Executive summary:

1. Executive summary
Over a four year period, 2009-2012, a consortium of 50 researchers and project partners from 12 European countries studied a range of alcohol policy approaches with a focus on member states of the European Union. Ten core findings resulted.

1. On average, European Union adults aged 15+ years drink 27g alcohol per day, more than twice the world's average. One in eight of this consumption is from unrecorded alcohol, which, with the exception of ethanol, is not normally a health risk. One in eight citizens consume 60g or more of alcohol at a time at least several times a week.
2. The best estimate is that about 138,000 people, aged 15-64 years, die prematurely from alcohol in any one year, with two-fifths of deaths due to liver cirrhosis, one third due to injuries, and one in five due to cancer.
3. Ethanol is a carcinogen, a teratogen and toxic to many body organs. Using the European Food Standards Authority guidance on risky exposure for human consumption of toxic substances in food and drink products, European drinkers consume more than 600 times the exposure level for genotoxic carcinogens, which is set at 50 milligrams alcohol per day; and more than 100 times the exposure level for non-carcinogenic toxins, which is set at 0.3 grams alcohol per day. [The average consumption of the 89% of EU citizens who drink alcohol is just over 30g/day].
4. Countries with more strict and comprehensive alcohol policies generally have lower levels of alcohol consumption. Regulating the economic and physical availability of alcohol are particularly effective in reducing the harm done by alcohol, and such regulations have tended to become more restrictive throughout the European Union in recent years, particular so in the eastern part of the Union. Involvement of alcohol producers in alcohol policy making tends to be associated with weaker alcohol policies, whereas the involvement of academia tends to be associated with stronger policies.
5. Socio-demographic changes impact on alcohol consumption. In general, increased urbanization results in increases in overall alcohol consumption, and a greater maternal age across all child births results in decreases in overall alcohol consumption. However, even when taking into account the impact of these socio-demographic changes, alcohol policy matters. Restricting the availability and advertising of alcohol, increasing the minimum purchase age, and lowering the legal blood alcohol concentration for driving can all reduce alcohol consumption.
6. The greater the exposure 13-16 year olds have to online alcohol marketing and alcohol branded sports sponsorship, the greater the likelihood that young drinkers will consume alcohol 14-15 months later. Such 13-16 year olds would not feel deprived of information should the advertising of alcohol be banned.
7. Brief interventions for risky drinking are effective in primary health care and emergency care settings, also in Europe, in reducing alcohol consumption by 18 grams and 11 grams per week respectively more than the control group at 12 month follow-up. The pharmacological treatments, acamprosate and naltrexone are effective in treating alcohol use disorders, also in Europe, with success rates of 18%-20% at 3-6 months follow-up.
8. Across six European countries studied, there is great variation in the health systems and treatment provision for alcohol use disorders, with the proportion of people in need of treatment who actually access it ranging from 1 in 25 to 1 in 7.

9. Across four countries studied, young people were already drunk by the time they went out to a drinking venue, fuelled by cheap alcohol purchased in shops and supermarkets; the drinking venues themselves exacerbated this problem by often being designed to promote further drunkenness and related problems.

10. Monitoring alcohol policy and its impact in the European Union is rather poor. Although 18 of 32 countries (56%) had prepared a report on alcohol as of 2010, their coverage of relevant issues tended to be poor. Reporting of summary measures of alcohol-related harm tends to be outdated, sometimes by as much as eight years.

Project Context and Objectives:

2. Summary description of project content and main objectives

The European Union (EU) is the region of the world with the highest levels of alcohol consumption, more than double the world's average. EU citizens aged 15 years or older drink on average 12.5 litres of pure alcohol per year, 27 grams a day. One in eight of this consumption is from unrecorded alcohol. Sixteen per cent of men consume 60g or more of alcohol a day, and nine per cent of women consume 40g or more of alcohol a day, definitions of heavy drinking. Five point four per cent of men and 1.5% of women (11 million people in all) are considered alcohol dependent. In 2004, almost 110,000 men and 28,000 women aged between 15 - 64 years living in the EU died prematurely due to alcohol. Two-fifths of these deaths due to liver cirrhosis, one third due to injuries, and one in five due to cancer. Three-fifth of these deaths occur in people who are dependent on alcohol.

The problem is not new to Europeans, and does not seem to improve. Per capita alcohol consumption has remained stable over the ten year period since 2000. During the last decade there have been a number of European initiatives on alcohol, including a series of WHO European Alcohol Action Plans and the European Commission's 'EU strategy to support Member States in reducing alcohol-related harms' which was launched in 2006. These initiatives are now supported at the global level with the WHO strategy to reduce the harmful use of alcohol and the WHO 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non-communicable Diseases.

It is in this context of high levels of alcohol consumption and alcohol-related harm that the AMPHORA project was launched in 2009, with the aim of creating a European Alcohol Public Health Research Alliance that could influence the debate on alcohol policy at a European level.

AMPHORA is the first research project on alcohol from a public health perspective that has been co-financed by the European Commission through the Seventh Framework Program of Research. With 33 partner institutions from 13 EU countries, counterparts and affiliated organizations from all 27 member states and a budget of 4 million EUROS, the AMPHORA project has undertaken intensive research over a four year period. AMPHORA has studied the wide majority of action areas identified in the WHO Europe Alcohol Action Plan, and this also means that most of the priority areas defined by the EC Strategy on Alcohol have also been studied.

The aim of AMPHORA is not just to do research, but to have an impact on policy, and this is why the project has put an emphasis in the science-policy debate. Through the life of the project there have been joint yearly meetings with WHO national counterparts and relevant national policy makers in Madrid, Zurich and at the final meeting in Stockholm in 2012, framed as the Fifth European Alcohol Policy Conference; this

formula has promoted a very much needed debate between science and policy makers that needs to continue far beyond the life of our project.

This report presents a summary of a relevant amount of work conducted during the last four years by a real multidisciplinary and multinational team. Nevertheless, we must acknowledge there is still a lot to be done. In the context of the financial and economic crisis facing the European Union, it is even more important to reduce the burden that alcohol poses to society in order to keep people healthy, and thus the EU productive and competitive. Good alcohol policy improves the sustainability and efficiency of social and health care systems, so we need to identify more clearly which factors at an EU level are limiting the implementation of efficient and innovative alcohol policies.

At the outset, AMPHORA had ten scientific objectives and three technical objectives, the results of which are summarized in the order in this report.

Scientific objectives
1. To provide a common European evaluative framework to measure the effectiveness and cost-effectiveness of integrated population based measures and interventions to reduce the harm done by alcohol;
2. To document alcohol content and health threatening contaminants of surrogate and illegally produced alcohol from all EU countries;
3. To analyze the cultural, social and policy interactions and their impact on alcohol consumption and alcohol-related harm in Europe;
4. To analyze the impact of price and availability and their synergies on alcohol consumption and alcohol-related harm in Europe;
5. To examine the impact of alcohol marketing on young European people's drinking;
6. To evaluate the public health impact of early diagnosis and treatment of alcohol use disorders in Europe;
7. To identify the factors associated with high and low alcohol-related harm in drinking environments in Europe, and the extent to which such factors differ between countries
8. To develop a scale of the comprehensiveness and integration of measures to reduce alcohol-related harm;
9. To determine the impact of public perceptions of harmful alcohol use on the implementation and outcome of measures to reduce alcohol-related harm;
10. To determine the impact of policy and preventive infrastructures on the implementation and outcome of measures to reduce alcohol-related harm.

Technical objectives
1. To create a European Alcohol Policy Research Alliance;
2. To build a database on cost-effective public health measures to reduce alcohol-related harm; and
3. To translate science into policy through easily understandable conclusions and recommendations.
Project Results:
3. Description of the main scientific and technical results (note: all tables and figures available in the complete Final Publishable Summary Report attached pdf file)

3.1 European evaluative framework to measure the impact of alcohol policy

Summary

The countries of the European Union have a high level of alcohol consumption, more than twice the global average. Consequently, alcohol-attributable harm is also at high levels, with almost 12% of all premature deaths and more than 10% of all premature burden of disease as measured in DALYs being caused by alcohol. In other words, 1 in every 7 premature deaths before age 65 in men, and 1 in every 13 premature deaths in women is estimated to be caused by alcohol. Given the high level of alcohol-attributable health harm, new forms of alcohol policy, including monitoring and surveillance systems to evaluate effectiveness, should be implemented. While all the elements of such monitoring and surveillance systems have been developed, the underlying data currently limit them to indicators based solely on mortality. This does not correspond to the focus in most societies on increasing healthy life expectancy rather than just prolonging life. There is an urgent need for developing a monitoring and surveillance system for alcohol, which includes non-fatal health outcomes. With respect to social harm, some progress has been made, but further developments to derive comparable and comprehensive indicators are still necessary.

The harm done by alcohol
Alcohol is a risk factor for disease and social harm. As the Europe drinks at a level of alcohol consumption which ranks among the highest globally, the countries of the European Union show a high level of alcohol-attributable harm. In the EU, in 2004, almost 95,000 men and more than 25,000 women between 15 and 64 years of age were estimated to have died prematurely of alcohol-attributable causes. This means that 1 in 7 male and 1 in 13 female premature deaths were caused by alcohol. These are net numbers, already taken into consideration the protective effect of alcohol on ischemic disease and diabetes. Moreover, as alcohol consumption contributes substantially to morbidity and disability as well, the overall alcohol-attributable burden of disease is high. In 2004, over 4 million disability-adjusted life years (DALYs), i.e., years of life lost either due to premature mortality or due to disability, were estimated to be caused by alcohol consumption, corresponding to 15% of all DALYs in men and 4% of all DALYs in women. Most of the health harms related to alcohol are caused by heavy drinking. The high toll of alcohol-attributable burden requires alcohol policy countermeasures including a monitoring system that is capable of evaluating change. While the tools for such a monitoring system exist, it is not possible to implement fully, as almost all countries lack comparable routine data on burden of disease such as DALYs.

Monitoring the harm done by alcohol
Epidemiology can help guide alcohol policy. However, what is necessary are relevant and timely data on a regular basis, i.e., a comprehensive monitoring and surveillance system, which can serve multiple purposes: as an early warning system, as a resource to monitor change and to evaluate the impact of policy, and as a comparator to benchmark against other countries. While in principle the elements to create such a monitoring system are in place, in practice meaningful monitoring and surveillance for alcohol-attributable harm is hindered by the data situation. Consider the following situation: at the media launch of the WHO European Region on alcohol, harm and policy in March 2012, data from 2004 were launched as the most recent data on alcohol-attributable burden of disease. Such a time lag is unacceptable if monitoring and surveillance are to have real impact on policy making. The reason for this time lag is clear: conceptually, public health wants to move away from mortality as the main

indicator and incorporate disability and quality of life into a summary measure of health.

This goal is laudable as it reflects preferences of modern societies and individuals not only to increase life expectancy but also to maximize disability-free life expectancy. However, while the goal is laudable, the implementation does not follow suit, and studies measuring burden of disease or other summary measures of health are rare. Thus, after the publication of the last Global Burden of Disease 2000 Study, there has de facto been a 10 year gap before new data on burden of disease were presented (in August 2012), with one non-empirical based update for the year 2004 in-between in 2008. During this time, few countries have conducted their own burden of disease study, so monitoring of alcohol-attributable burden of disease on a continuous basis has been absent.

In consequence, in order to make monitoring relevant, measures will have to be developed which are based on routinely collected statistics (e.g. hospitalization which could be comparable for a region like the EU – for the use of hospitalizations as a tool to quantify alcohol-attributable harm) and which can be reported within one or two years after the event. Only if we achieve monitoring and surveillance to give timely updates, can these data be really used as policy tools. Otherwise, the recent developments in alcohol epidemiology will remain academic successes without any impact on policy making.

3.2 The toxicity of unrecorded alcohol

Summary
Ethanol is the most dangerous toxic substance in unrecorded alcohol. Ethanol is a genotoxic carcinogen, as well as being toxic to many other health conditions. Adopting the European Food Stands Authority guidance for genotoxic carcinogens, no one should drink more than about 50 milligrams of alcohol a day, equivalent to 20g or two drinks a year. Adopting the European Food Stands Authority guidance for non-genotoxic carcinogens, no one should drink more than about 0.3 grams of alcohol a day, equivalent to 9g or one drink per month. European drinkers on average consume alcohol at levels 600 times the exposure level for carcinogens and 100 times the level for non-carcinogenic toxins. All alcohol beverage containers should carry consumer warnings that alcohol is a toxic substance, and in particular a carcinogen. Low risk guidelines for drinking alcohol are, in general, too generous for health safety and should, in general, be reviewed downwards.

Margin of Exposure
The Margin of Exposure (MOE) is the ratio of the dose of the consumed substance (for example ethanol or acetaldehyde) at the lower border of its toxic threshold divided by the estimated intake of the substance. Thus, for example a MOE of 1 means that the amount consumed is the same as the dose that is considered toxic. An MOE of 10 means that the amount consumed is only ten times lower than the dose that is considered toxic. An MOE of 1,000 means that the amount consumed is one thousand times lower than the dose that is considered toxic. For genotoxic carcinogens, (which ethanol, as well as acetaldehyde are), the European Food safety Authority indicates an MOE of 10,000 as the cut off point for public health safety. This means that the amount consumed should be at least 10,000 times lower than the level considered toxic. However, when based on human studies, and for a substance that is not considered an essential part of the diet as is the case for ethanol's cancer producing role, a

cut-off point of 1,000 is acceptable. This does not mean that it is 100% safe to drink below this level – only that it is a reasonable guidance to ensure safety as much as possible. For health problems other than cancer, the European Food safety Authority indicates an MOE of 100 as the cut off point for public health safety. This means that the amount consumed should be at least 100 times lower than the level considered toxic. However, again, when based on human studies, and for a substance that is not considered an essential part of the diet as is the case for ethanol's disease producing role other than for cancer, a cut-off point of 10 is acceptable. This does not mean that it is 100% safe to drink below this level – only that it is a reasonable guidance to ensure safety as much as possible

What are the margins of exposure in unrecorded alcohol?
One hundred and fifteen samples of unrecorded alcohol were collected from 16 European countries and margins of exposure were analysed for 10 potentially important substances, including alcohol.

Ethanol represents by far the highest risk in unrecorded alcohol. The MOE of ethanol reaches down to below 10, which is the lowest level of all compounds under study. Both genotoxic carcinogens ethyl carbamate and acetaldehyde may reach MOEs below 10,000 in some scenarios, which according to the European Food Standards Authority indicates a concern for public health. Nevertheless compared to ethanol, which is a genotoxic carcinogen, the risks of ethyl carbamate and acetaldehyde appear to be minor in the case of these unrecorded alcohol samples.

For non genotoxic substances, a 100-fold uncertainty factor is routinely applied. The factor is based on scientific judgment and allows for species differences (where animal data are used) and human variability. None of the average MOEs for the non-genotoxic substances would be below 100. For methanol and lead, where the MOE may be less than 100 in some cases below the 25th percentile, it must be considered that the toxicological assessment is based on human data, so that a safety factor of 10 should be sufficient. The MOE for these two compounds (methanol and lead) may fall below 10 only in extreme worst-case scenarios in the lowest 1st percentile of the distribution.

A further note about alcohol's toxicity
The International Agency for Research on Cancer (IARC), the world's reference body on cancer causing agents classifies alcohol as a carcinogen, causing cancers of the oral cavity, pharynx, larynx, oesophagus, liver, colorectum and female breast. Some 26,000 EU citizens die each year from alcohol-caused cancers before the age of 65 years, nearly 1 in 5 of all alcohol caused deaths, and about 1 in 14 of all cancer deaths. Using the European Food Standards Authority guidance on exposure for human consumption of carcinogens in food and drink products, with a margin of exposure set at 1,000, no one should drink more than about 50 milligrams of alcohol a day, equivalent to 20g or two drinks a year. Currently, the 89% of Europeans who drink alcohol consume just over 30 grams a day, some 600 times the exposure level. Ignoring alcohol's cancer causing role, and just considering other health outcomes, no one should drink more than about 0.3 grams of alcohol a day, equivalent to 9g or about one drink a month. Currently, Europeans drink about 100 times the exposure level.

3.3 Alcohol policies and social determinants of alcohol consumption

Summary
Using data over the time period 1960-2008, the potential impact of socio-demographic changes and planned alcohol policies on alcohol consumption and deaths from liver disease and road transport accidents was studied in twelve countries: Austria, Finland, France, Hungary, Italy, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, and the United Kingdom. Urbanization was found to be associated with increases in alcohol consumption, and mean maternal age at all childbirths was found to be associated with decreases in consumption, with urbanization having higher correlation coefficients than maternal age at childbirth. In general, the introduction of a legal blood alcohol concentration was associated with an increase, rather than a decrease in consumption, whereas, in general, a reduction in the legal level, once established, was associated with a reduction in consumption. Increasing the minimum age for purchase was generally associated with a reduction in consumption. In general, increased availability was associated with increases in consumption and decreased availability with decreases in consumption. In France and Spain increased advertising restrictions were associated with decreases in consumption, whereas in Austria and Norway with increases. The introduction of prevention and treatment programmes were more often associated with increases in consumption.

Societal determinants of alcohol consumption.
Thirty seven types of social, cultural, economic, demographic, political, health and religious factors were collected. Factors with good data sets across all countries were used in the analyses: income, price of alcoholic beverages, proportion of total population that were males over the age of 65 years, proportion of population living in urban areas, proportion of women who had completed tertiary education, proportion of women employed, and the average maternal age at all childbirths. The factors were subjected to multiple imputations for the missing values. In general, increased levels of urbanization are associated with increased consumption and maternal age at all childbirths with decreased consumption.

Planned policy measures
The measures documented included a mixture of administrative and regulatory measures related to availability, advertising, drink driving, and prevention and treatment responses. Alcohol taxes were not included, as the price of alcohol was include as a socio-demographic factor. In general, the introduction of a legal blood alcohol concentration was associated with an increase, rather than a decrease in consumption, whereas, in general, a decrease in the legal level was associated with a reduction in consumption. Increasing the minimum age for purchase was generally associated with a reduction in consumption. In general, increased availability was associated with increase in consumption and decreased availability with decreases in consumption. In France and Spain increased advertising restrictions were associated with decreases in consumption, whereas in Austria and Norway with increases. The introduction of prevention and treatment programmes were more often associated with increases in consumption. Although there were a few individual country and policy exceptions, in general, it was not possible to find consistent associations between the planned policies and changes in death rates from transport accidents and liver cirrhosis, either directly or mediated through consumption changes. The lack of findings is probably due to insufficient data being available over time.

Recommendations for policy

If one wants to understand the determinants of alcohol consumption over time and across Europe, then clearly socio-demographic factors, conceptualized in this study as changes in rates of urbanization and changes in mean maternal age at all childbirths matter. On the other hand, and when controlling for such socio-demographic changes, planned policies matter. Restricting the availability and advertising of alcohol, increasing the minimum purchase age, and lowering the legal blood alcohol concentration for driving, the policy measures studied here, can all reduce alcohol consumption.

3.4 Price and availability and alcohol policy changes

Summary
The strong knowledge base tells us that restricting the physical and economic availability on alcohol has a significant effect on reducing alcohol consumption and related harms, and is therefore one of the most effective tools against alcohol-related harm. Many European countries have implemented stricter alcohol policies during the last few years.

Published studies
Over the period 1980 to 2011, 383 studies have been published on the impact of changes in the physical and economic availability of alcohol in Europe, 40% of which were published after the year 2006. Most of the studies came from the Anglo-Saxon world and northern Europe, with many parts of southern and Eastern Europe poorly studied.

Over this time, the collected evidence on effectiveness of certain policy measures has become strong and comprehensive enough to tell us what works and what does not work when it comes to reducing alcohol consumption and related harms. The accumulated knowledge base tells us that restrictions on the physical and economic availability on alcohol have a significant effect on reducing alcohol consumption and related harms.

Unstudied cases
Over the last few years, 83 unstudied cases of changes in physical and economic availability were identified. Over four-fifths of these were restrictive, as opposed to liberal changes, and most of them took place in Eastern Europe.

3.5 Impact of commercial communications on alcohol

Summary
Focus group discussions of commercial advertising clips were undertaken and found to be an efficient way to stimulate 14-16 year olds to formulate media critical positions and express advertisement literacy in five European countries. No essential differences were found with regards to level of advertisement literacy or persuasion knowledge between different European alcohol geographies. The study's data found no reason or desire on the part of youngsters to be exposed to commercial messages on alcohol. European youngsters of average age 14 years from four European countries are highly aware of alcohol marketing on the internet, and of alcohol branded sport sponsorship in sports clubs. They report high exposure to online alcohol marketing, and to alcohol branded sports sponsorship. Higher exposure to online alcohol marketing and to alcohol branded sports sponsorship was found to be associated with students more likely to be using alcohol during a previous 30 days, 14-15 months later. The findings indicate a dose-response effect: the association with using alcohol becomes stronger with higher levels of exposure to online alcohol

marketing and to alcohol branded sports sponsorship. The impact of alcohol marketing is mediated to a considerable extent through positive attitudes (expectancies). These effects seem robust and consistent in the four countries studied. Results of the analysis give reason to support a ban on online alcohol marketing and on alcohol branded sports sponsorship to protect youngsters from the harmful effects of exposure to commercial communications, and more specifically online alcohol marketing and alcohol branded sports sponsorship.

Negotiating televised beer commercials
Forty eight focus group interviews with a total of 326 youngsters in the age range of 13-16 years from Finland, Italy, Denmark, Germany, the Netherlands and Poland documented how teenagers negotiate messages of televised beer commercials. Meaning-making concerning alcohol drinking differed between the young audiences in the different alcohol geographies. Differences were found in terms of norms on drinking contexts and drinking-related problems. No essential difference was found with regards to level of advertisement literacy or persuasion knowledge between different countries. All youngsters interviewed were equally aware of the persuasion techniques applied by commercial producers. The expression of such knowledge seemed to be very much stimulated by the study setup of the focus group sessions. The project suggests an added value of combining research strategies on commercial alcohol messages and their young audiences. Such mixed-approach strategies may not only give valuable insights into the question, but also strengthen a general credibility of the research area in question.

Longitudinal study of impact of commercial communications on young people's drinking
The impact of alcohol marketing in digital media and alcohol sport sponsorship on subsequent youth alcohol consumption was studied amongst 6,651 students with a mean age of 14 years from Germany, Italy, the Netherlands and Poland in a longitudinal setting. The study is important because the internet is the leading medium with adolescents, who spend more time on the internet than they do watching television. For this reason, the alcohol industry utilizes the internet as an important marketing tool, especially via the producers' websites, by banners in other websites, and on social networking sites. Alcohol sports sponsorship is also considered common and impactful on young people's drinking. It is thought that part of the impact of marketing on drinking behaviour is due to marketing influencing adolescents' attitudes of how drinking will affect them in a positive way, which in turn predicts actual drinking behaviour. The students were first studied between November 2010 and February 2011 (Time 1), when their alcohol use and their exposure to digital advertising, controlling for their internet use, was measured. Exposure to alcohol sponsored football championships and exposure to alcohol sponsorship of their own sport club were measured. The students were studied again 14-15 months later (Time 2), when their attitudes to alcohol and alcohol use were measured. The relationship between their exposures to digital advertising and sport sponsorship at Time 1 on their alcohol use at Time 2 was analysed.

The results at Time 1
More than 9 out of 10 students regularly used the internet during school days, with nearly two fifths of all students using the internet for more than two hours each day. Nearly one third of students reported using a social media site which contained alcohol advertisements, and two thirds reported noticing alcohol advertisements on an internet page. Over half

the 14 year old students had used alcohol, and one quarter of all students reported drinking five or more drinks on at least one occasion during the previous 30 days.

The impact of marketing at Time 1 on students' alcohol use at Time 2, 14-15 months later
Controlling for the students' sex, age, level of education, whether or not they smoked, how much they used the internet, and in which country they lived, the use of alcohol during the previous 30 days, exposure to digital marketing, and exposure to sport sponsorship at Time 1 independently predicted the use of alcohol during the previous 30 days at the follow-up time, Time 2, 14-15 months later. Thus, students who had used alcohol during the previous 30 days at Time 1 were more likely to use alcohol during the previous 30 days at Time 2 (ß = 0.41, p less than 0.001). The greater the exposure to digital alcohol marketing at Time 1, the more likely students were to use alcohol during the previous 30 days at Time 2 (ß = 0.12, p less than 0.001). The greater the exposure to alcohol sponsored championships at Time 1 (but not non-alcohol sponsored championships), the more likely students were to use alcohol during the previous 30 days at Time 2 (ß = 0.07, p less than 0.01), and the greater the exposure to alcohol sponsorship of own sports club at Time 1, the more likely students were to use alcohol during the previous 30 days at Time 2 (ß = 0.04, p less than 0.01).

That part of the effect of marketing was due to its impact on attitudes is shown by the associations becoming less strong, when taking into account the students attitudes at Time 2. The coefficient, ß, which measures the strength of the association dropped from 0.12 for the impact of online marketing at Time 1 to 0.08 when the impact of attitudes at Time 2 was taken into account. The association was still highly significant (p less than 0.001). For exposure to alcohol sponsored championships at Time 1, ß dropped from 0.07 to 0.04 when the impact of attitudes at Time 2 was taken into account, with the association losing significance. For exposure to alcohol sponsorship of own sports club at Time 1, ß dropped from 0.04 to 0.03 when the impact of attitudes at Time 2 was taken into account, with the association still being significant (p less than 0.01).

3.6 Early diagnosis and treatment of alcohol use disorders in Europe

Summary
Brief interventions for risky drinking delivered in primary care settings work, and work just as well when they are studied in Europe as when they are studied in the rest of the world. Throughout the world, they lead to about 18 grams less alcohol (just under two drinks) being drunk per week compared to groups that did not receive the brief intervention 12 months after the intervention. Brief interventions for risky drinking delivered in emergency care settings work, and work just as well when they are studied in Europe as when they are studied in the rest of the world. Throughout the world, they lead to about 11 grams less alcohol (just over one drink) being drunk per week compared to groups that did not receive the brief intervention 12 months after the intervention. The pharmacological treatment, acamprosate works for treating alcohol use disorders and works just as well when it is studied in Europe as when it is studied in the rest of the world. Throughout the world it leads to a nearly 20% less chance of returning to drinking after stopping, six months after starting the treatment. The pharmacological treatment, naltrexone works for treating alcohol use disorders and works just as

well when it is studied in Europe as when it is studied in the rest of the world. Throughout the world it leads to an 18% less chance of relapsing to heavy drinking three months after starting the treatment. There is wide variation in the organization and provision of alcohol interventions across the six countries studied, implying that the free movement of citizens throughout Europe is not matched by equal standards of care for risky drinking and alcohol problems. There is a mismatch between general practitioners knowledge and use of screening instruments. This is reflected in the very low level of screen positives identified (5% in a four week period). GPs express lack of time and fear of upsetting patients as the main obstacles to screening. Despite poor screening, GPs seem quite familiar with and use brief interventions. Time constraints and lack of training are impediments to greater use. Across the six countries studied, the best case scenario was that 1 in 7 of people in need of treatment for alcohol dependence accessed treatment; the worst case scenario was 1 in 25. There is an urgent need to improve the standards and availability of brief interventions for risky drinking, and, in particular, treatments for alcohol dependence across the six countries studied, and most likely the whole of the European Union.

Effectiveness of brief interventions in primary health and emergency care settings
The effectiveness of brief interventions for risky drinking in primary health care settings was analysed, comparing the results from studies undertaken in Europe with those undertaken in the rest of the world. In European studies, brief interventions lead to about 20 grams less alcohol (two drinks) being drunk per week compared to groups that did not received the brief intervention 12 months after the intervention. This is a large difference. The effectiveness of brief interventions for risky drinking in emergency departments was analysed, comparing the results from studies undertaken in Europe with those undertaken in the rest of the world. In European studies, brief interventions lead to 9 grams less alcohol (one drink) being drunk per week compared to groups that did not received the brief intervention 12 months after the intervention. This is a large difference.

Effectiveness of the pharmacological treatments, acamprosate and naltrexone, in treating alcohol use disorders
The effectiveness of the pharmacological treatment, acamprosate, in treating alcohol use disorders was analysed, comparing the results from studies undertaken in Europe with those undertaken in the rest of the world. In European studies, acamprosate resulted in a nearly 20% less chance of returning to drinking after stopping, six months after starting the treatment. This is a large difference. The effectiveness of the pharmacological treatment, naltrexone, in treating alcohol use disorders was analysed, comparing the results from studies undertaken in Europe with those undertaken in the rest of the world. Thus, it is fair to conclude that naltrexone seems to work just as well in European studies as it does in studies from the rest of the world. In all studies naltrexone resulted in an 18% less chance of relapsing to heavy drinking three months after starting the treatment. This is a large difference.

Health systems and treatment for alcohol use disorders (AUD)
The provision of screening and brief interventions for risky drinking and treatment for alcohol use disorders (AUD) was studied in six European countries (Austria, England, Germany, Italy, Spain and Switzerland) over the years 2009-2012.

Number of patients identified as positive for alcohol use disorders

Screening practice and barriers to screening in primary health care
GPs reported time constraints and the risk of upsetting the patient as
the two main barriers to alcohol screening.

Brief intervention practice and barriers in primary health care
GPs reported time constraints and lack of training as the two main
barriers to delivering brief alcohol interventions.

The gap between need and treatment for alcohol use disorders.
By comparing the number of people with alcohol dependence to the number
of people accessing treatment, it is possible to calculate the
prevalence-service utilisation ratio (PSUR), which measures the
proportion of people in need who actually access treatment. Overall,
there is a large gap between the need for treatment and actually
accessing treatment.

3.7 Alcohol-related harm in drinking environments

Summary
Preloading and binge drinking are common features of nightlife
participation in young people across Europe. This leads to young people
already being drunk by the time they arrive at a drinking venue, making
intoxication difficult for bar staff to deal with. Pre-loading is driven
by cheap alcohol prices in shops and supermarkets, much cheaper than in
drinking venues. An effective way to solve this is with the introduction
of a minimum price per gram of alcohol sold. Just from their physical
structure, drinking venues are designed to promote problematic drinking.
All drinking venues should be licensed to sell alcohol, and the renewal
of the licence, which should be monitored on a regular basis, should be
dependent on adhering to a range of minimum standard for the physical,
social and staffing environments. Although their use might seem
intuitive, the use of plastic glassware and the promotion of non-
alcoholic drinks, in particular energy drinks, may actually worsen
intoxication rather than prevent harm.

Drinking before going out
Drinking by young people before going out was studied in four European
cities, Liverpool in the UK, Ljubljana in Slovenia, Palma (de Mallorca)
in Spain and Utrecht in the Netherlands. The vast majority of drinkers in
all cities expected to binge drink on the night they were studied, and in
fact the amount of alcohol reported at interview had already reached
binge drinking levels in all cities and for both genders. With the
exception of those from Ljubljana, the majority of young nightlife users
surveyed reported that they had consumed alcohol at home, a friend's home
or, in the case of Palma, in public places prior to visiting public
drinking environments. Such preloading behaviour is often motivated by
price, with alcohol typically being vastly cheaper in supermarkets and
other off-licensed premises than in pubs, bars or nightclubs. However
such preloading has important implications for preventing harm in
drinking environments as it means that individuals are arriving at pubs,
bars and nightclubs already under the influence of alcohol, and in some
cases likely intoxicated. Serving alcohol to individuals who are drunk is
illegal in most European countries, yet a growing trend in preloading
means that bar managers and staff face an increasingly intoxicated
customer base.

Venues and intoxication
The physical environment within venues was assessed using a series of
rating scales (from 0 to 9) measuring noise levels, crowding,
ventilation, temperature, levels of lighting and factors regarding
cleanliness. On all scales, higher values represented more 'problematic'
levels. Venues that are crowded, loud, unclean and poorly monitored are
likely to see higher levels of intoxication, and consequently higher
levels of related harm. Such characteristics are likely to be symptomatic
of poorly managed bars where drunkenness and anti-social behaviour is
left unchecked, with permissiveness having one of the strongest
independent relationships with intoxication.

Strong relationships were also found between increased customer
intoxication ratings and both plastic glassware and the promotion of non-
alcoholic drinks. Both of these characteristics could be considered harm
reduction measures, yet findings here urge caution around recommending
them to prevent alcohol related problems. Relationships between plastic
glassware and intoxication likely represent the use (often enforced by
police or licensing authorities) of this measure to prevent serious
violent injury in high risk bars; yet suggest that bars' use of plastic
does not stop customers getting drunk, and therefore would not stop
alcohol-related harm including violence. For non-alcoholic drink
promotions, these were often focused on energy drinks that are typically
consumed in combination with alcohol and have been linked to greater
intoxication and alcohol-related harm.

3.8 Scaling alcohol policies

Summary
The scale, which also serves as a tool for information gathering,
translates formal alcohol policies into a single quantifiable figure,
making it a strong tool in communicating with the public or politicians.
The results should be interpreted with caution, acknowledging the built
in weaknesses of the scaling approach. Although there are signs of
convergence regarding both alcohol consumption and alcohol policies,
there are still immense differences on how alcohol is governed in Europe.
Despite a turn towards more liberal alcohol policies during the past few
decades, the four Nordic alcohol-monopoly countries still have by far the
strictest policies in Europe. With the exception of the Southern European
Profile countries, higher alcohol policy scores, i.e. more strict and
comprehensive alcohol policies, are strongly associated with lower
alcohol consumption.

Alcohol policy scale
By constructing a scale measuring the strictness and comprehensiveness of
formal alcohol policies, and applying it in 33 European countries, we can
create an overview on how alcohol is governed and controlled in Europe.
The alcohol policy scale, with a mean score of 71.3, varied from 38.5
points (permissive Luxembourg) to 133 points (stringent Norway) out of a
possible 160. Despite recent alcohol policy liberalizations in the Nordic
countries, the four Nordic alcohol-monopoly countries have by far still
the strictest alcohol policies in Europe. A common denominator for the
top ranking countries is high taxes and restricted physical availability
of alcoholic beverages.

Alcohol policy and alcohol consumption
With the exception of the southern European countries, higher AMPHORA
policy score is associated with lower alcohol consumption. The decrease

in alcohol (wine) consumption in the Mediterranean countries has been influenced mainly by societal factors like urbanization and changes in work organization, rather than changes in formal alcohol policies.

Using the alcohol policy scale
When using policy scales, one should remember that there are some built-in problems with the methodology. First of all, it is hard to quantify and reduce complex policies into numbers that are trustworthy and internationally comparable. It is also tricky to measure the degree of enforcement, and including informal control practises in a scale should be avoided altogether. An attempt to measure enforcement was included in the AMPHORA scale derived from the WHO material, but only for a limited number of policies (BAC limits and advertising restrictions). It is hard to get objective data on how well policies are enforced, and in the end the enforcement estimates did not have any greater effect on the final scores in the AMPHORA scale. However, it is something worth looking closer at in future research. Despite several built in flaws, the pros of the scaling approach still clearly outweigh the cons. The scale gives us a large amount of data in numerical form, which makes it a strong tool in communicating with the public or politicians. With the help of scales it is easy to compare and rank countries, as well as getting an overview of the alcohol policies implemented in Europe.

3.9 Public perceptions of harmful alcohol use

Summary
People who live in countries with stricter alcohol policies and thus in general lower levels of overall alcohol consumption tend to consider that individual problematic drinking occurs at higher levels of alcohol use, than people who live in countries with less strict policies and thus in general higher overall levels of alcohol consumption.

Perceptions and alcohol policy
People's definitions of what 'alcohol abuse' means was studied in seven European countries (Finland, Germany, Italy (Tuscany), Norway, Poland, Slovenia and Spain), and the results were compared with their country's comprehensiveness of alcohol policy. For 'alcohol abuse', an 18 point scale was developed which ranged from the most cautious: "Drinks a few times a year with friends and gets mildly intoxicated", to the most extreme: "Drinks a couple of times a week alone and gets strongly intoxicated". The 18 statements represent a scale on which the respondents can indicate if they would characterize each statement as "alcohol abuse", or not. For each country the mean number of descriptions of drinking habits that were characterized as "abuse" was calculated. Across the countries studied, the stricter the alcohol policy, the more one could drink before the respondents considered this as 'alcohol abuse'. In other words, the stricter the policy, and thus in general the lower the level of per capita alcohol consumption, the more likely higher levels of drinking were defined as 'alcohol abuse'.

3.10 Alcohol policy infrastructures

Summary
The exercise of conceptualizing and mapping alcohol policy infrastructure in Europe is complex but important to identify the elements that have a major impact on alcohol policy and strengthen them. Laws and regulations, written national policy documents, and coordinating centres for alcohol policy are the most widespread infrastructures. However, efforts have to

be done to extend comprehensive reports on the alcohol situation and to establish public funds earmarked for alcohol prevention in all countries. The impact of the involvement of different stakeholders in alcohol policy is diverse. Whereas academia involvement seems to facilitate stricter and comprehensive alcohol policy, the involvement of alcohol producers could be a barrier, at least, to a stronger pricing policy, while NGO involvement did not show any relationship.

Are alcohol policy infrastructures in place across Europe?
Ten alcohol policy infrastructure elements were studied in 32 European countries for the year 2010:
(1) Policies, priorities and goals, i.e. a national policy document on alcohol needed to set priorities, guide action and allocate resources;
(2) laws and regulations that build a legislative basis related to alcohol and its implementation;
(3) different governmental sectors at different levels involved in alcohol policy (multisectoral approach) and a coordinating body;
(4) national politicians specialised in alcohol issues;
(5) the alcohol industry engaging in alcohol policy as a pressure group;
(6) civil society organisations and 'voice' as public health advocates;
(7) science and research-based organisations building the knowledge base for the development of effective alcohol policy;
(8) the professional workforce engaged in alcohol policy and practice;
(9) monitoring and surveillance systems to identify and make information available; and
(10) funding basis needed to develop effective alcohol policy.

The spider web graph below summarizes the number of countries that had these infrastructures in in blue. The assessment of the categories 'national alcohol policy', 'coordinating centre for alcohol policy', 'laws and regulations', 'politicians', 'comprehensive report on alcohol situation' and 'public funds earmarked for alcohol prevention' examines the presence or absence of that infrastructure element for all countries. The categories 'NGO', 'academia' and 'health professionals' show countries with high and medium involvement of those stakeholders in public policy. The category 'alcohol industry', in contrast, shows the amount of countries where both manufacturers and producers/retailers have low or no involvement in public policy, since such involvement is found to weaken alcohol policy.

All countries have a number of laws and regulations addressing alcohol. This might be a comprehensive alcohol act or a number of laws and regulations addressing alcohol besides other issues. Twenty four of the 32 countries have a written national policy document, which can contribute to set priorities, show commitment and allocate resources and shape a country's alcohol policy. The same number of countries had a coordinating body available that is responsible for the overall coordination of the development and monitoring of the national alcohol policy.

However, only about half the European countries have prepared a comprehensive report on the alcohol situation in their country despite the importance of monitoring and surveillance as a basis for priority setting and policy development. Only eleven countries had public funds earmarked for alcohol prevention. NGOs, academia/research organisations and health professionals/health services in most countries show high or medium involvement in alcohol policy. This could be a contributing factor to the development of effective alcohol policy. On the other hand, the

alcohol industries showed a high involvement in alcohol policy, remembering that the spider web documents the number of countries with low no involvement in alcohol policy.

Do stakeholders make a difference to alcohol policy?
The mean scores for the strictness and comprehensiveness of alcohol policy by level of stakeholder involvement in alcohol policy development (no, low, medium or high). An increased involvement of academia was associated with more strict and comprehensive policies (Beta=0.77, p less than 0.01). Increased involvement of producer companies was associated with less strict and comprehensive policies, but the relationship was not significant (Beta=-0.49, p=0.063).

3.11 European Alcohol Policy Research Alliance

The European Alcohol Policy Research Alliance involves more than 50 researchers and over 30 research institutions from all EU Member States and project partners from 12 European countries. They are listed on the AMPHORA website: http://www.AMPHORAproject.net/view.php?id_cont=32. The Alliance met four times during the course of the project, on two occasions with the counterparts of the World Health Organizations' European Alcohol Action Plan and during the final project conference (see http://www.AMPHORAproject.net/view.php?id_cont=57 online). The Alliance shared research methodologies, peer reviewed each other's' work and was responsible for more than 30 scientific publications in peer-reviewed journals during the lifetime of the project. It produced a manifesto on alcohol (see http://www.AMPHORAproject.net/files/file/AMPHORA%20manifesto%20on%20alcohol_October%202012.pdf online), and an e-book on alcohol policy (see http://www.AMPHORAproject.net/w2box/data/e-book/AMPHORA%20ebook.pdf online).

3.12 Database on cost-effective public health measures to reduce alcohol-related harm

A database on cost effective public health measures to reduce alcohol-related harm was set up and completed (see http://AMPHORA.caint.com/block3 online). The data base was based on the AMPHORA e-book (see http://www.AMPHORAproject.net/w2box/data/e-book/AMPHORA%20ebook.pdf online) and a joint World Health Organization and European Commission report on alcohol policy (see http://www.AMPHORAproject.net/w2box/data/AMPHORA%20Reports/Alcohol-in-the-European-Union-2012.pdf online).

Potential Impact:

4. Translating science into policy: The potential impact and main dissemination activities

4.1 Potential impact

The main outcomes of the scientific work of the AMPHORA project drive the need for stepped-up implementation of a number of alcohol policy actions. Were these actions implemented, there would be considerable benefit in terms of health gain, disability adjusted life years averted, and premature deaths avoided. This applies to price increases, restrictions on the availability of alcohol and bans on alcohol advertising. It also applies to brief interventions for risky drinking and treatments for alcohol dependence. Such actions not only improved health, but can also reduce crime, improve personal security and improve productivity at work. Alcohol tax increases also bring in much needed government revenue.

The ten core messages of the project are:
1. EU adults drink 27g alcohol (nearly three drinks) a day, more than twice the world's average.
2. About 138,000 EU citizens, aged 15-64 years, die prematurely from alcohol in any one year.
3. EU drinkers consume more than 600 times the exposure level set by the European Food Standards Authority for genotoxic carcinogens, of which ethanol is one.
4. Countries with more strict and comprehensive alcohol policies generally have lower levels of alcohol consumption, and policies are tending to get stricter in recent years.
5. Alcohol policies impact on alcohol consumption, even when talking into account broader socio-demographic changes, such as increased urbanization which is associated with increased consumption and increased maternal age at all childbirths which is associated with decreases in consumption.
6. Online alcohol marketing and alcohol branded sports sponsorship increase the likelihood of 14 year olds to drink alcohol.
7. Brief interventions for risky drinking and pharmacological treatments for alcohol use disorders are effective.
8. The proportion of people who need treatment who actually access it ranges from only 1 in 25 to 1 in 7.
9. Young people are often already drunk by the time they go out, fuelled by cheap alcohol from shops and supermarkets, with drinking venues exacerbating problems further.
10. Monitoring alcohol policy and its impact needs much improvement.

The core policy options that derive from these findings, which are consistent with the extensive published literature on alcohol policy are:

1. European countries should, in general, strengthen alcohol policy further as a matter of urgent public health policy to reduce alcohol consumption and the estimated 138,000 preventable deaths that occur annually. The most cost-effective way to do this is through implementing the three best busy for alcohol policy recommended by the World Economic Forum and the World Health Organization in their joint submission to the 2011 United Nations High Level Meeting on non-communicable disease, increase the price of alcohol, reduce the availability of alcohol and ban alcohol advertising.
2. Pricing policy should include the implementation of a minimum price per gram of alcohol, an alcohol policy option that reduces consumption

and harm, and one which targets in particular young people's heavy drinking and drunkenness.
3. Reducing the availability of alcohol should be matched with a licensing system for the sale of alcohol in all countries, with the receipt and maintenance of the license dependent on adherence to a minimum set of environmental standards in the licensed premise.
4. Given their importance in promoting adolescent drinking, bans on alcohol advertising should include bans on digital alcohol advertising and alcohol branded sports sponsorship.
5. The availability and standards of brief advice and treatment for risky drinking and alcohol use disorders should be dramatically improved and harmonized upwards across all European Union member states to improve the existing poor coverage.
6. Standardized monitoring and reporting on alcohol consumption, alcohol-related harm and alcohol policy responses should be improved and harmonized upwards across all European Union member states to ensure a monitoring system that can evaluate up-to-date change in health status.
It is possible to estimate the impact, cost and cost-effectiveness of a range of policies in reducing disability adjusted life years (DALYs) in European Union countries.

Tax increases (of 20% or even 50%) are estimated to be highly cost-effective throughout Europe. Even accounting for longer life, and thus potentially increased social welfare costs, taxation remains a highly cost-effective alcohol policy option. The effect of alcohol tax increases could be mitigated by illegal production, tax evasion and illegal trading, which account for approximately 12% of all consumption in Eur-A countries and 40% in Eur-B and Eur-C countries. Reducing this unrecorded consumption (by 20-50%) via concerted tax enforcement efforts is estimated to cost 50-100% more than a tax increase but to produce similar levels of effect. In settings with higher levels of unrecorded production and consumption, increasing the proportion of consumption that is taxed (and therefore more costly to the price-sensitive consumer) may represent a more effective pricing policy than a simple increase in excise tax, which may only encourage further illegal production, smuggling and cross-border purchases.

Reducing access to retail outlets for specified periods of the week and implementing a comprehensive advertising ban are estimated to have the potential to be cost-effective countermeasures, but only if they are fully enforced (each healthy year of life restored costs between I$ 567 and I$ 2509).

The estimated cost-effectiveness of brief interventions in the health sector is not as favourable as the population-level policy instruments because they require direct contact with health care professionals and services. Although brief interventions are the most expensive of the policy options to implement, it should be noted that within health service expenditure, brief interventions for hazardous and harmful alcohol consumption are one of the most cost-effective of all health service interventions in leading to improved health.

Given that three-fifths of all alcohol-related deaths occur in people who are dependent on alcohol, it is also possible to model the impact of treatment in reducing alcohol related deaths and this has been done for men and women. Assuming that 40% of people with alcohol dependence are treated, the model estimates that about 10,000 male deaths could be avoided with pharmacological treatment, and more than 1,700 female

deaths. The difference between the sexes is due to more men being dependent on alcohol than women and the all-cause mortality rate of women being lower than that of men. Brief interventions for heavy drinkers who are also acute-care hospital patients (BI hospital 2) yield almost the same number of deaths avoided, whereas the other two treatments are associated with a considerably smaller numbers of deaths avoided. While the number of women's deaths avoided by any given treatment is only up to 30% of the men's deaths avoided, the proportional differences between the treatments are much smaller.

But, of course, it is not just health that alcohol impacts on, but also on other areas of individual and societal well-being. As an intoxicant, alcohol impairs personal security and is a causal factor in harm to people other than the drinker, including interpersonal violence, suicide, homicide, crime and drink-driving fatalities, and a casual factor for risky sexual behaviour, sexually transmitted diseases and HIV infection. There is also evidence, although not from all studies that drinking, and in particular heavy drinking can impair educational attainment and human capital formation, employability and productivity at work. These other harms can be summarized in social costs estimates, as is done in Figure 20 below in billion EUROS, with alcohol costing the EU some 156 billion EUROS in the year 2010.

Of course, not all of these costs can be averted, but there is evidence that implementation of alcohol policy can lead to reductions in social costs, can improve productivity, and, with tax increases, can generate increased revenue for countries, outcomes sorely needed in times of economic recession.

4.2 Main dissemination activities

Science policy meetings
Two expert and WHO counterparts meetings (took place, the first in Madrid in June, 2010, and the second in Zurich, May 2011. These meetings were instrumental in enhancing science-policy dialogue around the topic of alcohol. The final AMPHORA conference took place, on the 18-19 of October 2012, in Stockholm, Sweden. The event was the Fifth European Alcohol Policy Conference, and hosted by the Swedish Society of Medicine in the framework of the 84th Berzelius Symposium. The aim of this European conference was share the outcomes of the AMPHORA project and discuss their value for national and local policies and practices.

The AMPHORA website
The AMPHORA project website includes a news-reel to announce and highlight project achievements and forthcoming events and access to all available project documents and other resources. As part of the project website, a database on cost-effective public health measures and interventions includes 3 blocks of information: infrastructures, policy document profiles and scientific information.

Publications
Throughout the duration of the project, there have been over 30 scientific publications in peer reviewed journals.

The AMPHORA ebook
In addition to individual papers coming out of the project, AMPHORA produced an e-book publication on making and implementing European

alcohol policy http://AMPHORAproject.net/w2box/data/e-book/AMPHORA%20ebook.pdf.

Newsletters, videos and factsheets
A series of newsletters, fact sheets and videos have been prepared (see http://amphoraproject.net/view.php?id_cont=60 online).

The AMPHORA Manifesto
The AMPHORA Manifesto was launched at the final AMPHORA Conference in Stockholm. October 2012. The document was printed and included in the conference packs and also made available through the project website on this date. As an adjunct to the Manifesto document, and to increase visibility and accessibility, a short video was developed which explained the main points of the manifesto in a clear and easy-to-understand style in less than 5 minutes (see http://amphoraproject.net/view.php?id_cont=60 online).

Other dissemination activities
Throughout the four year period of the AMPHORA project over 60 complementary dissemination activities have been carried out by the participating scientists. These include a wide variety of presentations, workshops and posters at scientific meetings or conferences, as well as interviews with the media, press conferences and press releases. The AMPHORA project obtained coverage in the national press of 7 of the participating countries, and was also broadcasted to the general public on the national television of 3 of the countries.

List of Websites:
http://amphoraproject.net/