature death and disability of 12% of males and 2% of females in the EU.

[112] WHO (2004). *Global status report on alcohol*. Geneva: WHO.

A worrying trend is the rise of youth drunkenness in many Member States, where alcoholic beverages are becoming more affordable and easily available (see Figure 8). Overall, 20% to 30% of young people drink at least once a week in most countries. Also, binge drinking (heavy episodic drinking) occurs fairly frequently, involving as many as 30% of young people in the UK, Ireland and Poland. The danger of drinking among the young is that once a pattern emerges, it becomes more difficult to convince drinkers to change their behaviour.

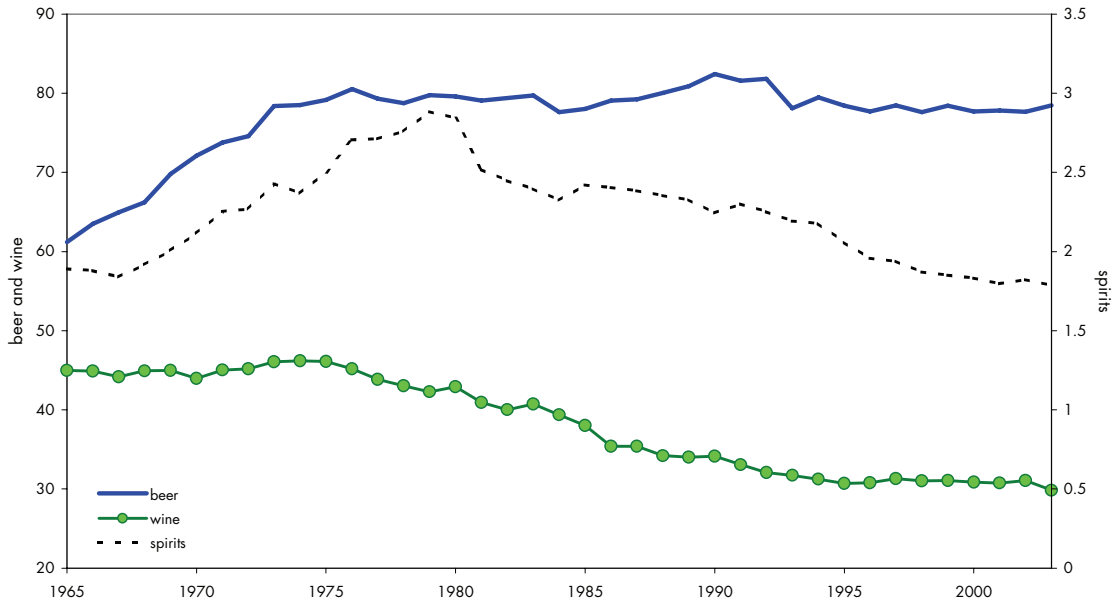


Figure 6. Average per capita consumption of beer, wine and spirits in the EU25, 1965–2003
Note: Estonia, Latvia, Lithuania and Malta were excluded from the calculations.
Source: World Advertising Research Centre (2005)[113]

[113] World Advertising Research Centre (2006). *World Drink Trends 2005 Edition*. World Advertising.

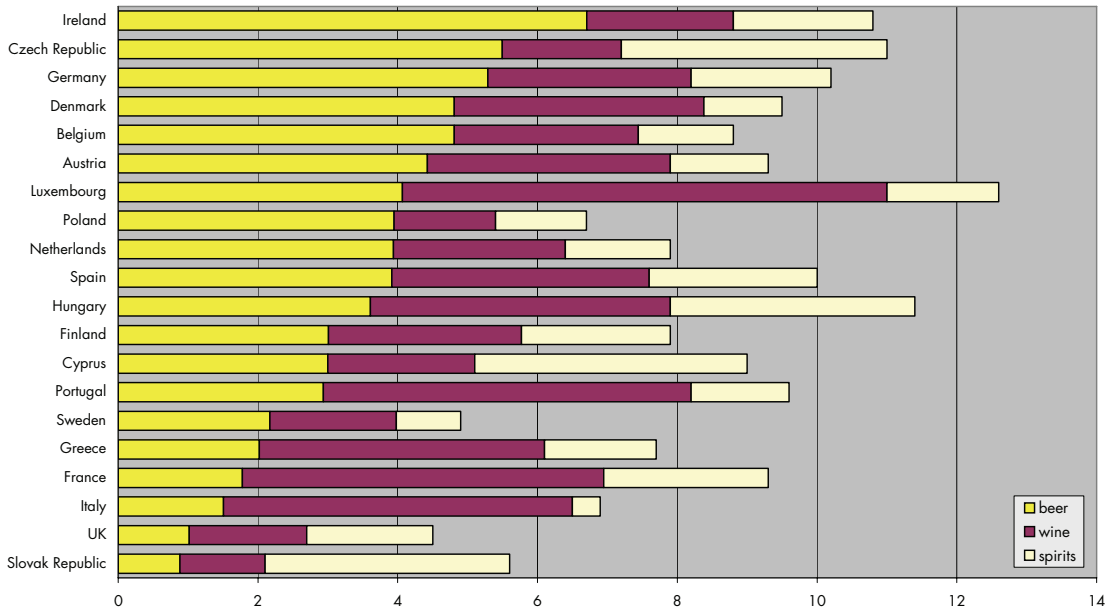


Figure 7. The composition of alcohol consumption in the EU25, 2003 (litres of pure alcohol)
Source: World Advertising Research Centre (2005)

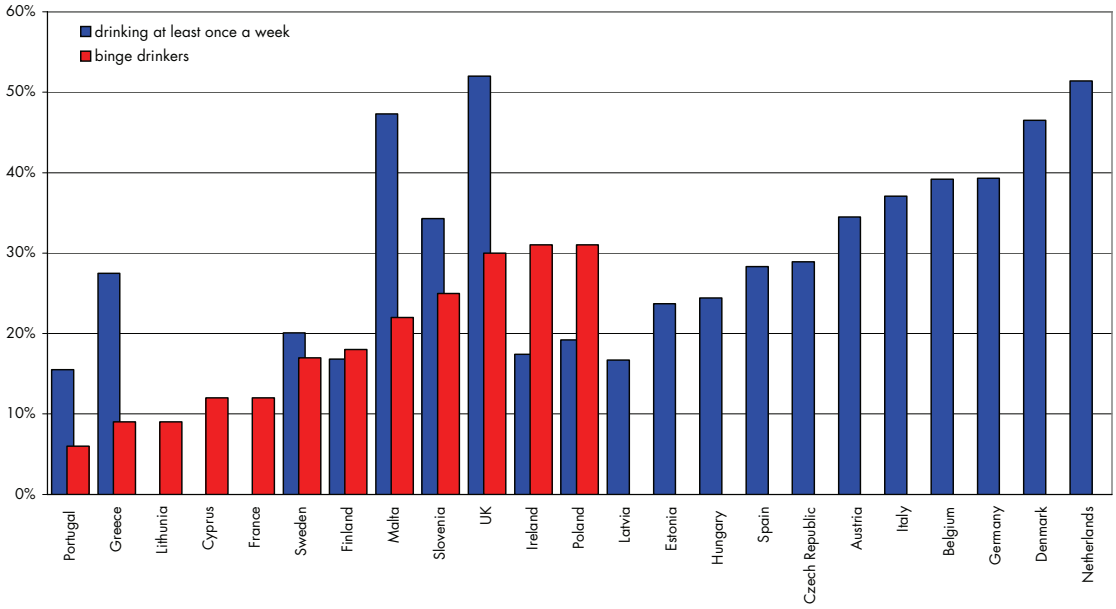


Figure 8. Patterns of alcohol use among young people in the EU25, 2004
Source: WHO Global status report on alcohol, 2004

Alcohol was first mentioned as a public health and social problem in a Council resolution in 1986, which stated that the increase of alcohol abuse was causing serious concern for public health and social welfare. Since then alcohol has gradually made an entrance on the EU agenda. Areas where alcohol has been introduced are, for instance, the Europe against Cancer Programme in 1987, road and traffic safety issues, as well as alcohol advertising in broadcast media. In response to the introduction of 'alcopops' or designer drinks into the European market in 1995,

the European Parliament demanded that the Commission introduced Europe–wide guidelines for the promotion, marketing and retailing of alcopops, to enforce regulatory control of the promotion, marketing and retailing of these products. In addition, the Commission established a working group on alcohol as a forum for sharing experiences on alcohol–related problems and alcohol policy. Gradually the discussion shifted towards dealing with alcohol consumption by adolescents and children in general and the issue on alcopops even disappeared in the final Council recommendation, adopted in 2001. In the same year the Council also decided on a conclusion underlining the development of a comprehensive Community strategy to reduce alcohol–related harm.[114]

In the PHP, all activities related to alcohol were categorised under the health determinant strand, along with those related to tobacco, drugs and nutrition. To date the funded activities with regard to alcohol have mainly concentrated on building European opinion, developing interest groups, as well as ensuring practical competence in the area. But also, outputs from alcohol use related activities in the former PHP have resulted in a set of measures that include a Recommendation (OJ L 161, 16.6.2001) on drinking of alcohol by young people.

Finally, in 2004 the Council adopted a follow–up Conclusion on Alcohol and Young People, which states that special attention should be directed at young people when drafting the Community strategy on reducing alcohol–related harm. The Commission is planning to adopt a communication to the Council and European Parliament on alcohol in late 2006.[115] The EU response to this challenge will focus on a combination of targeted measures aimed at limiting the availability of alcohol beverages especially to young people and at reducing their exposure to commercial communications, drink–driving countermeasures as well as improving education and information may be included in a future strategy.[116]

The EU legislative framework for alcohol beverages and alcohol policy can be distinguished into 'hard' (binding legislation and regulation) and 'soft' (non–binding agreements, recommendations, conclusions, strategies, etc.) law. Alcohol is in practice affected by the trade law. The expansion of the Single Market has influenced national regulation of alcohol consumption and alcohol–related harm in several Member States. Although the EU itself has no mandate to harmonise alcohol policy, some policies dealing with the internal market can incorporate substantial health concerns, such as the alcohol advertising clause within the Television without Frontiers Directive. Otherwise the EU's action on alcohol has come through soft law, such as the 2001 Commission Recommendation on the maximum permitted blood and alcohol content for drivers of motorised vehicles.[117] One of the main challenges for the Alcohol Strategy will be to address how, in practice, social and health concerns related to harmful and hazardous alcohol consumption could be more effectively considered within EU competence. This calls for innovative combinations in actions involving all levels, available mechanisms and relevant actors. For example, the alcoholic beverages industry can contribute by enforcing its code of conduct and acting responsibly,

[114] Council (2001). Council Conclusion of 5 June 2001 on a Community strategy to reduce alcoholrelated harm (OJ L C 175/01, 20.6.2001).

[115] Finnish Ministry of Social Affairs and Health (2006). *Health in all policies – Prospects and potentials*, Finland.

[116] http://ec.europa.eu/health-eu/my_lifestyle/alcohol/index_en.htm

[117] Anderson, P. and Baumberg, B. (2006). *Alcohol in Europe: A public health perspective*. A report for the European Commission. London: Institute of Alcohol Studies.

Member States and NGOs can contribute through implementing measures with proven impact on alcohol–related harm and international co–operation, in particular with WHO is important to develop a system for the epidemiological surveillance of alcohol consumption and related social, economic and health indicators.[118]

Meanwhile it is crucial that DG SANCO co–ordinates and facilitates the exchange of information and co–operation with Member States, mobilise and involves both non–governmental organisations and the public in the policy–making process, and raising awareness. Based on our evidence we can conclude that the PHP activities with regard to alcohol positively contribute to tackling alcohol–related harm. Although evidence is found that activities funded under the Programme (e.g. the report on alcohol in Europe by Anderson and Baumberg, 2006[119]) have a positive leverage effect on EU alcohol policy–making, the extent of impact is hard to measure. This calls for an evaluation framework with sound and quantifiable indicators to measure the impact of such activities.

3.12 Success of Programme in helping the public health system to reduce the incidence of disease and injury

The public health system as a whole aims to reduce the incidence of disease and injury. This includes concrete data (incidence/prevalence) on diseases. The question is whether the Programme helps them do this in an efficient, effective and equitable way. To address this question, overall baseline data is complemented by specific indicators of interaction with targeted public health initiatives, taking into account any differences in the extent to which specific health threats are tackled as public health threats.

What are the major diseases the EC believes they should address? Have the EC prioritised these disease? How have budgets been allocated to tackle these prioritised diseases?

The PHP focuses on three priorities: improving health information and knowledge; responding rapidly to health threats; and addressing health determinants.

Responding to health threats involves strengthening the surveillance and control of *communicable disease* (e.g. HIV/AIDS), and developing responses to the rising number of *non communicable diseases,* illicit drugs and physical agents that may be linked to specific health conditions, and the prevention of injuries and accidents. For example, more than 500,000 people in the EU are currently living with HIV/AIDS and over 6,000 people per year are dying from it. The situation is particularly alarming in some new Member States such as Estonia and Latvia, and in neighbouring Eastern Europe, where approximately 2 million people suffer from HIV/AIDS.[120] The main burden of disease stems from a few non–communicable diseases (often chronic) which represent about 75% of the burden of disease in disability life adjusted years (DALY).[121]

---

[118] http://ec.europa.eu/health-eu/my_lifestyle/alcohol/index_en.htm

[119] Anderson, P. and Baumberg, B. (2006). *Alcohol in Europe: A public health perspective*. A report for the European Commission. London: Institute of Alcohol Studies.

[120] Partnership for Health in Europe. Available at: http://www.evm-vaccines.org/pdfs/partnerships_health_en.pdf

[121] Partnership for Health in Europe. Available at: http://www.evm-vaccines.org/pdfs/partnerships_health_en.pdf

Other key priorities include seeking to address the high levels of premature deaths and illnesses in the EU from major diseases, *cancer and cardio–vascular diseases, stroke* as well as *mental illness, musculoskeletal diseases and diabetes*. Mental illnesses alone represent 20% of the total burden of disease in Europe in terms of DALYs. Mental disorders are responsible for a quarter of disability benefits in EU–15. Diseases of the circulatory systems including cardiovascular diseases represent 42% of mortality in EU–15, followed by cancer at 25%.[122]

The Programme also addresses specific challenges including, the *emergence of new diseases*, such as Creutzfeldt–Jakob disease and SARS and from food–borne illnesses, and resurgence of major *infectious diseases* such as avian influenza and tuberculosis. The EC addresses these priorities through focusing on lifestyle factors, such as smoking, alcohol, nutrition, physical activity, stress and drug abuse, as well as major socioeconomic and environmental factors (see section 3.11). For example the increase in asthma and allergies throughout Europe over the last few decades illustrates the impact of the environment on health – on average 10% of European children suffer from asthma. Environmental tobacco smoke and air pollution are major threats, increasing the risk of lung cancer in non–smokers by 20–30%.[123] The Communication also provides an indicative breakdown for the level of expenditure corresponding to the different areas of the Programme.[124] The actual amounts are determined in accordance with the outcome of the annual budgetary procedures.

The Programme provides flexibility through the drawing–up of annual work plans to allow deployment of resources and adaptation of activities to address emerging priorities, unanticipated events, and adjustments in the form of outputs, while respecting the fundamental criteria of selecting and ordering priorities according to the magnitude of risk or potential of effect, public concerns, availability of instruments and methods for effective intervention and response or potential for their development, subsidiarity and added value, and likely impact on other sectors. The Commission acknowledged that action programmes undertaken in the past suffered from a lack of flexibility to handle new or re–emerging threats that could not allow for the deployment of resources.

Quantitative indicators on major diseases

One of the objectives of the PHP is to develop comparable information on health, and eventually 'to develop a European Union System of Information on Health and Knowledge fully accessible to all European experts and public'.[125] The information broadly covers health–related behaviour of the population (e.g. data on lifestyles and other health determinants); diseases (e.g. incidence and ways to monitor chronic, major and rare diseases); and health systems (e.g. indicators on access to care, on quality in the care provided, on human resources, and on financial viability of health care systems). A key output is the recent Public Health EU–portal[126] and the regular EU

[122] Partnership for Health in Europe. Available at: http://www.evm-vaccines.org/pdfs/partnerships_health_en.pdf

[123] Partnership for Health in Europe. Available at: http://www.evm-vaccines.org/pdfs/partnerships_health_en.pdf

[124] Commission of the European Communities (2000). Communication from the Commission to the Council the European Parliament, the Economic and Social Committee and the Committee of the Regions on the health strategy of the European Community. COM(2000)285 final. Brussels: European Commission.

[125] Network of Competent Authorities on Health Information (2004). Strategy on European Community Health Indicators (ECHI). *The 'Short List'*. Luxembourg: Network of Competent Authorities on Health Information.

[126] http://ec.europa.eu/health-eu/index_en.htm

health reports. The International Compendium of health indicators allows for direct comparison of indicators, and indicator definitions, and gives a full account of the ECHI indicator list proposed in the EU PHP (see section 3.3.3).

The work on indicators and data collection is conducted in co–ordinated Working Parties that are creating a prototype for the future health monitoring system. The ECHI–1 and ECHI–2 projects under the Health Monitoring Programme have developed a comprehensives list of indicators, in close collaboration with other projects.[127] By March 2003, the list included approximately 400 items/indicators. In order to harmonise EU Member States' data collection the Commission developed a short–list of approximately 40 indicators, divided in the main categories: demographic and socio–economic factors, health status, health determinants, health services and health promotion.

3.13 Success of Programme in achieving synergies between national health systems

To address this issue we combined two aspects – the function of the Programme as a 'marriage broker' or facilitator for linkages among national health systems and the way the Programme acts synergistically with those systems. The first is measured by indicators of Programme–sponsored Concertation (collaborative) activities and joint actions that follow Programme initiatives, and the second by participation of national public health practitioners and officials in 'bilateral' Programme activities and the extent to which these are continued in an individual Member State context. Below we specify several initiatives to which the PHP contributed.

High Level Group on Health Services and Medical Care

Health systems and health policies are increasingly becoming more interconnected. This is due to increasing professional patient movement,[128] dissemination of new technologies and techniques through information technology, and the enlargement of the EU.

In response to these emerging issues the Commission invited ministers from Member States and representatives of civil society to take part in a high level process of reflection on patient mobility and healthcare development in the EU. This resulted in a 2003 report which made nineteen recommendations across five main areas:

- European co–operation to enable better use of resources
- Information for patients, professional and providers
- Access to and quality of care
- Reconciling national objectives with European obligations
- Health and the Union's cohesion and structural funds.

[127] Kramers P.G.N. and the ECHI team (2005). *Public health indicators for the European Union: Context, selection, definition.* Final report by the ECHI Project Phase II. 20 June 2005. Bilthoven: Centre for Public Health Forecasting, National Institute for Public Health and the Environment.

[128] See: Rosenmöller, M., McKee, M. and Baeten, R. (Eds) (2006). *Patient mobility in the EU: Learning from experience*. Brussels: European Observatory on Health Systems and Policies.

In July 2004 the Commission established a High Level Group on health services and medical care to help facilitate Member States co–operation. The group brings together senior officials from EU health ministries in all Member States and works in the following seven main areas:

Cross–border healthcare purchasing and provision: Work is focused on a deeper analysis of the financial impact and sustainability of cross–border healthcare, developing a framework that could be used for cross–border healthcare purchasing, studying the reasons for mobility and the need for purchasing care abroad, providing information to patients on quality, safety and continuity of care as well as on patients' rights and responsibilities, considering liability issues in cross–border care, and gathering information to monitor cross–border healthcare purchasing and provision.

Health professionals: Work should be taken forward through exchanging information on continuing professional development to ensure quality; ensuring that basic data on migration of health professionals is provided by all Member States; surveying the impact of migration out of Member States; and sharing information on recruitment practices in order to assess whether common principles could be developed.

Centres of reference: Some principles have been developed regarding European centres of reference (ECR), including their role in tackling rare diseases[129] or other conditions requiring specialised care and volumes of patients and some criteria that such centres should fulfil. Options and procedures for designating European centres of reference for limited periods of time at European level based on agreed lists of pathologies, technologies and techniques are also being developed. The High Level Group will work towards a common approach which could then be implemented through pilot activities. The estimated number of potential ECR is approximately 800 centres of reference in the field of rare diseases necessary to serve a population of 450 million Europeans.[130]

Health technology assessment: The usefulness of establishing a sustainable European health technology assessment network has been recognised. Such a network should address methods for developing common core information packages, methods to support transferability of assessments, methods for identifying and prioritising topics and commissioning reports, tailoring common core information to national health policy processes and sharing methodologies, expertise and practice issues. This network could be established initially through the PHP.

Information and e–Health: An overall health systems information strategy in a European context is needed, considering mobility of citizens and availability of Europe–wide e–Health services. Future work should focus on developing such an information strategy and on outlining activities for the implementation of the e–Health Action Plan, looking at the information which should be available for patients, professionals and policy–makers; and looking at the appropriate structures for co–operation on information and e–Health (see also section 5.4).

Health impact assessment and health systems: The European Union's impact on health takes place largely through policies other than those specifically related to public health. Work is required to ensure a coherent approach to evaluating the impact on health of other Community policies.

---

[129] Member states with any disease with a prevalence less or equal to 1 in 2,000.

[130] Expert Group of the Rare Diseases Task Force. (2005). *Overview of current Centres of Reference on rare diseases in the EU*. Prepared for The High Level Group on Health Services and Medical Care. Available at: http://www.orpha.net/testor/doc/rdtf/wg/ECRFinalReport.pdf

However, there is no EU methodology to prospectively and systematically address the potential impacts of non–health policies on health systems. Work underway, including by other international organisations, will be drawn on to develop agreed instruments to measure impacts of non–health EU policies on health through impacts on health systems, which could then be tested for reliability and validity (see also section 5.4).

Patient safety: Health care interventions, although intended to benefit patients, may in some cases cause harm. An EU patient safety network or forum, working with other international organisations, could provide focus for efforts to improve the safety of care for patients in all EU Member States, through sharing information and expertise.

Number of cross border agreements

The project "Evaluation of Cross Border Regions in the European Union (EUREGIO) was initiated in summer 2004, which aims to give an overview of cross–border activities in the field of health in Europe. There are a number of cross–border health–related projects which have been or are being carried out on the international and external borders of the EU Member States.

There have also been a wide range of solutions that have been developed to encounter the practical problems of cross–border co–operation. One problem identified was that the projects and their experiences are not known by the broader public. Cross–border activities included financial supports so that access to grants is facilitated; providing support for finding project partners; establishing health–relevant working groups, working circles, forums, or similar bodies; cross–border congresses, workshops etc.; and cross–border agreements in health.

The results of the project showed that:

- 26 Euregios or similar cross–border structures exist, which implemented health–relevant working groups, working circles, forums or similar bodies.
- Cross–border structures which were mentioned to be particularly active in the health sector (at least one working group or project) include North West Europe, the Rhine–Waal and Meuse–Rhine Euregios; German–Dutch; German–Dutch–Belgian; and Ireland and Northern Ireland. In Northern Europe, the Finnish–Russian Karelia Euregio; the Danish–Swedish Oresund Committee, and Finnish–Swedish–Norwegian North Kalotten Council are active; and in Southern Europe cross–border arrangements exist between Spain and Portugal.
- In terms of health–related events (workshops, congresses, etc.) – over two thirds of the Euregios carried out at least one, and in a quarter of cases even seven or more events.

Cross–border health–related projects refer to all those activities in the health sector (e.g. health care, rescue services, disaster control, health reporting, epidemiology, health monitoring health promotion, prevention, training and further education) in which partners from two or more countries with a joint border are working together.

A summary is provided of the number of cross–border health–related projects sorted by regions.[131]

A/ North Europe and Baltic Sea Area

Finland–Sweden–Norway–(Russia) = 13
Sweden–Norway = 8

[131] Brand, H. and Wolf, U. (2006). *Evaluation of border regions in the European Union (EUREGIO): Second interim report* (2005–06–01–2006–06–01). July 2006, Grant agreement 2003104.

Finland–Russia = 26
Finland–Estonia = 17
Denmark–Sweden = 10
Denmark–Germany = 4

B/ Central and East Europe

Poland–Germany = 24
Czech Republic–Germany = 10
Czech Republic–Germany–Austria = 1
Czech Republic–Austria = 1

C/ Northwest Europe

Ireland–United Kingdom = 29
France–United Kingdom = 6
Belgium–Netherlands = 6
Belgium–Netherlands–Germany = 23
Netherlands–Germany = 34
Belgium–France–Luxembourg = 4
Belgium–France = 6
France–Germany = 3
France–Germany–Switzerland = 16
France–Switzerland = 3

D/ Alps and Danube Area

Austria–Switzerland–Germany–Liechtenstein = 9
Italy–France = 8
Italy–Switzerland = 10
Austria–Germany = 4
Austria–Italy = 8
Slovakia–Austria = 6
Austria–Slovenia = 5
Italy–Slovenia = 6
Austria–Hungry = 7
Italy–Albania–Croatia–Serbia and Montenegro–Bosnia Herzegovina = 2

E/ Southwest Europe and Western Mediterranean Sea

Italy–France = 3
Spain–France =3
Spain–Portugal = 16
Spain–Morocco = 6

G/ Southeast Europe and Eastern Mediterranean Sea

Greece–Bulgaria = 1

Results from interviews

In the interviews we asked stakeholders whether the PHP did influence the design and/or implementation of (inter)national (public health) programmes in Member States, DGs or other organisations.

The majority of DG SANCO officials acknowledged that creating synergies with other EC and national public health programmes is seen as one of the main efforts of the PHP. Most Commission officials (SANCO and other DG's) felt that the PHP had limited synergies with other DG/unit programmes (see also section 3.10). One reason for the limited synergies was due to financial mechanisms (including limited budgets) at the EC. On a more positive note, interviewees felt that DG SANCO had influenced the health–related programmes of DG Research.

There were diverse views amongst stakeholders as to whether the PHP influences the implementation of national public health programmes within Member States. The clear majority of national health authorities believed that the PHP influenced the design and implementation of national health programmes in various ways, such as raising awareness, and the incorporation of PHP in national policies (e.g. Lithuanian public health strategy and mental health strategy). Other areas of influence that either DG SANCO officials or national health authorities mentioned included: prevention methods (e.g. HIV/AIDS, control regulations (e.g. tobacco, alcohol), health information indicators and establishing European networks (e.g. communicable diseases and the European Network of Cancer Registries). Areas mentioned by project leaders included strengthening information flows between central and local agencies, injury prevention, harmonisation and standardisation of microbiology techniques, labelling of alcoholic beverages use of best practices, blue print for breast feeding, increased patient choice and European networks for mental health.

The majority of project leaders, proposal leaders and representatives of international organisations also supported the idea that the PHP had influenced national health programmes but found it difficult to state the extent. National health authorities acknowledged that perhaps the time period was too short to judge the PHP's influence. These stakeholders felt the extent of influence is likely to vary by country (which was also supported by DG SANCO officials), and also on the EC commitment and dissemination (e.g. through the High Level Committee) to government representatives and key decision makers. Proposal leaders felt that indicators should be developed to measure the influence of the PHP on the design and implementation of public health in Member States.

Other national health authorities and representatives of international organisations felt the PHP acted in parallel rather than having a direct influence on Member States' national programmes. This view was also supported by some Programme committee members. For example the health topics addressed by the PHP are of relevance to Member States however the PHP is unlikely to directly influence policies but rather the way of thinking on public health issues. Here it is important to distinguish between relevance and benefit: It is obviously relevant to those it benefits, but the question is whether the PHP is relevant to all the stakeholders that could benefit.

While Member States can influence the agenda of the PHP when discussing the design of the Programme, they are likely to define their own priorities and action independently of the Programme. The slight majority of interest groups believed that the PHP has no influence on programmes of their organisations. Commission officials from other DG's and proposal leaders

felt that projects that involved international organisations that need active involvement of the Member States are particularly good at creating synergies.

3.14 Success of Programme in generating and disseminating more and better health information to citizens, health experts and policy–makers

We addressed this issue by looking at the quality, availability and uptake of health information (the impact measure) and backing up to see whether the content and dissemination channels originated in the Programme. This is already part of the *ex post* evaluation (see section 3.2.3 and Appendix 3 for details on methodology and results).

To give it a suitably *ex ante* character, the evaluation should also have an implicit time–series dimension. If the content is being used but did not originate with the Programme, it is good for effectiveness but bad for efficiency and relevance. If the content started with the Programme but is now provided from other sources, it is good for relevance and efficiency and for effectiveness and sustainability, but the key issue is whether the availability and use of such information is equitably spread (across population groups and countries). Finally, if the bulk of the information continues to originate with and be disseminated by the Programme, it is good for relevance and possibly effectiveness, but not so good for sustainability unless soft evidence suggests a strong European added value component that makes a common source and platform valuable. This issue should be further analysed during the remaining years of the PHP.

CHAPTER 4 Conclusions and recommendations

4.1 Introduction and Context

Below we present the conclusions and recommendations regarding the thirteen key summative evaluation questions. However, before doing so, it is important to establish our understanding of the policy, legal and resource constraints within which the PHP functions, and to reiterate the context of this evaluation.

A coherent and co-ordinated health strategy was first put forward by the European Commission in May 2000. This built on the experience of eight separate health programmes. Efforts were required in the first two years of the programme to make a smooth transition from the eight separate programmes to the new PHP. For example, in addressing health determinants, efforts were made to develop a coherent approach between the various health determinant actions, with a view to developing a more strategic approach. Consequently, for example, a network to support coherent strategies in the domain of nutrition and physical activity was developed. A key part of the new strategy was a public health programme and this was adopted in September 2002 (referred to as the 'Programme Decision').[132] It was to run from January 2002 until December 2008. At the time of writing, a new Health Programme is being developed by the Commission. The conclusions and recommendations presented here relate to the interim evaluation of the Public Health Programme (2002-2008) and they are also intended to contribute to considerations about the new Health Strategy.

The historic background to the PHP is relevant to this evaluation. This is not only because is leaves a legacy of networks, relationships and knowledge that shape the PHP but also because the PHP was specifically established to address perceived weaknesses in the existing system (fragmentation, a lack of synergy, weak co-ordination of efforts) and the PHP should be evaluated partly against its success in overcoming these weaknesses.

As has been noted, the PHP (2002-2008) is based on three objectives: to promote health information, support rapid reaction to health threats, and address health determinants. Activities intended to realise these objectives include networking, co-ordinating responses, sharing experiences, training, and disseminating information. The intention was that these should be inter-linked and mutually reinforcing and should be connected with other Community policies and activities to create synergies and minimise over-lap. Simultaneously, it was anticipated that these activities would be co-ordinated with the work of the governments of Member States,

[132] Decision No 1786/2002/EC of the European Parliament and of the Council of 23 September 2002. OJ No L 271, 09.10.2002.

through dialogue and effective communication, and with the work of NGOs and international bodies. An important evaluation question therefore concerns how successfully the PHP developed links with relevant Community programmes and actions, and with national and regional initiatives, in order to promote synergies and avoid overlaps. Similarly, it was anticipated that synergy would be achieved with work undertaken but international organisations working in the health field (such as WHO and OECD). Communication with stakeholders (including the dissemination of results) has therefore been a significant question for this evaluation. An underlying reason for the design of the PHP was the perception that, at the European level, synergies and economies of scale were not being realised, and opportunities for concerted action were not being taken. If the PHP helps to address this then it is succeeding in achieving at least part of its purpose. The success of this communication is hard to measure quantitatively and we have therefore captured the insights and perceptions of those who were intended to be communicated to.

The PHP also aims to achieve its purpose within a particular legal context. This both empowers it to take action and constrains those actions. The programme is an 'incentive measure designed to protect and improve human health', 'excluding any harmonisation of the laws and regulations of the Member States'. This legal setting influences the choice of delivery mechanisms. This has encouraged DG SANCO towards the use of information, influence and incentives rather than the use of hierarchical interventions. This evaluation acknowledges this and using network analysis, surveys and interviews to consider the acceptability and perceived success of these mechanisms amongst its stakeholders.

The Commission implements the programme assisted by a Committee of representatives nominated by the EU Member States. This Committee has to give its opinion on the implementation measures defined and decided by the Commission (including the annual work plan, selection criteria, and financing of actions). In addition, the Committee is informed about the methods for evaluating the programme (including this Interim Evaluation).

Management of the programme is structured through the work plans.[133] For example, the 2003 and 2004 work plans launched various cross-cutting initiatives including the networking of NGOs, strategies for reducing health inequalities, and establishing a Europe-wide multi-disciplinary network on drug prevention in prison. For example, co-operation between Member States was promoted by three projects on the prevention of cardiovascular disease, mapping access to health services, and evaluating public health in the European border regions. An important evaluation question is therefore to consider whether the work plans have been delivered.

This is a complex and ambitious programme requiring energetic management. To strengthen its implementation, an executive agency was established (as anticipated in the programme Decision). Its establishment was postponed by delays in the overall legal and procedural framework for the creation of executive agencies and it was not until 2005 that it became operational. The management processes and monitoring system are therefore considered in this interim evaluation. However, much of the data collection came before the executive agency had had a significant impact and this should be recognised in considering the implications of our conclusions.

[133] Ibid Article 8(1).

From the outset, the intention has been to involve accession countries in the PHP. Memoranda of understanding were concluded with all accession countries and Turkey. They participated as observers in programme committee meetings and efforts were made to involve and inform them. The programme's initial budget allocation of €312 million was increased to €354 million to accommodate the 10 new Member States in 2004. It is therefore important to consider how successful this integration has been. We have considered this through, amongst other things, our portfolio analysis.

The development of a future Health Programme has been part of a wider debate about a future Health Strategy for Europe. This is a debate not only about the appropriate role and limits of European action but also about the proper role of the practice of public health. In April 2005, the Commission adopted a Health and Consumer Protection Strategy and a proposal for a European Parliament and Council Decision. The intention was to create a Health and Community Programme for Health and Consumer Protection (2007-2013). However, following a European budgetary discussion in December 2005 a Programme of Community Action in the Field of Health 2007-2013 was adopted with a budget set at a level approximately one third of the level foreseen in the proposal of April 2005 (this was for health alone, with a separate proposal for consumer protection). Our recommendations for a new Health Programme at the end of this chapter relate to this programme.

Our conclusions and recommendation contained in this chapter have therefore been informed by this context. Furthermore, they should be interpreted in the light of this being an Interim Evaluation. In a complex, context dependent and rapidly moving area such as the PHP there is an inherent problem in that what is being evaluated is itself being changed as data has been collected. Moreover, where, for example, the intervention is less than fully successful it is not always clear whether this is because the intervention was inherently faulty (a failure of intervention concept), whether the intervention was just badly delivered (a failure of delivery), or whether the failure was primarily due to the behaviour of organisations over which the PHP had no control or limited influence. All of this is made more complex by conducting an interim evaluation at the same time as the Programme itself is adapting and responding.

4.2 Conclusions and recommendations

1. To what extent does the current Programme address the needs of stakeholders and the EU citizens?

Our survey and interview evidence suggests a clear perception amongst stakeholders that the Programme is relevant. This is important because stakeholders witness at first hand the work of the PHP. They also act as 'ambassadors' for the PHP at conferences, forums and in professional discussion. However, any conclusions derived from this must be tempered by the understanding that many of these stakeholders benefit, in one way or another, from the Programme. Furthermore, it is conceivable that stakeholders in organisations might have interests that are not identical to the interests of EU citizens. This is clear if we consider the prioritisation of actions through the PHP workplan.

The PHP has a management framework which identifies priorities through the work plan. The priority areas for 2005, for example, were identified 'taking into account the need for supporting Member States' actions and enhanced co-operation in the EU context, legal obligations and their implementation, major concerns that have been identified by the European Council, the Council

and the Parliament.'[134] Furthermore, 'Synergies are to be ensured with the 6th Framework Programme of the European Community for Research and its activities'.[135] The 6th Framework Programme for Research is itself subject to complex and multiple influences. Prioritisation arrived at in this way might be hard to communicate and this might explain why survey respondents found it hard to clearly identify the profile of the PHP. But more significantly, it may be hard to demonstrate that it is driven by the health needs of EU citizens.

Comparisons should be managed with great care, but this approach might be contrasted with the prioritisation model adopted by the Centers for Disease Control and Prevention in the USA which includes considerable room for public comment, expert scientific input, and a transparent prioritisation process.[136] Alternatively, the National Institutes of Health adopts a 'Roadmap' identifying:

- What are today's scientific challenges
- What are the roadblocks to progress?
- What do we need to do to overcome these roadblocks?
- What can't be accomplished by any single Institute?

The NIH roadmap was developed with input with more than 300 nationally recognised leaders in academia, industry, government and the public. There were numerous steps from vision to implementation which were undertaken, including NIH Leadership Forums, Working Groups, and implementation groups (planning timelines, millstones, and mechanisms for coordination, needs for inventories, and staffing needs for programme implementation). The process began in 2002 within initiatives beginning in 2004 and beyond.[137]

Importantly, this process includes a consideration of the impact that the research is likely to have (i.e. it is not enough to focus on a significant health problem; there should also be a persuasive account of how the research might benefit citizens). Clearly, neither of these approaches could be adopted wholesale by the PHP which operates within a very different legal, policy, and resource context (outlined above). Furthermore, the needs to be addressed by the Projects are inevitably identified and prioritised within particular Governance arrangements (and 'roadmaps' and similar approaches are also influenced by their institutional setting). However, **we recommend that the Commission with technical support from PHEA considers whether the current prioritisation ensures optimal outcomes for EU citizens. In particular, the Commission might consider the contribution that 'roadmaps' or similar could make to this process.**

In addition to adding to the information and knowledge base, the PHP also provides forums and structures within which decision–making and action can be co–ordinated, adding to the capacity

---

[134] Community action in the field of public health (2003-2008) Work plan 2005. http://ec.europa.eu/health/ph_programme/howtoapply/proposal_docs/workplan2005_en.pdf

[135] Ibid.

[136] Centres for Disease Control and Prevention. Advancing the Nation's Health: A Guide to Public Health Research Needs, 2006 – 2015. Department of Health and Human Services. http://www.cdc.gov/od/science/PHResearch/cdcra/index.htm

[137] National Institutes of Health. NIH Roadmap for medical research. http://nihroadmap.nih.gov/overview.asp

to act at a European level to address public health problems that could not easily be managed at Member State level. These forums not only respond to the needs of stakeholders and citizens but they also help to shape the understanding of these problems amongst decision makers in the domain of public health. It may therefore be a problem that our network analysis suggests that successful partnerships formed to secure PHP funding are very likely to be led by institutions from the EU-15 and not from the new member states. However, an alternative consideration is that all new Member States participate in the various strands of the PHP and that the PHP has therefore successfully created a forum within which the new Member States have the opportunity to articulate their own conception of public health interests and citizens' needs. Indeed, the role of the PHP in providing forums for debate and participation that integrates the new Member States appears to have been more successful at integrating new Member States than projects in this respect.

The forums (amongst other tasks) help to shape and identify needs and priorities in the face of an uncertain future. Other health programmes include a greater reliance on more formal mechanisms, such as listening exercises and Delphis and other consensus exercises.[138] These are often used within more contained systems (such as the Canadian Health Services Research Foundation's listening exercises in 2001 and 2003; the Delphi-type process used by the Dutch Health Care Insurance Board in 1993; the roadmap used by the New Zealand Ministry of Research Science and Technology). As such they might need to be adapted if used at all. However, **we recommend that the Commission considers the use of more formal listening exercises, Delphis and other horizon scanning exercises in prioritising its future public health funding.**[139]

There is other evidence that the PHP helps to meet the needs of stakeholders and citizens. Examples derived from the survey and the interviews suggest that the PHP leads to increased knowledge of practitioners; improved everyday practice; better diagnostics; improved quality systems; more effective media and campaigns; vaccinations; and the establishment of smoke–free workplaces. In terms of concrete policy actions respondents expect a change that might eventually lead to improved health outcomes, such as colour photographs on cigarette packets; invitation policies for population–based screening; national campaigns for antibiotic use; and a law for infectious diseases. Also, the services and protection are expected to improve, e.g. through improved diagnostics for viral diseases; good practice recommendations for service delivery; improved rational for prescribed drugs; better national regulations; better health promotion and prevention; and wide dissemination and exchange of good practice. Finally, appropriate methods

---

[138] Dault, M., Lomas, J., Barer, M. on behalf of the *Listening for Direction II Partners.* (2005) Listening for Direction II: National consultation on health services and policy issues for 2004-2007; Lomas, J., Fulop, N., Gagnon, D., and Allen, P. (2003) On being a good listener: Setting priorities for applied health services research. *The Milbank Quarterly;* 81:3, 363-388. More generally, see:

Henshall, C., Oortwijn, W., Stevens, A., Granados, A., & Banta, D. (eds.) (1997) Priority setting for health technology assessment: theoretical considerations and practical approaches. *International Journal of Technology Assessment in Health Care*, 13:2, 144-85. On the use of Delphis, see:

Oortwijn *et al.* (1999) Priority setting for health technology assessment in the Netherlands: actors and activities. *Health Policy*, 47, 241-53.

[139] A review of research and development funding is available at: RAND Europe (2006) *Review of R&D management practice.* Project Memorandum PM-2004-SDO March 2006

for continuing surveillance are expected to be improved, e.g. through identification of evaluation strategies for interventions; setting up specific methodological guidelines; development of annual statistics; and simultaneously comparing data and methods between countries. This perception that the PHP delivers benefits is supported by anecdotal evidence such as the feedback from the 2005 Open Health Forum where 71 per cent of participants believed that the EU (including, but not only, the PHP) has a major impact on people's health and 90% believed it should have a bigger role in the future.[140] Respondents to our survey and interviewees agreed that the PHP delivered benefits for stakeholders and EU citizens. However, many respondents reported that despite their knowledge of, and approval of, particular parts of the PHP, they often knew little about the PHP and its priorities as a whole.

The PHP was established in a context where public health actions at the European level were limited, diverse, and loosely connected. Stakeholders now perceive there to be an important public health role at the European level. **We recommend that DG SANCO builds on the growing visibility of the PHP by giving sharper definition to its shape amongst the European community of public health practitioners and policy makers, Member States, and elsewhere in the Commission.** In our opinion, this should address not only the areas of greatest health need, but also the areas where action at a European level is uniquely well placed to provide benefits, and where action of the sort available to the PHP will have predictable benefits at identified points in the prevention of disease and the promotion of good health. **The Commission should actively consider drawing upon alternative prioritisation approaches such as 'roadmaps', expert workshops, and futures exercises (without undermining the legal and policy basis for the PHP).**

2. How can a model identifying the mechanisms for arriving at Programme policy be designed and used, signalling how specific actions would lead to outputs, how the real impact are achieved and identifying how the Programme objectives address the needs of stakeholders?

In order to address the complex issues involved in evaluating such a complex programme, RAND Europe considered creating logic models of the PHP to visualise the different streams that make it up. Logic models are commonly used evaluative techniques that allow a graphic representation of the "theory of action" – what is invested, what is done, and what are the outcomes. Logic models are one potential method of evaluation. The visual representation of the "theory of action" is easy to understand for all stakeholders, not just those with experience in evaluation. This allows a shared understanding of the project between all the stakeholders involved in the project and can surface unspoken disagreements and confusions. Thus, they can benefit organisations well beyond the production of a standard evaluation framework.

However, logic models have inherent limitations as an evaluation tool and in particular an inability to capture the counterfactual - what would have happened without the intervention in place, or if another intervention had been implemented. Furthermore, PHP's impact upon European citizens depends on the decisions and actions of many others; therefore attributing any particular outcome to the PHP is difficult. Another way of conceptualising this is that the outcomes of the PHP become the inputs to other projects. This problem is compounded by the

[140] Open Health Forum 2005 –Health Challenges and Future Strategy 7/8 November 2005, Brussels. http://ec.europa.eu/health/ph_overview/health_forum/open_2005/ev_20051107_eval_en.pdf

recognition that there may be unintended outcomes that are not anticipated in the logic model (and might therefore be missed in the evaluation). In the changing setting of the interim evaluation, in which the various actions are themselves changing, we arrived at the conclusion that the linearity of logic modelling would conceal more than it revealed.

Despite our conclusion that the development of a Logic Model was not appropriate for this interim evaluation, we believe that the benefits of a logic model approach will become increasingly apparent now that the PHP has become more established and its outputs clearer. There will also be a growing evidential basis for understanding the 'theory of change' that might connect the projects and activities funded through the PHP and potential benefits for citizens, especially if our recommendations for monitoring are acted upon. We believe that for the final evaluation of the PHP, the three core aims of the PHP (see above) could each be modelled using a logic model. By then, the evidence on inputs and processes will be available and it will be easier to relate these to outputs and outcomes.

However, there will still be a programme-wide set of evaluation questions that would need to be addressed in the final evaluation. These impacts are mediated by factors such as influence, persuasion, the shaping of forums and opinion-forming bodies as anticipated by the Programme Decision. These questions may be better addressed through surveys interviews and case studies (because case studies allow for the exploration of context-dependent factors). More specifically, the PHP's impact on health outcomes is mediated by the behaviour of other organisations/stakeholders over which the PHP has limited control. In addition, the Member States have their own policies relating to public health.

We therefore recommend that the Commission plays a key role in adapting logic models as an evaluation, management and learning tool.

3. To what extent are the objectives set in the Programme Decision and annual work plans achieved?

The Programme Decision and Programme have resulted in annual work plans that have attracted considerable interest among European public health actors. The programme has received many more applications than could be funded and, as intended, applicants come from a wide geographical range. Selected projects cover the whole intended range of PHP activities (although some areas attract many more proposals per project than others). Under the 2003 work plan, projects were proposed that would have cost ten times the sum available[141] suggesting that the PHP has successfully attracted proposals that are in line with the Programme Decision. The selection of projects are perceived to have been managed through clear and transparent evaluation procedures published in the Online Journal, reinforcing the sense that only relevant projects have been funded. In this process, evaluators appear to have applied appropriate criteria transparently and this impression is supported by evidence from the surveys and interviews. An Evaluation Committee was established to ensure that processes were in conformity with financial regulations.

[141] Commission of the European Communities. Report from the Commission to the European Parliament and the Council – Projects of the Public Health Programme committed in 2003-2004/*COM/2005/0511 final*/. Brussels: European Commission, 2005. http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&numdoc=52005DC0511&model=guichett&lg=en

The survey also shows that projects were considered to support the delivery of the objectives of the Programme Decision and the work plans.

All of this provides support for the view that intended objectives are being delivered at this interim stage. However, this impression would be strengthened through a more systematic approach to regularly monitoring the projects for progress against the work plan priorities. "Monitoring gives information on *where* a policy, program or project is at any given time (and over time) relative to respective targets and outcomes. It is descriptive in intent. Evaluation gives evidence of *why* targets and outcomes are or are not being achieved. It seeks to address issues of causality."[142] The monitoring approach used focuses on where the projects are at a given moment in time rather than where the Programme is. It would also support efforts to focus resources on the areas of highest priority to the PHP. However, it should also be clear that the monitoring activities would not substitute for an evaluation.

The Programme Decision also anticipated synergy and complementarity, enhanced co-operation and building cross-research area skills. Interviews with Commission officials suggest that such horizontal co-ordination within the Commission and between the Commission and other organisations is difficult. This is despite the fact that, according to interviewees, the PHP is regarded as relevant. It may be that the very complexity of the programme makes the multiple relationships it requires hard to manage and sustain. At the very least, it is known that project members believe that communication with PHP managers is disrupted by staff turnover and pressures of work.

We recommend the development of more quantitative intermediary outcome measures to support milestones which could chart progress towards more general public health measures. In practical terms, this could be part of a close of project report and need not be unduly burdensome. In time, this should be developed into a system of monitoring providing on–going routine information demonstrating actual progress against anticipated goals. This would reinforce and provide data for the logic model (discussed above) and would take the form of a 'dashboard' or 'report card'. **The Commission should also consider whether the complexity of the relationships implied by the work plans can be sustained, given the management capacity of the PHP.**

4. To what extent do the results achieved through the provisions of financial support for specific projects contribute to the achievements of the objectives of the Decision?

Both desk research and interviews reinforce the sense that the individual projects that were studied in this evaluation were oriented towards the objectives of the Programme Decision. In an interim evaluation it has not been possible to weigh the impact these have had because they are at early stage of development. The portfolio examination confirms that selected projects also reflect the range of objectives identified by the Programme Decision and that projects include partners from across the Member States. (However, some areas of work attract much more interest than others.) Furthermore, the proposals make a convincing case for how they will help to deliver the objectives of the Decision. The process of open competitive tendering, acting as an imperfect market, helps to support the delivery of value for money. Through the interviews we gained evidence that this was indeed the case but, less often, we were also told that uncertainty

[142] Kusek, J.Z. and Rist, R.C. (2004) *Ten Steps to a Results-Based Monitoring and Evaluation System*. Washington DC: The World Bank, 2004.

surrounding selection criteria and the likely level of award acted to discourage some potential applicants and so reduce the level of competition.

However, even when working well, the process is also thought to lead to a less pro-active and adventurous programme than might be desirable. The competitive tendering process plus the need to put together partnerships and to secure co-funding may all reinforce incentives towards conservatism in both proposals and selection. This brings with it its own set of risks. For example, important developments that depend on collaborating with one particular stakeholder might be missed. Supporting innovative research involves some trade-offs but examples exist where this has been managed in different ways to the PHP. For example, IDEA (Innovative, Developmental and Exploratory Wards) in the Californian Breast Cancer Research Programme gives initial research funding in 'high risk' areas that do not usually obtain government funding where there is potential to make a significant breakthrough but there is a current lack of data. The Medical Research Council-led LINK Programme in the UK is another approach that prioritises funding on the basis of potential for innovation and exploitation. Other approaches include providing better access to third party payers and supporting the engagement of NGOs.

We recommend that the Commission considers existing ways to encourage more adventurous and pro-active funding with a view to developing a more balanced portfolio of projects.

5. Are the results sustainable in the mid– and long term, i.e. after the funding granted by the EU has ceased?

The balance of evidence considered here and outlined in the paragraph above is that the PHP will reduce health risks by health promotion, disease prevention or health protection and improved surveillance. For these achievements to continue to be delivered after EU funding has ceased would require that the information and knowledge created by the project, or the synergies and co-ordination made possible by the Programme, would be sufficiently strong to attract further resources (whether financial or other). For example, through co-operating with OECD a sustainable health monitoring system is being created which will lead to comparable health information being produced across Member States. Similarly, by mapping access to health services, citizens and Member States are provided with information that may continue to shape decisions after the project is completed. Similarly, funding surveillance and health security preparedness is likely to set a standard of preparedness which will be difficult to ignore in the future.

However, we have been aware of very different types of risks to sustainability that would need to be guarded against. These include risks that are intrinsic to the project. For example, the risk that the project produces such weak data that it is unable influence future developments. A second type of risk is that there may be risks that are extrinsic to the project. For example, there is a risk that there is a lack of political support or a hostile legislative or cultural environment. Thirdly, there is the risk that an inadequate legacy plan means that, despite favourable intrinsic and extrinsic circumstances, there is a failure to put in place the necessary elements to secure a sustainable impact. Obviously, the value of legacy plans lies especially in the third set of circumstances (although rarely will any project sit neatly in one situation rather than another).

There are several recent examples of programmes which have evaluated the success of an initiative or project based on the legacy or sustainability plans. In the UK, The Health Foundation is currently funding two initiatives: Engaging with Quality (£4.5 million) and Engaging with

Quality in Primary Care (£2.4 million). The 16 award holders are currently being evaluated based on the projects ability to seek ways to sustain clinician driven quality improvement after the Foundation funding ceases and to spread the learning from each project to other clinical conditions. The NIH also has grants whereby "the potential to achieve a sustainable local and regional impact" is considered in making funding decisions.[143]

Despite the early stage of this interim report, it is clear that at least elements of the PHP are expected to have sustainable consequences. **We recommend that, in order to reinforce this, the Commission requires projects to provide a 'legacy plan' towards their completion which will identify how their achievements will be sustained in the future.** Furthermore, **we recommend that Commission prepares such a plan for the PHP as a whole** following a careful consideration of what should be included in legacy plans.

6. To what extent are the results of projects thoroughly disseminated to relevant stakeholders, including citizens, public health practitioners, policy–makers, researchers?

The results of the projects are disseminated in at least two important ways. First the projects themselves disseminate their findings through publishing, conferences and so forth. Second, the PHP has funded events and forums which function as a platform for the PHP's activities. The latter include electronic platforms and in particular the Public Health-EU portal and other websites (such as WHO) which are committed to giving PHP a profile. We also established that the Public Health Programme has a wider presence on the World Wide Web.[144]

Our analysis shows that the PHP as a whole has a high visibility in key websites such as from WHO (Health Evidence Network) and the Public Health EU–portal. In addition, NGOs such as the European Public Health Alliance also provide a vehicle for identifying and promoting PHP activities. Although projects are expected to have a dissemination strategy we have seen only limited evidence of the effectiveness or otherwise at this at this early stage and it would be problematic and, we think, unfruitful to conduct a systematic bibliometric analysis. Any final evaluation of the PHP should conduct an early bibliometric analysis and address the 'grey literature' that will be developing around the work of the projects.

In our interviews it was found that those with an active interest in PHP were able to find information. However, outside of this core group, there was less awareness. We can conclude that where there is a high level of demand for Programme outputs dissemination is effective.

---

[143] National Institutes of Health. Section V. Application Review Information. http://grants.nih.gov/grants/guide/rfa-files/RFA-TW-06-006.html#SectionV

[144] The following search terms were used for Google (http://www.google.com/). "DG SANCO" resulted in 325,000 hits; "DG Health and Consumer Protection" resulted in 111,000 hits; and "DG SANCO and public health" resulted in 136,000 hits. Both site the first link to the home page of DG SANCO website (http://ec.europa.eu/dgs/health_consumer/index_en.htm). "Public Health Programme 2003-2008" resulted in 28,400 hits and the first link was to the home page of the programme (http://ec.europa.eu/health/ph_programme/programme_en.htm). Other links from typing in these terms resulted in references to workshop reports and consultative documents.

The following search terms were used for Google Scholar (http://scholar.google.com/).

"DG SANCO" resulted in 911 hits; "DG Health and Consumer Protection" resulted in 211 hits; and "DG SANCO and public health" resulted in 655 hits; and "Public Health Programme 2003-2008" resulted in 25 hits. These hits linked to scholarly articles, citations and books. The references may be downloadable, but in the majority of cases a subscription by the user may be required.

However, where such demand is not apparent (and some of these might benefit from knowing about the programme) dissemination appears to be less effective.

We recommend a more tailored targeting of information, with different messages developed for different groups, than is currently the case. The PHP serves diverse interests and communities and these have very different interests in the portfolio of work produced by the PHP. These interests vary both by function (or professional interest) and by organisational belonging. A targeted information strategy would identify groups and organisations that might benefit from knowing more about the outputs of the PHP (but may be unaware of this). For example, communicating around specific themes through the use of newsletter, workshops and so forth. This should also target groups that are 'outside the circle' of the PHP. Some of these would be elsewhere in the Commission, others in Member States and still others in NGOs and other bodies.

7. To what extent does the Programme complement national policies?

The PHP is in a position to do a number of things that add value to national policies in areas where national governments find it difficult or inefficient to take effective action on their own account. There may be practical reasons why individual governments in Member States would find it difficult to act, for example in encouraging a shared system of health accounts, or economies of scale where Member States face similar problems, such as alcohol abuse, or where there are rare diseases. There may also be cross border issues that benefit from a European level response. Health threats rarely respect borders and surveillance and preparedness for European-wide pandemics would be hard to organise through individual Member States. Similarly with health determinants there may be Europe-wide issues which lend themselves to co-ordinated responses. This might involve issues that arise because of determinants that result from a combination of factors in two or more countries (for example, migrant prostitutes).

Despite these prima facie opportunities, consistency and complementarity with Member States is limited by three factors. First, despite actions by the PHP the information collected and used by Member States on public health varies (although initiatives such as the PHP and OECD sponsored system of health accounts help limit this difference) and the categories used for data collection and evaluating impact also differ. Indeed, what is included as 'public health' varies in different national systems. Second, the capacity of Member States to participate in agenda–setting and in delivering public health gains varies. Third, incentives vary. For example countering inequality might be given a higher priority in some states than in others.

Interviewees who were policy makers from Member States supported and accepted the rationale for European intervention in public health and, indeed, looked to Europe for firmer action. Interviewees suggested focusing on a smaller number of high profile issues known to be relevant to the concerns of Member States. However, this needs to be interpreted with care because what might be high profile and acceptable in one Member State might not be so in another. With these caveats, we conclude that it would be easier to complement national policies by focusing on fewer, more acceptable issues of clear relevance to Member States. We therefore recommend a programme of work that more closely reflects the anxieties of governments in the Member States. However, we recognise that this recommendation could on occasion's conflict with the recommendation that priorities are driven by a more 'bottom-up' analysis of needs and potential impact.

8. Have sufficient and well functioning/pragmatic synergies been created with international organisations?

There is evidence of successful interactions between DG SANCO and WHO in particular (e.g. mobility of health professionals, patient safety, disease prevention and health promotion (e.g. obesity). This evidence varies from mutual citing on websites through to joint participation in events and shared actions. A document set out the joint EU-WHO priorities for enhanced co-operation was agreed in July 2004.[145] The areas for co-operation were identified as focusing on generating and disseminating authoritative data; developing methodologies for health monitoring and disease surveillance; strengthening communicable disease surveillance; exchanging information and experience; promoting health related research; mobilising resources; and seconding staff. Co-operation with OECD has focused on developing Health Care Quality Indicators; the economics of health; issues related to the mobility of health professionals; and support for the System of Health Accounts. We have noted evidence of successful collaboration but it is not yet clear how far these collaborations might be taken in the future. As we have seen, joint initiatives with the OECD can frame public health discussions at the international level. This holds also true for the WHO that has a mandate for health. Effective co–ordination of public health issues and responsibilities would therefore be key to delivering the added value of the PHP (e.g. with regard to patient mobility, health threats and obesity).

SANCO has established a relationship with WHO, OECD, and other international organisations (partly mediated by the work of the European Health Forum) and **we recommend that DG SANCO continues to collaborate with key international bodies and, in partnership, identifies the most appropriate actions to be taken by each partner to identify where synergies and gaps exist.**

9. Do the selection, assessment, evaluation and management processes, starting from the call for proposals until the final reporting on selected and co–financed individual projects ensure satisfactory outcomes of the actions?

A significant number of applicants perceive the procedures as time–consuming and difficult, mainly because, they suggest, the turnaround time for proposals is 'too long'. It is not clear whether this is based on an awareness of other, quicker systems, or whether it is based upon a more general frustration with the inevitable delays of administrative processes. However, there is at least a task to be done in managing applicants' expectations. A further task is to explore how the turnaround time could be made shorter.

One reason for the pressure on the management process is the large number of applicants, many of which eventually fail. A response in other Programmes and funding systems is to require a short preliminary application (typically including a budget) which will filter out all but the most likely proposals. Feedback should also allow proposers to prepare better proposals next time round.[146] At the same time, the sort of prioritisation of projects described earlier in this chapter, might even more pro-actively shape proposals towards delivering the outcomes of the work plan. We observed a PHP information day and this was perceived to be helpful and well run. Survey respondents had a high opinion of PHP mangers (when they were able to contact them).

[145] Conclusions of the Fourth High Level Meeting between the European Commission and the WHO of 2 July 2004.

[146] See, for example, www.wellcome.ac.uk and www.cdc.gov

The PHP is constrained in its available funding modalities by the existing financial instruments and policy context. However, a more prioritised and innovative approach would require a consideration of additional funding modalities. Some of these are described in the Social Research Association's *Commissioning Social Research: a good Practice Guide*.[147] These include the use of indirect as well as direct competition (where indirect competition involves competing for the right to conduct a project, the content of which has not yet been specified). It is also possible to use open or closed competition (in the latter, only invited suppliers can take part). In addition there might be formal and informal competition (with less structured soundings of competencies and costs in informal competition). A consideration of such approaches might lead to more diverse approaches such as strategic partnerships, the funding of Units, and residential, interactive workshops to creative innovative multi-disciplinary research teams.[148] **We recommend that the Commission should consider using more of such diverse support modalities.**

10. Are the whole Commission selection and management processes carried out by its services in a cost–effective way?

The reporting procedures and the transparency of payment arrangements are seen to be working well within the PHP although the project submission procedure is regarded as unduly burdensome by some applicants. More importantly, we argued in the paragraph above that a consideration of a wider range of funding modalities could give rise to more cost-effective selection and management processes. However, we recognise that possibilities for further change/improvement in this area are limited by the constraints of the Financial Regulation. It should also be recognised that there is a perception amongst stakeholders that Commission and PHEA staff put in considerable effort to facilitate the proposal submission procedure. One example is the PHP information days.

On a more operational level, a recurring concern for survey respondents was the perceived turnover of staff which meant that contacts, once established, would often be broken.

We recommend that: a) where possible, either each project officer is given a relatively stable and coherent area of responsibility, or that continuity is achieved through team-based working (we understand that recent developments have improved the system for transferring information from one desk officer to the next. Clearly there are organisational, legal and financial constraints limiting this. We also recommend b) improving the application procedure by means of simplified, transparent and flexible procedures. For the latter, the PHEA could play an important role. Finally, we recommend, c) that the Commission considers the cost-effectiveness of the alternative funding modalities identified above.

11. To what extent is consistency and complementarity ensured between actions implemented under the current Programme and other EU policies and activities?

In some areas there are obvious overlaps between Community policies (e.g. health information). At this interim stage it is too early to draw firm conclusions but Commission officials who were interviewed argued that the level of interaction between the PHP and some other DGs should be increased. Stronger relationships with DG Research were noted but relationships with DG

[147] The Social Research Association (2002) *Commissioning Social Research: A Good Practice Guide*, pp.11-18.

[148] These are known as 'sandpits' or IDEAS factories and have been used in the UK by the EPSRC; see RAND Europe *Review of R&D management practice* Project Memorandum PM-2004-SDO March 2006, p. 12.

Employment, DG Environment, DG Regional Policy and DG Development were all said to be more limited. Understanding the consequences of these more limited relationships would depend upon an analysis of the capacity of other EU policies and activities to support the delivery of the PHP aims and, conversely, of the capacity of the PHP to support the delivery of wider EU policies. In concrete terms, examples of good practice were said to include attending each other's expert and committee meetings (although this appears to be a limited tool for achieving complementarity across Community programmes). Ensuring complementarity faces barriers similar to those described above, including the EC financial mechanisms that limit synergies between programmes. These problems are made more difficult by co-financing arrangements which further limit flexibility in some cases. It should be noted that at least some of these barriers arise from the nature of organisational life itself; there are inevitable limits to how 'joined-up' different organisations can become.[149]

The degree of complementarity varies by area. Some stakeholders stated that the extent to which the PHP interacts with other EC activities is small and that more horizontal information exchange is needed (e.g. in the field of quality of water and structural funds for health system development). However, in other areas there is considerable interaction between different programmes such as bioterrorism, pharmaceuticals and health information technologies.

We recommend the Commission continues to develop a strategy aimed at coordinating better and informing more effectively all European Community related health issues to avoid overlaps and improve synergies between EC programmes and policies (e.g. link the health objectives to the FP7 research programme and streamline collaboration between relevant DGs, such as with DG Environment and DG Research). Since integration can never be complete, the Commission should identify the most likely areas for beneficial complementary action.

12. To what extent do stakeholders accept public health policy in general and the way in which the Programme implements this policy?

The rationale for European intervention in public health is widely accepted and supported amongst stakeholders. On the one hand, interviewees from all stakeholders recognised that national governments have a distinct role to play. On the other hand it was generally accepted that the PHP had its own role to play. However, it was less clear that interviewees had a clear idea about the rationale for the PHP as a whole. Respondents knew about particular areas of the PHP which were of interest to them. They were less knowledgeable about the PHP as a whole. The implication of this is that many respondents were motivated by particular aspects of the PHP only. Presumably, this group would want to be communicated with about their own areas of interest. On the other hand, the rationale for the PHP is that there should be an integrated Programme which creates synergies. At the very least, it should be expected that projects should learn from each other and exchange good practice. This suggests that there is another group, concerned with securing synergies that need to be communicated with differently.

This gets to the heart of an important challenge facing the PHP. The complexity of stakeholders – NGOs for specific diseases, the professional public health community, international bodies, Member States, potential partners in other DGs etc. – means that a simple communication tool

[149] Ling, T. (2002) 'Delivering Joined-up Government in the UK: Dimensions, Issues and Problems.' Public Administration Vol. 80 No. 4 (615-642).

and coordinating mechanism is unlikely to be sufficient. The Commission may like to consider how to reduce the complexity of the Programme, while simultaneously developing more sophisticated co-ordinating mechanisms.

We considered arguments documented by WHO, the OECD and professional bodies representing international public health views such as the European Public Health Alliance, Health Action International, and the Standing Committee of European Doctors. Each of these also recognised the value of addressing health challenges in the EU in a co–ordinated approach. The PHP has addressed this by evaluating the impact of EU policies on health, developing joint actions with other activities, and supporting European agencies in the field of public health.

We recommend that that the Commission both reduces the complexity of the PHP (possibly by focusing it around matters of greater concern and visibility to stakeholders) and strengthens the mechanisms to support inter-project learning and synergies with the actions of stakeholders.

13. Does the current monitoring system deliver the necessary information to support a sound implementation of the Programme?

Monitoring of Programme activities is generally perceived to be adequate for monitoring the progress of each project. Furthermore there is no enthusiasm from the projects to provide more data and the projects operate within different timescales, may use different categories of information and contribute to very different healthcare systems. Even so, the data available to the Commission primarily concerns the delivery of individual projects. Data on securing synergies, learning from other projects, and delivering health benefits is less available to DG SANCO. Conceptually, organising such data collection would be made easier through the use of logic models which provide a ready structure for developing performance indicators.

We therefore recommend making the objectives and success indicators of the PHP as a whole more explicit and recommend that projects should report on progress against these targets.

4.3 Summary of recommendations for a new Public Health Programme

A range of recommendations were made in the previous section that could contribute to thinking about a new Public Health Programme. In addition, respondents also commented on their aspirations and recommendations for a future Programme. We have summarised all of these in the Table 11 below. We do not necessarily agree with the stakeholders recommendations but have included them here because they should be of interest to the Commission.

Table 11. Summary Recommendations for a new Public Health Programme

	RAND Europe recommendations	Stakeholder recommendations
Programme	• Develop a more needs-driven prioritisation process e.g. roadmap • Make use of Delphis and other horizon-scanning exercises • Give the PHP a sharper, less	• Focus on cross–cutting themes e.g. inequality, aging and health, gender aspects and health, health systems, disease prevention e.g. HIV • Avoid overlap and create more synergies between EC programmes and policies

	complex profile and focus on areas with a high impact and high concern (including a concern to Member States) • Develop logic models for understanding the mechanisms to achieve intended outcomes • Use project-level feedback to report against Programme priorities as well as project priorities and draw these together into a Programme-wide 'dashboard'	(e.g. align the health objectives to the FP7 research programme and streamline and strengthen collaboration between relevant DGs, such as with DG Environment, DG INFSO and DG Research). This requires mobilising resources within the EC to meet this objective • Focus of PHP should be multi–organisational, multi–cultural and should involve all EU countries (European added value) • Increase focus on impact and added value of PHP projects and activities (too much emphasis on topics) • Research is needed in those areas where a clear health gap is discovered and identified • Improve the balance between the geographic scope of the projects
Management	• Develop new funding modalities to encourage greater adventurousness and balance the current incentives towards a more conservative set of proposals • Work with projects to develop legacy plans to strengthen sustainability • Require, as part of the final evaluation, and exploit the findings of, bibliometric analyses of impact of PHP projects • Work with projects to target dissemination on particular stakeholders • Maintain and strengthen existing links with international bodies and develop a clear division of labour	• DG SANCO should improve its requirements for dissemination by means of general rules and criteria. For instance, requiring that all project results are being published on the new Public Health EU–Portal to also address a wider audience • There should be more contact between project participants and Member State governments with regard to the dissemination of project results • Improve assessment on European added value, impact and sustainability of finalised projects • Conduct comparative analysis of projects impacts by health topic • Better link EC public health policies with PHP and determine for each activity whether a call for tenders or a call for proposals would be more appropriate (based on criteria such as the

		required level of innovation, impact and sustainability) • There should be more focus on implementation and sustainability of activities (including monitoring and informing citizens) • DG SANCO should develop and make use of concrete outcomes/targets/indicators to measure the impact of activities and of the PHP as a whole. Improve the funding system by increasing the budget and reducing co–financing (especially for NGOs) • The financial mechanisms should become more flexible (e.g. allow for funding of networks and conferences) • DG SANCO should improve the Programme's consultative structure: e.g. involve national health authorities, international organisations and interest groups such as ECDC and ECMDDA earlier and more closely in advance of work Programme decisions • Increase human resources – in particular the number of project officers with expertise in the field of public health • Improve programme learning/ programme intelligence. The question in this respect is how to have more organisations 'outside the circle' participate in the Programme and at the same time use Programme participation as a tool to effectively share expertise, passing it from 'experienced partners' to new ones. This calls for a well developed system of programme learning/programme intelligence. A useful way to do this is through newsletters, organisation of workshops or any other form of information channel the EC chooses *around specific themes*. Rather than publish Programme results on a project–by–project basis, the

		study team recommend presenting the results of overlapping and complementing projects in an integrated and summarised manner, i.e. present the 'state of the art' in a certain broader area. A database of project participants could help organisations that are interested to find (new) partners • Improve the strategic (policy–oriented) focus of the Programme, with less project–related activities and more direct funding of international organisations such as WHO and OECD • Provide an indicative budget for each thematic area, so that applicants can weigh the required investment against the chance of success and the available budget. The current procedure strongly resembles that of a lottery due to limited transparency (it is completely unclear what type may have a chance as selection criteria seem to be rather arbitrary and unpredictable)
Project	• Manage and limit the number of proposals to be assessed • Consider using indirect competition • Consider using closed competition • Consider using informal competition • Pro-actively support the development of innovative research teams through residential events • Address and reduce the risks of high turnover of project officers • Simplify application procedure • Require projects to monitor their progress against PHP	• Simplify application procedures • Adopt a more proactive approach towards providing regular information on the interim status and outputs of projects. Project leaders therefore need to provide information periodically, which is currently not required • DG SANCO should be more responsive to problems or changes in the execution of a project (e.g. project partners pulling out). As a suggestion the time frame between proposal acceptance and project start should be shortened to minimise such risk Ensure annual work programmes conform to a transparent and certain schedule for every year of the Programme term • Provide templates on how to fill in the budget and how to report (e.g. DG

	priorities	Research as effective practice)

4.3.1 General recommendations for a new Health Programme

The conclusions and recommendations outlined in this chapter might be focused on a new Health Programme. First we recommend that priorities should be more explicitly set. We suggest that the priorities established at the Programme level reflect the answers to three questions. The first concerns the extent of the public health problem. This should include both actual impact and (in the case of disease prevention and health promotion) the expected impact. The second concerns the tractability of the problem in hand. For example, if the intention is to fund research activities, what is the (expert) opinion about the likelihood that the activity will deliver usable outputs and outcomes? 'Usable' should be understood to mean being not only scientifically valid, but also administratively feasible and acceptable and relevant to the wider community of European public health practitioners and policy makers. The third question concerns why the activity should be funded specifically at the European level.

Secondly, we agree that a formal logic modelling exercise would help to inform the design of the new Programme, would support learning, and would deepen accountability.

Thirdly, the priorities of the Programme Decision and the work plans should more actively shape the work of the projects, and this has implications for pre-selection, selection, monitoring and dissemination.

Fourthly, projects should be required to produce a legacy plan showing how their work will be sustained beyond the point at which EU funding ended (unless a compelling case could be made for not doing so).

Fifthly, the new Programme from the outside should be more actively 'marketed' both to ensure it is visible to those who might benefit from it, and to ensure that its purpose is clearly and widely understood.

Sixthly, the new Programme should build on the work of involving new Member States, and should continue to forge working relationships with international organisations.

Seventhly, the new Programme should consider a more systematic filtering system to reduce the burden of large numbers of full proposals.

Eighthly, the new Programme should consider adopting a team-based, rather than officer-based approach to managing the relationships with the projects.

References

Anderson, P. and Baumberg, B. Alcohol in Europe: A public health perspective. A report for the European Commission. London: Institute of Alcohol Studies, 2006.

Archambault, E., Vignola–Gagne, E., Cote, G., Lari viere, V. and Gingras, Y. Benchmarking scientific output in the social sciences and humanities: The limits of existing databases. Accepted for publication in Scientometrics, 2006. Available at: http://www.ost.uqam.ca/OST/pdf/articles/2006/Benchmarking_SSH_Limits.pdf

Benigeri, M. and Pluye, P. Shortcomings of health information on the Internet. Health Promotion International, 2003; 18 (4): 381–386.

Borgatti, S.P., Everett, M.G. and Freeman, L.C. Ucinet for Windows: Software for Social Network Analysis. Harvard, MA: Analytic Technologies, 2002.

Brand, H. and Wolf, U. Evaluation of border regions in the European Union (EUREGIO): Second interim report (2005–06–01–2006–06–01). Grant agreement 2003104, 2006.

Byrne, D. Enabling good health for all – A reflection process for a new EU health strategy, 15 July 2004. Available at http://europa.eu.int/comm/health/ph_overview/strategy/health_strategy_en.htm

Canadian Foundation for Health Services Research. Annual Report 2005. Ottawa: Canadian Foundation for Health Services Research, 2006.

Centres for Disease Control and Prevention. Advancing the Nation's Health: A Guide to Public Health Research Needs, 2006 – 2015. Department of Health and Human Services. http://www.cdc.gov/od/science/PHResearch/cdcra/index.htm

Commission Decision of 6 February 2004 concerning certain protection measuring in relation to avian influenza in several Asian countries (OJ L 36/59, 7.2.2004)

Commission Decision of 17 February 2006 concerning certain protection measures in relation to highly pathogenic avian influenza in wild birds in the Community and repealing Decisions 2006/86/EC, 2006/90/EC, 2006/91/EC, 2006/94/EC, 2006/104/EC and 2006/105/EC (OJ L 48/28, 18.2.2006).

Commission of the European Communities. Commission working document on Community influenza pandemic preparedness and response planning. COM(2004)201 final. Brussels: European Commission, 2004.

Commission of the European Communities. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee. The European

Environment and Health Action Plan 2004–2010. COM(2004)416 final. Brussels: European Commission, 2004.

Commission of the European Communities. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the regions on the health strategy of the European Community. COM(2000)285 final (2000/0119 COD). Brussels: European Commission, 2000.

Commission of the European Communities. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the regions. e–Health – making health care better for European citizens: An action plan for a European e–Health area (SEC(2004)539). COM(2004) 356 final. Brussels: European Commission, 2004.

Commission of the Eruopean Communities. Report from the Commission to the European Parliament and the Council – Projects of the Public Health Programme committed in 2003-2004/*COM/2005/0511 final*/. Brussels: European Commission, 2005. http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&numdoc=52005DC0511&model=guichett&lg=en

Conclusions of the Fourth High Level Meeting between the European Commission and the WHO of 2 July 2004., Brussels. http://ec.europa.eu/health/ph_international/documents/minutes_4ththighlevel_EC-WHO.pdf

Council. Council Conclusion of 5 June 2001 on a Community strategy to reduce alcohol related harm (OJ L C 175/01, 20.6.2001).

Council Directive 92/40/EEC of 19 May 2002 introducing Community measures for the control of avian influenza (OJ L 167, 22.6.1992, p. 1).

Council Directive 2005/94/EC of 20 December 2005 on Community measures for the control of avian influenza and repealing Directive 92/40/EEC (OJ L 10/16, 14.1.2006).

Council Directive 2005/94/EC of 20 December 2005 on Community measures for the control of avian influenza and repealing Directive 92/40/EEC (OJ L 10/16, 14.1.2006).

Cuijpers, P., de Graaf, I. and Bohlmeijer, E. Adapting and disseminating effective public health interventions in another country: towards a systematic approach. European Journal of Public Health, 2005; 15 (2): 166–169.

Dahlgren, G. and Whitehead, M. Policies and strategies to promote social equity in health. Stockholm: Institute for Future Studies, 1991.

Dault, M., Lomas, J., Barer, M. on behalf of the Listening for Direction II Partners. (2005) Listening for Direction II: National consultation on health services and policy issues for 2004-2007; Lomas, J., Fulop, N., Gagnon, D., and Allen, P. (2003) On being a good listener: Setting priorities for applied health services research. The Milbank Quarterly; 81:3, 363-388.

Decision No 1786/2002/EC of the European Parliament and of the Council of 23 September 2002 adopting a programme of Community action in the field of public health (2003–2008). Official Journal of the European Communities (L 271/1 of 9.10.2002).

Decision No 2119/98/EC of the European Parliament and of the Council of 24 September 1998 setting up a network for the epidemiological surveillance and control of communicable diseases in the Community (OJ L 268/1, 3.10.1998).

Deloitte. European Commission – Health and Consumer Protection DG. Final Evaluation of eight Community Action Programmes on Public Health. Diegem: Deloitte, 2004.

Dodgson, R., Lee, K. and Drager, N. Global health governance: A conceptual review. LSHTM Discussion Paper no 1. London: London School of Hygiene & Tropical Medicine, 2002.

EPIET – European programme for intervention epidemiology training, Cohort 9. Available at: http://ec.europa.eu/health/ph_projects/2003/action2/action2_2003_11_en.htm

EpiNorth – A framework for communicable disease surveillance, communication and training in Northern Europe, 2004–2006. Available at: http://www.epinorth.org/

European Commission. Activities of the European Union. Summaries of Legislation. Preparing for an influenza pandemic and other health threats. European Commission, 2006. Available at: http://europa.eu/scadplus/leg/en/cha/c11541a.htm

European Commission. Avian influenza. Special Eurobarometer 257. Luxembourg: European Commission, 2006.

European Commission. Avian influenza: Commission proposes updated measures aimed at preventing epidemics. IP/05/501, 28 April 2005. Brussels: European Commission, 2005.

European Commission. Avian influenza: Commission asks Member States to step up surveillance. IP/05/1068, 25 August 2005. Brussels: European Commission, 2005.

European Commission. Avian influenza confirmed in a wild bird in Denmark: Danish authorities applying precautionary measures. IP/06/317, 15 March 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza confirmed in two dead swans in Poland: Polish authorities applying precautionary measures. IP/06/266, 6 March 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza confirmed in wild swans in Italy: Italian authorities applying precautionary measures. IP/06/157, 13 February 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza H5 confirmed in a swan in Slovenia: Slovenian authorities implement the same measures as in Greece and Italy. IP/06/154, 13 February 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza H5 in two dead wild ducks in Sweden: Swedish authorities applying precautionary measures. IP/06/243, 28 February 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza H5N1 confirmed in a wild bird in Spain: authorities applying precautionary measures. IP/06/969, 7 July 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza: Highly pathogenic H5N1 virus confirmed in Bulgaria. IP/06/156, 13 February 2006. Brussels: European Commission, 2006.

European Commission. Avian influenza in Romania: Presence of virus confirmed. IP/05/1276, 13 October 2005. Brussels: European Commission, 2005.

European Commission. Avian influenza outbreak in Asia: Member States agree to prolong import embargo on poultry products. IP/04/160, 3 February 2004. Brussels: European Commission, 2004.

European Commission. Commission suspends EU poultry imports from Thailand after avian influenza outbreak. IP/04/95, 23 January 2004. Brussels: European Commission, 2004.

European Commission. EU suspends imports of pet birds from South East Asia. IP/04/123, 28 January 2004. Brussels: European Commission, 2004.

European Commission. European Commission offers help in avian influenza crisis to Vietnam. IP/04/64, 6 January 2004. Brussels: European Commission, 2004.

European Commission. Influenza and how the EU should respond to a pandemic. IP/04/432, 31 March 2004. Brussels: European Commission, 2004.

European Commission. Influenza pandemic – Europe has to be prepared. IP/01/1686, 28 November 2001. Brussels: European Commission, 2001.

European Commission. Results of user survey for website of DG SANCO, May 2006 [Internal document].

European Commission. Budget. Evaluation of EU Activities: An introduction. Brussels: European Commission, 2005.

European Commission. Health and Consumer Protection. Community action in the field of public health (2003-2008) Work Plan 2005. http://ec.europa.eu/health/ph_programme/howtoapply/proposal_docs/workplan2005_en.pdf.

European Commission. Health and Consumer Protection. The health status of the European Union. Narrowing the health gap. Brussels: European Commission, 2003.

European Commission, Health & Consumer Protection Directorate–General. Ensuring a high level of health protection–A practical guide, Luxembourg, 2001.

European Commission. Health Protection & Consumer Directorate–General. Public health evaluation report: Call for proposals 2004. Published on 27 February 2004 in OJ C52, Luxembourg: European Commission, 2004: 22.

European Union early warning and response system. Available at: https://webgate.cec.eu.int/ewrs/

Europe–wide pandemic influenza vaccine coverage: good epidemic vaccination practice by establishing integrated national stakeholders networks. Available at: http://ec.europa.eu/health/ph_projects/2005/action2/action2_2005_full_en.htm

Eurostat. Measuring progress towards a more sustainable Europe – Sustainable development indicators for the European Union – Data 1990–2005. Luxembourg: Eurostat, 2005.

Expert Group of the Rare Diseases Task Force. Overview of current Centres of Reference on rare diseases in the EU. Prepared for The High Level Group on Health Services and Medical Care, September 2005. Available at: http://www.orpha.net/testor/doc/rdtf/wg/ECRFinalReport.pdf

EXTENDED EPIET – European programme for intervention epidemiology training – A capacity building project for alert and response in Europe. Available at: http://ec.europa.eu/health/ph_projects/2004/action2/action2_2004_10_en.

Fetterman, D.M., Kaftarian, S.J., and Wandersman, A. Empowerment evaluation: Knowledge and tools for self–assessment and accountability. Thousand Oaks, CA: Sage, 1996.

Filho, A.P., Goldbaum, M. and Silvi, J. Production of scientific articles on health in six Latin American countries, 1973–1992. Revista Panamericana de Salud Publica v.2 n.2 Washington Ago, 1997.

Finnish Ministry of Health and Social Affairs. Health in all policies–Prospects and potentials. Finland, 2006.

FLUSECURE: Combating flu in a combined action between industry and the public sector in order to secure adequate and fast vaccine interventions in Europe. Available at: http://ec.europa.eu/research/health/influenza/proj15_en.html

Freeman, L.C. Centrality in social networks: Conceptual clarification. Social Networks, 1979; 1: 215–239.

Frenk, J., Sepulveda, J., McGuiness, M. and Knaul, K. The future of world health: The new world order and international health. British Medical Journal, 1997; 314 (7091): 1404–1412.

Gauld, R. Public health and government in New Zealand. Discussion paper for the Public Health Advisory Committee. Dunedin: Public Health Advisory Committee, 2004.

Godlee, F., Pakenham–Walsh, N., Ncayiyana, D., Cohen, B. and Packer, A. Can we achieve health information for all by 2015? The Lancet, 2004; 364 (9430): 295–300.

Goering, P., Butterill, D., Jacobson, N. and Sturtevant, D. Linkage and exchange at the organisational level: a model of collaboration between research and policy. Journal of Health Services Research and Policy, 2003; 8 (Suppl. 2): 14–19.

Green, C.W. North and South: bridging the information gap. The Lancet, 2000; 356 (9234): 1035.

Haas, P. Introduction: epistemic communities and international policy co–ordination. International Organisation, 1992; 46 (1): 1–35.

Hefler, L., Tempfer, C. and Kainz, C. Geography of biomedical publications in the European Union 1990–1998. The Lancet, 1999; 353: 1856.

Henshall, C.H., Oortwijn, W.J., Stevens, A., Granados, A. and Banta, H.D. (Eds). Priority setting for health technology assessment: theoretical considerations and practical approaches. In: EUR–ASSESS report. International Journal of Technology Assessment in Health Care, 1997; 13, 2: 144–185.

Holleman, G., Eliens, A., van Vliet, M. and van Achterberg, T. Promotion of evidence–based practice by professional nursing associations: literature review. Journal of Advanced Nursing, 2006; 53 (6): 702–709.

Holzinger, K. Career incentives. Contribution to the forum on 'Why is European political sciences so unproductive and what should be done about this'. Abstract available at: http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/downloads/papers/EPS.pdf

Hospital Committee of the European Community. Hospital Services in the E.C. Organisation and Terminology. Leuven: Ceuterick, 1993.

Jones, M.J. and Roberts, R. International publishing patterns: An investigation of leading UK and US Accounting and finance journals. Journals of business finance and accounting, 2005; I32 (5): 1107–1140.

Kouyate, B., Traore, C., Kielmann, K. and Muller, O. North and South: bridging the information gap. The Lancet, 2000; 356 (9234): 1035.

Kramers P.G.N. and the ECHI team. Public health indicators for the European Union: Context, selection, definition. Final report by the ECHI Project Phase II. 20 June 2005. Bilthoven: Centre for Public Health Forecasting, National Institute for Public Health and the Environment, 2005.

Kusek, J.Z. and Rist, R.C. Ten steps to a results–based monitoring and evaluation system. Washington DC: The World Bank, 2004.

Leatherman, S. and Sutherland, K. The quest for quality in the NHS: a mid term evaluation of the ten year quality agenda. London: The Stationery Office, 2003.

Ling, T. (2002) 'Delivering Joined-up Government in the UK: Dimensions, Issues and Problems.' *Public Administration* Vol. 80 No. 4 (615-642).

Matchar, D.B., Westermann–Clark, E.V., McCrory, D.C., Patwardhan, M., Samsa G., Kulasingam, S., Myers, E., Sarria–Santamera A., Lee, A., Gray, R. and Liu, K. Dissemination of Evidence–based Practice Center reports. Annals of Internal Medicine, 2005; 142: 1120–1125.

McKee, M., Gilmore, A.B., and Schwalbe, N. International co–operation and health. Part 2: making a difference. Journal of Epidemiology and Community Health, 2005; 59: 737–739.

National Institutes of Health. NIH Roadmap for medical research. NIH, Office of Portfolio Analysis and Strategic Initaitves. http://nihroadmap.nih.gov/overview.asp

National Institutes of Health. Section V. Application Review Information. http://grants.nih.gov/grants/guide/rfa-files/RFA-TW-06-006.html#SectionV

Network for communicable disease control in Southern Europe and Mediterranean countries. Available at: http://ec.europa.eu/health/ph_projects/2005/action2/action2_2005_full_en.htm

Network of Competent Authorities on Health Information. Strategy on European Community Health Indicators (ECHI). The 'Short List'. Luxembourg: Network of Competent Authorities on Health Information, 2004.

OECD. Evaluation feedback for effective learning and accountability Paris: OECD, 2002.

Oortwijn et al. (1999) Priority setting for health technology assessment in the Netherlands: actors and activities. Health Policy, 47, 241-53.

Oortwijn, W., Mathijssen, J., Cave. J., Scoggins, A., Ligtvoet, A., Horlings, E., Ling, T. and Frinking, E. Interim evaluation of the Public Health Programme 2003–2008. Inception Report. PM–208–EC. Santa Monica: RAND, 2006.

Open Health Forum 2005 –Health Challenges and Future Strategy 7/8 November 2005, Brussels. http://ec.europa.eu/health/ph_overview/health_forum/open_2005/ev_20051107_eval_en.pdf

Perrin, B. Effective use and misuse of performance measurement. American Journal of Evaluation, 1998; 19 (3): 367–369.

Prochaska, J., Velicer, W.F. and Rossi, J.S. Stages of change and decisional balance for twelve problem behaviours. Health Psychology, 1994; 13: 39–46.

Rahman, M. and Fukui, T. Biomedical publication–global profile and trend. Public Health, 2003; 117: 274–280.

RAND Europe (2006) Review of R&D management practice. Project Memorandum PM-2004-SDO March 2006

Regulation (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 establishing a European centre for disease prevention and control (OJ L 142/1, 30.4.2004).

Research Councils UK. Research Councils' UK efficiency plans: Background and measurement methodology. Swindon: Research Councils UK, 2003.

Rosenmöller, M., McKee, M. and Baeten, R. (Eds). Patient mobility in the EU: Learning from experience. Brussels: European Observatory on Health Systems and Policies, 2006.

Schneider, G. The quest for the holy grant – (mis)allocating money. Contribution to the forum on 'Why is European political sciences so unproductive and what should be done about this'. Abstract available at: http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/downloads/papers/EPS.pdf

Sparrow, M.K. The regulatory craft controlling risks, solving problems and managing compliance. Brookings Institution Press, 2000.

Swiss Federal Office of Public Health. Guidelines for evaluation for health programme & project evaluation planning. Bern: Swiss Federal Office of Public Health, 1997.

Technopolis. An international review of methods to measure relative effectiveness of technology policy instruments. Amsterdam: Technopolis, 2001.

Technopolis. Interdepartementaal beleidsonderzoek innovatiebeleid – Eindverslag beoordeling evaluaties. Amsterdam: Technopolis, 2002.

The Economist. The galling rise of English. The Economist, 1 March, 2003: 30.

The European Influenza Surveillance Scheme. Available at: http://www.eiss.org/index.cgi.

The Social Research Association (2002) Commissioning Social Research: A Good Practice Guide, pp.11-18.

Youstif, N.H. and Bonait, M. North and South: bridging the information gap. Lancet, 2000; Sep 16; 356 (9234): 1034–1035.

Wagner, C. and Leydesdorff, L. Mapping global science using international co–authorships: A comparison of 1990 and 2000. In: J. Guohua, R. Rousseau, W. Yishan (Eds), Proceedings of the 9th International Conference on Scientometrics and Informetrics. Dalian: Dalian University of Technology Press, 2003: 330–340.

WHO. Global status report on alcohol. Geneva: WHO, 2004.

World Advertising Research Centre. World Drink Trends 2005 Edition. World Advertising, 2006.

Wickam, J. Something new in old Europe? Innovation in EU–funded social research. Innovation, 2004; 17 (3): 187–204.

Wikipedia, the free encyclopedia. Betweenness. Available at: http://en.wikipedia.org/wiki/Betweenness

Wikipedia, the free encyclopedia. Statistical survey. Available at: http://en.wikipedia.org/wiki/Statistical_survey

Wikipedia, the free encyclopedia. Bradford's law. Available at: http://en.wikipedia.org/wiki/Bradford's_law

APPENDICES

Appendix 1: Results of survey

In this appendix we set out the results of the electronic survey of all projects funded within the Programmes (both resulting from call for tenders and call for proposals). The key areas addressed by the survey include general information about projects funded within the Public Health Programme (PHP); satisfaction with the PHP; programme management; project follow–up by the Commission; importance of the PHP; contribution to the objectives of the PHP; dissemination of research findings; capacity building and sustainability; use of research findings in public health policy; application of research findings in public health practice; and broader impact on public health/the health care sector. The first section provides a summary of how the survey was carried out and subsequent sections discuss the results of each of the questions.

Survey design and presentation of results

The survey was deployed on the web (http://www.phpsurvey.org/) and respondents were invited to visit the website and fill in the survey online – there was no option to download and complete a hardcopy of the questionnaire. Respondents were not forced to answer all the questions, the number of respondents (n) answering each question is shown below in each of the results tables.

The survey was open from 25 April 2006 until 31 May 2006 (a period of 36 days) and we received a total of 59 valid responses. All project leaders (n=159) that were funded within the Programme were invited to complete the survey. Project leaders who did not complete the survey received reminder e–mails. On the initial deadline of 15 May we achieved a response rate of 27%. However, most of the remaining respondents had informed us about their willingness to participate but not being able to meet this deadline. Therefore we decided to extend the deadline for another two weeks. Finally, we achieved a response rate of approximately 37%.

Three respondents reported technical problems but these were resolved and have not led to invalid responses.

Survey results

Part A: General information

Themes addressed

The respondents answered on a broad range of topics. *Health information* topics included health impact assessment; surveillance and monitoring systems; health indicators; public health training; and public health information systems. *Health determinants* topics

included extreme weather events; social exclusion; obesity; ageing; indoor pollution; health promotion; and depression. *Health threats* topics included AIDS and HIV; legionnaire's disease; bacterial infections; antimicrobial resistance; communicable disease infections; and injury prevention. Two respondents identified the project being applicable to both health information and health determinants themes. Two respondents identified their projects as being applicable across all three themes.

Table 1. Theme(s) and work plan addressed

Strand	2003	2004	2005	Not specified
Health information	9	11	5	
Health determinants	8	9	8	
Health threats	9	3	2	1

(Total respondents = 59)

Project duration

Approximately 82% of respondents' funded projects were (or were expected to be) less than two years in duration. The maximum duration of funded project was 4 years.

Table 2. Duration of funded projects

Duration	Number of projects
Less than 2 years	47
2 years or more	10

(Total respondents = 57)

Number of associated and collaborative partners

The average number of associated partners and collaborative partners was 13.5 and 12.0, respectively. Two respondents acquired no associated or collaborative partners.

Table 3. Number of associated and collaborative partners

Number of partners	Associated partners*	Collaborative partners**
Less than 5 partners	16	26
5 – 15 partners	24	12
More than 15 partners	18	10

(*Total respondents = 57), (Total respondents = 46)**

The Public Health Programme and project satisfaction–Part B (01)

Respondents were asked to rate general items of the Programme on a Likert scale from 1 (very bad) to 5 (excellent),[150] and had the opportunity to comment on each item. Most items received an average rating between 3 (neutral) and 4 (positive). The chance to work with numerous European partners received the highest average score of 4.4.

[150] Unfortunately we experienced technical issues and no data was collected on information on project submission requirement provided by DG SANCO (e.g. call for tender, call for proposal).

Eighteen respondents made comments regarding *application procedures.* Concerns were raised regarding the on–line nature of applications. A few respondents stated that the process is 'time–consuming', 'very bureaucratic', and 'comprehensive'. Other respondents stated that the time window between call for proposals and deadline for submissions is very short and that often mixed terminology is used. Respondents suggested DG SANCO providing increased telephone support, and being able to answer specific questions. One respondent stated they had a positive interaction with the EC.

Concerns were raised regarding *project administration,* namely that the process was 'complex', 'bureaucratic', and 'too heavy'. Other respondents commented on funding gaps and delays in signing contract agreements. The majority of comments were raised regarding changes in administrative staff, for example one respondent commented:

> 'we have had three different contact persons during this project of 18 months. The first one stopped after two or three months, then it took us almost eight months before we knew who the new contact person was.'

Another respondent commented DG SANCO staff has limited knowledge on field topics, and two respondents stated there is limited support from EC. A couple of concerns were voiced regarding the lack of transparency on legal and financial issues.

Eight out of the fifteen respondents' comments regarding the *relative attractiveness of the PHP over other sources of funding* voiced concerns that a relatively high level of co–financing is required, which in some cases poses problems for many organisations or may pre–empt an application. Three respondents made positive remarks, including that the Programme is 'flexible and allows for longer–term interventions', 'it's easy to see where a project fits under a specific call' and 'funding is reliable'. A couple of respondents commented that limited other sources of funding is available.

Respondents either raised positive or negative views regarding *the relative attractiveness of the PHP over funding through national programmes.* A couple of respondents stated that national programmes do not allow projects with a large number of beneficiaries; don't sufficiently promote pan–European co–operation; and tend to be 'too political'. On the other hand, respondents thought communications with national programmes are more "clear" and "helpful," and funds are easier to obtain.

While a few respondents mentioned that the *strategic orientation of the Programme* is responsive to priorities and 'addresses many of the public health issues across Europe', other respondents mentioned areas in the Programme that need to be emphasised, such as drug addiction, cancer screening programmes, and policy and implementation.

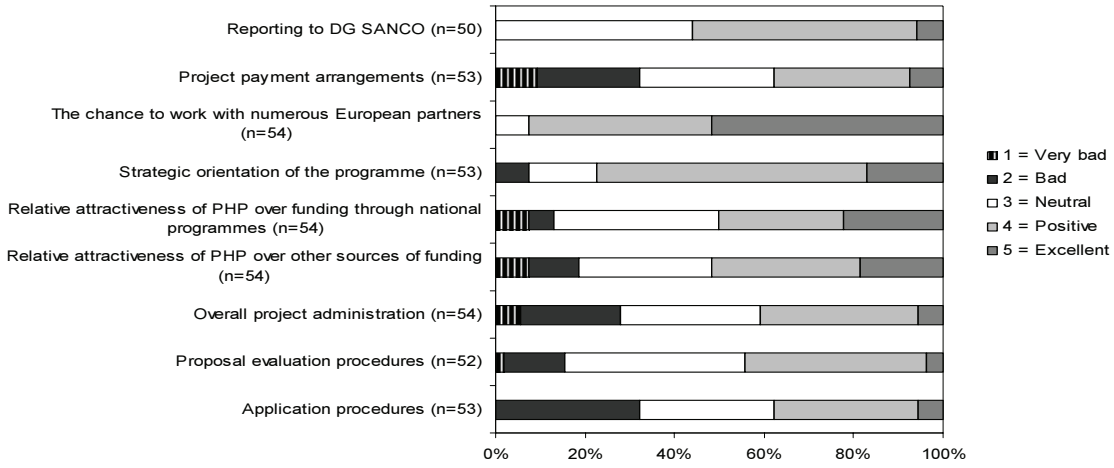
While a couple of respondents commented *the chance to work with European partners* requires large amounts of co–ordination and administration, another respondent said that once in a network this becomes easier. Several respondents said that the chance to work with European partners was 'the best feature of public health programmes' and added value to the projects. For example 'DG SANCO programmes are one of the few chances for Europe–wide healthcare collaborative platforms'. A couple of respondents thought the number of partners was hindered by insufficient funds.

Approximately half of respondents mentioned delays in *project payment arrangements.* Delays had been experienced in receiving interim and final payments. Four respondents

commented that the scheme was either time–consuming or difficult to manage. A couple of respondents mentioned that the Programme was transparent and poses no problems for all collaborating parties.

Two respondents commented that *reporting to DG SANCO* was not problematic – reporting guidelines were clear and reports were published quickly on the EU website. Conversely, three respondents mentioned there was a lack of specified reporting requirements for either technical or financial reports. Two respondents mentioned slow or receiving no feedback on submitted reports to the EC. Another respondent found a lot of effort was required to comply with reporting requirements.

Table 4. Satisfaction with Public Health Programme



The Public Health Programme and project programme management–Part B (02)

The *content of annual work plans* is generally perceived as clear. Only four respondents made comments. Comments included 'it's so broad that the Commission can do what it wants', the content of annual work plans is 'co–operated in drawing of work plans', 'it's very simple but comprehensive project' and it's a 'mixed bag'.

Table 5. Public Health Programme and project programme management

	Very unclear 1	Unclear 2	Neutral 3	Clear 4	Very clear 5	Average
How would you rate the content of annual work plans	0	1	15	32	6	3.8

(Total responses = 54)

Respondents were invited to comment on which elements of the Programme were unclear, discouraging or difficult to cope with in the design of the project. Thirteen responded to this question. Four elements were mentioned by respondents: (1) the funding contribution limits the scope of activities and the time and resources required is often in excess of what's available; (2) the Programme is not specific enough; (3) a lot of paper work is required and

that the 'request for DG SANCO is unrealistic and not very evidence–based'; and (4) instructions for applications are often obscure.

Project follow–up by the Commission–Part B (03)

Approximately 85% of respondents *interacted with project officers*, and 75% of respondents believed that the *monitoring and evaluation of projects* is adequate.

Table 6. Project follow–up by Commission

	Yes	No	Total respondents
Did you interact with the project officers?	44	8	52
Do you believe that monitoring and evaluation of projects is adequate?	38	13	51

The average rating of *monitoring and evaluation activities by the PHP* was 4.0 (positive). Respondents were asked to comment in terms of monitoring frequency, project officers' expertise, and issues addressed. Three respondents mentioned staff were very supportive, for example staff were 'helpful, quick to respond to questions and have good awareness of the project details'. Three respondents commented that whether the interaction with project officers was successful depends on whom you interact with. Other concerns raised by respondents included high staff turnover; lack of decision–making authority given to project officers; and low response due to personnel shortages or overburdened officers.

Table 7. Project follow–up by the Commission

	Very bad 1	Bad 2	Neutral 3	Positive 4	Excellent 5	Average
How would you rate the monitoring and evaluation activities by the Public Health Programme?	0	3	7	27	11	4.0

(Total responses = 48)

Respondents were asked about the *possibilities for improving monitoring and evaluation of projects.* The least preferred options were increased monitoring frequency, and increase in external evaluations. In terms of *monitoring frequency* respondents mentioned that current practices are sufficient, especially given the amount of administration. One respondent suggested 2–3 page monthly or bi–monthly progress reports. In terms of *increase external evaluations,* respondents mentioned that due to the short time spans of projects there is no room for external evaluators, or this is not efficient with a good project group. A couple of respondents said external evaluators would be useful.

Respondents were slightly more in favour (52%) of more *self–assessment procedures at project level* than not (48%). Two respondents mentioned this may be useful for projects. One suggestion was that DG SANCO could provide a generic tool for self assessment. A couple of other respondents mentioned self–assessment procedures would need to be easy and applicable, and not time–consuming or bureaucratic.

Approximately 68% of respondents did not perceive *in–depth interim evaluations at project level* as an option for improving monitoring and evaluation of projects. One respondent mentioned finding appropriate evaluators could be a problem. A couple of other respondents mentioned time and resource commitments may be problematic. One respondent said "it would allow for alterations and improvement in activities in due time."

Ideas mentioned for *other types of evaluation* included effective interaction with working parties or DG SANCO staff; evaluation by colleagues from comparable networks; outcome evaluation based on deliverables and products; participation in project co–operation events; and self–assessment procedures.

Table 8. Options for improving monitoring and evaluation of projects

	Yes	No	Total respondents
Increased monitoring frequency	12	40	52
More self assessment procedures at project level	27	25	52
More in–depth interim evaluations at project level	16	35	51
Increase external evaluations	11	39	50
Other types of evaluation	15	29	44

Respondents were also asked how monitoring activities should take place (e.g. phone, meetings, and visits). Most respondents suggested more than one means of how monitoring activities should take place. Table 9 shows the number of respondents suggesting how monitoring activities should take place and the number of respondents who answered the question. The most common suggestions were meetings, visits and phone.

Table 9. How should monitoring activities take place?

	Number
Meetings (including project meetings)	17
Visits	12
Phone	11
E–mail	6
Reporting	5
Internet–based (e.g. Skype)	4
Tele–conferences	3
Discussions with external experts	1
Self–assessment questionnaire	1
Workshops and events	2

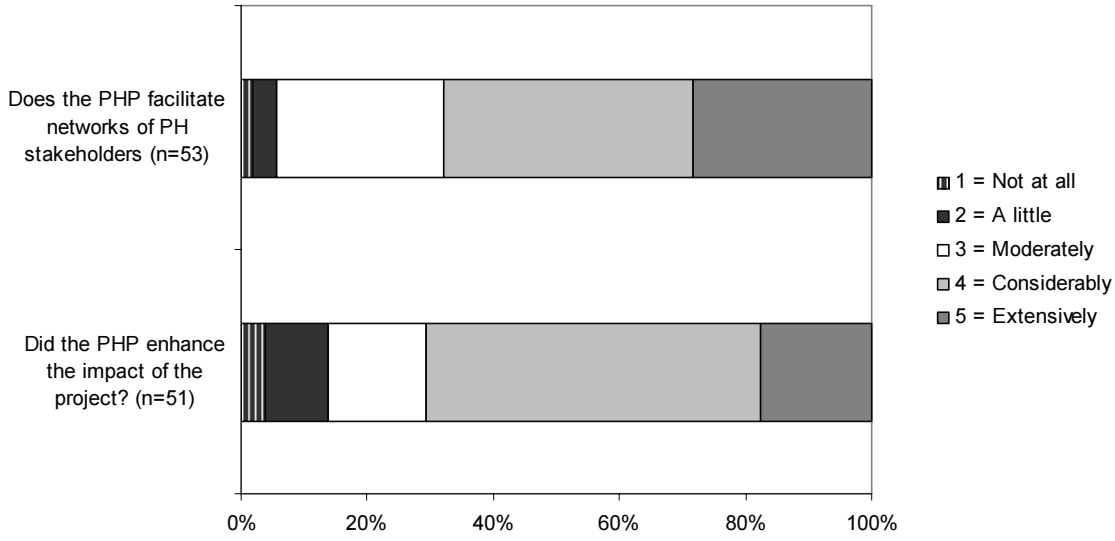
(Total respondents = 43)

Importance of Public Health Programme–Part B (04)

Respondents were asked whether the PHP enhanced the impact of the project. The average rating was 3.7 (moderately to considerably). Respondents mentioned several ways the PHP had enhanced the impact of the project, including finding partners and publication of the project and projects recommendations on the website. Other respondents mentioned that having EU–funding had raised the profile of the project. Further, the PHP had given the project an international dimension and made it easier to find partners. Two respondents commented it was 'difficult to say' whether the PHP had enhanced the impact of the project.

On average respondents felt the PHP had almost considerably *facilitated networks of public health stakeholders* (average 3.9). A few respondents felt that networks were dependent on level of funding. Other respondents mentioned pre–existing networks, and conferences which are useful for building networks of public health stakeholders.

Table 10. Importance of Public Health Programme



Respondents were asked what they would have changed without the PHP. The majority of respondents (73%) would not have undertaken the project, and 84% of respondents stated they would not have done exactly the same project.

Table 11. What would you have changed without the Public Health Programme?

	Yes	No	Total respondents
Would not have undertaken the project	36	13	49
Would have done exactly the same project	7	37	44

Only those respondents (59%) that still would have undertaken the project without the PHP or would have done exactly the same project were asked to comment on funding sources, budget amount, number of partners, types of partners, time scale, objectives and expected benefits.

In terms of **funding sources** almost half (48%) would have applied for more external funds.

Table 12. Funding sources

	More external funds	More internal funds	No search	N/A
Funding sources	14	5	10	20

(Total respondents = 29)

In terms of *budget amount*, almost half of respondents would have applied for a *smaller budget amount* (48%), and a *smaller number of partners* (46%). Thirty–eight percent of respondents would not have changed the number of partners.

Table 13. Importance of Public Health Programme

	Smaller	Larger	No change	N/A	Total respondents
Budget amount	13	7	7	22	27
Number of partners	12	4	10	21	26

In terms of *types of partners,* the majority of respondents (72%) would not have changed the type of partners in the project.

Table 14. Types of partners

	More national	More international	No change	N/A
Types of partners	4	3	18	24

(Total respondents = 25)

In terms of *objectives,* almost half (48%) of respondents would have made the projects objectives less ambitious.

Table 15. Objectives

	Less ambitious	More ambitious	No change	N/A
Objectives	15	4	12	18

(Total respondents = 31)

Almost equal numbers of respondents stated that they would have had either lower expectations (47%) or no change (43%) in the projects *expected benefits.*

Table 16. Expected benefits

	Lower expectations	Higher expectations	No change	N/A
Expected benefits	14	3	13	19

(Total respondents = 30)

In terms of *time scale* just over half of respondents (57%) would not have changed the time scale. The remaining respondents were relatively balanced as to whether they wanted shorter or longer time scales. Due to a technical error the 'not applicable' category was not

included in this question hence it is difficult to tell whether respondents were commenting on the time scale of their projects of the PHP.

Table 17. Time scale

	Shorter	Longer	No change
Time scale	8	10	24

(Total respondents = 42)

Contribution to Public Health Programme–Part B (05)

Just over half of the respondents' projects (57%) were a *follow–up activity of a former PHP or another EU–funded activity.*

Table 18. Contribution to Public Health Programme

	Yes	No
Is your project a follow–up activity of a former Public Health Programme or another EU–funded activity?	30	23

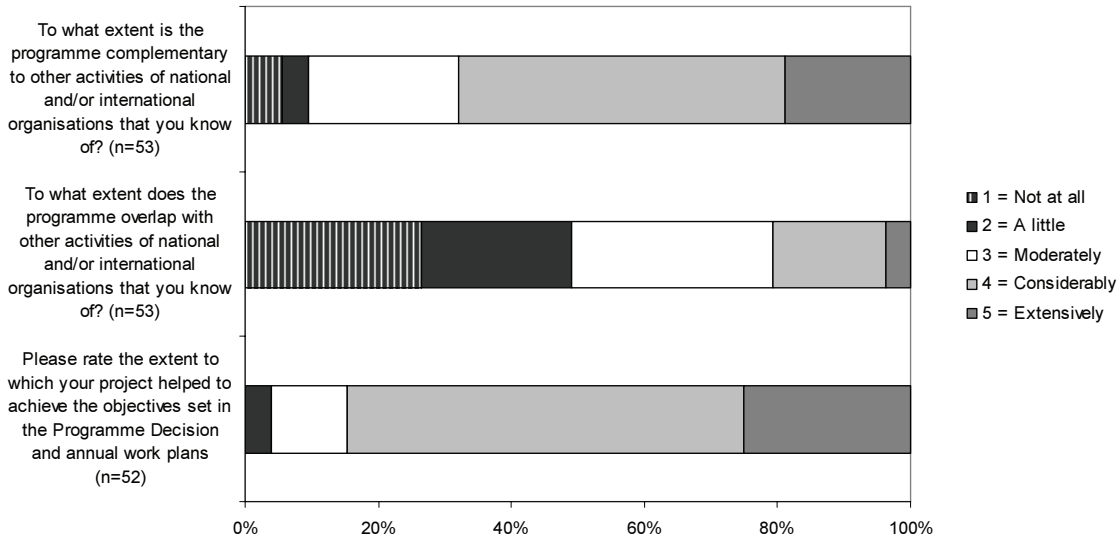
(Total respondents = 53)

The average rating of *the extent to which projects helped to achieve the objectives set in the Programme Decision and annual work plans* was 4.1 (Considerable). Four respondents mentioned that this was too early or difficult to assess. Other respondents mentioned how the project had helped achieve objects, for example improving information and knowledge for the development of public health; providing data on the resistance and spread of antibiotic resistance; and informing health professionals and helping national authorities to implement project outcomes.

The average rating of the extent which the Programme overlaps with other activities of national and/or international organisations was 2.5 (a little to moderately). Other organisations mentioned included WHO, Council of Europe, and World Marrow Donor Association (WMDA). Another respondent mentioned that rapid policy changes in health care sometimes means the extent of overlapping activities may change over time.

The average rating of the *extent to which the Programme is complementary to other activities of national and/or international organisations* was 3.7 (moderately to considerably). Organisations mentioned include national authorities, WHO, Council of Europe, and WMDA. Again, a respondent commented that the extent of complementarity may depend on national policies and may change over time. Another respondent stated that the Programme 'enhances other national activities in the same field'.

Table 19. Contribution to Public Health Programme



Dissemination of research findings–Part B (06)

Respondents were asked to *mention all the publications that were generated by the project* (peer review journal articles, thesis), other media used (e.g. newspaper, articles, DVD, TV, radio), and were asked to specify title and reference. The most common publications that were generated were articles and other forms. Other publications mentioned included newsletters; press conferences; annual reports; presentations at international conferences; reports; Internet; handbooks; training manuals; posters, radio; TV; newspapers; and lectures.

Table 20. Dissemination of research findings

Mode	Number
Articles	30
Books	7
Other	32

Respondents were also asked to state *how many presentations had been made to the following types of audiences at various levels: academic; health practitioner; policy–orientated; service user; or other.* Respondents were also asked to estimate the size of the target group and the percentage that were reached. If less than ten respondents answered the question, an average was not reported.

For all types of audiences, the average number of presentations was higher at the national level than European level. The potential size of the target groups varied quite a lot. It was difficult to interpret the results on the percentage of target groups reached and results at the regional/local level because of the low number of respondents.

Table 21. Dissemination of research findings: Primarily academic audiences

		European	National	Regional/local
Number of presentations	Range	1–40	1–30	5–13
	Average	6.5	9.8	-
	N	22	10	2
Potential size of target group	Range	30–3000	50–500	250
	Average	-	-	-
	N	9	4	1
What percentage did you reach?	Range	3–100%	80–100%	-
	Average	-	-	-
	N	6	3	-

Table 22. Dissemination of research findings: Primarily health practitioner audiences

		European	National	Regional/local
Number of presentations	Range	1–24	1–24	1–144
	Average	6.4	11	-
	N	14	12	6
Potential size of target group	Range	100–200*	3–300	2–300
	Average	-	-	-
	N	4	3	2
What percentage did you reach?	Range	50–80%	50–100%	-
	Average	-	-	-
	N	2	2	-
*** One respondent stated target group EU**				

Table 23. Dissemination of research findings: Primarily policy–orientated audiences

		European	National	Regional/local
Number of presentations	Range	1–22	1–22	1–22
	Average	5.2	7.9	-
	N	25	15	6
Potential size of target group	Range	20–1000	25–80	50
	Average	-	-	-
	N	8	5	1
What percentage did you reach?	Range	10–100%	50–100%	10%
	Average	-	-	-
	N	7	4	1

Table 24. Dissemination of research findings: Primarily service user audiences

		European	National	Regional/local
Number of presentations	Range	1–13	1–20	5–3000
	Average	-	-	-
	N	8	5	5
Potential size of target group	Range	50–100	1–300	7.5–300
	Average	-	-	-
	N	2	2	2
What percentage did you reach?	Range	100%	100%	5
	Average	-	-	-
	N	2	1	1

Table 25. Dissemination of research findings: Other audiences

		European	National	Regional/local
Number of presentations	Range	3–21	2–20	5–243
	Average	-	-	-
	N	6	3	2
Potential size of target group	Range	20–60	-	11
	Average	-	-	
	N	3	-	1
What percentage did you reach?	Range	80–100%	100%	-
	Average	-	-	-
	N	3	1	-

Respondents were asked *which factors strongly (positively or negatively) influence the outcome of the project* (e.g. specific audience, timing, budget, the research findings being taken up by key stakeholders etc.). Most respondents suggested more than one factor. The results table below shows the number of respondents suggesting a factor that may influence the outcome of the projects, and the number of respondents who answered the question. The most important factor was the level of funding, followed by levels of exchange and networking and specific audience.

Table 26. Which factors strongly (positively or negatively) influence the outcome of your project?

	Number
Funding	11
Exchange and networking	6
Specific audience	4
Timing of dissemination activities or project itself	3
Quality of partners	3
Support of other organisations	2
Support of DG SANCO	2
Quality of project members	1
Ethics approval	1
Workshops	1
Information about cross–border activities	1
DG SANCO staff shortages	1
Language barrier	1
Recruitment of medical professionals	1

(Total respondents = 37)

The majority (86%) of respondents *actively involved stakeholders during the lifetime of the project and in disseminating the results.* For example one respondent commented that stakeholders had been actively involved in the project to 'initiate activities at the local level'. A wide range of stakeholders were mentioned by respondents, including Ministries of Health, project partners, national counterparts, national coalitions, community advisory boards, WHO, scientific leaders, managers, administrators, policy–makers, and national focal points in all Member States, service providers, service users, universities, health workers, NGOs, patient organisations, hospitals and national institutes.

Table 27. Dissemination of research findings

	Yes	No
Were stakeholders actively involved during the lifetime of the project and in disseminating the results?	36	6

(Total respondents = 42)

Capacity building and sustainability–Part B (07)

The majority of respondents (74%) stated that participation in the project had not led to *formal or practical qualification for members of the project team or target group.* Of those projects that had led to qualifications, over half (58%) led to PhD's (n=12). Other qualifications mentioned included Master of European project management (n=1), JACIE Inspector (n=30), EMPH (n=6), and certificated in training workshops on health impact assessment (n=30). The member groups awarded qualifications included projects

managers, research assistants, physicians and nurses and researchers. One project led to six PhD's awarded to various project members.

Just over half of respondents (56%) stated that *the project findings, methodology or theoretical developments had not generated follow–up activities.* Respondents who had generated follow–up activities reported the title of the project, the grant size and lead organisations details.

Table 28. Capacity building

	Yes	No	Total respondents
Has participation in this project led to formal or practical qualifications for any members of the project team or target group?	13	37	50
Have the project findings, methodology or theoretical developments generated follow–up activities?	21	27	48

Almost half of respondents (47%) thought that the project and its results would be sustainable once the financing support of the PHP was stopped. Thirty nice percent of respondents didn't know. Respondents commented that sustainability could be achieved through use of project outputs; dissemination (e.g. public health reporting); continued collaboration and networking with partners and other organisations; training and additional funding.

Table 29. Sustainability

	Yes	No	Don't know
Is there an indication that the project and its results will be sustainable once the financing support of the Public Health Programme is stopped?	24	7	20

(Total respondents = 51)

Use of research findings in public health policy–Part B (08)

Respondents were asked whether the activities of their project have led to changes in public health practice or whether these changes are expected.

Approximately half of respondents (51%) expected *changes in decision undertaken by the Ministry of Health.* Respondents commented on some of the changes they expected and these included public health reporting; adjustments in regional health management; training; adoption of guidelines; sharing of best practice; evidence–based decision–making; supporting health promotion in workplaces; increased use of health impact assessments; and increased funding in specific areas.

In terms of *concrete policy actions* equal percentage of respondents (38%) reported no change or did expect a change. Policy actions mentioned included colour photographs on cigarette packets; invitation policies for population–based screening; changes in training courses; establish think tank on AIDS; national campaigns for antibiotic use; law for infectious diseases; regulations on public health reporting activities; restructuring of the

Institute of Health and Information Statistics; and regulation on emissions on building materials.

In terms of *allocation of resources to concrete policy actions* half of the respondents expected to make a change in public health practice. Areas mentioned includes internet services for public health publications; funding training professionals and implementation of workplace health programmes; funding of national surveillance networks; and continued collaborations.

The same per cent of respondents (41%) reported no change or did not expect to make change in *citing of findings by advisory councils.* Almost half of respondents (47%) expected to make a change in *citing of the findings in guidelines from a national or local professional group.*

The majority of respondents (76%) mentioned that the results did not lead to the *inclusion of findings in a contract or in a document from an audit, an inspectorial or an evaluative body.* A few respondents commented that because the project had recently started it was difficult to be precise.

Just over half of respondents (52%) mentioned that the results did not lead to *the establishment of a working group to examine the implications or implementation of the findings.* Respondents commented that this could happen in some countries, or possibly in the future.

Table 30. Use of research findings in public health policy

	Yes	No	Expected	Total respondents
Changes in decision undertaken by the Ministry of Health	9	15	25	49
Concrete policy actions (e.g. regulations)	11	18	18	47
Allocation of resources to concrete policy actions	9	14	23	46
Citing of the findings by advisory councils	8	19	19	46
Citing of the findings in guidelines from a national or local professional group	12	13	22	47
Inclusion of the findings in a contract or in a document from an audit, an inspectorial or an evaluative body	3	34	8	45
The establishment of a working group to examine the implications or implementation of the findings	8	24	14	46

Application of research findings in public health practice–Part B (09)

Respondents were asked whether activities of the project have led to changes in public health practice or whether influences are expected.

In terms of *application of policies* approximately half of respondents (53%) expected to have an influence. Respondents mentioned this could happen at the local, national and EU levels. Particular policies mentioned included vaccination policies and surveillance protocols, and good practice guidelines.

Slightly over half of respondents (57%) expected to influence *the behaviour of public health practitioners and managers.* Respondents suggested this could be achieved at a national level, through training and educating health professionals; improved and ongoing collaborations and partnerships; increased use of health impact assessments; use of environmental health information; public health reporting; and through the adoption of guidelines. A few respondents mentioned that the early nature of the project meant it was difficult to be precise.

In the involvement of users (patients, citizens) just under half of the respondents (43%) expected to have an influence. For example one respondent stated that new bodies at the national level for discussion among stakeholders were being established. Another respondent mentioned that good practice guidelines were going to suggest this. This should also happen through increased use of health impact assessment among public sector policy–makers. A couple of respondents did not comment due to the short running period of the project.

Table 31. Application of research findings in public health practice

	Yes	No	Expected	Total respondents
Application of policies	9	13	25	47
In the behaviour of public health practitioners and managers	10	10	27	47
In the involvement of users (patients, citizens)	12	15	20	47

Broader impact on public health/the health sector–Part B (10)

Respondents were asked whether the project has led to broader impacts or whether this was expected in the future.

Approximately half (52%) of respondents were expected to *improve health status.* This could be through, for example, cervical screening, dietary prevention; better diagnostics for viral diseases; developing health promotion; reducing cancers and cardiovascular diseases, improved access to care; less smoking among young people; and university curricular. A few respondents expected to have an influence indirectly or in the long run.

Half of the respondents expected to influence *risk factor reduction by health promotion, health prevention or health protection.* This could be achieved through health promotion and improving access to care; increased knowledge of practitioners; improving everyday practice; better diagnostics; improving quality systems; media and campaigns; vaccinations; and smoke free workplaces. A few respondents commented that this would be influenced indirectly.

Approximately 60% of respondents expected to influence the *improvement of services and protection.* This may be achieved through improved diagnostics for viral diseases; good practice recommendations for service delivery; improved rational for prescribed drugs; better national regulations; better health promotion and prevention; and wide dissemination and exchange of good practice.

Almost half of respondents (48%) expected to have an influence in terms of *appropriate methods for continuing surveillance.* This could be achieved through identification of evaluation strategies for interventions; setting up specific methodological guidelines; development of annual statistics; and simultaneously comparing data and methods between countries.

Table 32. Broader impact on public health/the health sector

	Yes	No	Expected	Total respondents
Improved health status	5	17	24	46
Risk factor reduction by health promotion, health prevention or health protection	11	12	23	46
Improved services and protection (e.g. effectiveness, efficiency)	7	10	28	45
Appropriate methods for continuing surveillance (e.g. health risks, health status)	9	15	22	46

Survey respondents

Project Title	Year	Leader organisation	Country of origin
EUPHIX — European Public Health Information, knowledge and data management system	2003	RIVM (National Institute for Public Health and the Environment)	Netherlands
REPROSTAT 2 — Assessing the usefulness of a comprehensive set of reproductive health indicators designed for the enlarged European Union, with particular emphasis on the reproductive health of adolescents and young adult (Phase 2)	2003	AIDFM (Associação para a Investigação e Desenvolvimento da Faculdade de Medicina de Lisboa)	Portugal
Unified Central and Eastern European surveillance/monitoring system for healthcare quality and efficiency indicators CEEQNET (Central and Eastern Europe Quality Network)	2003	Institute of Health Information and Statistics	Slovak Republic
Evidence Consortium — Getting evidence into practice	2003	NIGZ (Netherlands Institute for Health Promotion and Disease Prevention)	Netherlands
eHID — Electronic medical records for Health Indicator Data	2003	University of Nottingham	United Kingdom
The effectiveness of health impact assessment	2003	WHO (World Health Organization), Regional Office for Europe	Denmark
EUREGIO — Evaluation der Grenzregionen in der Europäischen Union	2003	LÖGD (Landesinstitut für den Öffentlichen Gesundheitsdienst NRW)	Germany
Ben RHM II — Benchmarking Regional Health Management (Phase 2)	2003	Ministry of Health, Social Affairs, Women and Family	Germany
HA — Healthy Ageing	2003	FHI (National Institute of Public Health)	Sweden
EUROCHIP 2 — European Cancer Health Indicator Project (PHASE 2)	2003	Istituto Nazionale per lo Studio e la Cura dei Tumori	Italy
HEM — Closing the gap — Reducing premature mortality. Baseline for monitoring health evolution following enlargement	2003	COI (Centrum Onkologii)	Poland
EU-IBIS — Invasive Bacterial Infections Surveillance in the European Union	2003	Health Protection Agency — Communicable Disease Surveillance Centre	United Kingdom
EARSS — European Antimicrobial Resistance Surveillance System	2003	National Institute of Public Health and the Environment	Netherlands
EISS — The European Influenza Surveillance Scheme	2003	NIVEL (Netherlands Institute for Health Services Research)	Netherlands
EpiNorth — A framework for communicable disease surveillance, communication and training in Northern Europe, 2004–2006	2003	Norwegian Institute of Public Health	Norway
EWGLINET — European surveillance of travel associated legionnaires' disease	2003	Health Protection Agency Communicable Disease Surveillance Centre	United Kingdom
JACIE	2003	European Group for Blood and Marrow Transplantation	Netherlands
European quality system for tissue banking	2003	Hospital Clinic I Provincial de Barcelona	Spain
ESAC — European Surveillance of Antimicrobial Consumption	2003	Universiteit Antwerpen	Belgium
EUNESE — European Network for Safety among Elderly	2003	National and Kapodistrian University of Athens	Greece
CHEST – Children's Health, Environment and Safety Training	2003	INCHES (International Network on Children's Health, Environment and Safety)	Netherlands
EMPH – European Master of Public Health	2003	ASPHER (Association of Schools of Public Health in the European Region)	France
ENYPAT Framework Project 2003	2003	KTL (National Public Health Institute)	Finland

Project Title	Year	Leader organisation	Country of origin
OSIAP – Ordonnances Suspectes Indicateur d'Abus et de Pharmacodépendance	2003	CEIP de Toulouse	France
European Centre AIDS & Mobility A&M	2003	NIGZ (Netherlands Institute for Health Promotion and Disease Prevention)	Netherlands
EAAD – European Alliance Against Depression	2003	Ludwig Maximilians Universität München	Germany
Implementation of mental health promotion and prevention policies and strategies in EU Member States and applicant countries	2003	FIOSH (Federal Institute for Occupational Safety and Health)	Germany
Hospital (Activity) data project 2	2004	Stichting Prismant	Netherlands
ENHIS2 – Establishment of Environmental Health Information System supporting policy making	2004	World Health Organization, Regional Office For Europe	Denmark
EHIP – European Health Information Platform	2004	European Broadcasting Union	Belgium
PPRI – Pharmaceutical Pricing and Reimbursement Information	2004	Österreichisches Bundesinstitut für Gesundheitswesen) – Austrian Health Institute	Austria
POMONA 2 – Health indicators for people with intellectual disabilities: using an indicator set	2004	National University of Ireland Dublin – University College Dublin	Ireland
EUHSID – European Union Health Surveys Information Database	2004	Scientific Institute of Public Health	Belgium
EPREMED – European Policy Information Research for Mental Disorders	2004	Institut Municipal Assitencia Sanitaria	Spain
PIA – PHR Policy Impact Assessment of Public Health Reporting	2004	Landesinstitut für den Öffentlichen Gesundheitsdienst Nordrhein–Westfalen	Germany
WHO/European e–Health consumer trends survey	2004	Universitetssykehuset Nord–Norge HF, Norwegian Centre for Telemedicine	Norway
HIA-NMAC – Health Impact Assessment in New Member States and Pre–Accession Countries	2004	Syddansk Universitet (SDU)	Denmark
BORDERNET – HIV/AIDS and STI–prevention, diagnostic and therapy in crossing border regions among the current and the new EC–outer borders	2004	Spi Forschung Ggmbh	Germany
BEPRASA – Best Practices in Prevention of Skiing Accidents in Europe: The new challenge	2004	Azienda ULSS 20 Verona	Italy
Basic Surveillance Network of 28 European countries	2004	Smittskyddsinstitutet	Sweden
ENIVD – Improving the diagnostic and monitoring of encephalitis viruses in Europe with the support of the European network for diagnostics of 'imported' viral diseases	2004	Robert Koch Institut	Germany
INSIGHT – International network of national public health institutes sharing information, expertise and capabilities in order to grapple with major health threats	2004	Nederlands Vaccin Instituut (Netherlands Vaccine Institute)	Netherlands
Elisad Internet Gateway: A qualitative resource for European web sites on drugs, alcohol, tobacco and other addiction	2004	TOXIBASE – Réseau National d'Information et de Documentation	France
European Cancer Network	2004	IARC – International Agency for Research on Cancer / World Health Organization	France
BALTIC HEALTHTRAIN – Baltic Sea public health training network	2004	University of Tartu	Estonia

Project Title	Year	Leader organisation	Country of origin
European co–ordinated action for the reduction of smoking prevalence and tobacco related harm	2004	Réseau Européen Pour La Prévention Du Tabagisme 'European Network For Smoking Prevention'	Belgium
Democracy, cities and drugs	2004	FESU – Forum Européen pour la Sécurité Urbaine	France
EUROSUPPORT V – Improving sexual and reproductive health of persons living with HIV in Europe	2004	Prince Leopold Institute of Tropical Medicine	Belgium
CORRELATION – European network on health and social inclusion	2004	AMOC – Stichting Amsterdams Centrum voor hulpverlening aan buitenlanders	Netherlands
ICAASE – Innovative Care Against Social Exclusion	2004	OMEGA –Verein für Opfer Von Gewalt und Menschenrechtsverletzungen	Austria
EURO HEAT – Improving public health responses to extreme weather/heat–waves	2004	World Health Organization, Regional Office For Europe	Denmark
DRAGON FLY – Development of structures for dissemination of good practice in the field of workplace health promotion in the acceding and the applicant countries	2004	Nofer Institute of Occupational Medicine	Poland
European mapping of obesity best practices	2004	Learning Lab Denmark	Denmark
WHP – Workplace Health Promotion, national health policies and strategies in an enlarging Europe	2004	Työterveyslaitos (Finnish Institute of Occupational Health)	Finland
Promotion of breastfeeding in Europe: pilot testing the blueprint for action	2004	IRCCS Burlo Garofolo	Italy
2nd open Europe conference 'Europe and HIV/AIDS: New challenges, new opportunities'	2004	Ministry of Health of the Republic of Lithuania	Lithuania
Quality labelling of medical web content using multilingual information extraction	2005	National center for scientific research 'DEMOKRITOS'	Greece
Prioritisation of building materials as indoor pollution sources	2005	University of West Macedonia	Greece
Health in the world of work – Prolonging healthy working years	2005	Finnish Institute of Occupational Health	Finland

Appendix 2: Interview respondents

In this appendix we provide an overview of the persons interviewed in this evaluation (per stakeholder group).

Stakeholder category	Interviewee	Organisation	Country
Programme committee member	Eero Lahtinen	Ministry of Social Affairs and Health	Finland
Programme committee member	Mojca Gruntar-Cinc	Ministry of Health	Slovenia
Programme committee member	Danielle Hansen-Koenig	Ministère de la Santé	Luxembourg
Programme committee member	Persefoni Lambrou-Christodoulou	Ministry of Health	Cyprus
Programme committee member	Leen Meulenbergs	Ministerie van de Vlaamse Gemeenschap	Belgium
DG SANCO official	Luc Briol	DG SANCO – Exective Agency	Luxembourg
DG SANCO official	Christophe Bertrand	DG SANCO – C1 Programme Management	Luxembourg
DG SANCO official	John Ryan	DG SANCO – C2 Health Information	Luxembourg
DG SANCO official	Stefan Schreck	DG SANCO – C3 Health Threats	Luxembourg
DG SANCO official	Michael Huebel	DG SANCO – C4 Health Determinants	Luxembourg
DG SANCO official	Bernard Merkel	DG SANCO – C5 Health Strategy	Belgium
Commission official other DG	Kevin McCarthy	DG Research – F1 Health Strategy and	Belgium
Commission official other DG	Ilias Iakovidis	DG INFSO – ICT for health	Belgium
Commission official other DG	Pierre Hecq	DG Environment – D02 Water and Environmental Programmes	Belgium
Commission official other DG	Lieve Fransen	DG Development - Directorate B Development policy and sectoral questions	Belgium
National health authority	Friederike Hoepner-Stamos	Bundesministerium für Gesundheit und Soziale Sicherung	Germany
National health authority	Nick Boyd	Department of Health	United Kingdom
National health authority	Machteld Wauters	Ministerie van de Vlaamse Gemeenschap	Belgium
National health authority	Francisco George	Ministério da Saúde	Portugal
National health authority	Isabel de la Mata Barranco	Permanent Representation of Spain to the EU	Spain
National health authority	Emanuelle Jean	Ministère de l'Emploi-Solidarité	France
National health authority	Wojciech Klosinski	Ministry of Health	Poland
National health authority	Liga Serna	Ministry of Health	Latvia
National health authority	Romalda Baranauskiene	Ministry of Health	Lithuania
National health authority	Irene Nilsson-Carlsson	Ministry of Health and Social Affairs	Sweden
National health authority	Arslan Umit Giray	Ministry of Health	Turkey
National health authority	Vesselin Delchev	Ministry of Health	Bulgaria
National health authority	Ole Anderson	Ministry of Health and Care Services	Norway
National health authority	David Gunnarsson	Ministry of Health and Social Security	Iceland
National health authority	Brigitte Magistris	Bundesministerium für Gesundheit und Frauen	Austria
Representative international organisation	Milagros Garcia Barbero	WHO Regional Office for Europe	Denmark
Representative international organisation	Lara Garrido Herrero	European Public Health Alliance (EPHA)	Belgium
Representative international organisation	Mark McCarthy	National Associations of Public Health for the European Public Health Association	United Kingdom
Representative international organisation	Francis Grogna	European Network For Smoking Prevention	Belgium
Representative international organisation	Clive Needle	EuroHealthNet	Belgium
European agency	Zsuszanna Jakab	European Centre for Disease Prevention and Control	Sweden
European agency	Doroto Jarosinska	European Environment Agency	Denmark
European agency	Wolfgang Götz	European Monitoring Centre for Drugs and Drugs Addiction	Portugal
European agency	Zinta Podniece	European Agency for Safety and Health at Work	Spain
Interest group	Martin McKee	London School of Hygiene & Tropical Medicine	United Kingdom

Stakeholder category	Project title	Year	Theme	Leader organisation	Interviewee	Country
Project leader	ENHIS – Implementing Environmental and Health Information System in Europe	2003	HI	WHO (World Health Organization), Regional Office for Europe	Michal Krzyzanowski	Germany
Project leader	Unified Central and Eastern European surveillance/monitoring system for healthcare quality and efficiency indicators CEEQNET (Central and Eastern Europe Quality Network)	2003	HI	Institute of Health Information and Statistics	Ales Bourek	Slovak Republic
Project leader	eHID –Electronic medical records for Health Indicator Data	2003	HI	University of Nottingham	Douglas Fleming	United Kingdom
Project leader	The effectiveness of Health Impact Assessment	2003	HI	WHO (World Health Organization), Regional Office for Europe	Matthias Wismar	Belgium
Project leader	Ben RHM II – Benchmarking Regional Health Management (Phase 2)	2003	HU	Ministry of Health, Social Affairs, Women and Family	Dorothea Prütting/ Peter Schroeder	Germany
Project leader	EpiNorth – A framework for communicable disease surveillance, communication and training in Northern Europe, 2004–2006	2003	HT	Norwegian Institute of Public Health	Stein Andresen	Norway
Project leader	GSCT – Development of Generic Scenarios alerting system and training modules relating to the release of Chemicals by Terrorists	2003	HT	Health Protection Agency	Gary Coleman	United Kingdom
Project leader	EUROCARE –Alcohol policy network in the context of a larger Europe: Bridging the gap	2003	HD	Alliance House Foundation	Peter Anderson	United Kingdom
Project leader	ENDIPP – European Network on Drugs and Infections Prevention in Prison	2003	HD	Wissenschaftliches Institut der Ärzte Deutschlands gem-e.V.	Caren Weilandt	Germany
Project leader	The way forward: a European partnership to promote the sexual and reproductive health and rights of youth	2003	HD	IPPF–EN (International Planned Parenthood Federation European Network)	Annet Britton	Belgium
Project leader	European Centre AIDS & Mobility A&M	2003	HD	NIGZ (Netherlands Institute for Health Promotion and Disease Prevention)	Georg Bröring	Netherlands
Project leader	Implementation of mental health promotion and prevention policies and strategies in EU Member States and applicant countries	2003	HD	FIOSH (Federal Institute for Occupational Safety and Health)	Karl Kuhn	Germany
Project leader	A European network for public health nutrition: networking, monitoring, intervention and training	2003	HD	Karolinska Institutet	Agneta Yngve	Sweden

Stakeholder category	Project title	Year	Theme	Leader organisation	Interviewee	Country
Project leader	Co–ordination and administration of the European injury prevention network	2003	HD	National and Kapodistrian University of Athens	Eleni Petridou	Greece
Project leader	EMPH — European Master of Public Health	2003	HD	ASPHER (Association of Schools of Public Health in the European Region)	Thierry Louvet	France
Project leader	EUROTHINE — Tackling Health Inequalities In Europe: an integrated approach	2003	HI	EMC (Erasmus MC) – Universitair Medisch Centrum Rotterdam (University Medical Center Rotterdam)	Johan P. Mackenbach	Netherlands
Project leader	EHIP—European Health Information Platform	2004	HI	European Broadcasting Union	Peter Kraewinkels	Belgium
Project leader	RDTF — Scientific secretariat of the Rare Disease Task Force	2004	HI	Institut National de la Santé et de la Recherche Médicale	Ayme Ségolène	France
Project leader	WHO/European e—Health consumer trends survey	2004	HI	Universitetssykehuset Nord–Norge HF, Norwegian Centre for Telemedicine	Toven Sorensen	Norway
Project leader	HIA—NMAC — Health Impact Assessment in New Member States and Pre–Accession Countries	2004	HI	Syddansk Universitet (SDU)	Gabriel Gulis	Denmark
Project leader	International Conference 'Challenges of delivering health in the enlarged Europe — Experience and perspectives from Member States and accession countries'	2004	HI	Faculty of Public Health, Medical University, Sofia	Lidia Georgieva	Bulgaria
Project leader	ESSTI — European Surveillance of Sexually Transmitted Infections	2004	HT	Health Protection Agency	Catherine Ison	United Kingdom
Project leader	EU—Q—Blood—SOP—Development of a pan–European standard operating procedure (SOP) methodology reflecting European best practice	2004	HT	DRK Blutspendedienst Baden–Württemberg–Hessen	Erhard Seifried	Germany
Project leader	Democracy, cities and drugs	2004	HD	FESU — Forum Européen pour la Sécurité Urbaine	Thierry Charlois	France
Project leader	TAMPEP7 — European network for Transnational AIDS/STI Prevention among Migrant Prostitutes	2004	HD	TAMPEP International Foundation	Licia Brussa	Netherlands
Project leader	ICAASE — Innovative Care Against Social Exclusion	2004	HD	OMEGA — Verein für Opfer Von Gewalt und Menschenrechtsverletzungen	Peter Kenny	Austria
Project leader	EURO HEAT — Improving public health responses to extreme weather/heat–waves	2004	HD	World Health Organization, Regional Office For Europe	Bettina Menne	Denmark
Project leader	BALTIC HEALTHTRAIN — Baltic Sea public health training network	2004	HD	University of Tartu	Raul Kiivet	Estonia

Stakeholder category	Project title	Year	Theme	Leader organisation	Interviewee	Country
Project leader	E–Health 2006 High Level Conference	2005	HI	Fundación Progreso y Salud	Juan Reig	Spain
Project leader	Quality labelling of medical web content using multilingual information extraction	2005	HI	National Centre for Scientific Research 'Demokritos'	Vangelis Karkaletsis	Greece
Project leader	Scientific platform of the working party 'Lifestyle and other health determinants'	2005	HI	Technische Universität Dresden	Wilhelm Kirch	Germany
Project leader	Feasibility of a European health examination survey	2005	HI	National Public Health Institute	Kari Kuulasma	Finland
Project leader	Building capacity for improving health across Europe	2005	HD	Health Promotion State Agency	Ineta Zirina	Latvia
Project leader	European alliance against depression II	2005	HD	Ludwig–Maximilians–Universität München	Tim Pfeiffer–Gerschel	Germany
Project leader	Organisation of a conference on the prevention of type 2 diabetes during the Austrian presidency	2005	HD	Austrian Institute of Health	Theresia Unger	Austria
Project leader	Health in the world of work – Prolonging healthy working years	2005	HD	Finnish Institute of Occupational Health	Matti Ylikoski	Finland
Project leader	Peer education project for young drivers to prevent alcohol and drugs in connection with road use – Drive clean!	2005	HD	MISTEL/Sozialpädagogisches Institut Berlin Forschung GmbH	Wolfgang Heckmann	Germany
Proposal leader	Evidence–based mental health information portal – Phase I	2005	HD	Trimbos Institute	Maurice Gallà	Netherlands
Proposal leader	Save Antibiotics for Europe – SAFE	2003	HT	University Medical Centre Utrecht – Eijkman Winkler Institute	Jan Verhoef	Netherlands
Proposal leader	Trans European environmental, educational and health network	2004	HI	National And Kapodistrian University of Athens	Polyxeni Nikolopoulou–Stamati	Greece
Proposal leader	Safety of blood and blood components. Quality management systems implementation in blood transfusion services	2004	HT	World Health Organization	Valentina Hafner	Denmark
Proposal leader	Planning effective prevention of obesity: from the understanding of determinants to intervention evaluation	2005	HD	European Medical Association	Vincenzo Costigliola	Belgium
Proposal leader	Pragmatic approach to health behaviour in monitoring in Europe	2005	HI	Kaunas University of Medicine	Vilius Jonas Grabauskas	Lithuania
Proposal leader	Getting evidence into practice second phase: implementation and sustainability	2005	HI	NIGZ	Gerard Molleman	Netherlands

Appendix 3: Dissemination activities

This appendix provides more detailed information regarding the summative question: 'to what extent are the results of projects likely to be adequately disseminated?' (evaluation question 6, see section 3.3).

Literature review and dissemination activities within the PHP

A literature review and Internet search was undertaken to identify best practice examples of dissemination activities in the context of public health. It is apparent from the outset that a dynamic and iterative search strategy was required in order to capitalise on the breadth of information available, especially as far as the review of wider web–based information sources is concerned. A search for peer–reviewed journal articles was undertaken (for the years 2000 to 2006) on PubMed, Ingenta, and Ovid using the term 'dissemination', which was then combined with the MeSH term 'public health' and the term 'best practice'. Other sources included a Google search of the Internet, and the sites of various research councils. We also used previous work undertaken by RAND Europe and other relevant documentation within UK and abroad to identify dissemination best practice. As we acknowledge that there is a bias toward Anglo–Saxon literature with regard to dissemination activities, we also explored the variation of dissemination practice between EU countries from our survey sample (n=59). In addition, we analysed the information and dissemination materials available on the PHP website and also references to the PHP on various external organisation websites to determine the success of the PHP in generating and disseminating more and better health information to citizens, health experts and policy–makers.

Types of dissemination activity

Despite growing understanding of the need for exchange of knowledge between countries and within regions, there is a continuing tendency to push information rather than strengthening and responding to the pull of their information needs.[151]

The focus on effective dissemination is based upon a growing recognition that distribution of information does not guarantee adoption or use. The definition of effective dissemination goes beyond the traditional concepts of diffusion and distribution of information and encompasses the process which target groups become aware of, receive, accept and utilise disseminated information. The target groups that are of interest to public health are likely to include consumers (individuals and organisations); health care practitioners of all disciplines (physicians, nurses, allied health professionals, and professional organisations); the health care industry; policy–makers (international, EU level, national and local); researchers; and the press. Once the target groups are defined it is important to customise the use of the different dissemination products, channels and activities accordingly.

---

[151] Godlee, F., Pakenham–Walsh, N., Ncayiyana, D., Cohan, B. and Packer, A. (2004). Can we achieve health information for all by 2015? *The Lancet*; 364 (9430): 295–300.

A critical component of the dissemination process is the medium to which the exchange occurs. A wide range of strategies, such as those listed in the table below have been used or prescribed to bring about dissemination.

Table 1. Types of dissemination activities

Steering controlling method				Education facilitating method
• Laws	• Policy development • Formulation of national or EU health policies • Regulations • Setting research agendas • Supporting further research i.e. funding incentives • Evaluation	• Peer reviews • Audit and feedback • Patient–orientated strategies • Patient education	• Evidence–based guidelines • Models • Recommendations • Production of tools or tool kits (relevant for different settings – e.g. research, clinical, public) • Professional training • Collaborative programmes	• Journals, monographs, technical reports, working papers, Internet posting, radio, TV, electronic databases (printed and electronic) • Forum discussions (small or large interest groups) • Conference symposium • Consensus conferences • Research committee • Workshops • Educational programmes for policy–makers, clinicians • Professional associations or organisations, government organisations, research institutes, policy think tanks • Policy forum • Communities of Practice • Interdisciplinary networks (health professionals, public health specialists, policy–makers, civil servants, commissionaires and managers, public) • Social marketing and media publicity • Exchange programmes

Source: Adapted from Holleman 2006[152]; Matchar *et al* 2005[153]; Goering *et al* 2003[154]; and Godlee *et al* 2004[155]

[152] Holleman, G., Eliens, A., van Vliet, M. and van Achterberg, T. (2006). Promotion of evidence–based practice by professional nursing associations: literature review. *Journal of Advanced Nursing,* 53; (6): 702–709.

[153] Matchar, D.B., Westermann–Clark, E.V., McCrory, D.C., Patwardhan, M., Samsa G., Kulasingam, S., Myers, E., Sarria–Santamera A., Lee, A., Gray, R. and Liu, K. (2005). Dissemination of Evidence–based Practice Center reports. *Annals of Internal Medicine,* 142: 1120–1125.

[154] Goering, P., Butterill, D., Jacobson, N. and Sturtevant, D. (2003). Linkage and exchange at the organisational level: a model of collaboration between research and policy. *Journal of Health Services Research and Policy,* 8; Suppl 2: 14–19.

[155] Godlee, F., Pakenham–Walsh, N., Ncayiyana, D., Cohen, B. and Packer, A. (2004). Can we achieve health information for all by 2015? *The Lancet*, 364; (9430): 295–300.

The pros and cons of particular mediums have also been documented. For example Benigeri and Pluye (2003) stipulated that while disseminating health and medical information on the Internet can improve knowledge transfer from health professionals to the population, and help individuals to maintain and improve health, the medium also hides several shortcomings. These include: uneven quality of information available; difficulties in finding information, understanding and using the information; and the potential for harm and risks of over consumption. Therefore it is important that public health practitioners and health professionals are involved in the design, dissemination and evaluation of Web–based health and medical information.[156] Resource factors can strongly influence the success of any dissemination effort. Creating financial incentive structures may need to be developed to encourage researchers and partners to participate in dissemination research.

Gauld (2004) argues that evidence and advocacy need to be directed to the right audience, at the right time, on the right issues, and in a way that is well received. Process of disseminating ideas (or influencing others) is inherently political and involves considerable strategic planning. Factors to be considered include: knowing who to target, knowing when to target, knowing how to target, and engaging in implementation analysis.[157]

Cuijpers *et al* (2005) found that public health interventions that have proven effective in one country are often adapted and disseminated in other countries. However the process by which effective interventions are chosen for adaptation and dissemination in another country is often not conducted systematically. Consequently, a four–step approach is suggested (Figure 1).[158]

[156] Benigeri, M. and Pluye, P. (2003). Shortcomings of health information on the Internet. *Health Promotion International,* 18; (4): 381–386.

[157] Gauld R. (2004). *Public health and Government in New Zealand*. Discussion paper for the Public Health Advisory Committee. Dunedin: Public Health Advisory Committee.

[158] Cuijpers, P., de Graaf, I. and Bohlmeijer, E. (2005). Adapting and disseminating effective public health interventions in another country: towards a systematic approach. *European Journal of Public Health,* 15; (2): 166–169.

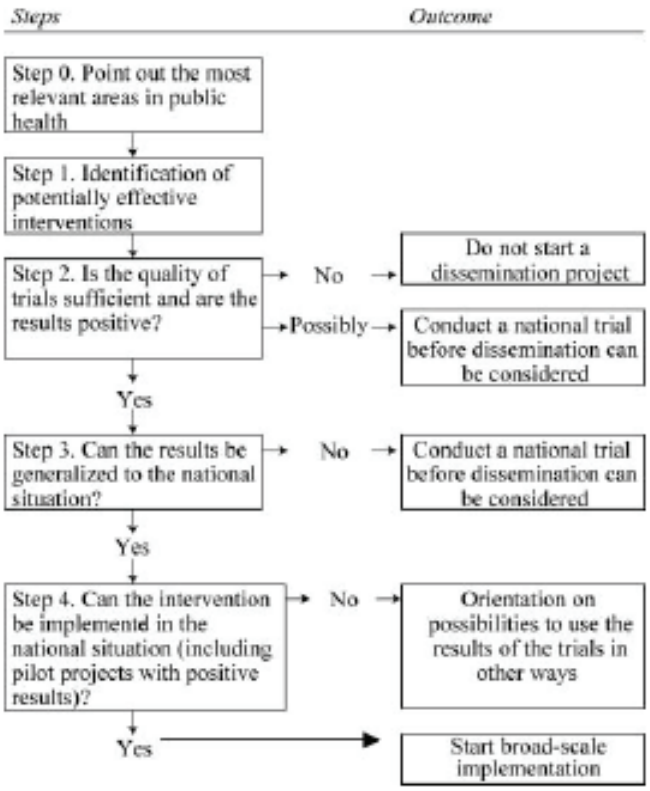


Figure 1. Decision tree for whether or not to disseminate an effective intervention from one country to another

Source: Cuijpers *et al*, 2005

Dissemination tools

Dissemination aims to ensure that policy–makers have access to relevant information. A number of different agencies have experimented with different approaches to dissemination (e.g. WHO Health Evidence Network, The Cochrane Collaboration). Distribution is by different modes (print, online, e–mail, and popular press), and through appropriate networks.

Supporting post–project mobilisation

Next to dissemination, post–project mobilisation is an important part of knowledge transfer. Post–project mobilisation is when a funding organisation provides funds to an activity after its completion, once it has been shown outcomes are effective and scalable. This is a relatively new idea, but has arisen from the observation that many agencies request information on (commercial and non–commercial) knowledge transfer in applications, but that this is often not followed up.

Dissemination and the Public Health Programme

Dissemination practice of new vs. old Member States

It was difficult to explore the variation of dissemination practice between EU countries from our survey sample (n=59). The number of respondents from new Member States was relatively low, and each country was represented by few respondents. Nevertheless it is still worthwhile to note variations in disseminating practices which have been previously reported in the literature as these may be relevant to the PHP.

Table 2. Survey respondents and non–respondents by country of origin

	Respondents	Non–respondents	Response rate
Former EU–15[159]	52	144	36%
New Member States[160]	5	12	42%
EFTA/EEA[161]	2	3	67%

Table 3. Number of respondents

	Articles	Book	Other
Former EU–15	27	6	28
New Member States	1	1	3
EFTA/EEA	2		1

Most of the variations reported concern the productivity of peer reviewed research articles in social science humanities and biomedical literature. However this literature is almost certainly of relevance to PHP activities. Public health has been defined as 'the science and art of promoting health, preventing disease and prolonging life through organised efforts of society', and hence sits at the intersect between the 'hard' and 'soft' sciences.[162] Public health initiatives often result from interdisciplinary integration and should be recognised not only to public health professionals but also specialists in other areas for healthcare and medicine, policy–makers and the general public.
Peer–reviewed articles are considered the 'gold standard' of scholarly publishing, and are widely available across countries and overtime. They are also considered the common premise for developing the body of language in the field and recommending suitable public health action. In this regard this channel of dissemination may create European added value. Softer channels (press releases, websites, newsletters, mailing lists and conferences) do not have the same quality assurance processes and are not available almost indefinitely. Nevertheless the channel of dissemination should suit the needs of the user to ensure information is useful and has impact. For example while a public health practitioner may consider a peer reviewed article more reliable than a conference paper, a policy–maker is probably more likely to read a press release as opposed to a lengthy peer–reviewed article.

Two factors appear to account for the variation between European countries. English–speaking countries seemed to have an advantage, and large countries were less productive.[163,164] The variation in productivity among the small states is considerable and many European countries, small or large, may not be represented in world rankings. The UK represents the Anglo–Saxon

[159] Austria (2), Belgium (6), Denmark (2), UK (3), Finland (3), France (5), Germany (9), Greece (2), Ireland (1), Italy (4), Netherlands (9), Portugal (1), Spain (3), Sweden (2).

[160] Czech Republic (1), Estonia (1), Lithuania (1), Poland (2).

[161] Norway (2).

[162] http://www.moh.govt.nz/moh.nsf/0/15f5c5045e7a1dd4cc256b6b0002b038?OpenDocument

[163] Holzinger, K. *Career incentives*. Contribution to the forum on 'Why is European political sciences so unproductive and what should be done about this'. Abstract available at: http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/downloads/papers/EPS.pdf

[164] Hefler, L., Tempfer, C. and Kainz, C. (1999). Geography of biomedical publications in the European Union 1990–1998. *The Lancet*, 353: 1856.

type, whereas Germany represents the 'continental' European type. There is high variance in these features across all European states, some closer to the Anglo–Saxon type (Scandinavia and the Netherlands) and others closer to the continental type (France, Italy).[165,166]

It has been suggested that in EU politics and policy–making English is becoming the lingua franca.[167] Anglophones have some advantages, since for them the lingua franca is also their first language. If non–Anglophones colleagues wish to reach audiences, they have to write in English. Conversely, Anglophones are under no such pressure, and appear never to write in a non–English language to reach a specific national audience.[168]

Language is even a greater challenge in dissemination of information.[169] Making the English version of information available more widely will not address this shortfall–information is needed in the vernacular.

A further complexity is that different stakeholders may have different understandings of dissemination. For example in continental Europe publication in books is more valuable for academics as they climb the career ladder. However in the UK there is pressure for academics to publish in top, highly related research journals, which in effect, means publishing in leading US and UK journals.[170] Often journals that are not in English are thereby defined as not international and hence ipso facto of lower status.[171] Although project results may be disseminated in non–English and English language journals, the latter are more likely to be included in the Social Science Citation (or PubMed) Index.[172,173] In addition, in any field the number of truly important journals that are frequently read and cited is relatively small, reflecting a precept known as 'Bradford's law'.[174]

Many local journals, and reports, and research conducted by non–governmental and international organisations are being published in each country without being cited on databases such as Medline,[175] which inevitably may lead to biases in this review since we have only drawn from these databases ourselves.

---

[165] Holzinger, K. *Career incentives*. Contribution to the forum on 'Why is European political sciences so unproductive and what should be done about this'. Abstract available at: http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/downloads/papers/EPS.pdf

[166] Kouyate, B., Traore, C., Kielmann, K. and Muller, O. (2000). North and South: bridging the information gap. *The Lancet*, 356; (9234): 1035.

[167] The Economist. (2003). The galling rise of English. *The Economist*, 1 March: 30.

[168] Wickam, J. (2004). Something new in old Europe? Innovation in EU–funded social research. *Innovation*, 17; (3): 187–204.

[169] Green, C.W. (2000). North and South: bridging the information gap. *The Lancet*, 356; (9234): 1035.

[170] Jones, M.J. and Roberts, R. (2005). International publishing patterns: An investigation of leading UK and US Accounting and finance journals. *Journals of Business Finance and Accounting*, I32; (5): 1107–1140.

[171] Wickam, J. (2004). Something new in old Europe? Innovation in EU–funded social research. *Innovation*, 17; (3): 187–204.

[172] Archambault, E., Vignola–Gagne, E., Cote, G., Lari viere, V. and Gingras, Y. (2006) Benchmarking scientific output in the social sciences and humanities: The limits of existing databases. Accepted for publication in Scientometrics. Available at: http://www.ost.uqam.ca/OST/pdf/articles/2006/Benchmarking_SSH_Limits.pdf

[173] Filho, A.P., Goldbaum, M. and Silvi, J. (1997). Production of scientific articles on health in six Latin American countries, 1973–1992. *Revista Panamericana de Salud Publica* v.2 n.2 Washington Ago.

[174] http://en.wikipedia.org/wiki/Bradford's_law

[175] Rahman, M. and Fukui, T. (2003). Biomedical publication–global profile and trend. *Public Health*, 117: 274–280.

The language hurdle may also limit the extent to which teams can genuinely carry out research that crosses national borders. Fortunately, there has been a decrease in the number of biomedical, clinical and public health articles by only one author, which suggests a greater frequency of team efforts. There has also been an increase in the number of authors tied to two or national or foreign institutes, which indicates greater co–operation between institutions and countries.[176] This trend could also hold true for non–research based activities.

Other factors accounting for variations include the amount of public and private spending for research institutions in a country. For example under funding will this not necessarily lead to fewer publications, but to a shortfall in the number of high–impact papers and books.[177] Further, the relation of teaching load as compared to time for research and institutional factors may influence the incentives for the individual researcher to publish in international journals.[178] The existing infrastructure and information technology resources may also be relevant to dissemination practices.

In summary the Anglo–Saxon countries in particular, and Western/Northern Europe more generally (Group 1), have a higher propensity to publish in the peer–reviewed literature. They may also have a high propensity to consult the peer reviewed literature. This is important because adequate dissemination practice needs both supply and demand sides. Those outside Group 1 who publish in peer–reviewed literature may tend to use journals that are underrepresented in the main databases (e.g. Web of Science and PubMed). This does not mean that those in Group 2 who could benefit from reading this work do not do so, but does mean that Group 1 and Group 2 communities may by asymmetrically connected: Group 1 output is read by people everywhere, but Group 2 output may only be read by other people in Group 2 – in the cases of non–English journals/articles, the output may only be read by those speaking the same language.

Dissemination plans

How well are dissemination plans taken into account in the PHP? We examined whether or not the presence of adequate dissemination plans influences the success of a proposal. Dissemination scores were obtained from DG SANCO's Communication & Information Resource Centre Administrator (CIRCA) database for the years 2004 and 2005.[179] Evaluation summaries were not available for 2003. For 2004 and 2005 dissemination plans were scored out of 15 and 10, respectively.

---

[176] Filho, A.P., Goldbaum, M. and Silvi, J. (1997). Production of scientific articles on health in six Latin American countries, 1973–1992. *Revista Panamericana de Salud Publica* v.2 n.2 Washington Ago.

[177] Schneider, G. *The quest for the holy grant – (mis)allocating money*. Contribution to the forum on 'Why is European political sciences so unproductive and what should be done about this'. Abstract available at: http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/downloads/papers/EPS.pdf

[178] Holzinger, K. *Career incentives*. Contribution to the forum on 'Why is European political science so unproductive and what should be done about this' Abstract available at: http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/downloads/papers/EPS.pdf

[179] 2004:

http://forum.europa.eu.int/Members/irc/sanco/publiceval/library?l=/call_proposals_2004&vm=detailed&sb=Title

2005:
http://forum.europa.eu.int/Members/irc/sanco/publiceval/library?l=/call_proposals_2005&vm=detailed&sb=Title

Guidelines on dissemination 2004–2005

The Public Health Evaluation Report 2004[180] outlines the rules, criteria and procedures for the selection and funding of actions under the PHP in *2004*. After the exclusion and selection criteria have been applied, a list of proposed actions responding most closely to the following award criteria is drawn up: quality of the proposed action and cost–effectiveness of the project.[181] For evaluation purposes, these two criteria are analysed on sub–criteria. Dissemination is a sub–criteria of the quality of the proposed action:

> The project must include the dissemination and exploration of the results, using suitable dissemination strategies (choice of target groups etc). The applicant must describe in detail the dissemination plan, covering all the levels envisaged (international, national, local), and must state how the Community nature of the project will be brought to bear.

This entails appropriateness of geographical coverage, dissemination strategies and visibility of the Community action that will be scored. Each award criterion is marked by the evaluators on a six point scale from 0–5:

0 failure / missing info	1 poor	2 fair	3 good	4 very good	5 excellent
Appropriateness of geographical coverage					
0	The project involves only one country, the applicant's country				
5	The project involves an optimum number of countries which can be involved in relation to the specific objectives and the budget of the project. At least one country				
Dissemination strategies					
0	The project does not explain how the results will be disseminated. Or no dissemination is forecast.				
5	The project explains in a detailed way how the results will be disseminated at European level and justifies the choice of the different target groups. All relevant target groups are addressed.				
Visibility					
0	The project does not provide enough information to be able to ensure that the financial support received from the EU budget and a reference to the EU objectives, including the Public Health Policy, are visible.				
5	The project ensures that the financial support received from the EU budget and a reference to the EU objectives, including the Public Health Policy, are visible.				

As regards to award criteria in *2005*, each proposal is assessed according to the scale of marks it receives for technical content (20%); methodology (20%); relevance of the proposed budget

[180] European Commission. Health Protection & Consumer Directorate–General. (2004). *Public health evaluation report: Call for proposals 2004.* Published on 27 February 2004 in OJ C52, Luxembourg: European Commission: 22.

[181] In 2004 the respective weighting of the categories of award criteria was: (1) Quality of the proposed action: *Conformity with the Commission's predefined objectives 15%; Community added value 15%; Dissemination of results and visibility of the Community action 15%; Results likely to be taken into consideration 15%.* (2) Cost–effectiveness of the project: *Relevance of the methods and quality of the proposed management 20%; Effectiveness of partnerships 10%; Consistency of the funding plan 10%.*

(20%); community added value (30%); and community visibility (10%). Each of the five criteria is divided into sub–criteria. For example the sub–criteria for community visibility includes: (a) dissemination strategy of the results (5%); and (b) visibility of Community co–financing 5%. For some criteria or sub–criteria, proposals must reach at least 50% of the maximum number of points, however this doesn't apply to community visibility.

Criteria	Maximum score
Community visibility	**10**
(a) Dissemination strategy of the results The applicant must provide a detailed description of how and to whom the results of the action will be disseminated. The applicant must specify the different target audiences of the action and justify their choice.	5
(b) Visibility of EU co–funding The applicant must describe the way in which the project will acknowledge the Community co–funding it has received	5

Analysis

Figures 2 to 7 opposite show the distribution of scores for all calls for proposals in 2004 and 2005 by theme: health information, health threats, and health determinants.

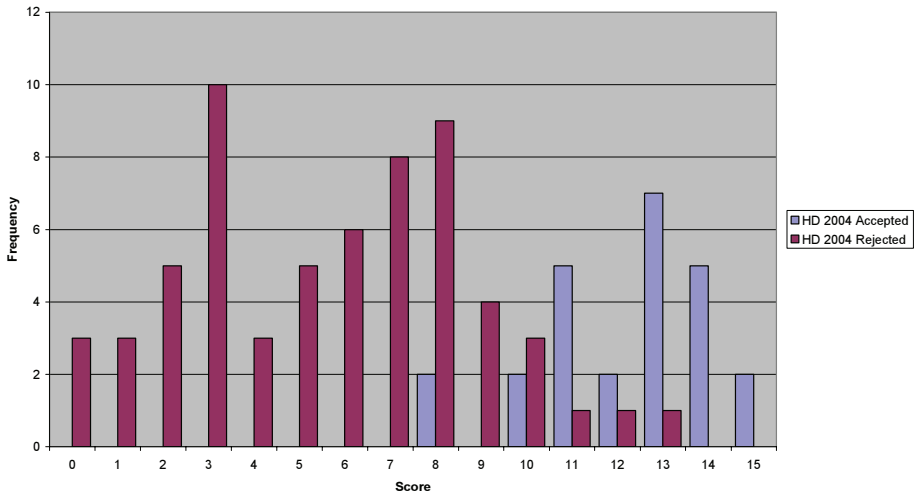


Figure 2. Distribution of dissemination scores – Health Determinants 2004

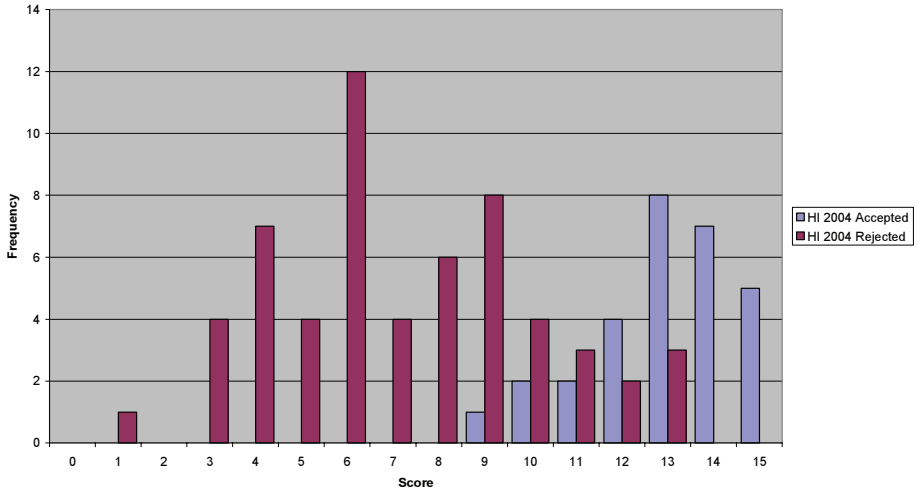


Figure 3. Distribution of dissemination scores – Health Information 2004

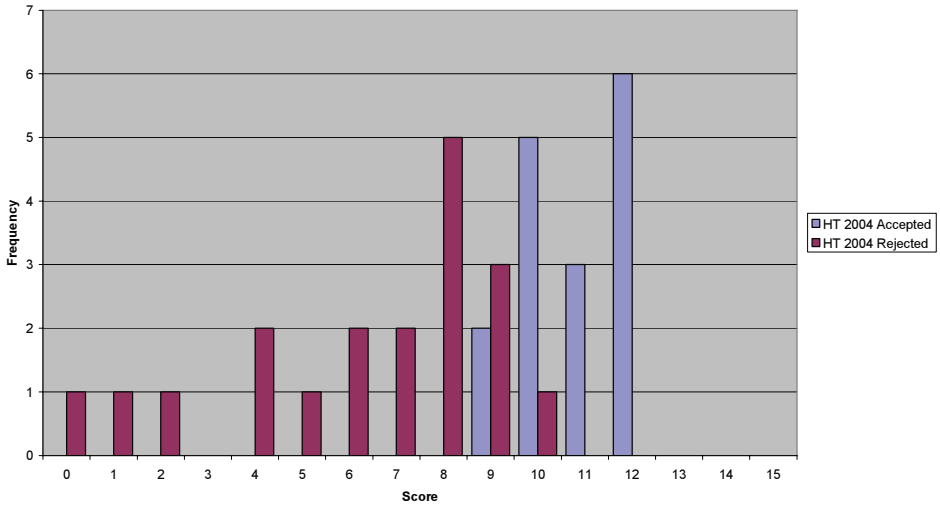


Figure 4. Distribution of dissemination scores – Health Threats 2004

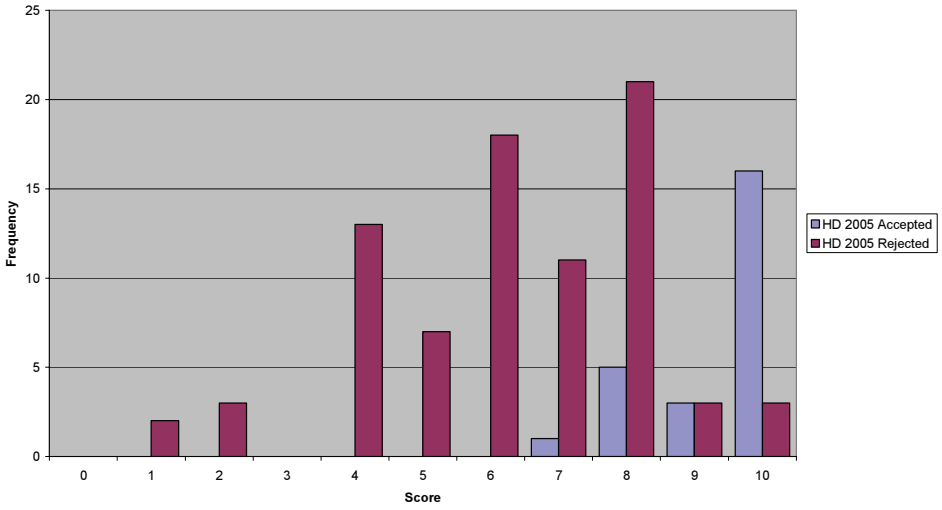


Figure 5. Distribution of dissemination scores – Health Determinants 2005

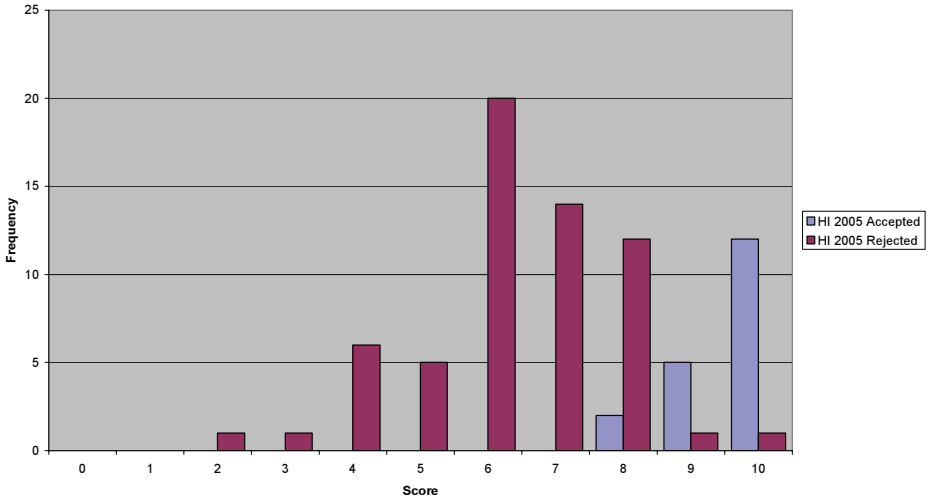


Figure 6. Distribution of dissemination scores – Health Information 2005

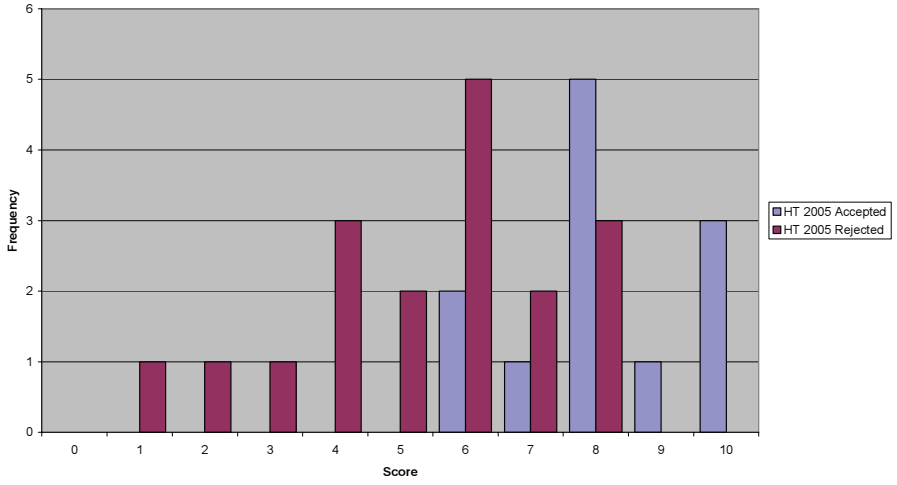


Figure 7. Distribution of dissemination scores – Health Threats 2005

To examine whether or not the presence of dissemination plans influences the success of a proposal we performed a two–sample t–test. The null hypothesis was that the average dissemination score is the same for the rejected and accepted proposals. The alternative hypothesis is that the average dissemination score is different for the two groups. The criteria or sub–criteria regarding dissemination do not have a threshold value (while other award criteria do have threshold values). Hence it is possible that a proposal could score poorly for dissemination and still receive funding.

Tables 4 and 5 below show that the null hypothesis was rejected, and there is a statistically significant difference between the dissemination scores of those proposals that are accepted and rejected in 2004 and 2005. In all cases the p–value was less than 0.01, suggesting the quality of dissemination plans may influence the success of a proposal.

Table 4. Two–sample t–test for calls for proposals 2004

		n	Mean (1 dp)	SD (1 dp)	Two–sample t–test (p–value)
Health determinants	Accepted	25	12.2	1.9	<0.01
	Rejected	62	5.6	3.1	
Health information	Accepted	29	13.0	1.6	<0.01
	Rejected	58	7.2	2.8	
Health threats	Accepted	17	10.8	1.1	<0.01
	Rejected	19	6.3	2.8	
Total (does not include reserved proposals)	Accepted	71	12.2	1.8	<0.01
	Rejected	139	6.3	3.1	

Table 5. Two–sample t–test for calls for proposals 2005

		n	Mean (1 dp)	SD (1 dp)	Two–sample t–test (p–value)
Health determinants	Accepted	25	9.4	0.9	<0.01
	Rejected	81	6.2	2.0	
Health information	Accepted	19	9.5	0.7	<0.01
	Rejected	61	6.3	1.5	
Health threats	Accepted	12	8.2	1.3	<0.01
	Rejected	18	5.3	2.0	
Total (does not include reserved proposals)	Accepted	56	9.2	1.1	<0.01
	Rejected	160	6.2	1.8	

We also performed the two–sample t–test on the selected projects in our representative sample of funded and unfunded projects to examine whether or not the presence of dissemination plans influences the success of a proposal. However the sample was too small to detect a difference.

Project websites

We analysed how many projects have a project website for the selected projects 2003–2005 (n=53). Google http://www.google.co.uk/ was used to find project website searching by the

project acronym or title. Table 6 shows that 70% of the selected projects 2003–2005 had active project websites.

Table 6. Number of project websites

		Active website	No website
2003 (n=23)	EU–15	14	6
	new Member State	1	1
	EFTA/EEA	1	
2004 (n=20)	EU–15	9	7
	new Member State	1	1
	EFTA/EEA	1	
	Accession country		1
2005 (n=10)	EU–15	9	
	new Member State		1
	Total	36	17

Over 70% of project websites had statements regarding the projects aims and objectives in 2003 (71%), 2004 (78%) and 2005 (100%). Over half the active websites had downloadable publications in 2003 (57%), 2004 (64%) and 2005 (55%). Publications included books; workshop papers; reports (including project results); presentations; flyers; newsletters; fact sheets; policy documents; posters; training manuals or training courses; guidelines; press releases; leaflets and information brochures; cinema spot; information material and decision aids; conference documents (programme, list of participants, speeches, abstracts and presentations, reports); and discussion forums and blogs. In some cases the information, especially reports and flyers, were available in multiple languages.

Approximately 60% of project websites provided links to partner organisation websites or related links. Other features included events calendar. A few websites had user login facilities, which presumably allows higher access to projects results and activities. All the project websites provided contact information and listed the project team. Across the selected projects (2003–2005) the majority (78%) of the projects had its own website (i.e. http:// address). In other cases the projects activities were accessible through the lead or affiliated organisations website such as WHO.

Appendix 4: Network analysis

This appendix we present the details of a network analysis performed to understand the capacity of Member States to participate in the PHP. We have performed an analysis on the networks within PHP projects in a selected representative sample of projects for the years 2003–2005 (n=53).[182] We have done so at two levels: at the country level and second at the level of organisations.

Country level

General characteristics of the network

On the basis of the contact details of the project partners provided in the proposal database we derived the geographical pattern in the selected sample of PHP projects (n=53). The total number of countries involved in the selected sample of PHP projects is 31, including EU Member States, Candidate countries and EFTA/EEA countries. Switzerland and Northern Ireland were also listed in one of the addresses. Although these are not a country and/or a EU Member State, we kept it as a separate entry in our data to keep close to the information supplied in the proposals. However, we shall refrain from discussing Northern Ireland and Switzerland as separate cases. The countries/region are listed in the following table.

Table 1. Countries/region involved in selection of PHP projects

Austria	France	Lithuania	Slovak Republic
Belgium	Germany	Luxembourg	Slovenia
Bulgaria	Greece	Malta	Spain
Cyprus	Hungary	The Netherlands	Turkey
Czech Republic	Iceland	Norway	Sweden
Denmark	Ireland	Poland	Switzerland
Estonia	Italy	Portugal	UK
Finland	Latvia	Romania	Northern Ireland

EU = Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, UK

NMS = Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia

EFTA/EEA = Iceland, Norway, Switzerland

Candidate countries = Bulgaria, Romania, Turkey

[182] The software used for this purpose was UCINET 6: Borgatti, S.P., Everett, M.G. and Freeman, L.C. (2002). *Ucinet for Windows: Software for Social Network Analysis.* Harvard, MA: Analytic Technologies.

Table 7 in the main text (section 3.5.3) gives the linkages across countries. There are three things to note about the linkages. First of all, countries can have more than one link with other countries. For instance, there are 9 links from Belgium to Italy (i.e. there are 9 linkages between project leaders located in Belgium and associated partners in Italy). Furthermore, some countries have links with themselves. For instance, Belgium has 2 links with itself. The existence of multiple (or *valued*) linkages within and between countries is due to the fact that some countries have more than one organisation participating in the PHP. Finally, linkages are *directed*. That is, there is a distinction between countries which 'provide' the project leaders (*source* of the link) and countries in which project (associated) partners reside (*destination*). This means that the matrix is not symmetrical. For example, if an organisation from Belgium co–operates with an organisation from Italy and the Belgian partner is the lead partner, the link will be recorded from Belgium (row) to Italy (column), but not vice versa.

We are interested to know what countries play a central role in the selected sample of PHP projects. Freeman's (1979) degree centrality measures centrality simply by counting the number of linkages: a country is more central the more linkages it has.[183] The results for the selected sample are given in Table 2 below. Note that in the subsequent analysis we take *valued* linkages into account again.

As mentioned above, we can distinguish between project leaders on the one hand and associate partners on the other. In the table, out–degree measures the number of linkages going from applicants in a certain country to associate partners in other countries. In–degree measures the number of ties, originating from applicants in other countries, coming into a certain country.

It appears from the table that there are 17 applicant countries (source), mainly from the 'old' Member States such as Austria, Belgium, Denmark, France and Germany and some recently new Member States such as Estonia, Latvia, Poland and Slovak Republic. The countries with the largest number of outgoing ties are Belgium (93), UK (88), Germany (87) and The Netherlands (83), probably because they have a long tradition in public health. Hence, organisations from these countries are often project leaders/applicants in the selected projects.[184]

Organisations from Germany and UK also frequently feature as associate partners (in–degree) in projects led by organisations from other countries. Organisations from Italy and Spain also participate a lot in PHP projects. This may be due to the fact that collaborations including 'southern' partners tend to have a higher success rate.

The descriptive statistics at the bottom of Table 2 indicate that the range of out–degree is higher (minimum and maximum) than the in–degree, reflecting the fact that a few countries (i.e. Belgium, UK, Germany and The Netherlands) clearly stand out in terms of outgoing ties. The population is heterogeneous with regard to both the in–degree and out–degree of centralisation, but clearly more so with regard to the out–degree.

The overall degrees of centralisation are

- Network Centralisation Out–degree = 27.980%
- Network Centralisation In–degree = 7.261%

---

[183] Freeman, L.C. (1979). Centrality in social networks: Conceptual clarification. *Social Networks*, 1: 215–239.

[184] We note that in the case of Belgium, the high out–degree is partially but not solely caused by European (network) organisations that have their headquarters in Belgium.

Table 2. Freeman's degree centrality

	Out–degree	In–degree
Austria	5	19
Belgium	93	27
Bulgaria	8	13
Cyprus	0	6
Czech Republic	0	21
Denmark	43	23
Estonia	7	12
Finland	47	22
France	22	26
Germany	85	37
Greece	22	20
Hungary	0	20
Iceland	0	9
Ireland	2	17
Italy	2	36
Latvia	11	15
Lithuania	0	4
Luxembourg	0	6
Malta	0	8
The Netherlands	83	25
Norway	12	11
Poland	20	22
Portugal	0	15
Romania	0	15
Slovak Republic	4	13
Slovenia	0	15
Spain	0	32
Turkey	0	5
Sweden	0	24
UK	88	35

Descriptive statistics:		
Average	17.38	17.38
St. Dev.	28.89	9.70
Minimum	0	1
Maximum	93	37

The degree of network centralisation gives the degree of inequality or variance in the network as a percentage of that of a perfect star network.[185] The degrees of centrality given above indicate that the amount of concentration or centralisation in this network with regard to in–degree (project partners) is very low. This means there are no single or sub–set of countries that have more ingoing ties than other countries. That is, countries do not stand out as more important project partners than others. The amount of concentration or centralisation in this network with regard to out–degree (project leadership) is somewhat higher (28%). This indicates that there is more variance across countries with respect to the number of outgoing ties and hence that some countries are relatively important in terms of being a project leader. But still, the figure suggests that overall power is relatively equally distributed in this network. Put differently, it is a fairly decentralised network.

Dissemination of knowledge and information

How easy/difficult is it to spread health related information and knowledge across the entire network of selected projects? The answer depends on the structure of the network. In this section we will look at the density of the network, the distances between countries and the extent to which the network is made up of sub–groups that do or do not overlap.

For this purpose we transformed the asymmetric and valued matrix into a symmetric binary one. That is, it no longer matter where a tie originates (applicant country) and where it is directed to, nor does it matter how many links there are between countries. Two countries are linked as soon as two or more organisations from the respective countries co–operate in a project. The resulting matrix is presented in Table A1 (at the end of this Appendix).

We begin by assessing the density of the network. Including self–ties (within–country links), the total number of possible links is 1024 (32*32). The actual number of ties is 401, including self–ties. This means that 39% of all possible ties across countries are present in the network of the selected sample of projects. However, the notion of density only takes into account *direct* links. A second way to assess the structure of the network of selected PHP projects and to see how countries are embedded is by looking at how far apart countries are. The geodesic distance measures the number of relations in the shortest possible 'walk' from one country to another. The matrix of geodesic distances for the network of selected PHP projects is presented in Table 3. It indicates that no country is more than three steps away from any other.[186] Average distance among country pairs in the network is 1.62 steps. This suggests a system in which (organisations from) one country can reach (organisations from) all countries fairly quickly (i.e. in a small

[185] According to Freeman, the star network is the most centralised or unequal possible network. In the star network, all the actors but one have a centrality degree of one, and the star has degree of the number of actors less one.

[186] This is also referred to as the diameter of the network.

number of steps). These results indicate that although the number of direct linkages is not too large, the network is still quite compact due to the short distances between non–linked countries.

Table 3. Geodesic Distances

		A	B	B	C	C	D	E	F	F	G	G	H	I	I	I	L	L	L	M	T	N	P	P	R	S	S	S	T	S	U
1	Austria	0	1	2	2	2	1	2	1	2	1	1	2	2	2	2	2	2	2	2	1	2	2	2	2	1	1	1	2	1	1
2	Belgium	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
3	Bulgaria	2	1	0	2	2	1	2	1	2	1	1	2	2	2	2	1	2	2	2	1	2	1	2	1	2	2	2	2	2	2
4	Cyprus	2	1	2	0	2	2	2	1	2	1	1	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	1
5	Czech Republic	2	1	2	2	0	1	2	1	1	1	1	2	2	2	2	1	2	2	2	1	2	1	2	2	1	2	2	2	2	1
6	Denmark	1	1	1	2	1	0	2	1	1	1	1	1	2	1	1	2	1	2	1	2	1	1	1	1	2	1	1	1	1	1
7	Estonia	2	1	2	2	2	2	0	1	2	1	2	2	2	2	2	1	1	2	2	1	1	1	2	2	2	2	2	2	1	1
8	Finland	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1
9	France	2	1	2	2	1	1	2	1	0	1	1	1	2	1	1	2	2	2	2	1	2	1	2	2	2	2	1	2	2	1
10	Germany	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Greece	1	1	1	1	1	1	2	1	1	1	0	2	2	2	1	1	2	2	2	1	1	1	1	2	2	2	2	1	2	2	1
12	Hungary	2	1	2	2	2	1	2	1	1	1	2	0	2	2	2	1	2	2	2	1	2	1	2	2	1	2	2	2	2	1
13	Iceland	2	1	2	2	2	2	2	1	2	1	2	2	0	2	2	2	3	2	2	2	1	2	2	2	2	2	2	2	2	1
14	Ireland	2	1	2	2	2	1	2	1	1	1	2	2	2	0	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	1
15	Italy	2	1	2	2	2	1	2	1	1	1	1	2	2	2	0	2	2	2	2	1	2	1	2	2	2	2	1	2	2	1
16	Latvia	2	1	1	2	1	2	1	1	2	1	1	1	2	2	2	0	1	2	2	1	1	1	2	1	1	1	2	2	2	1
17	Lithuania	2	2	2	3	2	1	1	2	2	2	2	2	3	2	2	1	0	3	2	1	2	2	2	2	2	2	2	2	2	2
18	Luxembourg	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	3	0	2	2	2	2	2	2	2	2	2	2	2	1
19	Malta	2	1	2	2	2	1	2	1	2	1	1	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	1
20	The Netherlands	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	0	1	1	1	1	1	1	1	1	1	1
21	Norway	2	1	2	2	2	1	1	1	2	1	1	2	1	2	2	1	2	2	2	1	0	1	1	2	2	2	2	2	1	1
22	Poland	2	1	1	2	1	1	1	1	1	1	1	1	2	2	1	1	2	2	2	1	1	0	2	1	1	2	1	2	2	1
23	Portugal	2	1	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2	1	1	2	0	2	2	2	2	2	1
24	Romania	2	1	1	2	2	1	2	1	2	1	2	2	2	2	2	2	1	2	2	2	1	2	1	2	0	2	2	2	2	2
25	Slovak Republic	1	1	2	2	1	1	2	1	2	1	2	1	2	2	2	1	2	2	2	1	2	1	2	2	0	2	2	2	2	1
26	Slovenia	1	1	2	2	2	1	2	1	2	1	2	2	2	2	2	1	2	2	2	1	2	2	2	2	2	0	2	2	2	1
27	Spain	1	1	2	2	2	1	2	1	1	1	1	2	2	2	1	2	2	2	2	2	1	2	1	2	2	2	2	0	2	2	1
28	Turkey	2	1	2	2	2	1	2	2	2	1	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	0	2	1
29	Sweden	1	1	2	2	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	0	1
30	UK	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	0

In order to assess whether information and knowledge may spread rapidly across the entire network we then investigate whether there are sub–groups, or *cliques*. Where groups overlap, mobilisation and knowledge diffusion may spread rapidly across the entire network–where the groups do not overlap information and knowledge may be 'locked in' in one group and not diffuse to the other.

In structural analysis, cliques are defined as sub–sets of a network in which a number of actors are more closely tied to each other than they are to other actors in the network. Starting with defining a clique as a group consisting of three countries that have all possible ties present among themselves,[187] we allowed groups to be expanded to include as many countries as possible. Using UCINET software we found 32 such cliques. These are presented below:

Table 4. Number and composition of cliques in the network

1: Belgium Denmark Finland France Germany Greece Italy The Netherlands Poland Spain UK
2: Belgium Czech Republic Denmark Finland France Germany Greece The Netherlands Poland UK
3: Belgium Denmark Finland France Germany Hungary The Netherlands Poland UK
4: Belgium Denmark Finland Germany Greece The Netherlands Norway Poland UK
5: Belgium Czech Republic Denmark Finland Germany The Netherlands Poland Slovak Republic UK
6: Belgium Denmark Finland Germany Hungary The Netherlands Poland Slovak Republic UK
7: Belgium Denmark Finland France Germany Ireland The Netherlands UK
8: Austria Belgium Denmark Finland Germany Greece The Netherlands Spain UK
9: Austria Belgium Denmark Finland Germany The Netherlands Slovak Republic UK
10: Austria Belgium Denmark Finland Germany The Netherlands Slovenia UK
11: Austria Belgium Denmark Finland Germany The Netherlands Sweden UK
12: Belgium Denmark Finland Germany The Netherlands Norway Sweden UK
13: Belgium Estonia Finland Germany Latvia The Netherlands Norway Poland UK
14: Belgium Estonia Finland Germany The Netherlands Norway Sweden UK
15: Belgium Czech Republic Finland Germany Greece Latvia The Netherlands Poland UK
16: Belgium Czech Republic Finland Germany Latvia The Netherlands Poland Slovak Republic UK
17: Belgium Finland Germany Hungary Latvia The Netherlands Poland Slovak Republic UK
18: Belgium Finland Germany Greece Latvia The Netherlands Norway Poland UK
19: Belgium Finland Germany Latvia The Netherlands Slovenia UK
20: Belgium Finland Germany The Netherlands Norway Portugal UK
21: Belgium Finland Germany Iceland Norway UK
22: Belgium Finland Germany Luxembourg UK
23: Belgium Denmark Finland Germany Greece Malta UK
24: Belgium Cyprus Finland Germany Greece UK
25: Belgium Bulgaria Finland Germany Greece Latvia The Netherlands Poland
26: Belgium Bulgaria Finland Germany Latvia The Netherlands Poland Romania
27: Belgium Bulgaria Denmark Finland Germany Greece The Netherlands Poland
28: Belgium Bulgaria Denmark Finland Germany The Netherlands Poland Romania
29: Belgium Finland Northern Ireland
30: Belgium Denmark Germany The Netherlands Turkey UK
31: Estonia Latvia Lithuania The Netherlands
32: Denmark Lithuania The Netherlands

[187] This means the members are all linked directly. If we allow cliques to be countries that are linked more indirectly, e.g. linked by one intermediate, the number of cliques falls to three. Allowing two intermediate countries, i.e. allowing a distance of three steps, all countries are interlinked (see results on geodesic distance).

The largest clique is composed of 11 countries. All smaller cliques share some overlap with some part of the core.

We are interested in the extent to which cliques overlap and what countries connect different groups. We can examine this by looking at the co–membership matrix (Table 8 in the main text, see section 3.5.3). It appears from the table that Belgium, Finland, Germany, The Netherlands and the UK share membership of a clique with most other countries and do so at least once. These countries are also very 'close' in the sense that they share memberships in over 20 cliques between them. With respect to Belgium, Germany, The Netherlands and the UK, these are also the countries with the highest degree of centrality (Table 2). Hence these two analyses complement each other. On the other hand, Cyprus, Iceland, Lithuania, Luxembourg, Malta, Portugal and Turkey are only in a few cliques.

Figure 1 below gives a graphical representation of co–memberships. It gives a hierarchical clustering based upon the number of times (in Table 8 in the main text) each pair of actors is in the same clique. The figure indicates that Belgium and Finland are joined first as being close because they have 29 clique memberships in common. At the level of 22 clique memberships, Belgium, Finland, Germany, The Netherlands and the UK have joined the core. As the number of co–memberships decreases further, more and more countries are integrated. It appears from the figure that at the level of two memberships, Romania and Bulgaria form a little core on their own. They become integrated into the core at a lower level. Again, Switzerland is not in any clique (level 0).

In summary: the results on distance and sub–groups presented in this section complement each other. We find that distances between countries in the network of selected PHP projects are small. No country is more than three steps away from any other, i.e. there are maximum two countries in between two countries. Belgium, Finland, Germany, The Netherlands and the UK are the key nodes in the network of selected PHP projects, linking countries. They are linked to most other countries in the network in bigger or smaller sub–groups. This implies a network in which information and knowledge is likely to reach all countries in the network rather quickly.

The new Member States, Czech Republic, Estonia, Hungary, Latvia, Poland, Slovak Republic and Slovenia appear to be well embedded in the network of selected projects. They are included in quite a number of sub–groups. By and large the same applies to the candidate countries Bulgaria and Romania. Countries that are less embedded are the smaller countries or islands like Cyprus, Iceland, Malta, Lithuania, Luxembourg and Portugal. Also Turkey is somewhat more in the periphery. Switzerland is quite isolated in this network.

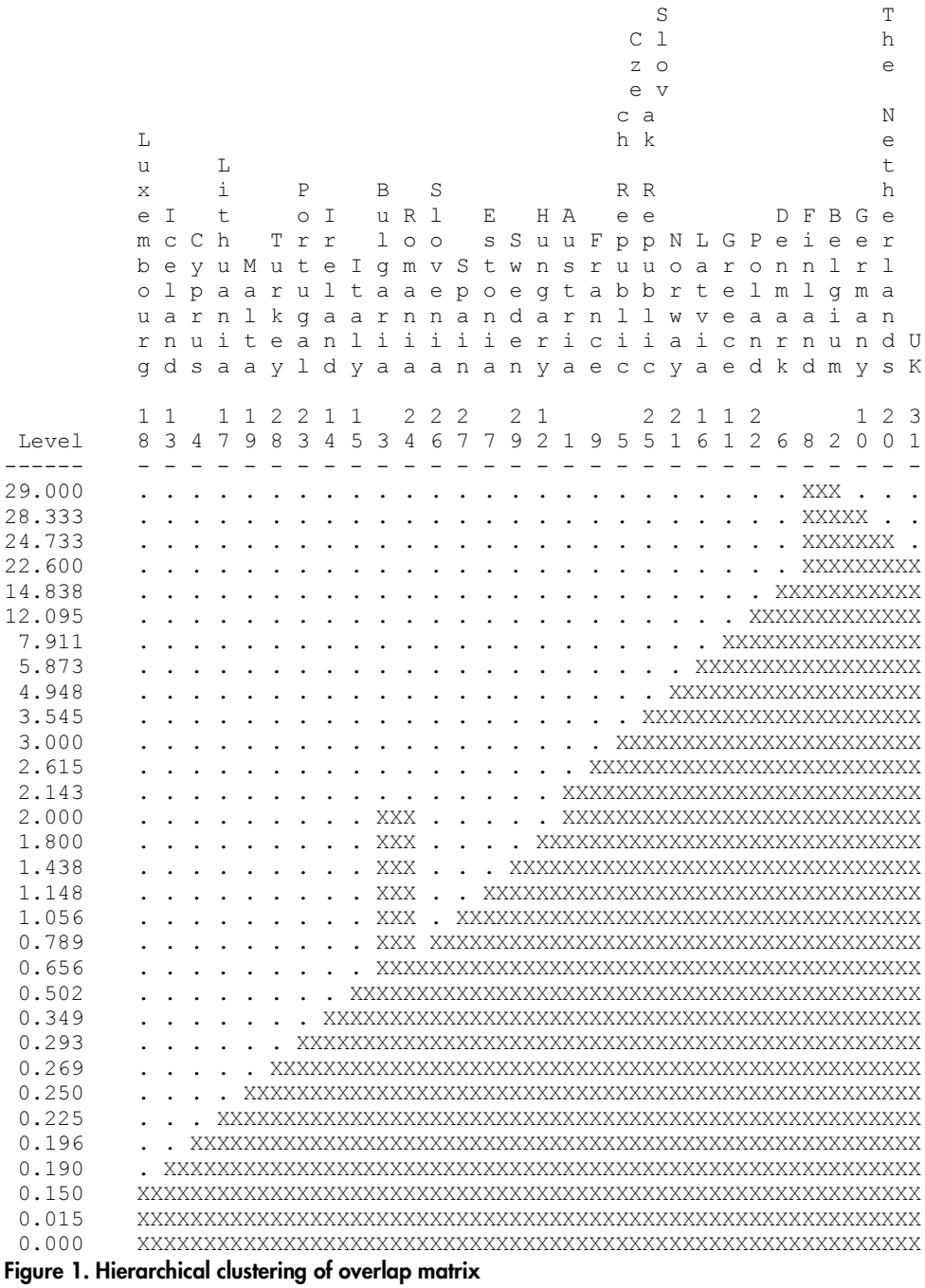


Figure 1. Hierarchical clustering of overlap matrix

Organisation level

General characteristics of the network

The number of organisations participating in the PHP, i.e. lead partners and associated partners, amounts to 461. Out of these 461 organisations, two are not part of a network in the sample of selected projects. That is, these two organisations carry out projects themselves, without associated partners. They also do not participate as an associated partner in another of the selected 53 projects. Our network analysis is based on the remaining 459 organisations.

The largest network in the sample of selected projects is made up of 61 organisations and is found in Health Determinants. Figure 2 opposite gives the sizes of each of the 53 projects divided by strand. From the figure we cannot say that large networks are characteristic for a particular strand. Granted, the average size of networks is higher in Health Threats than in the other two strands. Nevertheless, we find some large networks in Health Information and Health Determinants, too (45 and 60 partners, respectively).

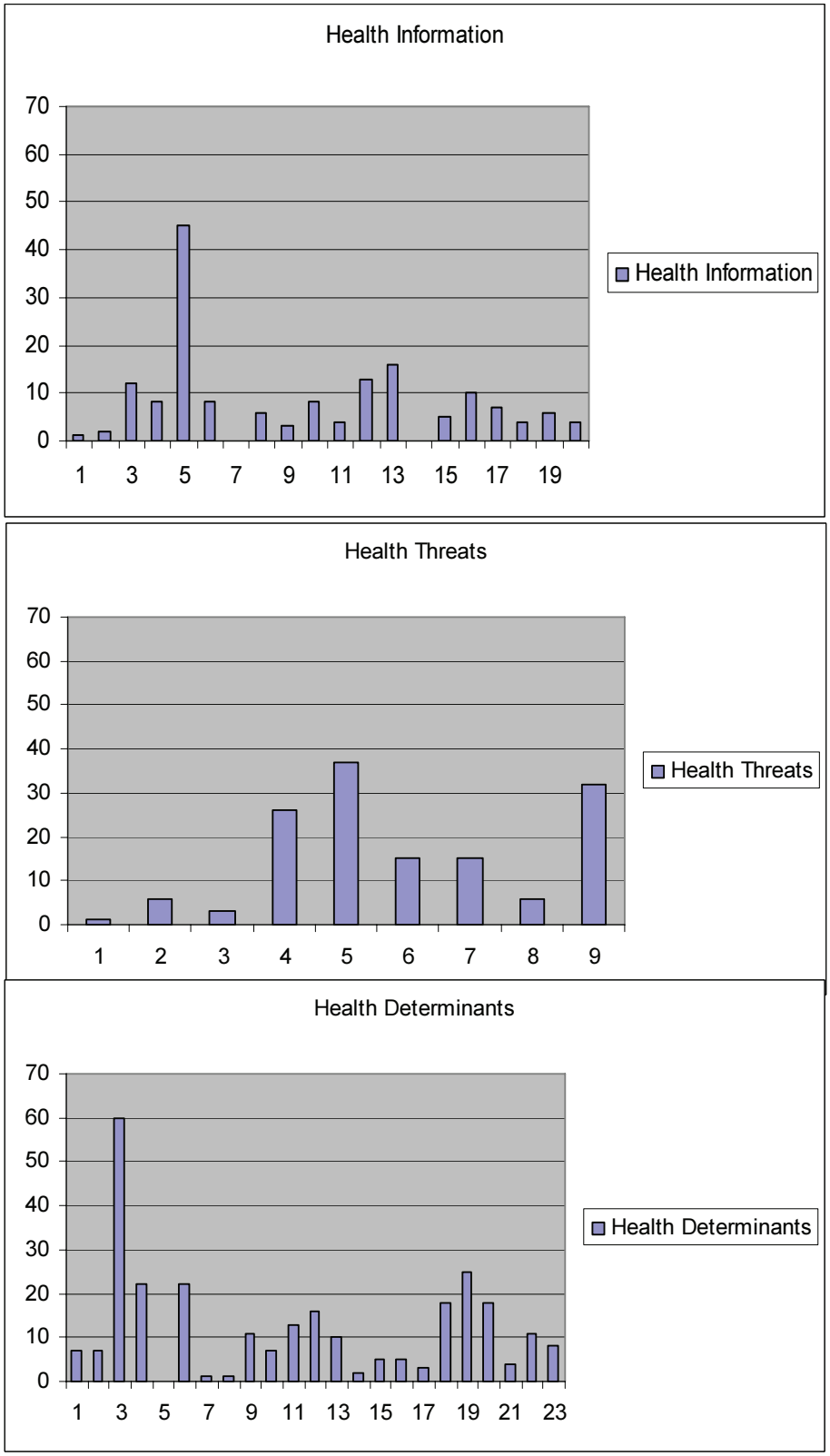


Figure 2. Network sizes by strand

Table 5. Descriptive statistics

Mean	0.064
Standard deviation	0.245
Sum	13,430
Number of observations	210,222 (459*458)

In Table 5 we present some descriptive statistics of the network. The figures can be explained as follows. First of all, the matrix of co–operations is binary: the entries reflect whether two organisations co–operate (indicated by 1) or not (indicated by 0). If two organisations co–operate in more than one project, this is only recorded once. The total number of possible co–operations of 459 organisations with any other organisation apart from itself is 210,222. The total number of direct co–operations actually in the 53 selected projects is 13,430 (or 6,715 bilateral links). This means that 6% of all possible *direct* ties across organisations are present (i.e. the *density* of the matrix).

Yet, the way in which organisations are embedded in networks is more complex. Organisations may be able to reach each other indirectly, because they are linked through other organisations. In network analysis, the geodesic distance is the number of relations in the shortest possible walk from one actor to the next. For each pair of organisations, the algorithm finds the number of links in the shortest path between them. For the network of the 53 selected projects, the average geodesic distance among *reachable*[188] pairs is 2.4. In other words, on average organisations that can reach others do so in approximately two steps, i.e. through two other organisations. The diameter of the network is four, i.e. connected organisations are no more than four steps away from any other. This suggests a compact network or a system in which information or knowledge is likely to reach everyone fairly quickly. In order to add some flavour to these numbers, Table 6 presents the corresponding figures for various Framework Programmes.

Table 6. Network characteristics of Framework Programmes

	FP3&4[a]	FP5[b]	FP6[c]
Number of links in funded projects	103678	76995	66242
Density (%)	0.2152	0.2391	1.1802
Number of organisations in 1st component of network	9455	7389	3287
As % of all organisations	96.30%	93.70%	98.10%
Average path length	3.16	3.14	2.63
Maximum distance/diameter	8	9	7

a: Breschi, Stefano and Lucia Cusmano (2003) – FP4 data covers first part only (Breschi and Cusmano (2003: 9).
b: Data from European Commission (2004).
c: Data from European Commission (calls 1 and 2).

[188] There are six 'unconnected' networks in the sample. The organisations in these projects can only reach partners inside their own project. Distances are minimum within these projects (distance =1), but distances with organisations from other projects are greater than that of any real distance in the data.

This comparison suggests that the PHP network (at least the network composed of the 53 selected projects) is more compact than the FPs: in the PHP network the density is higher (6%), i.e. a larger share of possible direct links are actually present. Moreover, average and maximum distances are smaller in the PHP: 2.4 and 4 respectively in the PHP versus 2.63 or more, and 7–9 in the FP. As argued throughout this Appendix, the higher compactness of the PHP network should make it easier to spread information and knowledge across organisations, even if they are not directly linked.

Dissemination of knowledge and information

Organisations in a network may differ in the amount of ties that they have. Some organisations may be connected to many others, others may not. Organisations that have many ties play an important role in linking other organisations and facilitating exchange of information and knowledge across a network. Who then are the main brokers in the network of the 53 selected projects and how 'hierarchical' is the network? We assess this by using Freeman's degree of centralisation once more.

Table 7. Descriptive statistics degree centrality

Mean	29.46
Standard deviation	25.2
Minimum	1
Maximum	168

Table 7 presents some descriptive statistics of the degree of centrality in the network of the selected sample of projects. On average, organisations have a degree of centrality of 29. We see that the range of centrality is high, though, with a maximum degree of 168 and a minimum of 1.[189] Our results[190] indicate that the University of Ljubljana (organisation no. 30), the National Institute of Public Health (NIPH) in the Czech Republic (organisation no. 10), the National Public Health Institute in Finland (organisation no. 63), Direcção–Geral da Saúde (131) and the Scientific Institute of Public Health in Belgium (40) are the most 'central' or 'influential' in the network of selected projects (centrality degrees of 168, 144 and 141, respectively). Inspection of the representative sample of projects shows that these organisations are members in projects consisting of a large number of partners, many of which are in turn members of other projects. At the same time, these organisations operate in different strands (Table 8). In other words, they link organisations across strands as well. Out of these five organisations three are national institutes of health, a fourth is a ministry. In other words they are central organisations. This may explain their frequent involvement and in particular their involvement across strands.

[189] The standard deviation also indicates that there is a lot of variability. One can examine whether the variability is high or low relative to the typical scores by calculating the coefficient of variation (standard deviation divided by mean, times 100). The current value is 86. Clearly, the population is heterogeneous in structural positions.

[190] We have not shown the list of 491 organisations here. However, it is available upon request.

Table 8. Central organisations participate across different strands in the PHP

	Health Information	Health Threats	Health Determinants
10	3	2	3
30	2	1	3
63	1	2	2
131	0	2	2
40	2	3	1

Network centralisation = 31.34%

For the network as a whole, the degree of network centralisation is 31%.[191] This figure reflects that some organisations (30, 10, 63, etc.) are more central in the network (are linked to many organisations). However, most organisations have several ties. There are only a few organisations in the network that are linked to only a single other organisation. Therefore, the overall degree of concentration or centralisation in this network is not too high. That is, the network is not very 'hierarchical' in the sense that only a few organisations have all the connections while the remaining organisations are only linked to these specific organisations and hence are dependent on these broker organisations so as to reach other organisations.

Table 9. Descriptive statistics betweenness centrality[192]

Mean	0.25
Standard deviation	0.93
Minimum	0
Maximum	10.73

Note: numbers are normalised.

We further support our finding that the network is not hierarchical by looking at *betweenness centrality*. Betweenness centrality views an actor as being in a favoured position to the extent that the actor is on a path between other pairs of actors in the network. The actor between has power to either conduct or obstruct interaction or exchange. Table 9 presents descriptive statistics of betweenness centrality in the network. We find that the range of betweenness centrality is also high, with a maximum normalised degree of 10.73 and a minimum of 0.[193] Table A2 (at the end of this Appendix) indicates that the University of Ljubljana (organisation no. 30) and the National Institute of Public Health (NIPH) in the Czech Republic (organisation no. 10) are also the most 'central' or 'influential' in the network of selected projects in terms of betweenness centrality (10.73 and 7.60, respectively). For the network as a whole, the Freeman betweenness centralisation index is 10.51%. This indicates that there is not a lot of 'power' in the network. Individual organisations cannot really

[191] As mentioned before, this is the variance as a percentage of the perfect star network.

[192] Betweenness is a centrality measure of a vertex within a graph. Vertices that occur on many shortest paths between other vertices have higher betweenness than those that do not (Wikipedia, Available at: http://en.wikipedia.org/wiki/Betweenness).

[193] The actual betweenness centrality are 22468 and 0, respectively.

obstruct interactions and dissemination of information between other organisations. Organisations in the network can reach other organisations by alternative paths (in max. four steps).

So what can we conclude about the possibilities for dissemination of knowledge and information in this network? In summary, the network of organisations in the selected PHP projects is characterised by

- A number of broker organisations with links to a great deal of other organisations
- Co–operation across the entire PHP, both within and across strands
- A lack of power of individual organisations to obstruct interaction and exchange of knowledge and information.

Within the 53 selected projects there are (only) six isolated networks (two in health information and four in health determinants) and two isolated organisations (Alliance House and COI). We conclude that this network is suited for PHP and EU–wide dissemination of public health related information. Whether or how effectively this is happening we cannot assess from this statistical analysis.

Table A1. Binary and symmetric matrix of linkages – countries

		1 A	2 B	3 B	4 C	5 C	6 D	7 E	8 F	9 F	10 G	11 G	12 H	13 I	14 I	15 I	16 L	17 L	18 L	19 M	20 T	21 N	22 P	23 P	24 R	25 S	26 S	27 S	28 T	29 S	30 U
1	Austria	0	1	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	1
2	Belgium	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Bulgaria	0	1	1	0	0	1	0	1	0	1	1	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0
4	Cyprus	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5	Czech Republic	0	1	0	0	0	1	0	1	1	1	1	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	1
6	Denmark	1	1	1	0	1	1	0	1	1	1	1	1	0	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1
7	Estonia	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0	1	1
8	Finland	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1
9	France	0	1	0	0	1	1	0	1	1	1	1	1	0	1	1	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1
10	Germany	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Greece	1	1	1	1	1	1	0	1	1	1	1	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	1	0	0	1
12	Hungary	0	1	0	0	0	1	0	1	1	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	1
13	Iceland	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
14	Ireland	0	1	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
15	Italy	0	1	0	0	0	1	0	1	1	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1
16	Latvia	0	1	1	0	1	0	1	1	0	1	1	1	0	0	0	0	1	0	0	1	1	1	0	1	1	1	0	0	0	1
17	Lithuania	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
18	Luxembourg	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19	Malta	0	1	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20	The Netherlands	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1
21	Norway	0	1	0	0	0	1	1	1	0	1	1	0	1	0	0	1	0	0	0	1	0	1	1	0	0	0	0	0	1	1
22	Poland	0	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	1	1	0	1	0	0	1
23	Portugal	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
24	Romania	0	1	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0
25	Slovak Republic	1	1	0	0	1	1	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1
26	Slovenia	1	1	0	0	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
27	Spain	1	1	0	0	0	1	0	1	1	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
28	Turkey	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
29	Sweden	1	1	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
30	UK	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1

Table A2. Betweenness centrality

Organisation	Betweenness	Betweenness (normalised)
30	22467.652	10.734
10	15895.864	7.595
269	10493.991	5.014
40	10330.972	4.936
125	10028.434	4.791
46	9852.366	4.707
63	9501.335	4.539
86	9091.331	4.344
131	8170.044	3.903
52	7137.931	3.410
6	6818.946	3.258
250	6516.128	3.113
12	6118.081	2.923
105	5225.184	2.496
214	4860.200	2.322
25	4264.877	2.038
1	3961.860	1.893
331	3957.034	1.891
3	3374.271	1.612
286	3183.134	1.521
218	3103.458	1.483
53	3036.292	1.451
121	3003.643	1.435
11	2927.082	1.398
181	2924.819	1.397
68	2849.341	1.361
….		

This is a shortened version, displaying only the highest degrees. The full list of all 491 organisations and their degrees of betweenness centrality is available upon request.

Appendix 5: European science network

In this appendix we provide a graphical representation of science networks to illustrate that co–operation or networking is seen to be path dependent (see section 3.5.3). People co–operate more (easily) with persons they already know or have worked with before. This principle is described by Wagner and Leydesdorff (2003)[194] for global science networks.

Figure 1 opposite shows a science network (based on co–authoring) of the EU and new Member States in 2000. The figure indicates that especially the 'old' Member States are mostly interconnected. Cyprus and Malta are rather to the periphery of the network. Figure 2 shows the network in 1990. Wagner and Leydesdorff (2003) conclude that overall regional science networks have expanded (more players involved) and have become more interconnected (more linkages). Moreover, the growth of linkages has been largest between countries that already had a robust network in 1990.

[194] Wagner, C. and Leydesdorff, L. (2003). *Mapping global science using international co–authorships: A comparison of* 1990 and 2000. In: J. Guohua, R. Rousseau, W. Yishan (Eds), Proceedings of the 9th International Conference on Scientometrics and Informetrics. Dalian: Dalian University of Technology Press: 330–340.

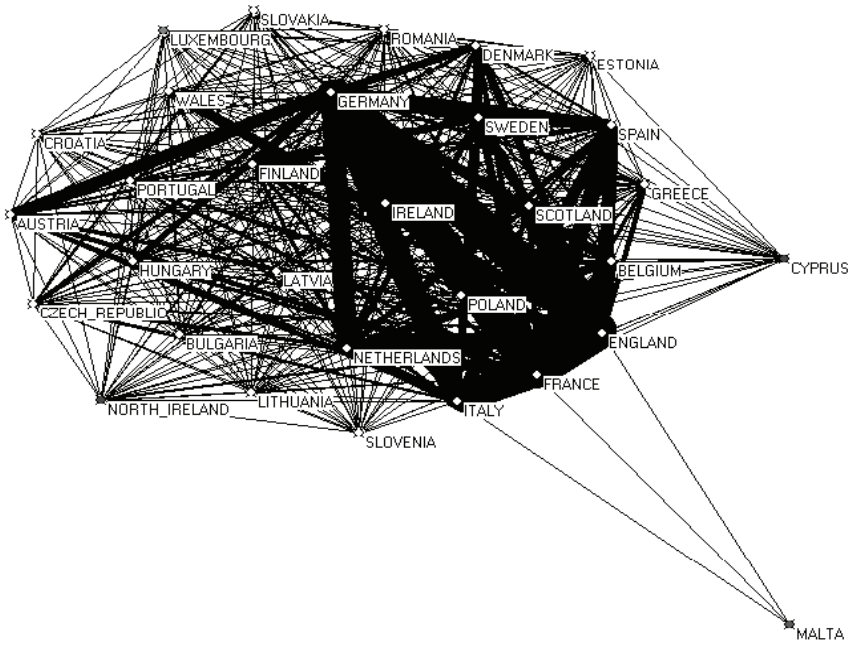


Figure 1. Network of 31 members of the European Union and Accession Countries co–authoring in 2000

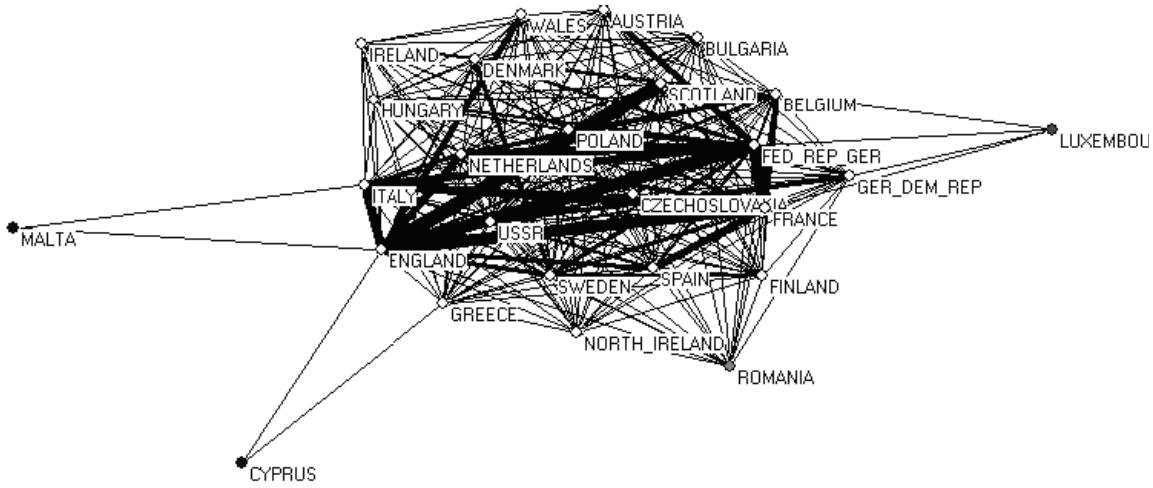


Figure 2. Network of European Union, future Accession Countries, and the USSR co–authoring in 1990
Source: Wagner and Leydesdorff, 2003

Appendix 6: Efficiency of processes

In this appendix we provide details on success rates and reasons for rejections, and outputs and outcomes of the PHP (see also section 3.4.3).

Success rates

Success rates vary over the years 2004 and 2005 and between strands of the PHP (see Table 1). The overall proposal success rate decreased from 32.5% in 2004 to 25.8% in 2005. At the same time, the overall number of proposals in 2005 was higher than the overall number of proposals in 2004, 235 against 218. It is important to take into account the relation between increased numbers of proposals and decreased success rate. Had the number of funded projects remained constant over the years, the success rate would come down to 28% by the increased number of proposals alone – the remaining reduction in success rates can be attributed by a fall in funded projects from 71 to 61. This depends on how reserved proposals are treated. Success rates also vary between the three strands of the PHP. For the two–year period studied, the success rate for Health Determinants (HD) is 25.4%, the rate for Health Information (HI) is 27.4%, and the rate for Health Threats (HT) is 43.9%. The number of proposals is negatively related to the success rate. For instance HD has a low success rate and the highest number of proposals. HT has a low number of proposals and a high success rate. Again, it is important to assess whether the difference in success rates reflects differences on the applicant side (in terms of being able to submit good proposals and/or needing EC–level support for financial, profile or networking reasons) or on the funding side (high success rate may come from having too few good proposals as probably is the case in the HT strand – low success rates may come from earlier overspending or changes in Programme emphasis that were not communicated adequately to the community of potential applicants). The subsequent analysis looks deeper into this issue: it considers whether there were systematic correlations between proposal characteristics and successful projects (e.g. level and proportion of funding) and it examines the reasons for rejection to expose any underlying mismatch between applicants' and evaluators' expectations.

These observations lead to some questions on *efficiency*:[195]

- How is the budget divided between strands of the PHP?
- Is this allocation of budget pre–determined per annual programming cycle or per call?

[195] We aim to answer these questions by looking at correlations between various modality and selection process indicators.

- Does the allocation and setting of co–funding affect the quality of the projects?
- Does this allocation indicate an efficient use of resources (i.e. could you get better proposals funded through different allocations)?

In short, how are success rates related to levels of funding and types/modalities of co–funding and how do these modalities affect the projects?

Table 1: Success rates

		HD	HI	HT	Total
2004 (218 proposals)	Accepted	24	26	17	67
	Rejected	62	58	19	139
	Reserve	3	9	0	12
2005 (234 proposals)	Accepted	25	19	12	56
	Rejected	82	61	18	161
	Reserve	12	5	0	17
Total		208	178	66	

Success Rates (excluding reserve proposals)	
Overall	29.1%
2004	32.5%
2005	25.8%
HD	25.4%
HI	27.4%
HT	43.9%

Reasons for rejection

We undertook a detailed analysis of the reasons given in the evaluators' reports on why projects were rejected for the years of 2004 and 2005. We particularly focused on the reasons listed in the 'Evaluator's Conclusion', rather than the scoring on the basis quality criteria. We then developed categories of reasons, given in the conclusions that logically show some overlap with some of the European Commission's quality criteria. We identified the following categories:

- Budget
- Cost–effectiveness
- Co–funding
- Geographical coverage (enough EU Member States covered)
- Overlap (with prior research or ongoing research)
- Scope of topic (too narrow or too wide for the research)

- Previous experience (no expertise or experience in the research group to successfully undertake the research and no connection to previous models and programmes)
- Added value (adds to EU research agenda)
- Planning (a wide category consisting of methodology, project plan/management, personnel capacity, and detail provided in proposal)
- Dissemination
- General quality (e.g. bad writing).

We then coded all the rejected proposals according to these categories. We performed a limited cluster analysis to see if certain groupings of reasons were associated with certain strands of the PHP or with proposals with a certain range of scores. Table 2 gives the results of the analysis. The weight of reasons is given as a percentage of the total reasons identified. It is obvious that one proposal can have more than one reason for rejection. The average number of reason for rejection per proposal across the strands and 2004 and 2005 is 2.33.

Table 2: Reasons rejected

Reasons Rejected	HI 2004	HI 2005	Total HI	Weight of reason	HD 2004	HD 2005	Total HD	Weight of reason	HT 2004	HT 2005	Total HT	Weight of reason	Total 2004	Total 2005	Total	Weight of reason
# of projects	58	57	115		62	82	144		19	18	37		138	215	353	
Budget	1	19	20	8%	6	21	27	8%	0	7	7	8%	25	48	73	9%
Cost/effectiveness	11	1	12	5%	8	1	9	3%	5	0	5	6%	14	13	27	3%
Co-funding	0	2	2	1%	1	1	2	1%	1	1	2	2%	4	4	8	1%
Geographical coverage	17	23	40	15%	30	33	63	19%	6	7	13	15%	59	80	139	17%
Overlap	11	11	22	8%	6	9	15	4%	4	5	9	10%	21	36	57	7%
Scope of topic	29	20	49	19%	16	19	35	10%	3	10	13	15%	39	78	117	14%
Previous experience	7	10	17	7%	12	11	23	7%	3	2	5	6%	25	30	55	7%
Added Value	9	12	21	8%	24	15	39	12%	5	5	10	11%	41	41	82	10%
Planning	23	24	47	18%	26	52	78	23%	8	5	13	15%	58	104	162	20%
Dissemination	8	6	14	5%	9	5	14	4%	0	0	0	0%	15	19	34	4%
Partnerships	8	8	16	6%	14	13	27	8%	5	2	7	8%	27	31	58	7%
General quality	1	0	1	0%	3	1	4	1%	3	1	4	5%	6	3	9	1%
Total	125	136	261	100%	155	181	336	100%	43	45	88	100%	334	487	821	100%
Average # of reasons per proposal	2.16	2.39	2.27		2.50	2.21	2.33		2.26	2.50	2.38		2.42	2.27	2.33	

The results of the analysis show that there is limited variation in the weight of reasons given over time and between strands of the PHP. Overall, 'planning' and 'geographical coverage' are the principal reasons for rejection. 'General quality', 'cost–effectiveness', and 'co–funding' are the least cited reasons for rejection across strands over time. Remarkably, 'dissemination' despite its importance as an output measurement is not often cited as a reason for rejection. These are general observations. Table 2 also shows some differences between strands. For instance, the absence of dissemination reasons in the HT strand seems noteworthy. There are also other differences such as the relative weight of 'planning' and 'scope' across strands of the Programme (e.g. 'planning' is a less important reason for rejection in the HT strand than in the other strand; and 'scope' is the most important reason for rejection in the HI strand), which might indicate different nuances in evaluation (views of different evaluators or even different foci in evaluation) or differences in quality between strands. Moreover, the cluster analysis did not show any significant difference in reasons given between certain bands of scores, e.g. a project with a quality score of 30 in general did not significantly show different patterns of reasons for rejection than a project with a quality score of 60. At this point in time, we have not undertaken a covariance analysis to determine whether patterns exist between reasons given by the evaluators (e.g. poor planning is associated with co–funding). However, given the apparent random distribution of the reasons seen in the coding, it is questionable whether such an analysis would yield significant and usable results.

We subsequently looked more closely at the overall (across strands and years) weighting of reasons. Of these, 'planning' (a wide category), 'geographical coverage' and 'scope' were the most important reasons given (see Table 2). Furthermore, we decided to put these categories in three broader categories:

- finance, consisting of 'budget', 'cost–effectiveness' and 'co–funding';
- general EC requirements, consisting of 'geographical coverage', 'overlap', 'scope of topic', 'previous experience' and 'added value'; and
- general quality of the proposal, consisting of 'planning', 'partnership', 'dissemination' and 'general quality'.

We found that 13% of the weighted reasons related to 'finance', 55% to 'general EC requirements', and 32% to particular quality issues. This analysis indicates that the overall quality of the proposals suffers mainly because proposals are insufficiently aware of the general EC requirements for participating in the PHP or the background and the ongoing work of the Programme. 'Planning' and 'geographical coverage' as mentioned earlier are the main reasons for rejection in this category. The questions arising from this observation are whether proposal leaders pay sufficient attention to the EU requirements or whether there are issues relating to how the Commission communicates its requirements to potential proposal leaders. This question will be addressed in the interviews.

Modalities of support

In general, the PHP provides several different types of support, attuned to the specifics of the different Action Lines, the costs of the necessary activities and the availability (and focus) of additional support. To assess the likely impacts of the support provided, it is necessary to take account of:

- Different objectives – for example: support for networking and recognition/dissemination of good practice; co–ordination of response to common problems; and improving the state of knowledge

- The way support interacts with risk and uncertainty
- Outcome measures likely to reflect (and possibly affect) modality choices
- 'Design features' of the support allocation mechanisms and the support itself
- The relations between design features and outcome measures.

In the following, we frame these issues in terms of the modalities of support.

With regard to *objectives*, the focus to support *networking* is more obviously built on existing lines of activity than the others – despite this, it is generally regarded as appropriate to provide support to individual (consortia of) participants, and to provide support that is closely hypothecated to the networking activity in question.

By contrast, the focus for *co–ordination* of responses is more explicitly joint – provision of support to individual institutions may not produce sufficient 'leverage' to make the joint activity integral to the health response (as opposed to an incremental extra added at the end).

Finally, for *advancing the state of knowledge*, the support can differentially affect the generation of new knowledge ('variation' or innovation), the validation or assessment of the knowledge ('selection' or scholarship) and/or the promulgation of knowledge (publication, dissemination, teaching and application). In this case, it is necessary to consider whether the flexibility in the support (e.g. the balance between the EC and proposal leaders in defining research objectives, methods, etc.), the specification of mandated outputs and activities (e.g. deliverables, publications, etc.) and the time–scale are appropriate both to the objective of support and the external context within which the activities are to be conducted.

Issues related to modalities of support

Uncertainty plays a critical role in support modalities in two ways. First, any research endeavour is uncertain – it is not known in advance what the appropriate response to a public health threat is, what forms of intervention are most effective, or even how the various stakeholders will respond. In some cases, a portfolio of different approaches must be tried, while in others a more concentrated effort is needed to produce a widely accepted and consistently applied response as quickly and efficiently as possible. This has implications for both the structure of the Programme (how the 'real options' entailed by the supported activity are evaluated and aggregated) and for individual project support (as discussed below). Second, both programmes and projects unfold over time, and the modality of support determines the extent to which the activity can respond appropriately to shocks, surprises and the 'temporal resolution of uncertainty.' More specifically, if in the course of a project it turns out that the avenue being pursued is unlikely to yield results, is there sufficient flexibility to redirect or stop the effort? Looking across projects, is there any scope for readjusting the support portfolio? Considering the relation of the PHP to activities elsewhere in the Commission and at Member State level, is there any provision for responding to particular successes or difficulties in attaining broader objectives?

The 'outcome measures' are based around the *ways SANCO support can influence public health practice*. As with any central support programme, the evaluation issues can be divided into conceptually distinct categories. These relate first to how the Programme works: relationship with other support activities; engagement with the public health community; impact of programme participation. Second, they relate to the impacts of the Programme; which issues are addressed; how are they framed; how efficiently and effectively are they pursued (and solutions identified); and how do the results shape practice and future progress? Throughout, the key insight is that material and human support are linked to each other, and that – perhaps more in public health than elsewhere – money is more an enabler than a direct incentive.

In relation to *other sources of support*, it is always necessary to consider – but often hard to verify – additionality (i.e. the degree to which SANCO support adds to rather than substitutes for other forms of support). Direct evidence of crowding out can only be obtained in special cases (e.g. where there is a longitudinal record to support a causal inference) and subject to interpretation – for instance, if SANCO support appears to have displaced Member State support, it may be that the activity had moved into a phase where the European added value by co–working or dissemination had become the most important output. In this case, a 'failure' of additionality may be justified in terms of overall contribution to Programme objectives. The necessary analysis must be based on the degree to which the projects broadened the participation or focus in ongoing activity and the extent to which resources thus freed at the Member State were redirected to new activities likely in future to reinforce these gains. This 'opportunity cost' analysis is beyond our current scope, but evidence that such matters were considered in evaluation is not.

In terms of *engagement*, the central question is whether the projects will attract those most likely to benefit from the support and/or those most likely to help meet Programme goals. This is being assessed through (inter alia) a network analysis and comparative bibliometric analysis of Programme participants and (where relevant) outputs (as described elsewhere). The connection with modalities is one of (adverse or positive) selection. Adverse selection refers to the possibility that those attracted to the Programme may be precisely those incapable of attracting support elsewhere. Sometimes this is beneficial – for instance where the proposal specifies a particular output that is more closely aligned to the PHP than to others – but this is by no means always the case. Positive selection refers to the 'focal' or awareness raising aspect of the PHP – for instance where support attracts people who would otherwise have not engaged as closely. The direct connection with modality comes via the level of support (in the sense that minimal support may differentially attract projects with little chance of success or may be seen as a 'research–bis' way of topping up prior funding to complete existing projects).

The impact of Programme participation also refers to *incentive effects*. The supported activity forms part – in most cases – of broader public health activities of those involved and may rebalance their efforts towards the project. Support that is appropriate in scale and administrative requirements is less likely to distort incentives – but should not be relaxed altogether. Clear structures and serious attention to dissemination, use of plans and activities, intellectual property rights arrangements and other 'design features' can all have profound impacts on project efficiency.

In terms of impacts, the specificity and nature of the Call (e.g. the extent to which the public health community individually and collectively influences the research and activity agendas) is an important aspect of avoiding gaps, duplications, and conflicts and of ensuring a flexible response to emerging knowledge and the lessons of experience.

Summarising, the important aspects of design of the Programme include the specification of the topic; the selection mechanisms (e.g. whether technical and financial aspects are evaluated separately; how they are weighted; and whether bidders know and respond to the weighting scheme); the extent and variability of both funding levels and co–funding proportions; the linkage between resource allocations and contracted activities; and the arrangements for intellectual property, dissemination and exploitation. The main distinctions are between: responsive and directive funding; institutional, deliverable–based or activity–based funding; and standard–form versus negotiated contractual vehicles.

Analysis of outputs and outcomes of selected projects

We undertook an analysis of outputs and outcomes of the selected projects during 2003–2005 (n=53). Data was only available for 52 of the projects. We based our analysis exclusively on

outputs listed. The study team coded the outputs and outcomes of projects according to categories that we identified when examining the project fiches. The categories were:

- *European comparisons*: This category includes outputs that aim to build comparisons between different approaches or interventions in the EU.
- *Capacity–building*: This category refers to activities aimed at public health or other capacity in specific countries.
- *Network*: This category refers to outputs that aim to build European networks to facilitate an intervention or address or research a specific public health issue.
- *Database*: This output category consists of the building of public health databases.
- *Guidelines/Indicators*: This category lists outputs that aim to develop indicators to measure public health development or draft guidelines that help organisations in addressing public health issues.
- *Dissemination*: This category refers to explicit efforts at dissemination specifically listed as outputs in the project fiches.
- *Prevention*: This category lists outputs that are geared to preventing certain type of behaviours (e.g. alcohol consumption or smoking) or public health outcomes.
- *Recommendations*: This category encompasses the making of recommendations specifically listed as an output in the project fiches.
- *Training*: This category consists of outputs linked to training of officials and researchers and training events.
- *Secretariat*: This category relates to outputs aimed at setting up a secretariat for particular public health issues or activities.
- *Reporting*: This category lists outputs aimed specifically at reporting of findings, research, training events, or other public health related activities.
- *Reporting system*: This category is similar to the previous one, but relates specifically to a reporting system being set up, i.e. a prolonged and systematic reporting of public health activities.
- *Monitoring*: This category refers to outputs related to monitoring activities of ongoing public health indicators or activities.

In terms of outcomes, the main finding was that the project fiches did not contain much specific information about outcomes (e.g. long–term enhancement of public health; or targets aimed at the improvement of public health). As a result, we could not systematically include information on outcomes. This observation raises some questions: whether projects are connected to the long–term outcomes of the PHP; and whether the PHP should develop or clarify specific long–term outcomes.

Projects mostly have more than one project output. The total number of outputs coded for 52 projects was 137 (see Table 3).

Table 3: An analysis of outputs of selected PHP projects in 2003, 2004, 2005 broken down by strand (HI, HD, HT)

		European comparison	Capacity-building	Network	Database	Guidelines/indicators	Dissemination	Prevention	Recommendations	Training	Secretariat	Reporting	Reporting system	Monitoring	Total outputs
Totals	52 projects	10	4	17	14	13	34	4	6	3	2	22	4	4	137
Total HI	20 projects	4	0	4	6	4	12	0	3	1	2	7	2	2	47
Total HT	9 projects	0	1	1	3	4	4	0	1	0	0	5	2	1	22
Total HD	23 projects	6	3	12	5	5	17	3	2	2	0	10	0	1	66
% of total outputs		7%	3%	12%	10%	9%	25%	3%	4%	2%	1%	16%	3%	3%	
% HI of total		3%	0%	3%	4%	3%	9%	0%	2%	1%	1%	5%	1%	1%	
% HT of total		0%	1%	1%	2%	3%	3%	0%	1%	0%	0%	4%	1%	1%	
% HD of total		4%	2%	9%	4%	4%	12%	2%	1%	1%	0%	7%	0%	1%	
% of total HI outputs (47)		9%	0%	9%	13%	9%	26%	0%	6%	2%	4%	15%	4%	4%	
% of total HT outputs (22)		0%	5%	5%	14%	18%	18%	0%	5%	0%	0%	23%	9%	5%	
% of total HD outputs (66)		9%	5%	18%	8%	8%	26%	5%	3%	3%	0%	15%	0%	2%	

This sample serves as an indication for the type of outputs in the PHP. We provide an overview of the general findings.

About 25% of outputs are related to dissemination. In a sense, this observation is not surprising as dissemination is a major priority of the PHP. Dissemination mostly relates to how data, information, and research are distributed in the public health community through conferences, web portals, publications, etc. Our sample showed that wider dissemination to the public was less of a priority in the overall outputs.

Other frequently occurring outputs are the establishment of networks, the development of databases, and 'reporting' activities, with respectively 12%, 10% and 16% of outputs. 'European comparisons' was 7% of total outputs and the development of indicators 9% of outputs. No other category scored higher than 4% of total outputs. The six main output categories listed represent 79% of outputs of the selected projects.

Less frequently occurring outputs are, for instance, 'capacity–building' (3% of outputs), 'training' (2% of outputs) and 'prevention campaigns' (3% of outputs). Although we are only looking at a sample, we found it slightly surprising that outputs that were explicitly aimed at these activities had a limited weight in the total number of outputs, about 8% combined of the total outputs.

There seems to be little concentration of outputs in specific strands of the PHP. When one looks at outputs in the different strands of the PHP, there is little variance between the weight of outputs in specific strands. Perhaps, the only exception is that about 75% of networking–building outputs occur in the Health Determinants strand. Otherwise, the distribution is more even.

Equally, there is generally little variance in the occurrence of outputs between years. There are some notable exceptions. For instance, the 'reporting system' output only occurs in the 2003 sample and then is absent in 2003 and 2005 samples. 'European comparisons' occurs in 2003 and 2004, but is less visible (absent) in the sample for 2005. These differences could be related to changing foci of the PHP from year to year, to changing ways of describing outputs year to year, or the limits of coding such information.

Appendix 7: Use of financial resources

In this appendix we provide details on at what cost the objectives of the PHP are achieved. The analysis is (therefore) concerned with an examination of financial resources in a selected sample of projects for the years 2003–2005 (n=53), as described in the Inception report of April 2006. The necessary information was obtained from the CIRCA database for projects. In the following sections, we address the following major aspects of efficiency issues:

- Budget per project and variance
- Type of costs, including ratio between cost of administration and cost of actual work on public health
- % EC funding per strand
- Source and amount of co–funding.

Budget per project and variance

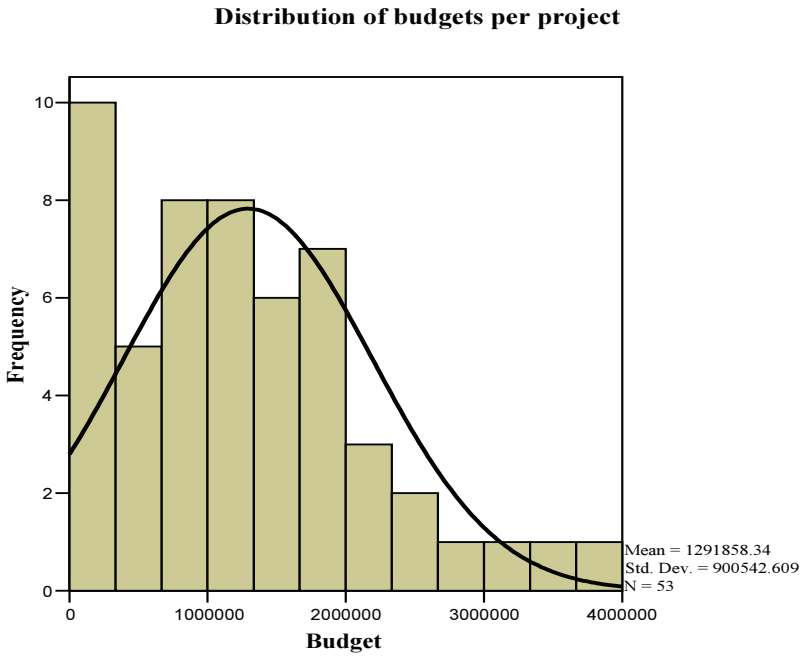


Figure 1. Overview of budgets (in Euros) for 53 selected projects

Figure 1 gives a graphical representation of the distribution of the budgets per project of the selected sample.[196] We point out that these are the budgets as published by the Commission on

[196] The distribution of the budgets of the 53 selected projects across different budget sizes is representative for the distribution of the entire sample of approved PHP projects.

its website.[197] Figure 1 shows that the budgets do not follow a normal distribution. Some exceed €3 million, while a disproportional share is below €300,000.[198] The variance in budgets is also illustrated by descriptive statistics in Table 1. The data show a high standard deviation, which is also reflected by the large difference between minimum and maximum budget value.

Table 1. Descriptive statistics

	Euro
Mean budget	1,097,523
Standard deviation	796,365
Minimum budget	144,380
Maximum budget	4,153,716

If we look at the descriptive statistics *by year* (Table 2 below), the data show that there are no significant differences in the budgets of the selected projects across years. The mean budgets of the selected projects are comparable across all three years. Moreover, the three highest budgets (maximum budget) and the three lowest budgets (minimum budget) are distributed across all three years.

Table 2. Descriptive statistics by year

	2003 (n=23)	2004 (n=20)	2005 (n=10)
Mean budget	1,139,808	1,043,576	1,108,164
Standard deviation	736,495	912,846	753,658
Minimum budget	144,380	150,784	247,865
Maximum budget	3,158,704	4,153,716	2,517,504

Table 3 below presents the descriptive statistics *by strand*. The data suggest that there are differences in the budgets of selected projects across strands.[199] The highest budgets on average as in absolute terms (maximum budgets) are found in health determinants (strand 3), followed by health threats (strand 2). The mean budget as well as the maximum budget of the 53 selected projects is lowest in health information (strand 1), and the standard deviation is smaller than in the case of health threats and health determinants. These results suggest that the selected projects in health information are generally smaller in terms financial resources. This is illustrated graphically in Figure 2 below. The first panel of Figure 2 illustrates that many selected projects in health information (in fact more than 50%) are below €1 million. The opposite is true for the selected projects in strand 3, health determinants. The lower panel in Figure 2 shows that many selected projects in health determinants are substantially over €1 million. In fact, we find the two highest budgets in this strand (€4,153,716 and €3,158,704).

[197] http://ec.europa.eu/comm/health/ph_projects/project_en.htm

[198] With a minimum budget of €144,380 (see Table 2).

[199] The median would be a better descriptor for a non–normal distribution. The median seems to be the same (slightly below €1 million) for strands 1 and 2, slightly above for strand 3.

Table 3. Descriptive statistics by strand

	Health information (n=20)	Health threats (n=9)	Health determinants (n=24)
Mean budget	888,639	1,110,401	1,266,765
Standard deviation	443,322	681,234	1,020,867
Minimum budget	150,784	444,809	144,380
Maximum budget	1,871,147	2,255,995	4,153,716

These results indicate that the character of projects in the different strands may differ intrinsically, with projects in health information requiring less financial resources a priori, and projects in health determinants requiring more financial resources. Health threats projects assume an intermediate position. Another hypothesis is the bias in assuming that analysis requires less funding than action. However, the number of selected projects in this category is somewhat small to draw firm conclusions. In addition, the budgets probably are related to the methodology adopted in the projects (e.g. in the health information strand we encountered projects that entailed organisation of workshops/conferences. These activities are less costly than conducting surveys). In the health determinants strand, on the other hand, projects that received the largest budgets (at least €1 million) are often directly aimed at prevention and/or reduction of alcohol, smoking, drugs, AIDS and depression on a European level.

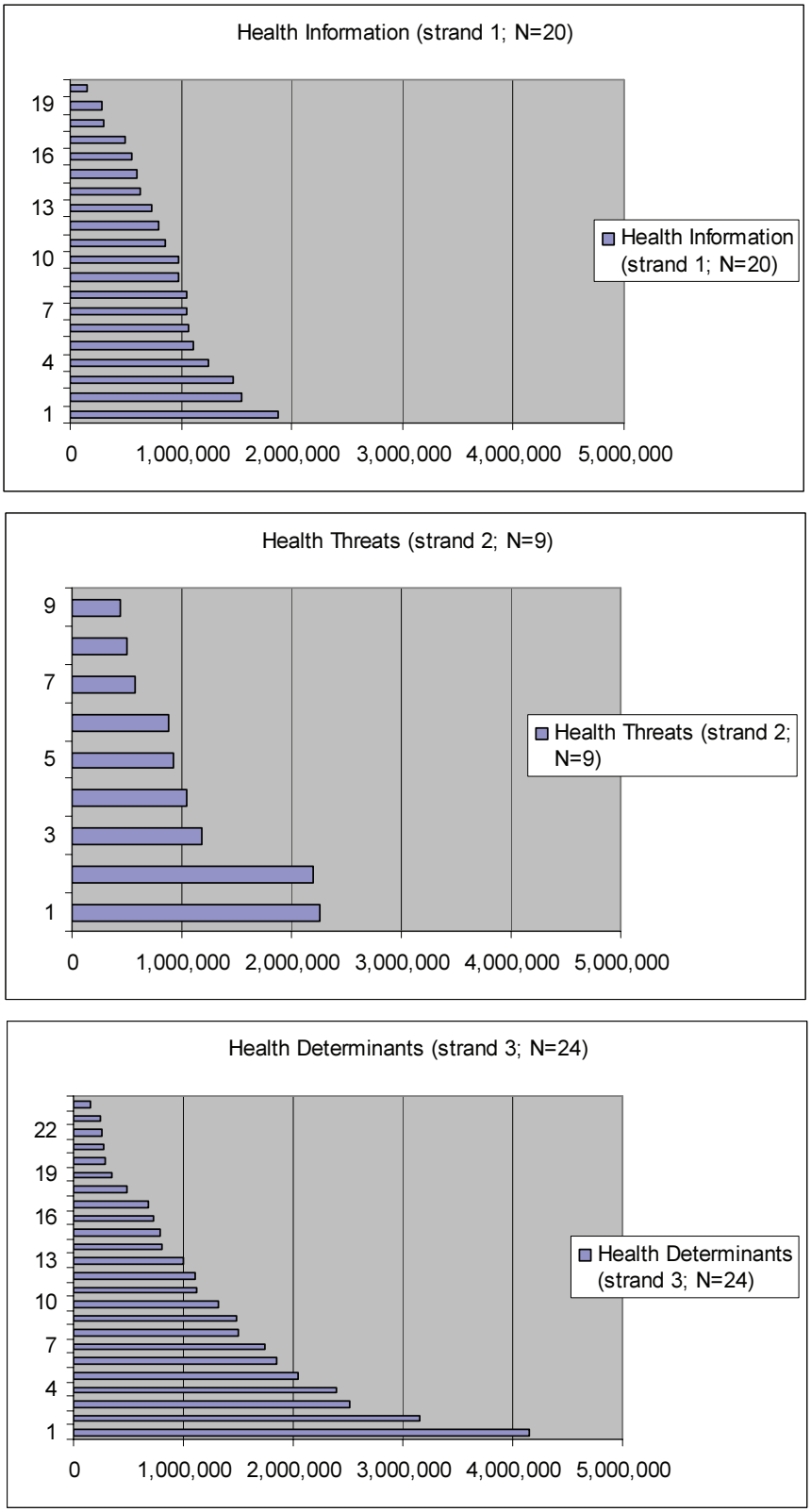


Figure 2. Budgets in selected projects by strand

Type of costs

The cost categories specified in the proposals vary somewhat across years. Hence we analyse the selected projects from each year separately.

Cost composition selected projects 2003 (n=23)

The cost categories specified in the proposals for 2003 are:

a) Direct eligible costs

- personnel costs (1)
- travel and subsistence costs (2)
- miscellaneous services (3)
- administration (4)
- reserve for unexpected costs. This was pre–specified by the Commission at maximum 5% of direct eligible costs (1+2+3+4).[200]

b) Indirect eligible costs (overhead). This was pre–specified by the Commission at maximum 7% of direct eligible costs (1+2+3+4).

Figure 3 presents the breakdown (in %) of the budgets according to these (sub)categories of cost. From Figure 3, it appears that personnel costs are the main cost element of the budgets. A smaller part of funding for the selected projects funded in 2003 is requested for travel and subsistence, and miscellaneous services. It seems that administration costs make up a negligible part of the total budgets, indicating that funding for direct eligible costs is spent first and foremost on activities related to public health.

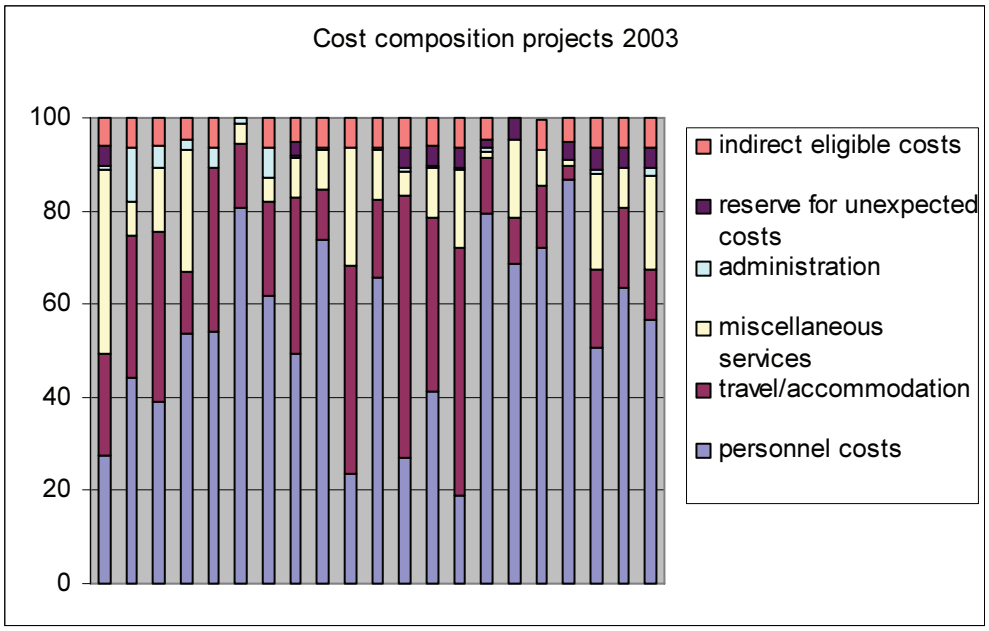


Figure 3. Breakdown of budgets in selected projects funded in 2003 according to cost categories

Figure 4 shows the cost composition of the selected 2003 projects ***by strand***. The figure suggests that for projects in strands 1 (health information; n=9) and 2 (health threats; n=5) personnel costs are the main element of the budget (taking up the largest surface [blue] across the selected projects) followed by travel and subsistence costs (burgundy/brown colour). As for strand 3 (health determinants; n=9), travel and subsistence and miscellaneous services appear to be also relatively important cost categories.

[200] This definition is used in the 2003 proposals (source: CIRCA database).

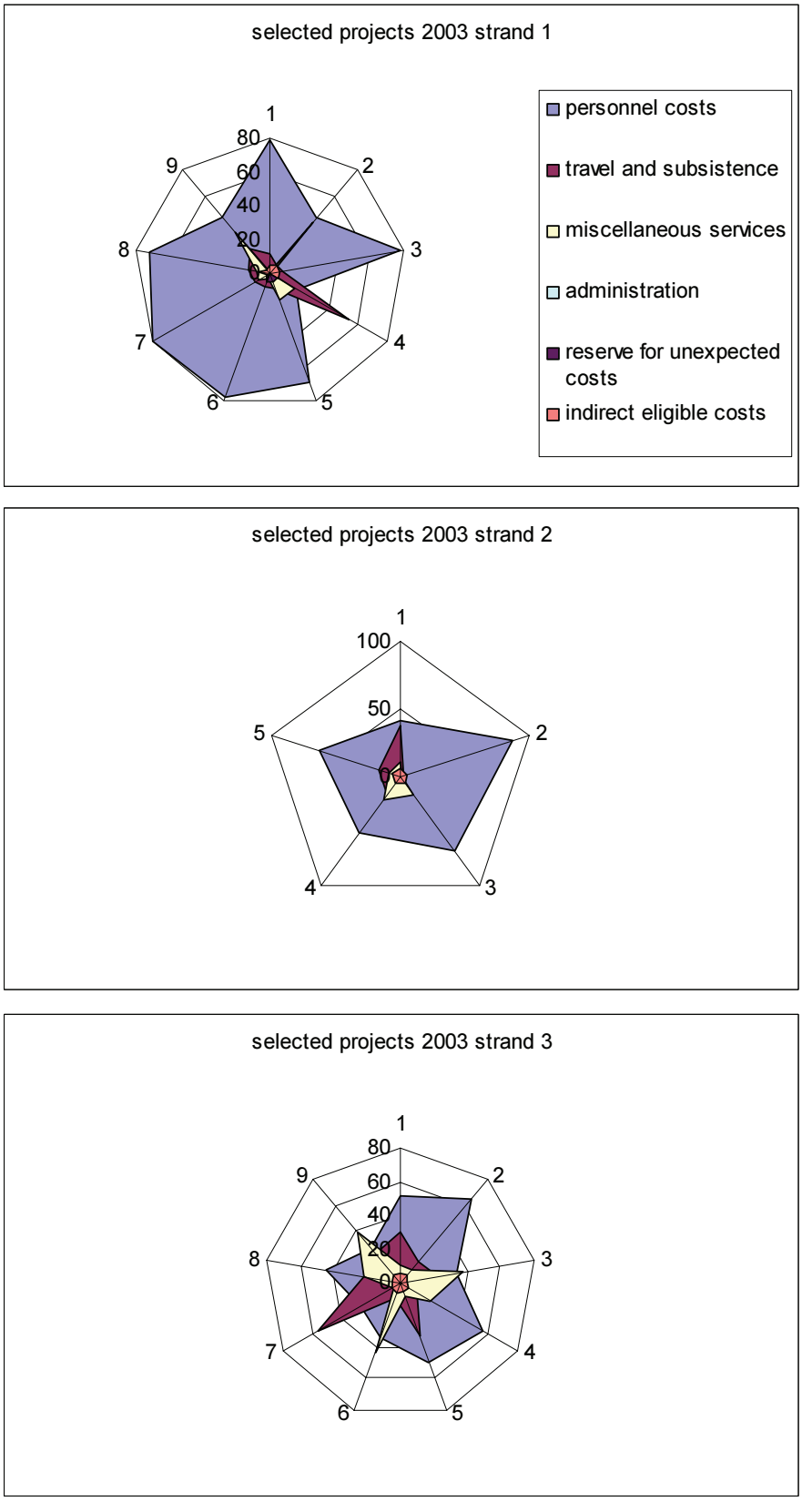


Figure 4. Breakdown of budgets in selected projects funded in 2003, by strand

Cost composition selected projects 2004 (n=20)

Cost categories in the 2004 projects are:

a) Direct eligible costs

- personnel costs (1)
- travel and subsistence costs (2)
- miscellaneous services, including subcontracting costs (3)
- administration (4)

b) Indirect eligible costs (overhead). This was pre–specified by the Commission at maximum 7% of direct eligible costs (1+2+3+4).[201]

Figure 5 presents the breakdown (in %) of the budgets according to these (sub)categories of cost.

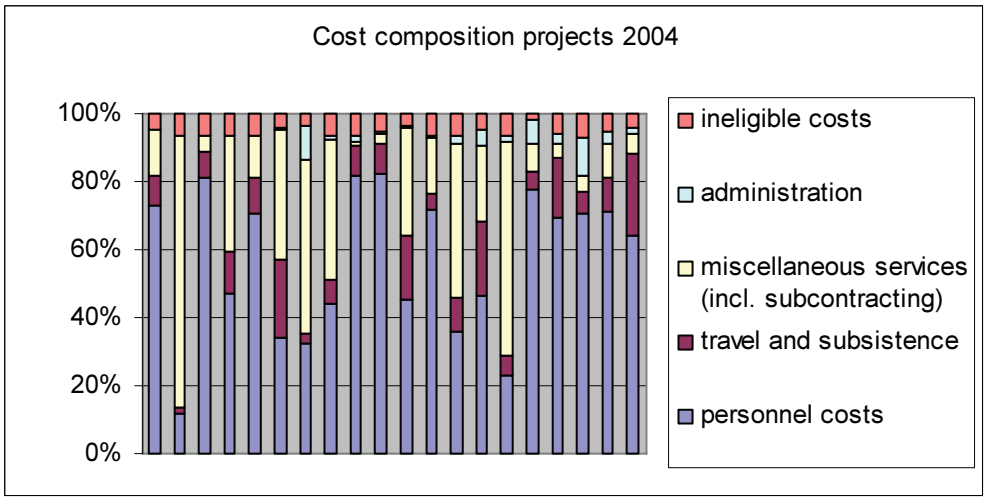
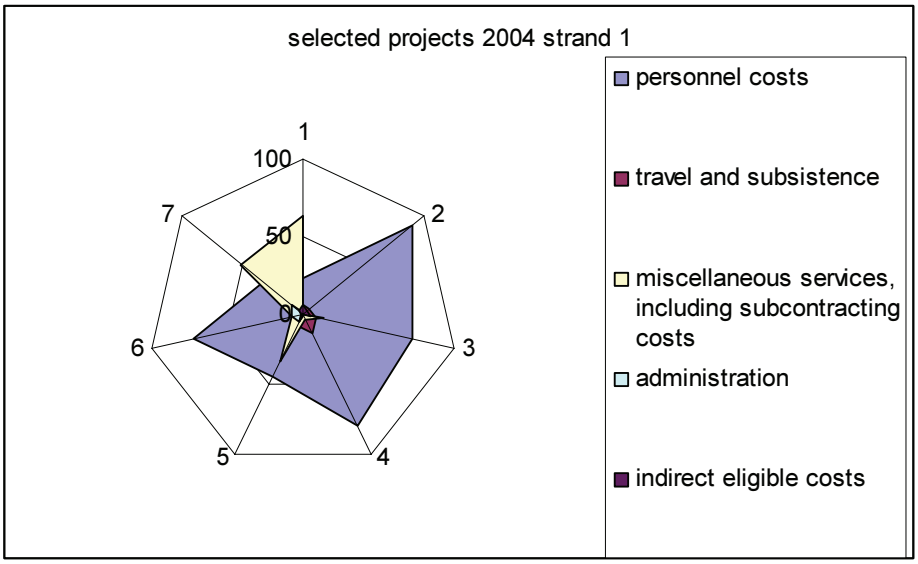


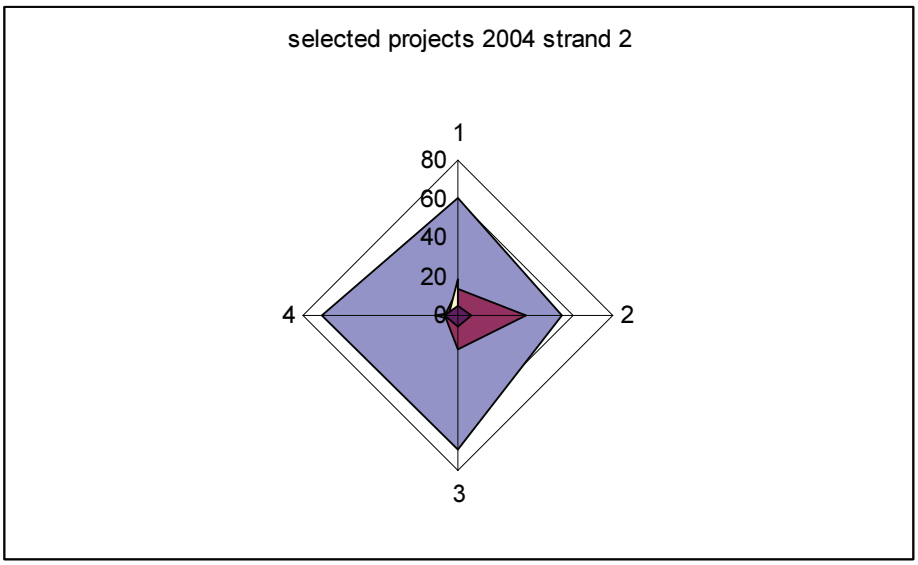
Figure 5. Breakdown of budgets in selected projects funded in 2004 according to cost categories

The sample of projects funded in 2004 show similarities in cost composition to the selected projects funded in 2003. This implies that personnel costs are the main cost element of the budgets. A smaller part of funding for the selected projects funded in 2004 is requested for travel and subsistence and miscellaneous services. It seems that administration costs make up a negligible part of the total budgets, indicating that funding for direct eligible costs is spent first and foremost on activities related to public health.

Figure 6 shows the cost composition of the selected 2004 projects ***by strand***. The figure suggests that in strand 3 (health determinants; n=9), and in particularly strand 2 (health threats; n=4), personnel costs are the main element of the budget (largest surface area across projects in Figure 6). As for strand 1 (health information; n=7), travel and subsistence and miscellaneous services are important cost categories in two projects.

[201] This definition is used in the 2004 proposals (source: CIRCA database).





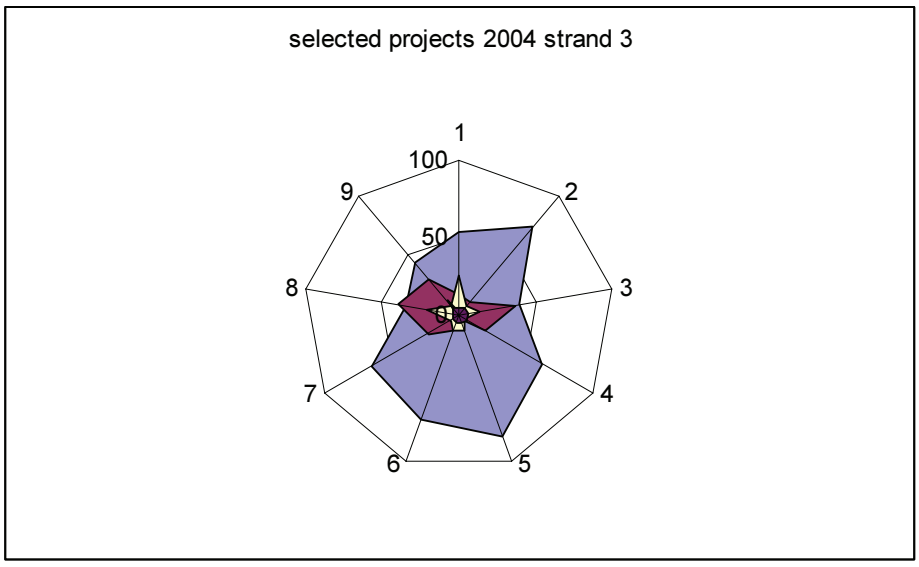


Figure 6. Breakdown of budgets in selected projects funded in 2004, by strand

Cost composition selected projects 2005 (n=10)

Cost categories in the 2005 projects are:

a) Direct eligible costs

- personnel costs (1)
- travel and subsistence costs (2)
- equipment (3)
- consumables and supplies directly linked to the project (4)
- subcontracting costs (5)
- other costs (6)

b) Indirect eligible costs (overhead). This was pre–specified by the Commission at maximum 7% of direct eligible costs (1+2+3+4+5+6).[202]

Figure 7 presents the breakdown (in %) of the budgets according to these (sub)categories of cost.

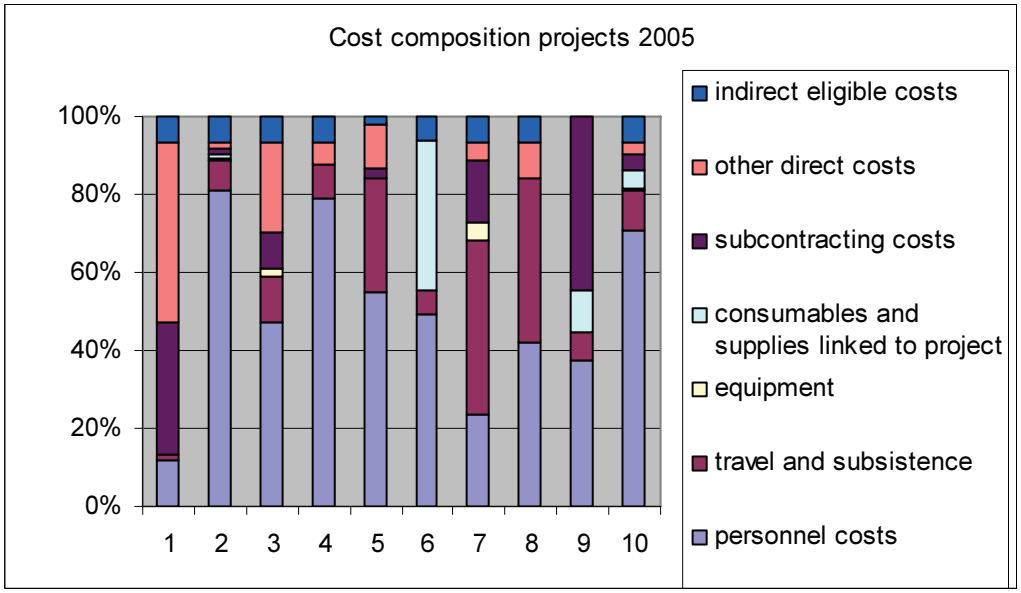


Figure 7. Breakdown of budgets in selected projects funded in 2005 according to cost categories

Figure 7 shows that personnel costs are the main cost element of the budgets of the selected projects funded in 2005 (largest surface area across projects). In two projects the main element of costs pertains to subcontracting. Figure 8 shows that these two projects belong to strand 3 (health determinants; n=6). 'Other' direct eligible costs have an important weight in the request for funding (orange surface colour in Figure 8). From figure 8 it appears that the respective projects belong to strand 1 (health information; n=4).

[202] This definition is used in the 2005 proposals (source: CIRCA database).

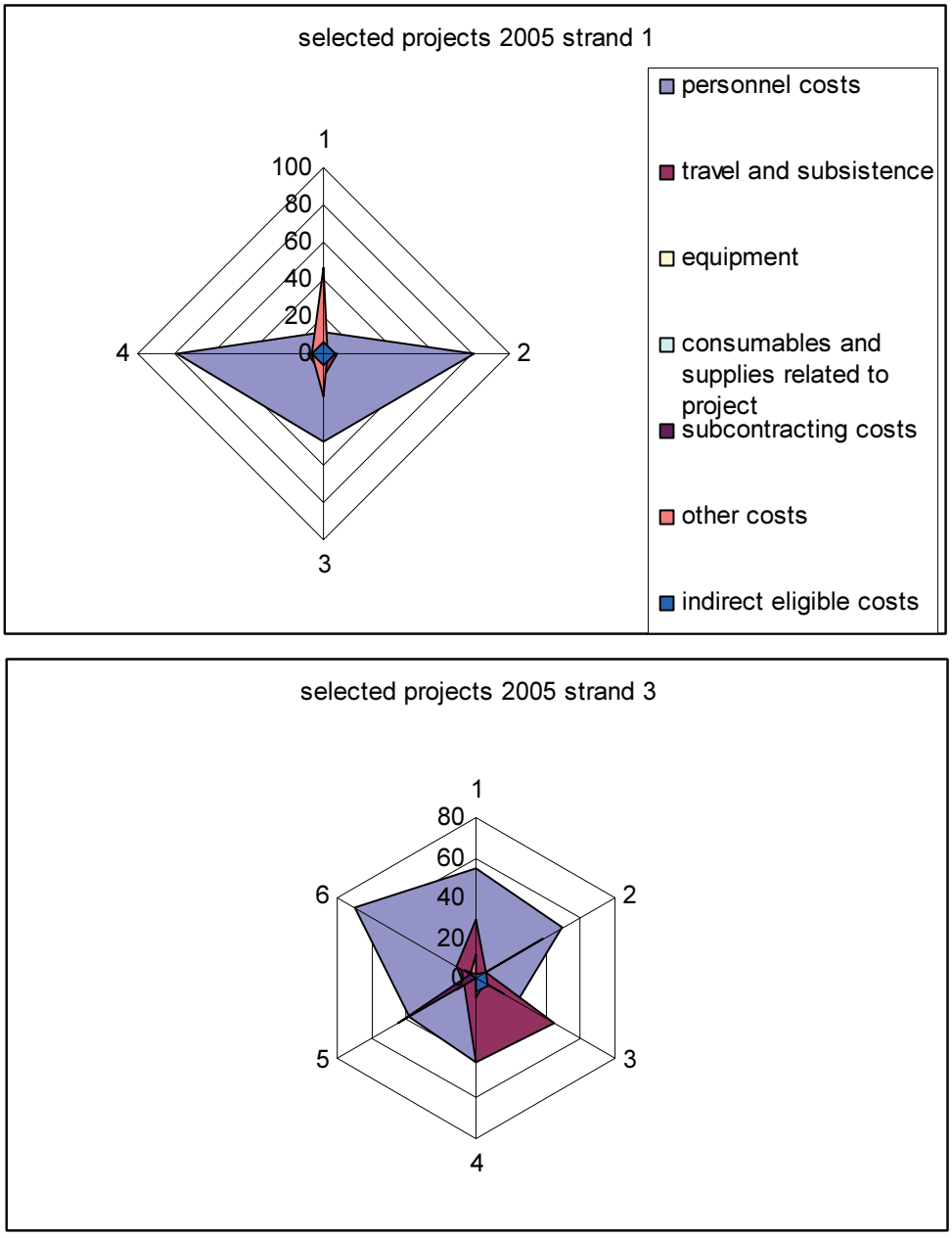


Figure 8. Breakdown of budgets in selected projects funded in 2005, by strand

Percentage of EC funding per strand

The financial provisions in the call for proposals for the period 2003–2005 describe that the financial contributions under the call could be envisaged for a maximum financing of up to 80% of eligible costs when projects: 1) have significant European added value; 2) involve the acceding states and applicant countries in a substantial manner; and 3) have regard to the cross–cutting themes set out in the work plans. We investigated whether the different strands are characterised by these particular projects. For instance, if projects in one strand often receive 80% EC funding, this may indicate that projects in this strand score high in terms of the conditions set by the Commission.

The data from the selection of projects for the years 2003–2005 provide *no* evidence that the strands differ significantly in terms of percentage of EC funding (see Figure 9). In all three strands, projects on average receive 60% of EC funding, with some deviation up to the maximum of 80% and down to a minimum of 35–40% in the case of strands 1 (health information; n=20)

and 2 (health threats; n=9), and a minimum of 27% in the case of strand 3 (health determinants; n=24). As for the percentage of selected projects that received 80% of EC funding, this is comparable across the three strands: in health information 4 out of 20 (25%) receive the maximum of 80%; in health threats it is 2 out of 9 (22%); and in health determinants the corresponding figure is 6 out of 24 (25%). Based on these figures, one cannot say that one strand scores particularly high in terms of the conditions set by the Commission.

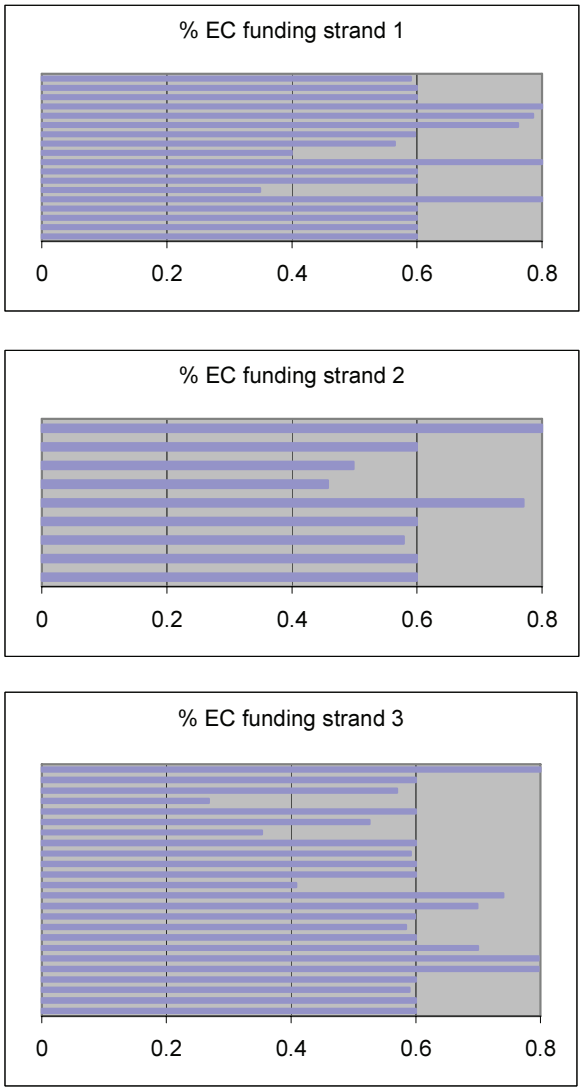


Figure 9. Percentage of EC funding per strand for the years 2003–2005

Source and amount of co–funding

The maximum percentage of financing that may be requested from the Commission is 80%. Hence, in all public health projects there is (at least) 20% of co–funding involved. The proposals identify the following possible sources of co–funding:

- Contribution pertaining to national officials
- Applicant's financial contribution
- Income generated by project
- Other external resources (not specified)
- Other current funding applications.

Table 4 below shows the number of occurrences of these co–funding sources or combinations of them in the sample of selected projects for the years 2003–2005.

Table 4. Sources of co–funding and the number of occurrences in selected projects

Source of co–funding	Frequency
Contribution pertaining to national officials	9
Applicant's financial contribution	16
Income generated by project	0
Other external resources	2
Other current funding applications	1
Contribution pertaining to national officials and applicant's financial contribution	11
Contribution pertaining to national officials and income generated by project	1
Applicant's financial contribution and income generated by project	2
Applicant's financial contribution and other external resources	3
Applicant's financial contribution and other current funding applications	1
Contribution pertaining to national officials, applicant's financial contribution and other external resources	2
Contribution pertaining to national officials, applicant's financial contribution and other current funding applications	1
Contribution pertaining to national officials, other external resources and other current funding applications	1
Applicant's financial contribution, income generated by project and other current funding applications	1
Income generated by project, other external resources and other current funding applications	1
Contribution pertaining to national officials, applicant's financial contribution, income generated by project, other external resources and other current funding applications	1

Table 4 indicates that in 28 selected projects there is only a single source of co–funding besides the Commission. These 28 selected projects are mainly co–funded through the applicant's (and its project partners) own financial contribution (16 times) or contributions pertaining to national officials. The remaining 25 selected projects are co–funded by at least one additional source besides the Commission. Most of these projects are co–funded by a combination of the applicant's (and its project partners) own financial contribution and contributions pertaining to national officials (11 times).

Figure 10 below gives an overview of the composition by source of co–funding in the 25 projects that have *two or more* sources of co–funding. The figure shows that, when there are additional sources of co–funding, the applicant and its project partner are frequently the main contributing party (burgundy/brown surface colour). Second, contributions pertaining to national officials constitute an important part of total co–funding (blue surface colour). 'Other external resources' are a less important source of co–funding across the selected projects. Income generated by the

project and other current funding only constitute a significant source of additional co–funding in two (separate) projects.

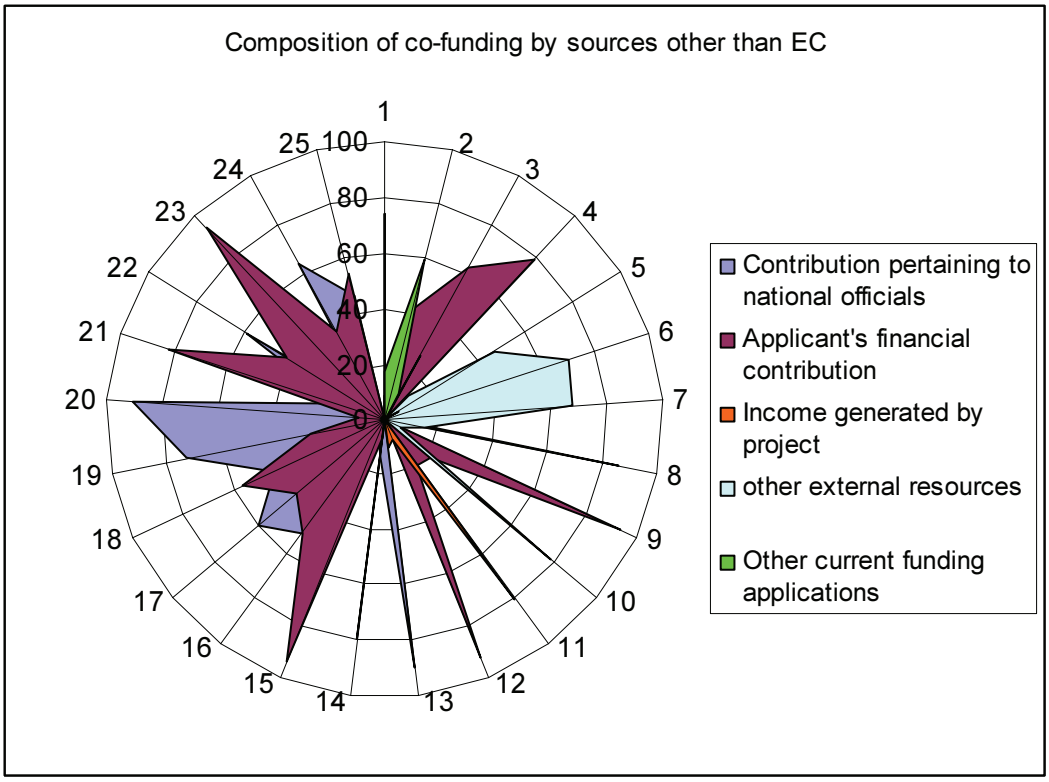


Figure 10. Composition of co–funding in selected projects in 2003–2005 by source of co–funding