



# WHO

REGIONAL OFFICE FOR EUROPE

---

EUR/ICP/HSC 013 (B)  
5110g  
ENGLISH ONLY  
UNEDITED

44319

## *FUTURE TRENDS IN SOCIETY AND THE EUROPEAN HEALTH FOR ALL STRATEGY*

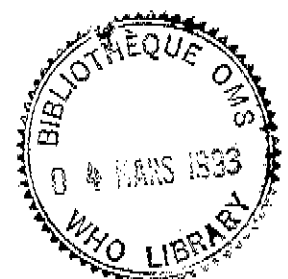
A Report on the Second Consultation

Prague  
2 July 1992

SCHERFIGSVEJ 8  
DK-2100 COPENHAGEN Ø  
DENMARK

TEL.: (45) 39 17 17 17  
TELEFAX: (45) 31 18 11 20  
TELEX: 15348

1993



## ABSTRACT

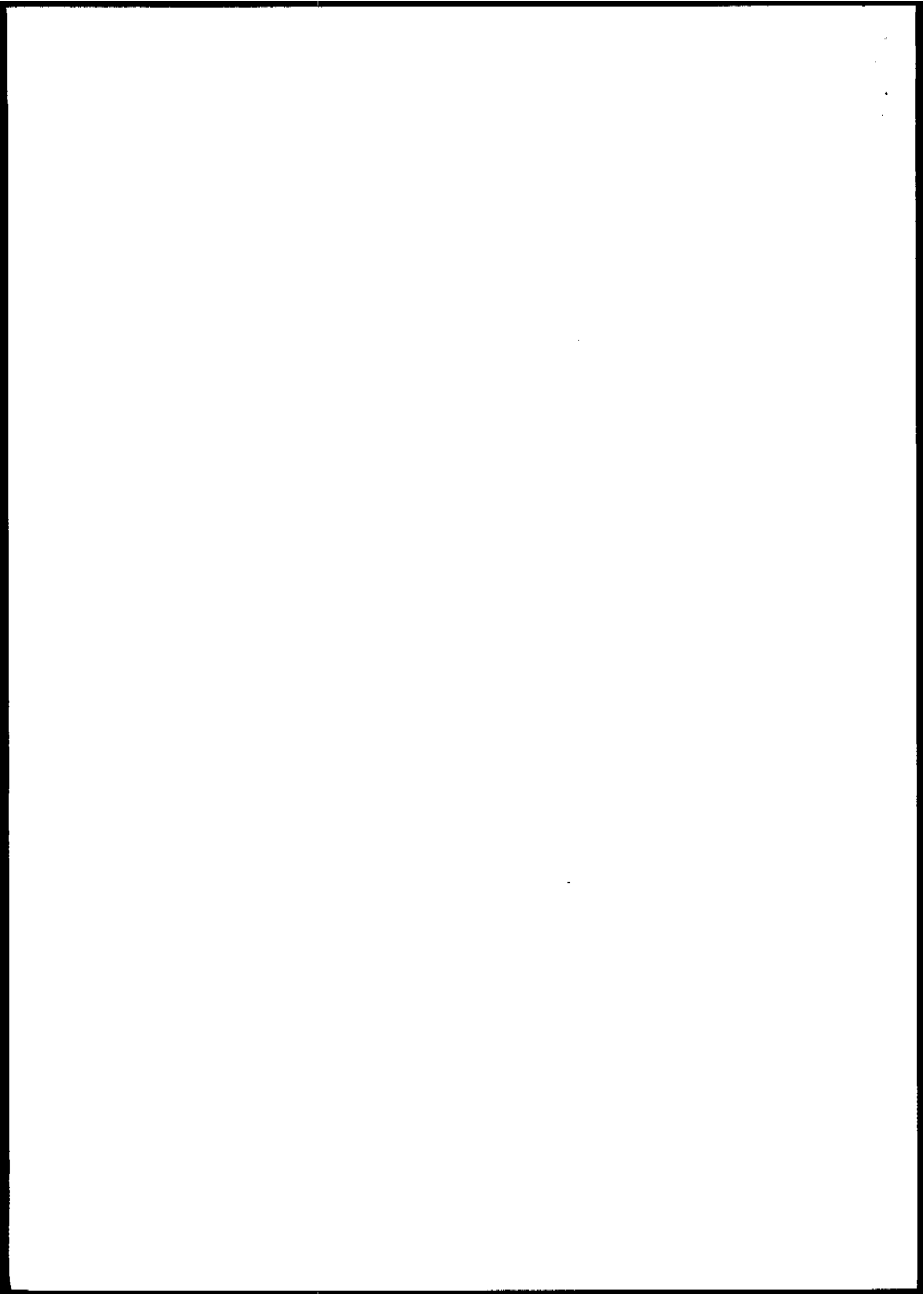
The meeting was the second of its kind, bringing together various experts in selected fields, health sector personnel and WHO staff to review the present European macro-situation (as the operating environment of the health sector) and to discuss possible future trends and their implications taking as reference point the updated health policy for Europe. The discussions were focused on three main areas: (1) future environment of health in Europe (geopolitics, population and epidemiology, ecology, technology, economy, social structure and demography); (2) implications for health action in Europe (promoting health in large towns, reorganizing health care); and (3) challenges to systems science. The results of a written consultation with the participants immediately following the meeting has also been included in the report.

### Keywords

HEALTH FOR ALL – trends  
HEALTH POLICY – trends  
SOCIAL CHANGE  
FORECASTING  
EUROPE  
CCEE

## CONTENTS

	<u>Page</u>
1. Introduction	1
2. Future environment of health in Europe (Mr K. Barnard - Chair)	2
2.1 Futures scenarios as health policy context (Mr K. Barnard)	2
2.2 Ecology (Dr R.T. Mayon-White)	3
2.3 Technology (Professor J. Avery)	4
2.4 Geopolitics (Docent G. Falkenmark)	5
2.5 Economy (Professor B. Majnoni d'Intignano)	5
2.6 Population and epidemiology (Ms A. Taket)	6
2.7 Social structure and demography (Professor L. Balbo)	7
2.8 Discussion on future environment of health in Europe	8
3. Implications for health action in Europe (Professor W. van Eimeren - Chair)	9
3.1 Promoting health in large towns (Mr N. Gianotti)	9
3.2 Health service organization in Europe: Destabilization and adaptation (Dr M. Warner and Dr C. Riley)	10
Reorganizing health care in eastern Europe (Dr A. Javor)	10
3.3 Discussion on implications for action	12
4. Health and Systems Sciences (Dr H. Zöllner - Chair)	12
4.1 Challenges to systems sciences (Mr M. Lagergren)	12
4.2 Discussion on implications to systems sciences	13
5. A synthesis	14
6. The continuing agenda	16
7. Follow-up	16
Annex 1 Participants	17



## 1. Introduction

Dr Herbert Zöllner opened the meeting. He welcomed participants and recalled the first futures consultation held by the Regional Office in Copenhagen, in February 1990. Set in the context of WHO's commitment to review and update the European health for all policy and targets for the 1990s and beyond, the first consultation had focused on the macro-environment for the health sector in Europe. It had identified a number of possible trends which if they materialized would create both opportunities and problems for the development of health policy and action. A similar approach had been adopted for this second consultation and Dr Zöllner indicated his pleasure at seeing a number of the experts who had participated in Copenhagen, joining the second meeting. He contrasted the situation in Europe now with that observed at the first consultation. For WHO and its Member States, the health policy for Europe articulated in the HFA targets updated in 1991 now provided a point of departure for a more closely defined speculation on the health sector itself and on options for future development. As for the wider context, the geopolitical and economic situation remained very fluid. Two dominant features were the clearer understanding of the problems in central and eastern European countries arising from the lack of many aspects of societal and economic infrastructure; and continuing uncertainties concerning the ratification of the Maastricht Treaty of European Union (which included a public health mandate) and the future nature and size of the European Community.

Dr Zöllner then explained the structure of the meeting. The morning, chaired by Keith Barnard, was concerned with possible futures in the macro environment, following a similar format to the Copenhagen consultation i.e. exploring the implications of trends in ecology, technology, geopolitics, economy, demography and epidemiology and social structure. The afternoon was divided into two parts, the first focusing on the health sector itself, chaired by Professor Wilhelm van Eimeren and taking in policy and organizational issues; and the second, chaired by Dr Zöllner, focusing on systems sciences implications. In this way, each phase provided the context for the one following, finally feeding into the wider themes of the Systems Sciences Conference which was the parent event of the consultation.

Dr Zöllner proposed as rapporteur for the meeting Dr Ron Schreuder, Secretary of the Foundation for Strategic Health Policy Development and the International Health Futures Network. This was endorsed unanimously.

In each session briefing papers were introduced by the authors who were invited experts for the Consultation and followed by panel discussion. The presentations, papers and discussions are briefly summarized in the following sections of the report. Material based on replies received to a questionnaire, sent after the meeting to allow participants to comment further, has also been incorporated into the text. The report is concluded by outline proposals for a plan of action.

## 2. The operating environment of the health sector

### 2.1 Futures scenarios as health policy context

In opening the session, Keith Barnard drew attention to the background paper "The future of health in Europe" which was a synthesis of various scenarios. Our attempts at systematic thinking about the future are a mix of our efforts of reconstructing, interpreting and responding to the past; our partial understanding of the present and the implications as we see them; and our general expectations and hopes for the future. Scenario methods as developed for the health sector by the Ministry of Health in the Netherlands and others had given us a technology for this, a way of describing desirable and unacceptable futures and of investigating possible and probable futures.

This paper was an attempt from a WHO perspective to provide a context for the updated HFA policy, the macro assumptions on which specific feasible targets for making progress towards health for all had been based. He reflected on the difficulties of preparing such a text, since the political and economic environment, including the climate of thinking within the WHO family itself, had been shifting over the 18 months or so during which the targets were being reviewed and revised. He had seen a swing from a basic desire to project a positive future building on a record of achievement to a concern about appearing naively optimistic. He had also noted among policy makers and their advisers a reluctance to accept images of the future which appeared negative, e.g. "Fortress Europe". Even more strongly they rejected scenarios of possible futures which could imply faults in present institutions and errors of judgement on the part of those at present in power.

The experience of drafting "The future of health in Europe" highlighted the danger, or at least the difficulties, of being responsive to contemporary events when preparing a text which is intended to have a reasonably long shelf life. It raises a number of questions of preparing scenarios or "histories of the future" for policy-making purposes and in particular for the task of creating a climate of thinking for policy-makers and their advisers.

Some of these questions are the following:

- (1) How much importance is to be attached to the past, given the dramatic discontinuities of the recent past and present, particularly in geopolitics?
- (2) Should we just concentrate on the "super tanker trends", i.e. those trends which continue irrespective of temporary turbulences?
- (3) Are discontinuities really foreseeable if only we could improve our methodologies?
- (4) Is it possible in the practice of preparing for actual policy-making to distinguish between possible futures as "might be's" and assertions of what needs to happen, and what will be good, (e.g. current intellectual, emotional and political investment in promoting privatization of public assets, free trade, tends to take the benefits which will accrue as self-evident, just as did earlier claims for central planning).

(5) Is it good enough or appropriate to work with a framework of:

- possible futures;
- probable futures;
- most unacceptable future;
- desired future.

(6) How are these alternatives handled in the policy-making process given the limited capacity of people to handle more than a few ideas at the same time?

In order to achieve some continuity with the first Futures Consultation and the context developed in the "Future of health in Europe", the present Consultation made these assumptions; in health policy development in addition to working with the best informed speculations about technology development and trends in ecology and the environment, we need to be specially aware of geopolitical discontinuities, economic prospects, attitudes and feelings about caring in society, and the consequences of all these for health. He therefore concluded by inviting participants to assume, as a starting point for assessing the speculations of the panel of speakers who would follow him, that the conditions required for a healthy future could be summarized as:

- geopolitical stability, particularly through North-South rapprochement
- social harmony
- sustainable development (i.e. ecology, technology, demography and economy)
- health accepted as an important criterion in all political decision-making.

## 2.2 Ecology

This theme was introduced by Dr R. Mayon-White who suggested that the urgent question is whether the effect of past trends, which have generally produced a healthier environment (for the human species), will ultimately be a more hostile environment. He focused on a number of ecological developments and their consequences for the future health situation.

- Global warming: The health effects are uncertain. It might result in a better food situation in Europe but also in an expansion of circumstances in which mosquitoes can survive. This might re-introduce malaria as an endemic disease in Europe.
- Air pollution: The direct effects on health are not clear. One would predict an improvement in air quality and consequently a reduction in respiratory illness. Technical methods of preventing exposure can usually be found. So the incidence of air-borne industrial diseases should fall to very low levels in Europe.

Diseases associated with the ventilation of buildings are more difficult to prevent. If present building trends continue an increase in morbidity is to be expected.

- Water pollution: The trend is to reduce water pollution for ecological reasons that do not directly include health. Due to a number of reasons high quality drinking water may become in short supply.

- Foodborne diseases: Foodborne diseases remain a potential threat, particularly because of the intensity of meat production and the international trade patterns. Surveillance and control need international cooperation.
- Waste disposal: The increasing trend in the production of waste will require more efforts to recycle waste material and changes in industrial processes to protect the health of the population.

Dr. Mayon-White concluded that the prevailing ecological view of present trends is gloomy and littered with words such as "disaster" and "catastrophe". Global warming could give reality to such words, but there are more immediate adverse effects from other trends in environmental change. Sustainability will depend on a restricted growth of the population, a willingness to make the effort to change and to repair the damage already caused.

### 2.3 Technology

Professor John Avery cited a number of technologies which might significantly affect health status and impact on health services. In order to illustrate, he focused on:

- Biotechnology: An ambitious programme for human genome mapping has been initiated. It will become possible to predict many inherited defects and diseases. Extensive genetic screening may lead physicians under certain conditions and assumptions to recommend the termination of many pregnancies. The techniques being developed will therefore raise many ethical problems. The countries of Europe may well find it difficult to reach agreement on the policy and legal implications.
- Micro-electronics: During the next decade we can expect all activities of living to be linked by instantaneous communication networks. Rapid technological developments will result in a shift in the economy from production to the service sector. There will be increased "technological" unemployment with possible serious adverse effects on health in terms of e.g. mental illness, alcoholism and drug abuse among those who are unable to cope with such changes in their circumstances.
- Energy: Energy consumption will increase dramatically, depleting available traditional resources.

Professor Avery concluded that the resources of the earth and the techniques of modern science would be able to support a future population of "moderate" size in comfort and security. However, an increase of the global population to between 10 and 14 billion followed by an ecological catastrophe and famine would be a disaster of a scale unprecedented in history, and all should be done to prevent this. Continued developments in biotechnology and microelectronics should provide replacements for vanishing mineral resources and fossil fuels, new sources of food, and minimize the environmental impact of human activities.

## 2.4 Geopolitics

Major geopolitical trends influencing the future environment of health in Europe were reviewed by Dr Gunnar Falkemark. He explained a number of different conceptions behind the term geopolitics; (1) geopolitics adds a geographical dimension to the classic definition of politics as to "who gets what, when, how" by adding 'and where'; (2) geopolitics has to do with the political importance of geographical factors i.e. it is taken for granted that such factors do have considerable political significance; (3) geopolitics during the Nazi regime in World War II was essentially a normative theory which legitimized German imperialism and the "Lebensraum" concept; (4) recently, geopolitics is seen as an empirical body of thought.

One basic idea of geopolitical thinking is the importance of a state's location; another is the often neglected distinction between "states" and "nations". One of the most controversial issues of geopolitical thinking is the concept of "natural boundaries" which is a difficult to define. Most geopolitical analysts emphasize that many states in the world are not nation-states i.e. states where one nation dominates; while every nation wants to form a state of its own.

The recent developments in Europe has resulted in 50 sovereign political units i.e. in Eastern Europe one political will has been transformed into a multitude of independent wills. A complicating factor of the new democracies is the fragile character of the regimes; the temptation to stir up national animosities for leaders in trouble will be great.

Dr Falkemark concluded that in respect of the political preconditions or prerequisites for health, the prospects in coming years in large parts of Europe are very gloomy. He was pessimistic about the chances of stability and democracy in Eastern Europe. Constantly shifting alliances and conflicts could be expected in the next decade and weak economies presented a risk of adventurous populists emerging as national leaders. Civil war in several parts of Europe might be (practically) unavoidable.

## 2.5 Economy

Professor Beatrice Majnoni d'Intignano presented an overview of the history of the EC, the consequences of the creation of a European Economic Area (agreement between EFTA and EC countries) and the introduction of the EC Single Market in 1993. The major aspects of the latter would be a free movement of labour, goods and services, and of capital and investments. Poorer regions and countries will benefit from "structural funds". Past trends within EC have been a low economic growth rate (as compared to Japan and the US), high and long-term unemployment and little job creation, a high percentage of GDP being devoted to social welfare and protection (30% in Europe vs 18% in the US), and social security schemes to protect employees and workers. A European monetary system (EMS) was established in 1978 designed to create more stable exchange rates for most EC currencies and limit inflation.

The Maastricht Treaty on European Union which will come into effect when ratified by all EC members (during 1992 and 1993), introduces a concept of "European citizenship" and "political components" to the EC for common defence and international policy. A European Monetary Union (EMU) is being established during three phases between 1991 and 1999, with the aim of creating a European system of central banking, a common monetary policy and external exchange policy, and ultimately a single EC currency.

The main economic and social questions facing EC in the future are growth and unemployment and the options of widening to include new CCEE members and deepening relations between existing members. Social security systems still vary widely in EC member states. This diversity is protected by both the rule of unanimity in policy-making and the principle of subsidiarity which in effect constrains action taken at Community level rather than by and within Member States.

Despite a decrease in the working age population, unemployment is expected to go up, and there will be increased pressure from immigration especially into low density and wealthy regions. The only countries who may escape long-term and selective unemployment (the unemployable part of the population) will be those practising "active compensation" employment policies rather than passive income distribution to the unemployed. The EC is expected to benefit from the economic integration with the EFTA countries but the creation of the EMU may take longer than expected.

Professor Majnoni concluded that Europe will face dramatic changes during the next decade. The EC can thus choose to be a "declining fortress" (with an aging population, highly protected agricultural markets, and a mixture of individualistic Nation States and currencies); or to carry out major institutional innovation i.e. experiment with partial but increasing transfer of sovereignty (money, external trade, defence and international policy) while protecting language and ethnic diversity; and offering the CCEE both an institutional model and a strong partnership. In the short term, the best help the EC can provide to some CCEE would be to open her agricultural markets.

## 2.6 Population and epidemiology

Ms Ann Taket, focusing on demographic and epidemiological trends, quoted a number of studies which indicated widening inequalities in health. Some parts of the European region are experiencing negative trends in the most basic of health indicators. As far as life expectancy is concerned, 42% of the regional population live in countries where life expectancy at birth is over 75 years; 35% of the population in the European region have a life expectancy below 70 years. To illustrate, mortality projections show that 50% of the 35 year old males in Poland will die before the age of 70, whereas in Sweden it will be only 25% of the same age group.

She presented a number of statistical overviews on mortality and disease categories which showed significant declines in overall cardiovascular mortality rates; and much less favourable trends for cancer, mainly due to the increase in lung cancer. The most recent figures for smoking prevalence show some increase and thus tobacco attributable death rates can be expected to rise in the future if this continues. Accidents are the third largest cause of death before the age of 65. Upward trends are evident in eastern

European countries. AIDS represents an increasing problem in the region. Widely varying projections of the future number of cases are still under debate and sophisticated epidemiological forecasting models are being developed.

It is estimated that 5% of the European population suffer from serious diagnosable mental disorder. Demographic trends mean that dementia will become an increasing problem in the future (1.4% for 65-69 age group, rising to 38.8% for the 90-95 age group).

Lifestyle changes could make an enormous difference on health status in the future. Consumption of tobacco is increasing in Mediterranean and eastern European countries. The figures are decreasing in Nordic and most EC countries. Alcohol consumption declined between 1980-1989 in 61% of the regional population. It remained stable in 24% of the population and continues to increase in countries covering 14% of the population.

Ms Taket concluded that the overall picture is similar to that painted in earlier reviews of health in Europe: increasing diversity and increasing inequalities in many instances. Cardiovascular diseases and cancer continue to dominate mortality among the middle-aged and the elderly. In the majority of countries, mortality is decreasing for age groups over 65 but there is as yet no clear evidence of the expected compression of morbidity (i.e. compression to the last years of life of a population with extending longevity). Inequity in health does not seem to decline. Differences in mortality between and within countries are increasing. For some countries in central and eastern European countries, negative trends are apparent in life expectancy and maternal mortality. The updated HFA targets (Targets for health for all: the health policy for Europe, WHO Regional Office for Europe, Copenhagen, 1992) reoriented in places to include a sharper focus on the health of disadvantaged population groups, provide a strategic framework, which can be used at a variety of levels: international, national/federal, subnational or local, to help shape the necessary flexible and adaptive responses to meet the particular challenges concerned. A focus on the health of children and young people (HFA target 7) in particular, provides the framework for investment in health necessary for reversing adverse trends in the future.

## 2.7 Social structure and demography

Professor Laura Balbo reconsidered the societal scenarios discussed at the First Consultation on Future Trends in Society (Copenhagen, 1990). She felt that the three basic scenarios of possible futures which could now be foreseen were, in essence:

- Dual Europe: still a privileged part of the world, however characterized by a widening in the gap in inequalities within and between countries, and increasingly, by patterns of ethnic, racial, linguistic, religious discrimination and segregation;
- "Blade-runner Europe": a society of conflict, poverty and violence, in which a minority strives to keep safe and stay in control; and possibly one in which youth dominates at the expense of the elderly;
- a user-friendly Europe: a homogeneous (relatively speaking) Europe, striving for peaceful coexistence and tolerance and committed to universal social citizenship rights.

The present trends in Europe are an increasing proportion of elderly people, a fall in birth rate, a dual work situation for adult women who have to care for children and older relatives in a society which neither rewards nor supports this dual work pattern, nor has adequate policies addressing family, old age and children's issues. Moreover, it is becoming increasingly clear that particularly under current conditions of economic crisis and widespread unemployment, there are groups in the population that harbour xenophobic and antisemitic feelings and engage in aggressive and violent behaviour.

She argued that existing social arrangements and social policies are weakening and inadequate. This will continue for the foreseeable future and seeking new answers to social needs is not part of the political agenda anywhere. Structural, self-perpetuating processes of inequality and discrimination seem to be inescapable.

Professor Balbo concluded that a dual Europe seems to be the most likely scenario. It was therefore desirable that strategies of "reverse discrimination" should be kept on the political agenda; focusing not only on models of political action through social policies, professional codes and practices but also on grass roots individual strategies, to develop counter-mechanisms to the increasing dualism in society.

#### 2.8 Discussion on future environment of health in Europe

In the ensuing discussions, one strongly expressed view was that all the panelists' views were essentially gloomy but a more optimistic outlook could also be foreseen e.g. the liberalization of Eastern Europe and the political and economic integration of Europe were basically very promising developments even if they carry risks of different kinds. It was therefore important before considering possible action to be satisfied that this pessimism was justified. According to this view, the world was less gloomy than 5 years ago and some of the negative interpretations of CCEE developments which were now current were in fact rather questionable. The majority of Europeans would do well economically in the next decade, thereby refining the problem of economic development to one of support for less developed groups and regions and for CCEE. The contrary view had it that historical precedents of comparable geopolitical situations warranted pessimism, and progress towards European Union, which might help, was too slow, held back by (among other factors) the decision-making procedures which had been adopted.

There was also a lack of consensus revealed as to who had the responsibility to act. One view was that it was not only governments: individuals and society itself should change. The contrary view to this was that the role of governments remains important, indeed essential. Market mechanisms will not necessarily pave the way for the societally necessary and desirable technical and other advancement. Technology development itself could be seen as creating possibilities rather than threats. In addition to causing technological unemployment, it might boost the creation of jobs in the service sector but that would mean a conscious intervention by governments.

But on another values question, there was consensus. There was a general affirmation that people should be empowered to take action in local situations. Although some decision-making is being pushed upwards, most of the real action will come from local initiatives. The introduction of some market mechanisms could perhaps enhance local initiatives, but also professional groups should be involved in the process of change, where their knowledge and competences could be used for the community's benefit.

The need for networking was stressed. People involved in local initiatives should be informed about actions going on in other parts of their country and abroad. Also, in the field of prevention, people should be informed about the results of certain types of action, for instance, about the effects of prices on the consumption of alcohol and tobacco. It was also noted that while there are reasonable mortality statistics, there is a clear lack of registration and statistics on morbidity and disability patterns. For effective action, these data are badly needed.

Important in futures thinking is the way we handle discontinuities. Our recent and current experience suggests that we need better methods for this, particularly for handling new ideas which emerge to shape first public debate and then the range of feasible policy options. There was also much debate whether there should be an optimistic or pessimistic perception of the future. Almost everybody now has a strong awareness of discontinuities which engenders both optimism and pessimism; but the younger generation has enormous potential for social and other innovation. The perspectives for the future were very diverse and none should be seen as simple either-or possibilities; rather multiple speculations should help open up new perspectives and options.

There was general agreement that among the most important factors and issues which should guide health strategy development in the future will be:

- consensus-building (national/international) on a framework for the health sector within which all kinds of action can take place;
- demographic and social developments: aging population and chronic disease and illness; migration; impact of changes in family structure; increasing inequalities gap associated with low economic growth;
- applicability of concept of sustainable development to the health sector; adverse effects of the physical environment on health;
- types, funding, and quality of care ("what do we really want"); advances in medical and other technology;
- the uncertain geopolitical environment in Europe; and the importance of seeing developments in Europe within a global context.

### 3. Implications for health action in Europe

#### 3.1 Promoting health in large towns

Mr Nicolo Gianotti noted that it is projected that in the year 2000, around 70% of all people will live in towns. At least 50% of the total population will live in towns with over one million inhabitants.

The health definition of WHO assumes health as a holistic value. Health is the consistent fundamental component of "wellbeing". The achievement of the HFA goal presupposes health promotion policies and programmes. The necessary strategic framework for local health promotion as proposed in the Ottawa Charter can be summarized as follows:

- promoting healthy public policies
- creating supportive environments
- strengthening community participation
- improving personal skills
- reorienting health services to give greater emphasis to health promotion.

He drew attention to the concept of "healthy public policies" which is concerned with ensuring that health criteria are taken into consideration in the policy and decision-making processes of all sectors. But it also includes recognition of a new competition between public and private provision in the "market" of the health care system as well as in the market of health information and education which consequently must innovate structurally and culturally.

The WHO Healthy Cities Project was developed as a model for networking local initiatives and examples of good and effective innovations are found throughout the Healthy Cities network. To illustrate this, Mr Gianotti cited a number of such innovations in Italy and other European countries.

He concluded that a fundamental requirement for a successful health promotion policy in urban areas was the participation of the people as well as institutions, commercial and industrial bodies, services, professional groups, and organized voluntary associations. Without this participation, progress will be difficult and success doubtful.

### 3.2 Health service organization in Europe: Destabilization and adaptation

Drs Morton Warner and Chris Riley addressed the question of why health services have to change. They observed that a number of trends outlined by previous speakers act on the health services in a number of ways by:

- changing the pattern of perceived need, and at the same time
- affecting the ability of countries to allocate resources to health care services.

The term "perceived needs" was used by Dr Warner, to reflect the specific problems to which the health care system is expected to respond and the way individuals and society see health issues. Even if health promotion activities are effective, certain eventualities should still be contemplated. There may yet be a high concentration of problems towards the end of life. Disease patterns will change; medical technology development will have radical effects on existing health care services. This much was already illustrated by other speakers. New knowledge may even have the potential to reduce what are at present major crises to the level of minor irritations. The outlook of people will change; more people will be interested in health and less will accept disease fatalistically.

This plausible future will require more thoughtful responses by health care professionals and will be demanding on resources of all kinds. An important feature will be the effect of demographic change; traditional sources of manpower will be under strain, while demands for services will be growing. There will therefore be even more incentive to provide tightly focused health services, judged rigorously in terms of efficiency, effectiveness and appropriateness i.e. adapted to meet assessed population needs. Consumer expectations cannot be met fully. At the same time, more protection of vulnerable groups is needed, e.g. the elderly, mentally ill and handicapped. A number of changes would be initiated by change in financing mechanisms. The roles of purchaser and provider of services, for instance, could be more clearly defined and made distinctive. The implications of any changes in mechanisms for the transaction costs they generated could be addressed more seriously in future.

Illustrating the theme by reference to possible UK developments, the speakers thought it unlikely that there would be privatization of public health care services although some market forces and elements were being introduced within the public services which still dominated the British health sector. It was also anticipated that the results of future technology developments would mean care brought closer to the individual's home, and up to 50% reduction in hospital beds could be expected; this will have enormous implications for the training and (re)deployment of human resources.

Much of this overview was corroborated by Dr Javor as it related to developments in Central and Eastern Europe where previously centralized systems were now undergoing structural changes which in some instances and respects were radical. He cited his own work in changing the health care system in Hungary where the main problems had been identified as:

- low health status of the population compared with other countries in Europe;
- too many acute hospital beds;
- lack of consumer organization;
- underfunding (only US\$ 140 per capita);
- health not having such a high value as in western European countries;

and a number of reform proposals had been set in motion, e.g.

- the introduction of an independent national social insurance fund;
- a more fair distribution of the funds available for health services;
- the rigorous introduction of a DRG-system for reimbursement.

Drs Warner and Riley stressed the importance of developing vision in health care issues. The core should be targets, like those proposed for the WHO European HFA Strategy for:

- equity;
- health status;
- quality of services.

The speakers recommended five major adaptations for the health sector:

- a health focus for health services;
- efficiency with effectiveness (i.e. not only efficiency);
- any new technologies to replace old technologies should be introduced after favourable technology assessment studies;
- new organizational frameworks, e.g. "down-sizing" from large acute hospitals to hospitals with 250 beds serving only very ill patients;
- a shift to primary care and health promotion investment.

They concluded that a clear and firm sense of direction is essential if scarce resources are to be sensibly invested across Europe. As Europe moves towards the year 2000, one common pattern for both eastern and western European countries might be:

- decentralization to local level;
- increased cost consciousness;
- a diversification of health care funding sources;
- a shift of responsibility to the patient; and
- the development of a competent cadre of general practitioners who, together with other physicians, have been trained for competence in health promotion.

### 3.3 Discussion on implications for action

The importance of a clear framework and targets was underlined: targets are the instrument to focus everybody's attention on the broader notion of health. It was also evident that health care systems of all present types need some change or at least modification. It was therefore important to share experience and information between countries on trends and options for change, and on the means being developed for studying them.

Important issues for the health sector were identified as:

- securing sufficient political interest and therefore attention to health care issues;
- making a shift from hospital to home and community-based care together with closer integration of health and social services; and shifts in professional skills;
- assessing the options in financing health care systems: (public, private, or a mix) and developing a rational equitable distribution of health care personnel and services;
- responding to increasing consumer participation in health care;
- monitoring and evaluation of health services and the development of outcome measurement, continuous technology development and assessment.

It was particularly stressed that effort was needed in adjusting health care systems to pressures arising from:

- increasing demands from better informed users of services in respect of the quality and type provided;
- demographic developments i.e. aging population, migration;
- developments in medical and information technologies.

Reorienting health care in central and eastern Europe would be a long-term process; priorities needed to be set since not all could be done at once. Existing structures and processes should continue to be used wherever possible to minimize destabilization during the political, economic and cultural transition. The particular needs in this part of Europe and the range of feasible options for the health system in its broadest sense could be the specific focus of a later "futures" consultation.

## 4. Health and Systems Sciences

### 4.1. Challenge to systems sciences

Dr Marten Lagergren analyzed the challenge to health care systems of anticipated future trends in society. Looking at the European scene the following trends seem to be most important:

- the aging of the population;
- the changed role of women which means that much responsibility for care is shifted from the informal to the formal sector;
- advances in medical technology;
- the likely convergence of systems conditions and design following the integration of the European market in the West;

- the wider concept of health policy developed through WHO with its emphasis on equity in health implies action in all sectors through a healthy public policy.

The above-mentioned trends in combination with limited economic growth implies that cost control and efficiency improvement will be even more important in the future. The emerging responses are interesting: in general, countries with market oriented solutions are introducing more government control; public systems are introducing market or pseudo-market solutions.

From a systems thinking perspective, different methods and approaches are suited to meet the various challenges. The scenario technique is very suitable for handling complex problems. Incentive structures can be attacked by using the technique of gaming. Consequences in terms of costs and manpower requirements under different sets of assumptions can be evaluated using econometric modelling. Simulation is a powerful and simple tool for assessing quantitative consequences of alternative systems design. Micro-simulation can be utilized for assessing the effects of changes in utilization of care. Other applications of systems science are found in operational planning, staff scheduling, waiting list management. Among other new "instruments" which can be applied are DRG types of mechanisms for reimbursement and also different systems of population and individual need assessment. For system evaluation one can look to performance indicators, expert systems outcome assessments and quality assurance as having important roles to play.

He concluded that to meet the anticipated future of increasing demands with less resources available, the current performance of the current rapidly changing health and health care systems in Europe would need to be significantly improved. Systems science approaches and techniques would need to be deployed in areas of systems design, systems operations and systems evaluation. Their potential as tools has been, and will be even further, enhanced by the developments within computer and information processing technology. The key problem appears to be that of systems design, especially the issues of how to combine incentives and cost control. He stressed that attention to policy formulation and systems design in the health field should be a long-term activity and based upon continuing systematic assessments of trends and developments.

#### 4.2 Discussion on implications for systems sciences

Members of the multidisciplinary panel identified a number of general issues.

At present, the majority of research (or at least the research presented at the Prague Conference) was too provider rather than public policy or system-oriented. Within governments and national administrations often too little attention is paid to health matters, and health ministries need to redefine their missions. It was felt that competition between the private and public sector might in some circumstances help to stimulate innovation. Also advocated was the application in ministries of health system modelling as an aid to practical decision-making of well-defined problems. Much emphasis was laid on the role of informatics and the need for health monitoring.

### Systems science issues and the role of systems scientists

The panel emphasized the appropriate use of systems sciences. Systems science is a tool to assess effectiveness of common care processes and practices and to help define future trends, rationalizations or new cultural and organizational approaches. Need-definition should be encouraged by other people than just systems scientists or professional health advisers and consultants.

The importance of international cooperation and the role of networks for sharing information and providing support was also stressed. More attention should be given to coordination of the contributions of interested international organizations e.g. EC, OECD, WHO (Copenhagen and Geneva). The recently established International Health Futures Network could play a very stimulating role, e.g. in promoting or conducting futures studies which would act as navigation maps for system reforms. Systems scientists could use such an international network to address both "basic" research issues and questions posed by policy-makers and administrators, and to facilitate interchanges between countries, between disciplines and between researchers/evaluators and political leaders/administrators.

One participant felt that there was an ethical obligation on systems scientists to work towards avoiding further shifts away from social solidarity and equity. Generally, it was felt that greater attention should be paid to people and their experience with health care delivery and health care systems. Emphasis must be on both health strategy development and its implementation, and efforts made to explore and explain whatever gap may appear between the original vision and the outcomes in practice.

Given the importance of the role systems scientists could play in developing future health strategies, it was suggested that units of systems science experts could be set up at central and local levels, to support planners, administrators and policy researchers. The Operational Research unit at the UK Health Ministry was mentioned as an example of this approach. In this connection one participant felt that systems scientists needed to be firmly guided by managers representing the client perspective on where to apply their attention e.g. prevention, equity, cost-effectiveness and efficiency, etc. This also meant that more attention should be paid to the training, employment and deployment of health systems/management scientists. There did not seem to be sufficient opportunities for postgraduate education in management sciences applied to health.

#### 5. A synthesis

The following inferences may be drawn from the Consultation:

- (1) The overall picture offered by present trends suggests that the future of Europe will be gloomy in a number of societally important aspects if no efforts are made to undertake changes. Three main scenarios can be foreseen: a dual Europe; a fortress Europe, or a divisive "blade-runner" Europe. The difference in life expectancy between East and West highlights the widening gap of health inequalities both within and between countries. In addition to the inequalities gap, there will be an increase in social needs and in discrimination. Slower economic growth will cause increased unemployment and social problems.

- (2) It is plausible to conclude that if present ecological trends continue without major change in the attitude and behaviour of individuals and society collectively, and in public policy, there will be catastrophic effects both on the environment and on the health of the population.
- (3) The trend in the structure of the economy is towards a society with more service-related jobs. Society will not be able to adapt to rapid technological developments resulting in increased "technological" unemployment and many ethical problems unless governments decide in time to play a central active role.
- (4) If the present geopolitical trends of civil unrest and conflicts continue, the prerequisite of peace for achieving health for all, will not be met or appear possible to meet.
- (5) The decision-making processes within the EC might complicate efforts to fully integrate Europe. Unless specific counter measures are taken, the deepening of the EC Single Market and the consequent economic integration will have severe consequences for non-EC countries.
- (6) It will take time to rebuild health care structure in CCEE; health sector issues will not be on the top of the political agenda. Support will be needed from Western Europe in establishing an appropriate framework and clarifying appropriate targets. The framework of the WHO Healthy Cities project had been successfully applied as a model for networking and enhancing the effect of local initiatives and should be used as a model also in the CCEE, more will need to be done to inform and involve professional and other groups at local level in all parts of Europe.
- (7) Population movements may mean that there will be an increase in the number of large towns and the need for strengthened health promotion efforts. Increased efforts to change health behaviour might change the health status of the population. But also the emergence of new health problems, demographic changes, technological developments requiring less hospital beds and more ambulant and home care, and more consumer participation will all create increasing pressure for efficiency and effectiveness from future health services and personnel. Better registration and more accurate statistics on morbidity and disability patterns are needed along with developments in informatics, health care monitoring and the use of simulation models. The respective roles of provider and consumer and of government and the public and the private sectors need to be better defined. Better interaction will be necessary between all actors and especially between budget-holders, providers, and consumers.
- (8) The debate about responsibility for action - government, society or autonomous market forces obscures two other important and related issues. The starting point of any explanation and proposal is the perspective and frame of reference of the proposer. The Consultation revealed not only that different professions and disciplines perceive issues as problems differently; they also operate with different time frames and look to different time horizons for meaningful outcomes. This has serious implications for generating a shared sense of urgency and importance, for assigning responsibility, and for creating a sound technical, economic

and political basis for policy and action. The second issue is the need to develop political, economic and administrative institutions which fit with ecological and technological developments in particular and thereby make timely action possible (this without any judgement here on the market or government dichotomy).

#### 6. The continuing agenda

On the basis of the replies to the questionnaire sent to participants after the meeting, there was wide agreement that future consultations should be structured along certain lines; there should be:

- a balanced Europe-wide participation;
- a clear outline of the specific objective and scope of a given meeting and hence a focused discussion;
- preparatory work by an organizing committee, e.g. in commissioning expert statements from invited participants on certain topics, regions and methodological issues;
- a programme of work designed for producing a report of conclusions based on discussions rather than for providing expert verbal briefings to fellow participants.

It was felt that a continuous structured dialogue should be established between policy-makers, health scientists and futurists; and that this dialogue should be structured under the auspices of the WHO Regional Office for Europe, the European Community and Member States.

#### 7. Follow up

Immediately following the consultation, May Hansen, Keith Barnard and Ronald Schreuder met to discuss possible follow-up activities. The following outline suggestions were agreed:

- (a) a two-day follow up meeting should be organized in 1993 to further analyze the observed trends and their implications;
- (b) this meeting, for reasons of economy, could be held at the WHO Regional Office for Europe in Copenhagen;
- (c) this meeting (in keeping with the opinion corroborated later by the replies to the questionnaire) should spend less time on briefings and more time on discussions between participants on selected topics;
- (d) the International Health Futures Network and its European Secretariat, based at the Foundation for Strategic Health Policy Development in the Netherlands, should play a role in facilitating follow-up meetings;
- (e) the first follow-up meeting could be linked with the larger HFA policy conference planned to be held in Madrid in 1994.

Annex 1

PARTICIPANTS

TEMPORARY ADVISERS

- Professor Christa Altenstetter  
c/o GSF Munich - MEDIS Institute, Neuherberg, Germany
- Professor John Avery  
Köbenhavns Universitets Fysisk-Kemiske Institut, Kemisk Laboratorium IV,  
Copenhagen, Denmark
- Professor Laura Balbo  
Milan, Italy
- Mr Keith Barnard  
Nordic School of Public Health, Gothenburg, Sweden
- Docent Gunnar Falkemark  
Department of Political Science, University of Gothenburg, Sweden
- Mr N. Gianotti  
Project Coordinator, Officio Progetto "Citta Sane", Milan, Italy
- Dr A. Javor  
State Secretary, Ministry of Welfare of the Republic of Hungary,  
Budapest, Hungary
- Mr Maarten Lagergren  
Assistant Under-Secretary of State, Ministry of Health and Social  
Affairs, Stockholm, Sweden
- Professor B. Majnoni d'Intignano  
Paris, France
- Dr D. Mayon-White  
Department of Public Health, John Radcliffe Hospital, Oxford, United  
Kingdom
- Professor N. Misuniene  
Vice Rector for Education, Kaunas Medical Academy, Lithuania
- Mr J. Ian Morrison  
President, Institute for the Future, Menlo Park, CA, USA
- Dr Wim Nuyens  
Head, Department of Research and Development, Association of Dutch Health  
Insurers, Zeist, Netherlands
- Dr Christopher Riley  
Associate Director, Welsh Health Planning Forum, Cardiff, United Kingdom

Dr G.H.D. Royston  
Head, Operational Research Service, London, United Kingdom

Dr Ronald F. Schreuder  
Foundation for Strategic Health Policy Development, Zoetermeer,  
Netherlands

Professor C. Selby Smith  
Graduate School of Management, Clayton, Victoria, Australia

Professor A. Sissouras  
Department of Operational Planning, School of Engineering, University of  
Patras, Greece

Ms Ann Taket  
Department of Geography, Queen Mary & Westfield College, London, United  
Kingdom

Professor W. van Eimeren  
c/o GSF Munich - MEDIS Institute, Neuherberg, Germany

Mr Jan van der Kamp  
Director of Public Health Services, Sneek, Netherlands

Dr Herman van Oyen  
Institute of Hygiene and Epidemiology, Brussels, Belgium

Dr Morton Warner  
Executive Director, Welsh Health Planning Forum, Cardiff, United Kingdom

#### BUSINESS LEADER

Dr Jonathan E. Fielding  
Vice President, Health Policy Analysis and Planning, Johnson & Johnson,  
Santa Monica, CA, USA

#### WORLD HEALTH ORGANIZATION

##### Regional Office for Europe

Ms May Hansen  
Assistant, Strategic Planning and Evaluation

Dr Herbert Zöllner  
Regional Adviser, Strategic Planning and Evaluation

##### Headquarters

Dr S. Sapirie  
Chief, Monitoring, Evaluation and Projection Methodology