

Policy Health Impact Assessment for the European Union: Pilot Health Impact Assessment of the European Employment Strategy in Germany

AUGUST 2004

Report authors: **Fiona Haigh¹, Odile Mekel¹**

German research team: **Odile Mekel¹, Fiona Haigh¹, Rainer Fehr¹,
Rudolf Welteke¹**

Project research group: **Alex Scott-Samuel², Debbie Abrahams²,
Andrew Pennington², Lea den Broeder³,
Cathal Doyle⁴, Owen Metcalfe⁴, Odile
Mekel¹, Fiona Haigh¹, Rainer Fehr¹**

Institutes:

¹Institute of Public Health (Iögd) North Rhine-Westphalia, D

²IMPACT Group at the University of Liverpool, UK

³National Institute for Public Health and the Environment (RIVM), NL

⁴Institute of Public Health in Ireland, IRL

Table of contents

Executive summary	3
1 Introduction	8
1.1 Project Background	8
1.2 Aims and Objectives of the report	8
1.3 European Policy Health Impact Assessment methodology (EPHIA)	9
2 Screening.....	10
3 Scoping.....	10
4 Conduct assessment	12
5 Policy analysis	12
5.1 The European Employment Strategy	12
5.2 EES Implementation in Germany	14
5.3 Policy analysis focus: EES and Flexibility	14
5.3.1 Flexibility concept	15
5.3.2 EES and flexibility	16
5.3.3 Flexibility in Germany	16
6 Profiling.....	17
6.1 German Profile.....	18
6.1.1 Population.....	18
6.1.2 Employment.....	20
6.1.3 Unemployment.....	21
6.1.4 Forms of employment.....	23
7 Qualitative and quantitative data collection.....	26
7.1 Participatory workshop	27
7.1.1 European Employment Strategy (EES) – Implementation in Germany	28
7.1.2 Identification of Health impacts.....	29
7.2 Selection of HIA focus	29
7.2.1 Prioritisation criteria	30
7.2.2 Application of criteria	31
7.2.3 Selection	32
7.3 Health impacts	33
7.3.1 Employment and health.....	34
7.3.2 Health impacts focus: flexible forms of employment and health	35
7.3.3 Employment and health models	39
8 Impact analysis.....	43
8.1 Flexible forms of employment and health.....	43
8.2 Impact of fixed term employment on self reported health status.....	46
8.2.1 Methods	47
8.2.2 Results.....	48
8.3 Estimation of impact of part and fulltime work on work related absenteeism due to health problems	51
8.3.1 Methods	52
8.3.2 Results.....	53
8.4 Discussion	56
8.4.1 Fixed term contracts and perceived health status.....	56
8.4.2 Part-time work and absenteeism	56
8.4.3 General discussion of modelling.....	57
9 Establish/evaluating priority impacts	58
9.1 Application of prioritisation criteria.....	59
9.1.1 Strength of evidence.....	60
9.1.2 Likelihood of impact.....	60
9.1.3 Severity	60
9.1.4 Health inequalities	60
9.1.5 Existing health targets	60
9.2 Result of prioritisation	61
10 Develop Recommendations	61
10.1 Recommendations.....	61
11 Process evaluation	62
12 Monitoring and outcome and impact evaluation.....	63
Literature.....	65

Appendix 1 Draft terms of References	68
Appendix 2 German employment policy grouped according to relevant EES guideline.....	73
Appendix 3 Core indicators	77
Appendix 4 Participatory workshop results	90

List of tables

Table 1	Different forms of flexibility (Goudswaard and de Nantueil, 2000).....	15
Table 2	Unemployment Situation September 2003.....	21
Table 3	Priority selection matrix	32
Table 4	Synopsis of literature review of flexible forms of employment and health.....	38
Table 5	Synoptic table: evidence flexible employment and health.....	44
Table 6	Changes in reported health status due to shift from permanent full-time contracts to fixed term full-time contracts.....	49
Table 7	Absenteeism due to work related health problems	52
Table 8	Changes in reported absenteeism due to work related health problems resulting from changes in number of full-time and part-time contracts	53

List of figures

Figure 1	European Policy Health Impact Assessment Methodology (EPHIA).....	4
Figure 2	Schematic representation of the EU Policy HIA Procedure.....	10
Figure 3	Steering group formation process	11
Figure 4	Age structure of the population in Germany	19
Figure 5	Population Germany in April 2002 according to age and participation in employment in million	20
Figure 6	Development severely disabled unemployment rate in comparison to total unemployment rate (Federal Statistical Office of Germany, 2003a).....	22
Figure 7	Employment rate of women with children according to living situation (%) (Federal Statistical Office of Germany, 2003a).....	23
Figure 8	Employed with fixed term contract (excluding trainees) as proportion of all independent employees.....	24
Figure 9	Fixed term contract employees in April 2002 according to age group as percentage of all independent employees in corresponding age group (Federal Statistical Office of Germany, 2003a).....	24
Figure 10	Employment rate of women with children according to number of children and full/part-time status in April 2002 (Federal Statistical Office of Germany, 2003a).....	25
Figure 11	Part-time employed women with children in April 2002 according to reasons for working part-time (Federal Statistical Office of Germany, 2003a).....	26
Figure 12	Health problems due to work (Qu 35) as perceived by European and German workers in 2000.....	35
Figure 13	DPSEEA Model (Corvalan et al., 1996)	40
Figure 15	Structural model of employment and health.....	42
Figure 16	Shift in types of jobs	49
Figure 17	Number of people reporting poor health according to job type	49
Figure 18	Health impact due to shift in job type: from permanent to fixed term	50
Figure 19	Attributable cases reporting poor health due to fixed term contracts under different scenarios.....	51
Figure 20	Shift in types of jobs from full-time to part-time	54
Figure 21	Number of people reporting absenteeism according to job type.....	54
Figure 22	Health impact (reduced amount of absenteeism) due to shift in job type: from full-time to part-time	55
Figure 23	Number of reduced cases of absenteeism due to part-time work.....	55

Executive summary

Background/Aims

Health Impact Assessment (HIA) is a "combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population". The Treaty of Amsterdam made explicit the commitment of the European Union to ensure that human health is protected in the definition and implementation of all Community policies and activities. However there is presently no accepted methodology for assessing the impacts of EU policies on health within the Community. Therefore the EC funded a project (Policy Health Impact Assessment for the European Union) to develop a generic HIA methodology to assess the potential health impacts of European policies.

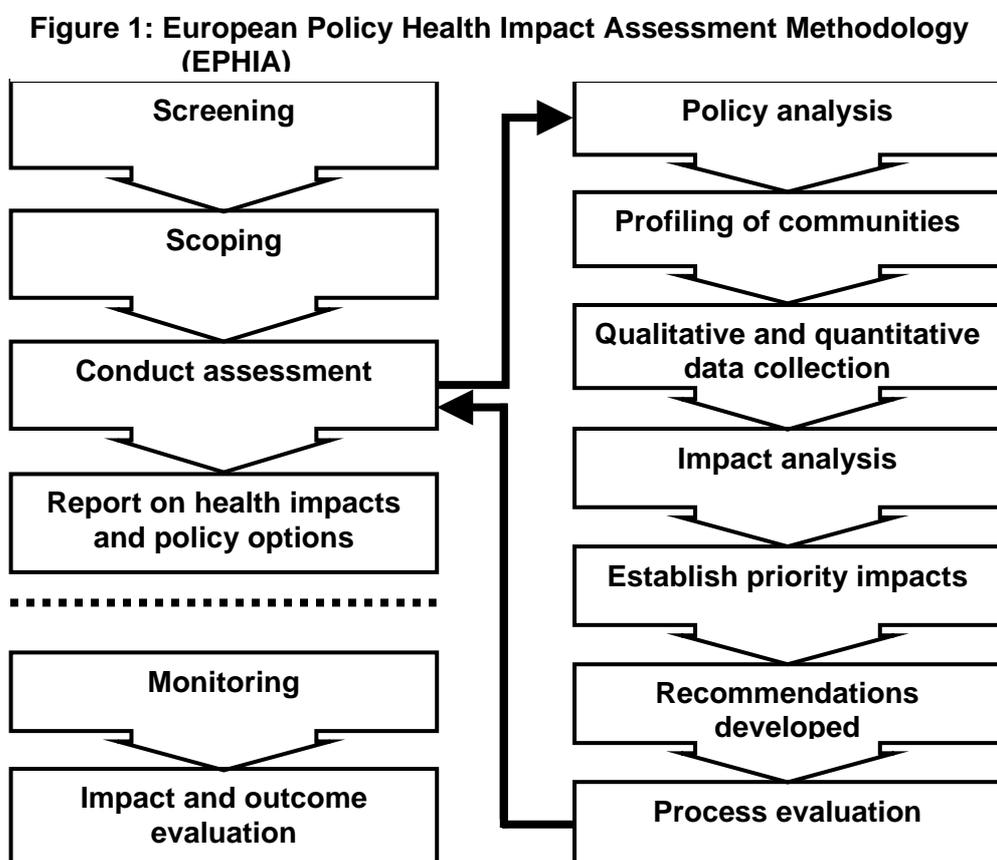
The project developed the European Policy Health Impact Assessment methodology (EPHIA). EPHIA was then piloted at member state and EU level on a selected EU policy in order to test out and refine the methodology. The main aim of this HIA was to pilot the EPHIA methodology in Germany.

Methods

The EPHIA methodology is a combination of procedure and methods (see figure 1). After the selection of the European Employment Strategy (EES) as the policy to pilot the methodology on, a scoping process was carried out whereby the HIA was planned. In this step in the EPHIA methodology; terms of reference were developed outlining the: scope, intended outputs,

resources needed and timetable. A steering group was convened.

The actual assessment began with an analysis of the EES itself and related policy. Literature related to the implementation of the EES in Germany was also examined. In addition to understanding the content of the ESS and how it functions the policy analysis



was intended to identify elements of the policy that were of particular relevance to the German situation.

A common set of indicators were identified as a basis for developing a profile to provide a picture of the health and socio-demographic context of the policy in Germany in order to better understand its potential health impacts and particular population groups that may be affected. European level data was accessed through EUROSTAT. For German specific data the Federal Statistical Office databases such as Genesis were searched as well as data from other research institutes.

Evidence on the potential effects of the EES on health determinants and outcomes was gathered by carrying out a literature search and analysis. Alongside literature published in peer reviewed journals and books, publications from research institutes which specialise in employment policy were an important source of information, for example European level research was accessed at the European Foundation for Living and Working Conditions and particularly German specific information was located at the state funded Institute for Employment Research. A search of the websites of these research institutes was carried out including available databases.

Relevant stakeholders and key informants were identified and invited to a stakeholder workshop. The workshop invitees were intended to act as a steering group for the HIA and to provide evidence from the experience, knowledge, opinions and perceptions of populations affected by the policy (stakeholders) and people with expert knowledge (key informants).

The results of these stages led to potential health impacts of the EES in Germany being identified. Criteria were developed to select the focus of the impact analysis. During the impact analysis stage, scenarios were developed and mathematical modelling was used to predict the magnitude and direction of the potential health impacts of two kinds of employment. Odds ratios identified in research already carried out were applied to the present situation in Germany and 3 scenarios.

Criteria developed within the project were used to prioritise the identified health impacts. Recommendations for minimisation of potential negative health impacts were developed. An evaluation of the pilot HIA was carried out using the following criteria; efficiency, effectiveness, equity, participation and transparency, and practicability.

Results

The HIA focussed on flexible forms of employment. This refers to employment that is different from the traditional full-time position such as part-time work, fixed term contracts, telework and shift work. Flexible forms of employment are specifically encouraged within the EES and the German government also supports this. A range of potential health impacts relating to flexible employment were identified. Flexible workers are particularly affected by the health impacts resulting from job insecurity and in general flexible workers experience 'worse' working conditions than other workers. Flexible forms of work are also likely to share some of the unfavourable characteristics of unemployment which can result in negative health effects.

The potential health impacts of fixed term employment on self reported health status and part-time employment on absenteeism caused by work related health problems were examined. The scenarios contained a shift in employment of 5, 10 and 15% from permanent to fixed term contracts and from full-time to part-time positions. The modelling based on the three scenarios developed indicates that a shift towards more people working in fixed term employment could lead to an additional one to four hundred thousand people with poor health status. A shift from full-time contracts to part-time contracts could result in a reduction

of between 34 000 and 102 000 reported cases of absenteeism due to work related health problems in Germany.

The impact of fixed term contracts on health will particularly affect some population groups. The health impacts will be more strongly felt in the new *Länder* where almost 14% of employees work in fixed term contracts in comparison to 9% in the old *Länder*. Young people are also particularly affected by fixed term employment. Fifty percent of fixed term employees are under the age of 35. Fixed term employment ranges from 37% in the 15-20 year old age group to 4% in the 45-50 year olds. Women will also be more affected than men by these negative health impacts (10% vs. 7%). Health effects related to part-time work will particularly impact on women as 86% of all part time workers are women. 40% of women who work, work part-time.

Discussion/ Conclusions

Results of the HIA: The EES encourages flexible forms of work. If the goals of the EES were successfully implemented within the member states then it could be expected that there will be an increase in limited term and part-time contracts. In Germany recent changes in employment protection legislation are aimed at this. We have modelled the possible impact of increases in numbers of fixed term employees in Germany on two indicators, self reported health status and absenteeism due to work related health problems.

An increase in limited term contracts could lead to increases in reported poor health however there is probably a difference in the potential health impacts between cases where limited term contracts are freely chosen as a means of improving a person's work/life balance and cases where it is non-voluntary or 'imposed' by labour market conditions. It can be expected that the negative health impacts will be particularly strong for workers who involuntarily work in fixed-term contracts.

An increase in part-time work could lead to a reduction in absenteeism due to work related health problems. However it is unclear if this is actually a positive health impact. Research in Germany has indicated that the main reason for a recent drop in absenteeism rates is fear of losing one's job. Workers who perceive their jobs as being insecure often try to avoid taking sick leave when they feel ill. Workers in atypical jobs may tend to have higher levels of job insecurity which could lead to part-time workers having more fear of losing their jobs than full-time workers. Part time workers may also be able to more easily delay 'being sick' to days when they don't work.

There are some additional limitations to the modelling carried out. The scenarios used were very simple with only two main variables taken into consideration. However, in reality the relationship between flexible types of employment and health is complicated. It is difficult to analyse the relationship between flexible forms of employment and health because within the multiple forms of employment there is also a wide range of different situations. Different aspects of flexible forms of employment can be focussed on but it is difficult to isolate these aspects from other factors. No correlations were modelled although in reality there may be some. Due to data limitations we were also unable to specifically examine population sub groups such as men/women, disabled people, migrants etc. It could be expected that there are sex and age related differences in outcomes.

The HIA indicates that there will probably be winners and losers when it comes to the health effects of flexible forms of work. The winners will tend to be well educated people for whom flexible forms of employment might offer career advancement or opportunities to better combining work and private life. People in this group will often have a higher degree of financial security which will enable them to work part time while still earning enough for a satisfying lifestyle. They will also be the kind of people who find new jobs at the end of fixed term contracts without much difficulty. The losers, on the other hand, work in flexible forms of

employment because either they were unable to find permanent full-time employment or have personal/ family reasons which mean they are unable to work in 'normal' position. These people may tend to belong to already vulnerable groups such as older workers or disabled people who already face difficulties finding new jobs when unemployed. These are also the people that will tend to be exposed to health impacts resulting from hazardous working conditions, job insecurity, poor occupational health and safety conditions etc. It is recommended that the EES policy and the implementation of the EES in Germany should be monitored for any discriminatory effects on particular population groups.

Results of piloting EPHIA in Germany: The pilot HIA was carried out successfully with potential health impacts being identified. The pilot itself proved to be an effective tool for further refining and developing the EPHIA approach.

Predicting health impacts by modelling was shown to be possible for policy level HIA but was limited due to lacking data and evidence of "dose response" relationships. However it can be useful to provide an estimation of the magnitude and direction of impacts. This can be used to compare different impacts. By using alternative scenarios the effect of different policy options can be estimated. The results of quantitative methods such as modelling can provide useful input for the participatory HIA process. The results can be used as a starting point for further discussions within the assessment team and with stakeholders and project initiators. Here there may be different opinions on the 'rightness' of the modelling outcomes expressed. This can provide the opportunity for reflection on the assumptions and beliefs that go into a model. This may help to clarify the relationship between the policy in question and health impacts and can also feed into the prioritisation process. Modelling may also identify areas where further research is needed or additional data. This is an additional valuable HIA outcome.

Some difficulties were encountered in gaining participation from relevant stakeholders and key informants. The planned steering group did not go ahead due to these difficulties. However a small stakeholder workshop was carried out. Reasons for the lack of participation may include a limited familiarity with policy level HIA in Germany and the lacking involvement of the policy initiators. These are issues that should be considered in future HIAs.

The breadth of the EES also brought to attention the need to place limits on the focus of HIAs. For a policy of this size it is difficult to identify all relevant health impacts in sufficient depth in a limited amount of time. Boundaries can be set while carrying out HIAs but the HIA initiators could also in future identify particular issues that should be focussed on in the HIA before it actually begins.

On the basis of the impact analysis recommendations were developed:

Recommendation 1: Introduce a screening process at national and European level of employment related policy for possible discriminatory effects for flexible workers. E.g. having children, obtaining loans, retirement, health insurance. This screening process should also specifically consider population groups which are particularly vulnerable to the negative health effects of flexible forms of employment such as women, older workers, disabled people and migrants/ foreigners.

Recommendation 2: Mainstream flexible forms of work. Mainstreaming would involve encouraging 'non typical' flexible workers into flexible work (for example specifically encouraging males into part-time work). Mainstreaming flexible work could result in some of the negative framework factors such as social benefits systems being adapted to fit these kinds of work. For example, as men are more often confronted with discontinuous work biographies and resulting problems such as social protection there seems to be a growing interest in the topic. When non-typical work becomes typical then the structures will generally be adapted to fit these types of employment.

Recommendation 3: During the course of the HIA limitations in the available data and research were identified. In order to address these limitations it is recommended that:

- more specific data on flexible employment which covers topics such as non voluntary working arrangements should be collected,
- data that allows more differentiated analysis of who works in particular jobs should be collected,
- further research on the effects of different working relationships on health should be encouraged,
- the comparability of national data should be further improved- e.g. disability, unemployment rates.
- ways should be developed to further integrate quantitative and qualitative studies capable of understanding the relations between types of employment and health.

1 Introduction

This is a report of a pilot Health Impact Assessment (HIA) of the European Employment Strategy (EES) which was carried out as a part of the European Union (EU) funded project 'Policy Health Impact Assessment in the European Union'. The report forms part of the final project report but is also a 'stand alone' documentation of the German pilot.

1.1 Project Background

Article 152 of the Treaty of Amsterdam (EC, 1999) made explicit the commitment of the European Union to ensure that human health is protected in the definition and implementation of all Community policies and activities. However there is no accepted methodology for assessing the impacts of EU policies on health within the Community, although many organisations are carrying out Health Impact Assessments (HIA) at regional or Member State level. More recently, the proposal for a decision by the European Parliament and Council in the field of public health (EC, 2001) included objectives to 'support the development of health impact assessment methodologies and other relevant tools' (EC, 2001, objective 4.2) and to 'support pilot projects on the health impact of Community policies and actions' (EC, 2001, objective 4.3).

A call for proposals by the Health and Consumer Protection Directorate General sought to develop this work on HIA in the EU, and IMPACT, The International Health Impact Assessment Consortium, successfully co-ordinated a bid with partners from Germany, Ireland and the Netherlands to undertake this work.

The aim of the Policy HIA for the EU project is to develop a health impact assessment methodology and assess the health impacts of a selected EU policy by:

- Developing a standardised HIA methodology for assessing the health impacts of EU policies and activities;
- Applying this methodology to a selected EU policy (the policy chosen for assessment is the European Employment Strategy) in order to test out and if need be modify the methodology;
- Disseminating findings and lessons learnt throughout Europe.

In addition to a Europe-wide HIA pilot to assess the health impacts of the policy across Europe, each participant has undertaken a HIA to assess the impact in their own country. This national report is part of this exercise.

1.2 Aims and Objectives of the report

This report describes the process of piloting European Policy Health Impact Assessment methodology (EPHIA) and the outcomes of the HIA. The report structure is based on the EPHIA structure (see **Error! Reference source not found.**). The chapter titles reflect the steps in the EPHIA procedure. However, although EPHIA represents a procedure, the procedure does not necessarily involve one step following the next. For example the first three steps in conducting the assessment; policy analysis, profiling and data collection, all involve assembling and analysing information. Each step feeds into the others and during the actual process these steps were to a certain degree carried out concurrently.

The information gathered and analysis carried out during the first three steps led to a decision being made to focus on flexible forms of employment for the actual impact assessment. As well as forming the basis for deciding which health impacts to focus on in the impact assessment stage, the results of these first three steps were also used in the impact analysis itself. For example, the literature review identified research that could be used as a

basis for modelling and German specific data gathered during the profiling stage was put into the model.

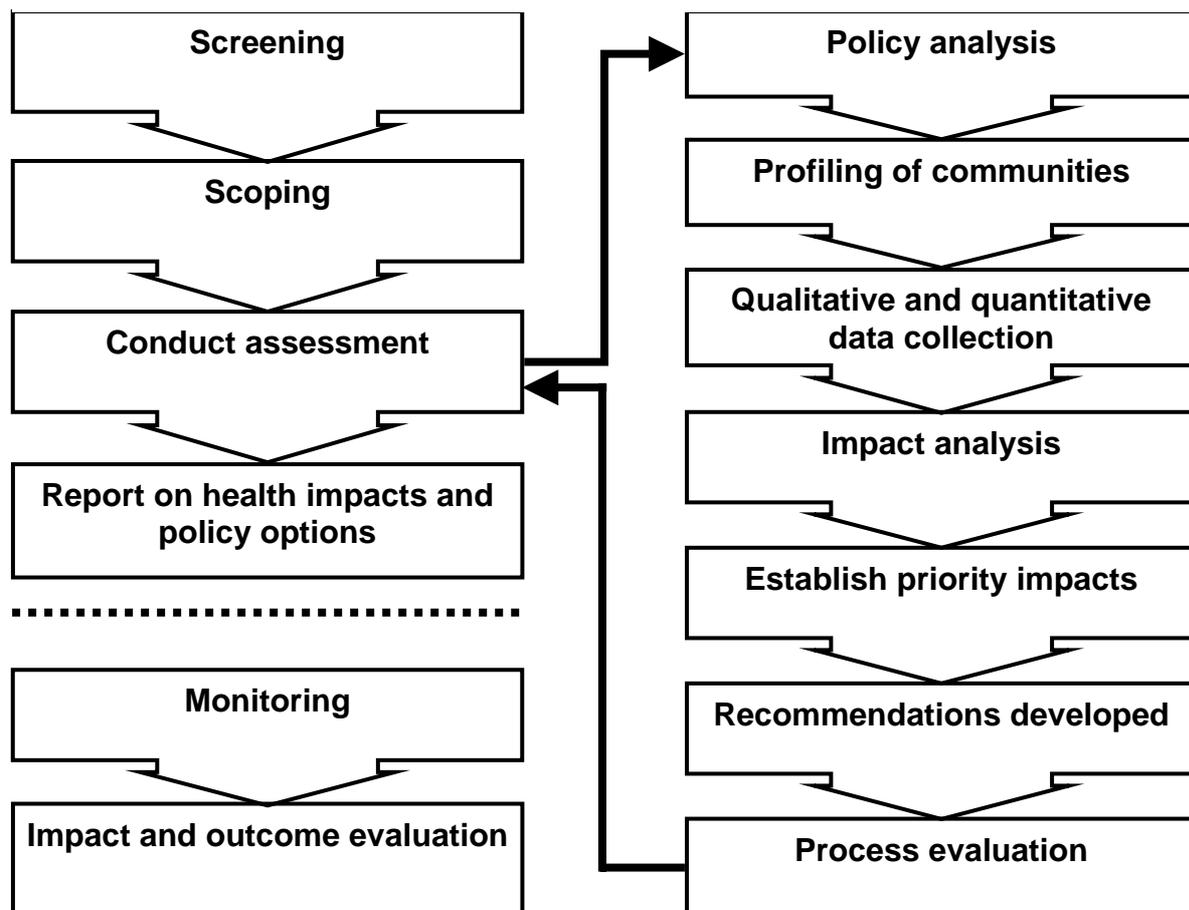
The aim of the pilot health impact assessment was to test out EPHIA so that EPHIA could be further refined and developed. This meant that the HIA was in some ways different to a non pilot health impact assessment. One of the main differences was the limited focus of the HIA. It was decided to limit the focus of the impact assessment so that it would be possible within the time and resources available to carry out an in-depth HIA in order to test out the methodology adequately.

1.3 European Policy Health Impact Assessment methodology (EPHIA)

EPHIA is designed to inform and influence decision-making in the policy development process, contributing to better policy-making. EPHIA contains aims, principles, methods and procedures. It can be used in the identification of the effects of policies on health determinants and health/well being outcomes, as well as the distribution of these effects across different population groups.

The methodology can be adapted to three different depths of assessment, 1) desk-based 'policy analysis HIA' 2) 'rapid appraisal HIA' 3) 'in-depth' or 'comprehensive HIA'.

Figure 2: Schematic representation of the EU Policy HIA Procedure



2 Screening

The policy selection process is explained in detail in the main report. Prior to selecting an EU policy for HIA, an overview of the different EU policy types, levels and activity areas was developed. In addition to this, it was attempted to gain an overview of the decision-making process for EU policy.

Policy selection criteria were developed to assist in selecting an appropriate policy to carry out the pilot HIAs on. The criteria finally selected were as follows:

- Evidence;
- Timing;
- Typology;
- Complexity;
- Topic of public interest;
- Relevance.

Once the policy selection criteria were agreed upon, these were applied to the policies identified in the 2002 work programme annex as well as to those policies in the 2003 work programme that had been identified for extended assessment. A short-list of 10 policies were identified and submitted to the Health and Consumer Protection Directorate General (DG SANCO) in December 2002. Based on this, the European Employment Strategy was selected to pilot the EU Policy HIA methodology on.

3 Scoping

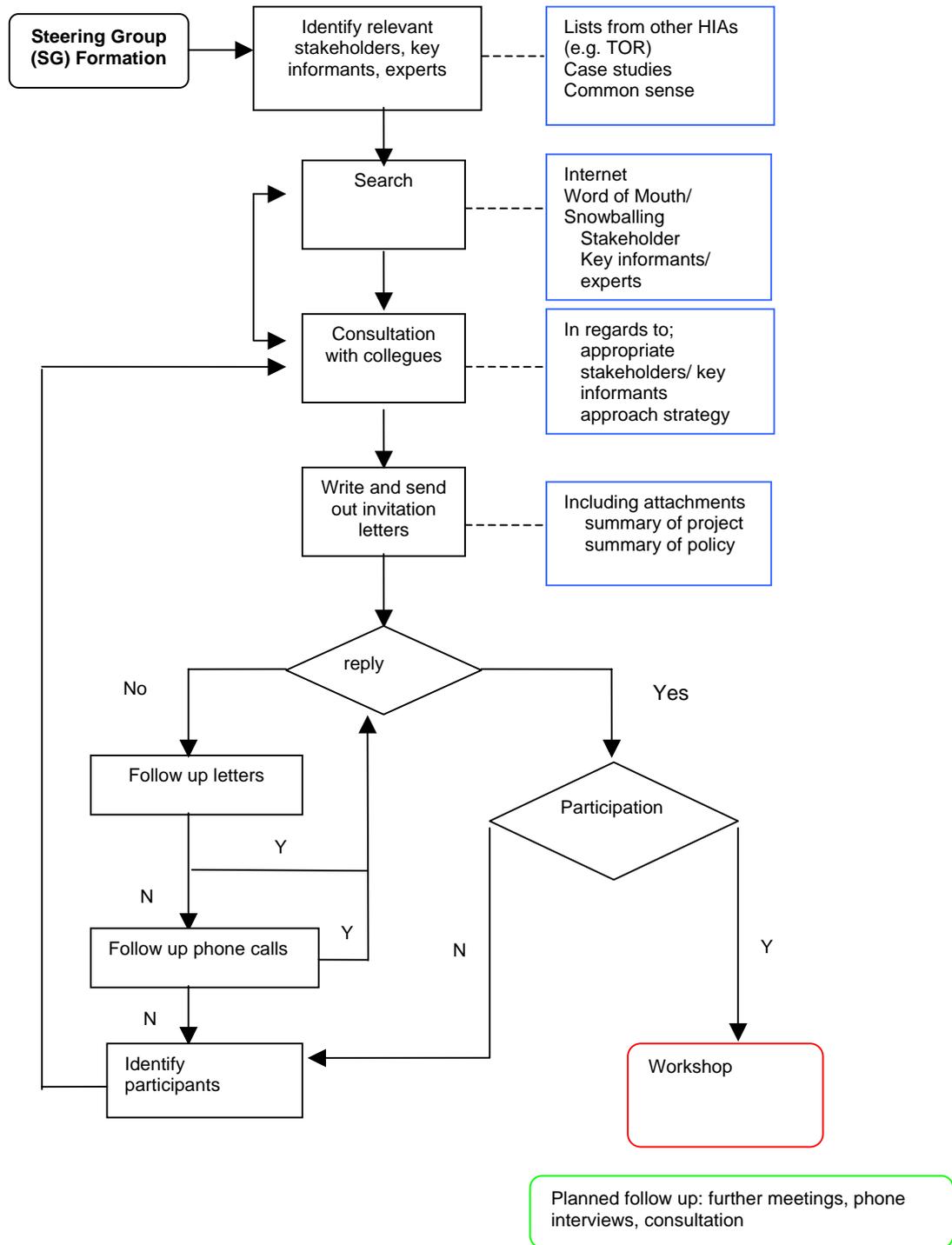
Terms of references for the European level HIA pilot steering group were developed within the project group. These terms of references were translated and adapted for the German steering group see Appendix 1.

Possible steering group members were identified, contacted and invited to participate as steering group members. The process of forming the steering group is illustrated below in Figure 3. An initial steering group meeting and stakeholder/key informant workshop held in June 2003. The outcomes of the meeting are reported in section 7.

It was initially planned that this would be a 'kick off' meeting for the formation of a steering group for the pilot HIA. However, due to the difficulty in gaining the participation of a representative group of stakeholders and key informants it was decided not to go ahead with a steering group.

The German research group is carrying out the assessment.

Figure 3 Steering group formation process



4 Conduct assessment

The methods involved in this are described in the following section. The assessment procedure is an iterative process. Each step feeds into the others and during the actual process can be carried out to a certain degree concurrently.

5 Policy analysis

The European Employment Policy (EES) was chosen as the EU policy to test out EPHIA on. During the policy analysis stage three types of information sources were examined, the EES and supporting documents, other policies that relate to the policy under investigation such as the European Social Fund, evidence of the social, economic, political, cultural and scientific context of the policy.

The policy analysis stage was carried out concurrently with the profile development and data collection. The three 'stages' fed into each other. For example, from the review of literature additional relevant indicators for the community profile were identified. At the same time the data collected for the German profile helped identify potential significant health impacts particularly relevant for Germany which led to the literature review focussing on particular aspects (e.g. flexible types of employment).

5.1 The European Employment Strategy

The EES is designed as the main tool to give direction to and ensure co-ordination of the employment policy priorities to which Member States should subscribe at EU level. The EES was launched in 1997 to combat unemployment and promote the convergence of employment policies in Europe. It aims to produce long-term economic growth, full employment, social cohesion and sustainable development in a knowledge-based society.

In 2000 the Lisbon European Council of 2000 developed an "Agenda of Economic and Social Renewal for Europe" that is known as the Lisbon Agenda (European Commission, 2000a). The Lisbon Agenda outlined the main features of Europe's employment deficit and proposed the targeting of labour market, fiscal and structural policies to address them.

The Lisbon Agenda (European Commission, 2000b) identifies a number of structural weaknesses in European employment including:

- 1 **A gender gap** – only half of the women in the EU are in work compared to two thirds in the US.
- 2 **A services gap** – the EU has a much lower level of employment in the service sector than in the US.
- 3 **Marked regional imbalances** – EU unemployment is concentrated in Germany, France, Italy and Spain and is the highest in the south, outlying regions and declining industrial areas.
- 4 **Long-term structural unemployment** – half of those out of work have been unemployed for more than a year.
- 5 **A skills gap** – particularly noticeable in information technology, due to under-investment in education and training.
- 6 **An age gap** – the rate of employment in the 55-65 age group is too low.

The Lisbon Agenda calls on the Member States to foster three complementary and mutually supportive objectives of the EES (European Commission, 2000b).

1. **Full employment:** Member States shall aim to achieve full employment by implementing a comprehensive policy approach incorporating demand and supply side measures and thus raise employment rates towards the Lisbon and Stockholm targets. Policies shall contribute towards achieving on average for the European Union:
 - an overall employment rate of 67 % in 2005 and 70 % in 2010,
 - an employment rate for women of 57 % in 2005 and 60 % in 2010,
 - an employment rate of 50 % for older workers (55 to 64) in 2010.
2. **Quality and productivity at work:** Improved quality at work is closely interlinked with the move towards a competitive and knowledge-based economy. Quality is a multi-dimensional concept addressing both job characteristics and the wider labour market. It encompasses intrinsic quality at work, skills, lifelong learning and career development, gender equality, health and safety at work, flexibility and security, inclusion and access to the labour market, work organisation and work-life balance, social dialogue and worker involvement, diversity and non-discrimination, and overall work performance. Quality at work can help increase labour productivity and the synergies between both should be fully exploited.
3. **Social cohesion and inclusion:** Employment is a key means to social inclusion. Employment policies should facilitate participation in employment through promoting access to quality employment for all women and men who are capable of working; combating discrimination on the labour market and preventing the exclusion of people from the world of work. Economic and social cohesion should be promoted by reducing regional employment and unemployment disparities, tackling the employment problems of deprived areas in the European Union and positively supporting economic and social restructuring.

After a mid-term review of the first 5 years of the EES (Commission of the European Communities, 2002) and a wide-ranging debate involving European institutions, social partners and stakeholders, the strategy has been redesigned as a tool to underpin the Lisbon Agenda in the enlarged EU and contribute to economic and social cohesion. The revised EES identifies and examines 10 priority areas that need to be addressed (Commission of the European Communities, 2003).

Priority areas

1. Active and preventive measure for the unemployed and the inactive
2. Job creation and entrepreneurship
3. Address change and promote adaptability and mobility in the labour market
4. Promote development of human capital and lifelong learning
5. Increase labour supply and promote active ageing
6. Gender equality
7. Promote integration of and combat the discrimination against people at a disadvantage in the labour market
8. Make work pay through incentives to enhance work attractiveness
9. Transform undeclared work into regular employment
10. Address regional employment disparities

This co-ordination of national employment policies at EU level is built around several components:

Employment Guidelines: following a proposal from the Commission, the European Council shall agree every year on a series of guidelines setting out common priorities for Member States' employment policies;

National Action Plans: every Member State shall draw up an annual National Action Plan which describes how these Guidelines are put into practice nationally;

Joint Employment Report: The Commission and the Council shall jointly examine each National Action Plan and present a Joint Employment Report. The Commission shall present a new proposal to revise the Employment Guidelines accordingly for the following year;
Recommendations: The Council may decide, by qualified majority, to issue country-specific recommendations.

A detailed description of the EES is available on the following European Commission website: http://europa.eu.int/comm/employment_social/employment_strategy/.

5.2 EES Implementation in Germany

Every year the European Council makes country specific recommendations. Recommendations are not sanctions, but meant to provide additional guidance for Member States by directing their attention to issues which emerge from the analysis of all national action plans. In 2003 the Council recommended that Germany should focus on:

- 1. help unemployed and inactive to find a job, prevent long-term unemployment (activation prevention);**
- 2. promote adaptability of workers and firms to change (adaptability);**
- 3. provide more and better investment in human capital (life long learning);**
- 4. promote gender equality in employment and pay (gender equality);**
- 5. improve financial incentives to make work pay (making work pay).**

In addition to the country specific recommendations issued by the Council, in spring 2003 the European Employment Task Force, chaired by Wim Kok, was set up by the European Commission. It's task was to carry out an independent in-depth examination of key employment-related policy challenges and to identify practical reform measures, which should as far as possible produce immediate employment impacts.

The taskforce published it's report on the 26 November 2003. The report identifies 4 priority areas for European employment policy;

- Increasing adaptability of workers and enterprises;
- Attracting more people to the labour market;
- Investing more and more effectively in human capital;
- Ensuring effective implementation of the EES through better governance.

These priorities are already contained in the Council guidelines and country specific recommendations.

On December 8 2003 a meeting was held in Berlin where the European Employment Taskforce report was presented and discussed. At the meeting and within the report it is stated that the present German Government's reform plans (Agenda 2010) are directly in line with the aims of the EES. Agenda 2010 contains a range of employment related measures. The German National Action Plan 2003 (Federal Government of Germany, 2003) identified employment policy measures that specifically relate to the employment guidelines. The main employment policies identified by the German government as supporting the implementation of the EES in Germany are listed in Appendix 2.

5.3 Policy analysis focus: EES and Flexibility

The increasing demand for flexible labour markets, employment and work organisation is a key feature of modern work and is an important component of the EES. Flexibility is seen to be a prerequisite for economic competition and also as a solution to unemployment (European Commission, 1995). Within the EES flexibility is referred to in the context of adaptability. Adaptability is one of the four thematic priorities of the EES alongside employability, entrepreneurship and equal opportunities.

5.3.1 Flexibility concept

According to the Merriam-Webster's Online Dictionary (10th Edition) "flexibility is characterised by a ready capability to adapt to new, different, or changing requirements". Flexibility within the employment context is generally used to refer to employment that is different from the traditional permanent full time position. Included in this definition are:

- types of employment such as part time employment, fixed term contracts, temporary work and shift work;
- working hours such as night and shift work, weekend work, overtime and reduced working hours;
- production systems such as sub contracting, outsourcing and self employment;
- work organisation such as job enrichment, rotation, team work, multi-tasking, multi-skilling.

Table 1 Different forms of flexibility (Goudswaard and de Nantueil, 2000)

Forms of flexibility	Quantitative flexibility	Qualitative flexibility
External flexibility	Employment status: <ul style="list-style-type: none"> • permanent contract • fixed term contract • temporary agency contract • seasonal work • work on demand/call <i>numerical flexibility</i>	Production system: <ul style="list-style-type: none"> • subcontracting • outsourcing • self-employed <i>productive and/or geographical flexibility'</i>
Internal flexibility	Working time: <ul style="list-style-type: none"> • reduction of working hours • overtime / part-time work • night and shift work • weekend work • compressed working week • varying working hours • irregular / unpredictable working times <i>temporal/ financial flexibility</i>	Work organisation: <ul style="list-style-type: none"> • job enrichment / job rotation • team work / autonomous work • multi-tasking, multi-skilling • project groups • responsibility of workers over: • planning, budget, innovation technology <i>functional/ organisational flexibility</i>

Alongside different forms and ways of working, flexibility is also used to refer to the ability to make changes easily. For example in the 2002 European Joint Employment Report (European Council and Commission of the European Communities, 2002) flexibility was referred to so; "the capacity to "hire and fire" (including the use of temporary or fixed term contracts) constitutes an immediate reaction and allows firms to adapt to unforeseen circumstances and changing trends such as changing demands or skill requirements and allows firms to adjust their production quickly."

The term flexibility is often used in conjunction with security. The term 'flexicurity' is now commonly used to describe these concepts. Flexicurity is often used to refer to policies that address both enhancement of labour market flexibility and employment and social security (Wilthagen and Rogowski, 2003).

5.3.2 EES and flexibility

The EES attempts to combine flexibility and security. Within the EES, alongside encouraging different types of work to encourage productivity and competitiveness, flexibility is also intended to "guarantees workers' rights of access to opportunities in education and training (Zappalà, 2003)."

Five years after its launch, a mid term evaluation of the EES was carried out in 2002. As a result of the midterm evaluation future guidelines will focus on a limited number of priorities with related targets. The commission identified 10 priorities which they believe will be most relevant for future guidelines (Commission of the European Communities, 2003). One of which is promoting adaptability in the labour market. The terms adaptability and flexibility are often used interchangeably within the employment context. The Commission sees increasing flexibility to be "a key to the success of future employment policies(Commission of the European Communities, 2003at 14)."

The new employment guidelines (European Council, 2003) also explicitly address flexibility. Priority number 3 focuses on addressing change and promoting adaptability and mobility in the labour market. Among other things, Member States are encouraged to: "reform overly restrictive elements in employment legislation that affect labour market dynamics and the employment of those groups facing difficult access to the labour market... and undertake other appropriate measures to promote diversity of contractual and working arrangements, including arrangements on working time, favouring career progression, a better balance between work and private life and between flexibility and security" (European Council, 2003).

Flexibility has found application in Member States. In the European Commission's overview of industrial relations in Europe for the year 2000 {European Commission., 2000 79 /id}, it found that all member states have tried to improve flexibility in the labour market by launching active employment and vocational training policies.

5.3.3 Flexibility in Germany

Flexible forms of employment are an important aspect of the EES and are also of particular relevance to Germany.

The Commission made a formal proposal for the new employment guidelines and recommendations in April 2003. The Commission recommended that Germany should focus on five priorities one of which is adaptability. Germany is specifically recommended to promote adaptable work organisations. The Commission stated that one way of doing this is the prompt implementation of the labour law reform announced in March 2003 by the Federal Government (European Council, 2003). The labour law reform referred to is Agenda 2010.

To underpin the midterm review, the Commission and the Member States had agreed in 2001, within the Employment Committee, on a joint work programme, whereby the Commission would co-ordinate an impact evaluation, based on national policy impact evaluation studies. The national studies were co-financed by the Commission and were in general carried out by independent experts under supervision of the national employment ministries. The authors of the German study concluded that the EES corresponds in most areas to the political orientation of the Federal Government in the context of its national policies, and smoothly fits into the Government's overall economic policy¹ (RWI and ISG, 2002).

¹ Diese Strategie entspricht auf den meisten Gebieten den politischen Orientierung, die durch die Bundesregierung auch im Rahmen ihrer nationalen Politiken verfolgt wurden und fügt sich insoweit nahtlos in die Gesamtkonstruktion der Wirtschaftspolitik der Bundesregierung ein.

According to the impact assessment work time flexibility is also regarded meanwhile in Germany by all "major participants/actors in the employment market as the central instrument for the 'modernisation' of the employment sector²" (RWI and ISG, 2002)(quotation marks added). However major partners such as the employee unions have also expressed strong reservations about the possible outcomes of increased flexibility in the employment market.

The authors of the German Study identified measures taken by Germany to fulfil obligations under the EES. They observed that changes in work time flexibility are generally negotiated between employees representatives and employers. Work-time accounts are particularly common form of work flexibility. Flexibility is generally based on the needs of employers in Germany. Reducing overtime is quantitatively the most important form of work flexibility in Germany (ISG and WSI, 2002; ISG and WSI, 2002; RWI and ISG, 2002).

The importance of the issue of flexible forms of employment for Germany is further emphasised in the German Economic Report 2003 where it is stated that:

lifelong employment with a single employer will be the exception in the future and the traditional unlimited full time position will also no longer necessarily be standard. Temporary employment, fixed term activities, part time work, switching between self employment and "freelance" work and having several parallel jobs will continue to become more common and make employment more diverse (Federal Ministry of Economics and Labour, 2003).

The director of the Institute for the Study of Labour described the future for Germany where "multiple jobs, irregular working hours and insecure contract relationships will play a dominant role in the working world (Federal Ministry of Economics and Labour, 2003)".

Germany has been recommended by the EU Commission to focus particularly on encouraging flexibility within the employment market. The impact analysis carried out on the implementation of the EES within Germany, German employment policy and literature on the employment market in Germany indicate that flexibility is a highly topical and important issue in Germany. This impression was also supported by key informants and stakeholders that participated in a workshop organised to collect opinions on the implementation of the EES in Germany and possible health effects resulting from this (see 7.1).

There is a broad and divergent political discussion in Germany on positive and negative consequences of flexibility of work for the labour force and for the social situation of flexible workers and their families. This discussion includes reference to traditional values and claims. Many people believe that these could be damaged some day by an unlimited increase of flexibility of work. The framework of our investigation did not give the opportunity to cover the whole range of aspects, which are brought up by this debate. The HIA focused on only a small part of the influences and meaning of flexibility of work. This limitation should be seriously taken in account while reading this report.

6 Profiling

Within the HIA process developing a community profile is a distinct step. The community profile provides an overview of the current situation as well as past trends and trends expected. It may therefore be seen as a 'snap shot', taken at the start of an HIA and can thus be used to focus on specific expected impacts. The data collected is also used for calculation in the impact analysis stage. The profiling was carried out to certain degree concurrently with

² Arbeitszeitflexibilisierung wird mittlerweile auch in Deutschland von allen wesentlichen Akteuren des Arbeitsmarktes als zentrales Instrument zur Modernisierung der Arbeitswelt angesehen.

the other two data collection and analysis stages (policy analysis and primary data collection).

Within this methodology community profiling means collecting data on a number of indicators that are expected to be relevant given the content of the policy selected and its possible impacts on health or health determinants. One special feature is that a community profile contains not only health data but also data on those factors outside the health field that may affect given population groups. This may mean that data are collected regarding health determinants which can also include broader social determinants of health- 'determinants of determinants'.

In all pilot HIAs a community profile was developed. The project research group³ decided to design a common set of indicators for these different national profiles, to ascertain a minimum degree of comparability between the HIAs conducted. The composition of this joint indicator set was developed within the research group. The wish for comprehensiveness was balanced against workability of an extensive data set. Starting from a 'long list' of indicators the research group defined a 'short list', a core set of indicators for which each country partner would collect data. The criteria used were:

- the indicators should be relevant to all countries piloting the methodology;
- they should related directly to the topic employment;
- they should relate to the specific target groups in the EES.

For comparability between the different pilot HIAs it was decided to use EUROSTAT (<http://europa.eu.int/newcronos/>) as the first choice database to search for data. The data from EUROSTAT were collected in one joint search. Only data from EUROSTAT were used that were available for at least two countries participating in the research project. However this yielded data about a very limited number of indicators.

(adapted from Den Broeder, Progress Report Netherlands, November 2003)

6.1 German Profile

The starting point for the German profile was the agreed core indicator list. Alongside the core indicators identified within the EU project, additional data was collected that was considered relevant for the HIA. This additional data was needed to assist in identifying health impacts resulting from the EES and also to be used as a basis for the impact analysis stage of the HIA. E.g. number of people working part time and fulltime, number with short term and permanent contracts. This additional data was identified during the impact analysis process as being necessary to identify and understand health impacts resulting from the EES.

German data for more than 30 indicators was collected. Where possible data was collected specific to population subgroups such as; non Germans, women/men, East/West Germany and disabled people. Data sources included: Federal Statistics Office of Germany, Institute for Employment Research ("IAB"), EUROSTAT, European surveys on working conditions and the Robert Koch Institute.

The core indicators with German data are listed in Appendix 2. In the following section a general overview of the labour market situation in Germany is presented.

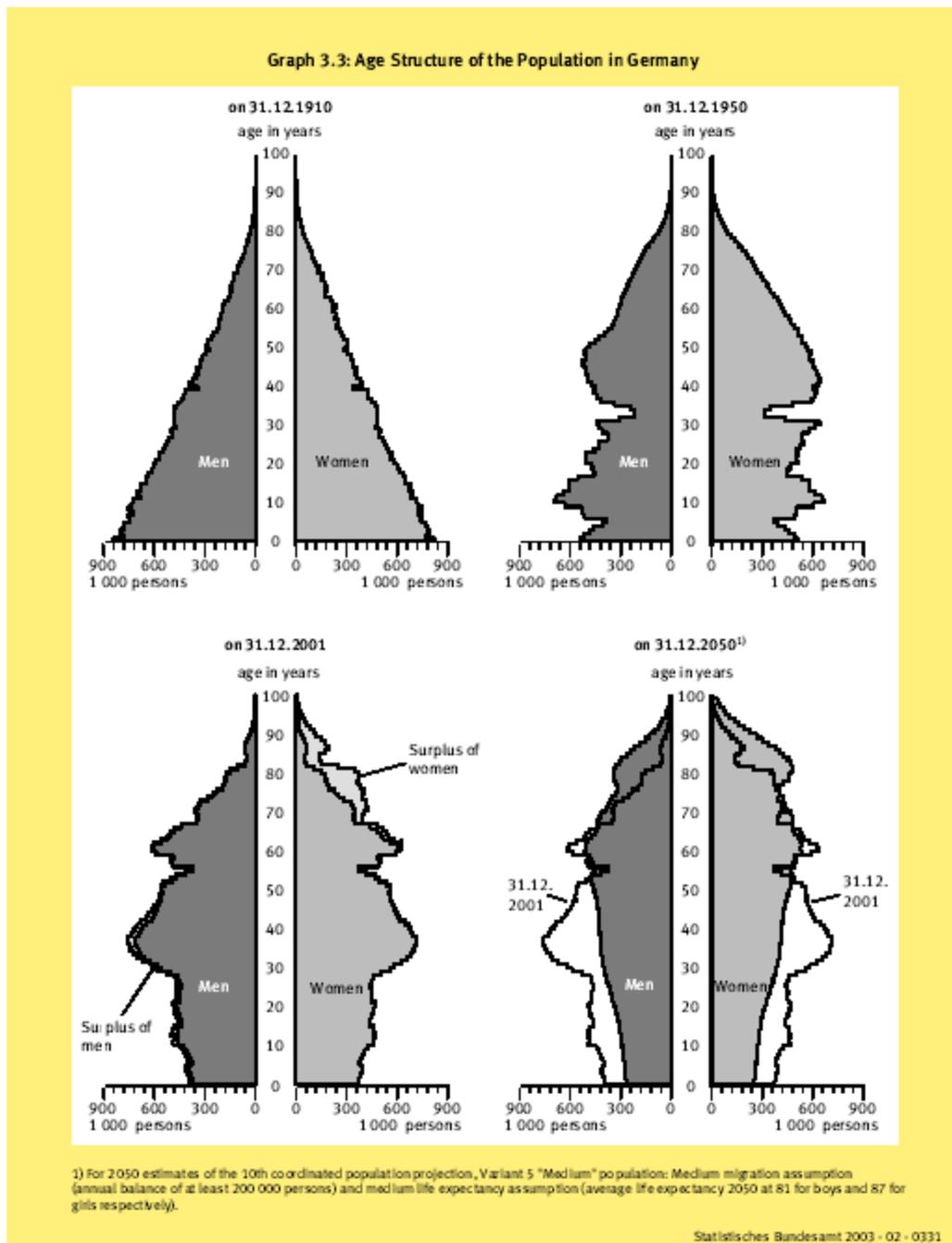
6.1.1 Population

In 1989, after 40 years of separation, the Berlin Wall was dismantled in the midst of demonstrations in East Germany. After the fall of the wall, East (new *Länder*) and West (old *Länder*) Germany agreed to reunite and became one unified Germany in 1990. Since reunification, Germany has undergone massive changes.

³ English, Irish, Dutch and German project research groups

The future demographic developments in Germany can be summed in these terms- an ageing society, a low birth rate, a falling population size and a shrinking working-age population (Federal Statistical Office of Germany, 2003b). In 2003 there are 82.5 million people living in Germany, approximately 40 million men and 42 million women. Non Germans make up almost 9% of the population. However in the new *Länder* only 2% of the population are non Germans compared to 10% in the old *Länder*.

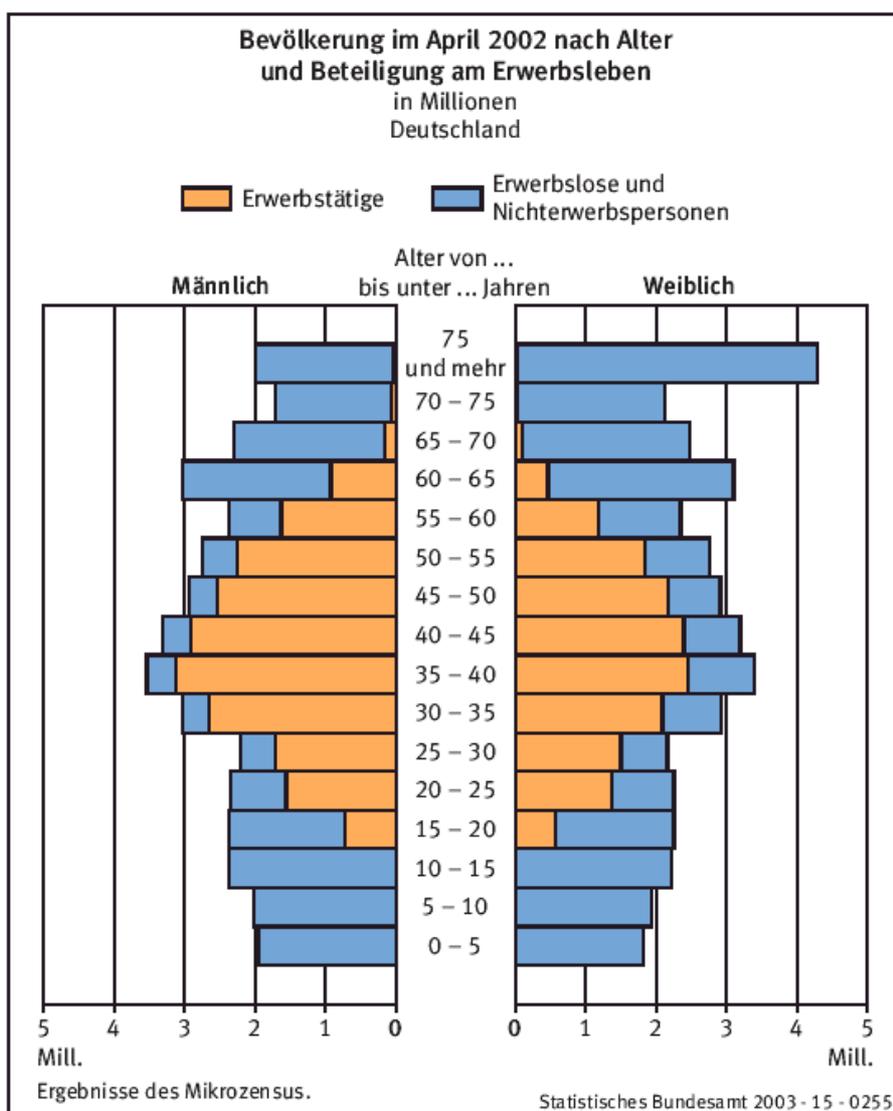
Figure 4 Age structure of the population in Germany



6.1.2 Employment

Between 1998 and 2001 employment rates increased and unemployment decreased significantly in Germany. However, since 2001 the labour market situation has deteriorated (Federal Government of Germany, 2003 at 4). Germany has a labour force⁴ of 41.7 million people. Of the 38 million people working in Germany 33,8 million are employees and 4.1 million are self employed. In 2002 the employment rate within the working age population (15-65) was 80% for men and 64% for women. Foreign citizens living in Germany have a lower employment rate⁵ of 60% (women 41%, men 51%).

Figure 5 Population Germany in April 2002 according to age and participation in employment in million



Translation:

<i>Erwerbstätige</i>	Employed	<i>Männlich</i>	Male
<i>Erwerbslose</i>	Not working	<i>Weiblich</i>	Female
<i>Alter von...bis unter ..Jahren</i>	Age from...to below...years		

Almost one third of employees belong to the 35-45 year old age group. There has been an increase in the average age of employees. In future there will be an increasing proportion of

⁴ All people over the age of 15 who are either employed or unemployed. Inactive people are not included.

⁵ Unemployment rate = number of unemployed people/ number of people in the labour force X 100

older workers. However at the moment although there is an increase in average age of workers this is not reflected in the number of older workers. This is probably because of the general trend in Germany towards early retirement and increasing unemployment among older workers (Federal Statistical Office of Germany, 2003a at 52).

6.1.3 Unemployment

In September 2003 there were 4.2 million unemployed people in Germany. This is 10,5% of the labour force. There are significant regional differences in Germany's unemployment rate. In the old *Länder* the unemployment rate is 8.4%, in the new *Länder* it is more than double that of the old *Länder* (18.6%). Particularly younger and older people are affected by unemployment. Also the long term unemployed have particular problems being reintegrated into the work force.

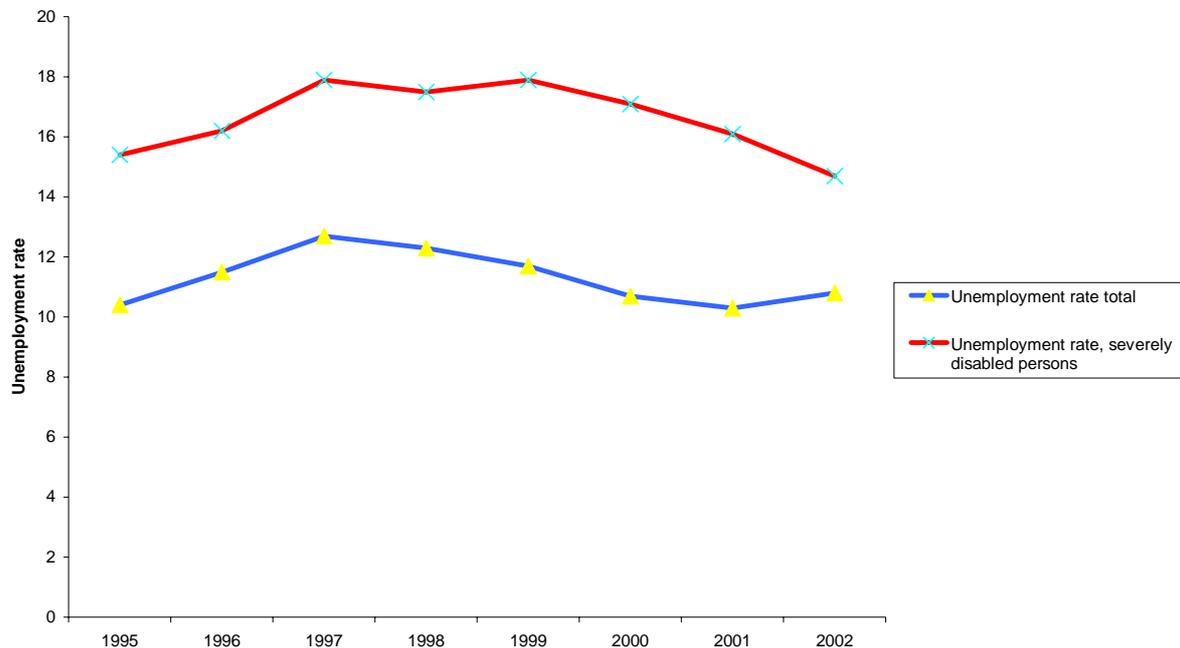
Table 2 Unemployment Situation September 2003

	Germany	West Germany	East Germany
Total unemployment quote thereof:	10.5%	8.4%	18.6%
Women	45.4%	43.2%	49.2%
Manual workers	59.9%	58.9%	61.5%
Young persons under 25	12.3%	12.2%	12.3%
Young persons under 20	2.2%	2.1%	2.3%
Persons 50 years and older	24.5%	24.3%	24.7%
Persons 55 years and older	11.3%	11.9%	10.1%
Long-term unemployed	36.4%	32.3%	43.4%
Disabled persons	4.0%	4.7%	2.8%
Non-Germans	12.6%	17.1%	4.8%

Source: Federal Statistics Office Germany

Vulnerable population groups such as foreigners and disabled people are disproportionately represented in the unemployed. In 2001 8.1% of Germans were registered as disabled. Severely disabled people in Germany have a higher unemployment rate than the total labour force.

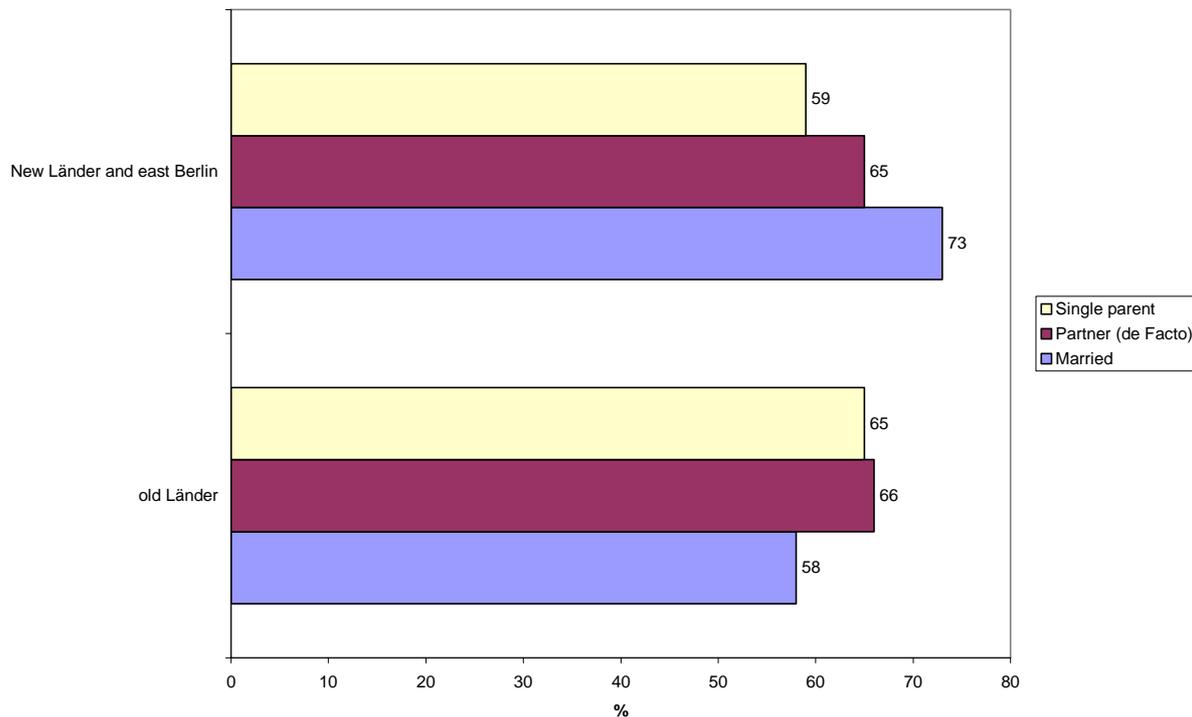
Figure 6 Development severely disabled unemployment rate in comparison to total unemployment rate (Federal Statistical Office of Germany, 2003a)



There are also significant differences in employment between male and female parents. In 2002 there were 11.8 million working age mothers (15-65 years) and 10.2 million working age fathers in Germany. 7.6 million mothers and 8.8 million fathers were employed. When parents who have paternity leave are removed from the employment figures, there is a large difference between the employment quotes for mothers and fathers (mothers 61% and for fathers 86%). This indicates that the main impact on employment of having children is on women. The difference between women with and without children is most extreme in the 21–30 year old age group women without children having an approximately 40% higher employment rate than women with children. After about the age of 45 this difference becomes minimal. In contrast to women, men with children have a higher employment rate as men without.

The employment situation also differs between mothers in the old and new *Länder*. It is interesting to note that married mothers have 15% higher employment rate in east Germany, however this difference disappears when comparing de facto relationships and when comparing single parents, the west German mothers show a higher employment rate (see {Federal Statistical Office of Germany, 2003 40 /id}). The new/old *Länder* differences in women's employment situation is at least partly due to the different employment politics that were implemented in former east and west Germany. In former east Germany women were encouraged and expected to work and there was a developed system of child care available. In contrast to former west Germany where there was and still is a lack of child care facilities.

Figure 7 Employment rate of women with children according to living situation (%) (Federal Statistical Office of Germany, 2003a)



6.1.4 Forms of employment

There have been changes in the forms and types of employment in Germany, particularly over the last ten years.

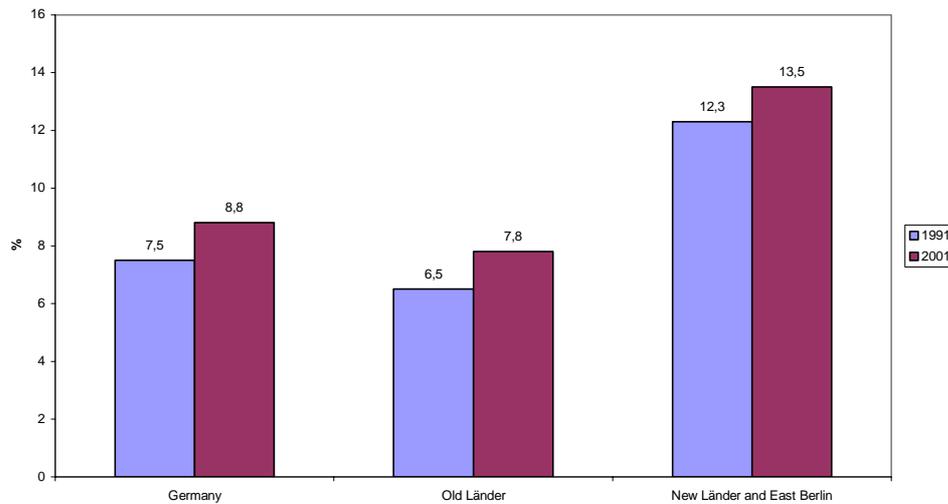
Fixed term/ Permanent contracts

13 % (4.1 million) of employees in Germany have fixed term contracts⁶ (Federal Statistical Office of Germany, 2003a). In east Germany there is a higher proportion of fixed term contracts (18%) in comparison to west Germany (11%) (see figure). However, when people working in job creation measures are removed from the calculation then the difference disappears.

The reasons for having a fixed term contract vary. In the Microcensus 2002 (Federal Statistical Office of Germany, 2003a) 45% of respondents said they were undergoing training (for example apprenticeship), 10% had a trial or probationary contract and 10% said they were unable to find a permanent position. Here there were again east/west differences with 18% of east Germans saying they were unable to find a permanent position in comparison to 8% in west Germany. Employed with fixed term contract (excluding trainees) as proportion of all independent employees (Federal Statistical Office of Germany, 2003a)

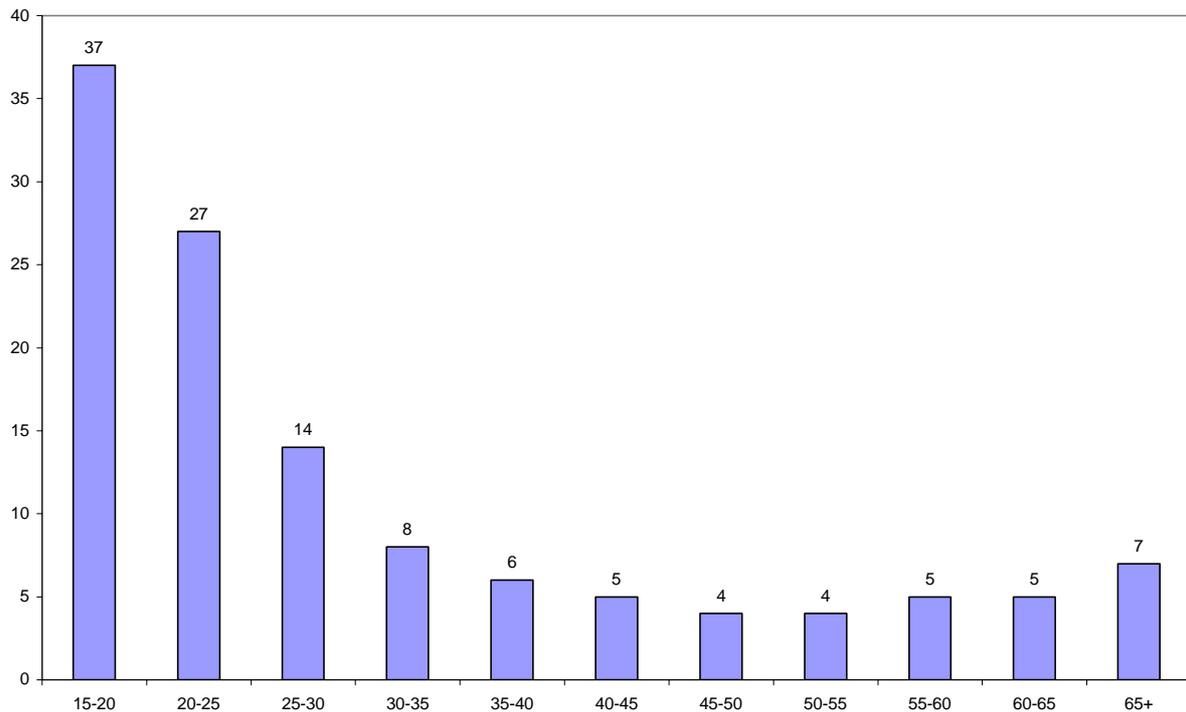
⁶ fixed term contracts are employment contracts which have a definite end point, in contrast to permanent positions. Fixed term positions are also often referred to as short-term contracts.

Figure 8 Employed with fixed term contract (excluding trainees) as proportion of all independent employees



There are also age differences in fixed term contracts. The under 30s have a particular high percentage of fixed term contracts (>20%) (Figure 9)

Figure 9 Fixed term contract employees in April 2002 according to age group as percentage of all independent employees in corresponding age group (Federal Statistical Office of Germany, 2003a)



Part time employment

The proportion of people working part time is increasing in Germany. In 2002 there were 6.6 million part time workers in Germany. This is 46% more than in 1991. The proportion of part time workers increased by 7 % to 21% (Federal Statistical Office of Germany, 2003a). The number of fulltime workers has fallen by 14% and the proportion of full time workers has dropped from 86% to 79%.

In Germany it is mostly women that work part time. With a part time employment rate of 40% (1991, 30%) women made up 86% of all part time workers (Federal Statistical Office of Germany, 2003a). However part time employment is also of increasing importance for men. Their part-time employment rate has increased to 5% and thereby increased their proportion of all part time workers to 14% (1991: 8%). Part time work is concentrated in areas where women traditionally work such as in sales and gastronomy.

There is a significant difference between the new and old *Länder* mothers in terms of part time and fulltime employment. The employment situation of women is also affected by the number of children she has (Figure 10).

Figure 10 Employment rate of women with children according to number of children and full/part-time status in April 2002 (Federal Statistical Office of Germany, 2003a)

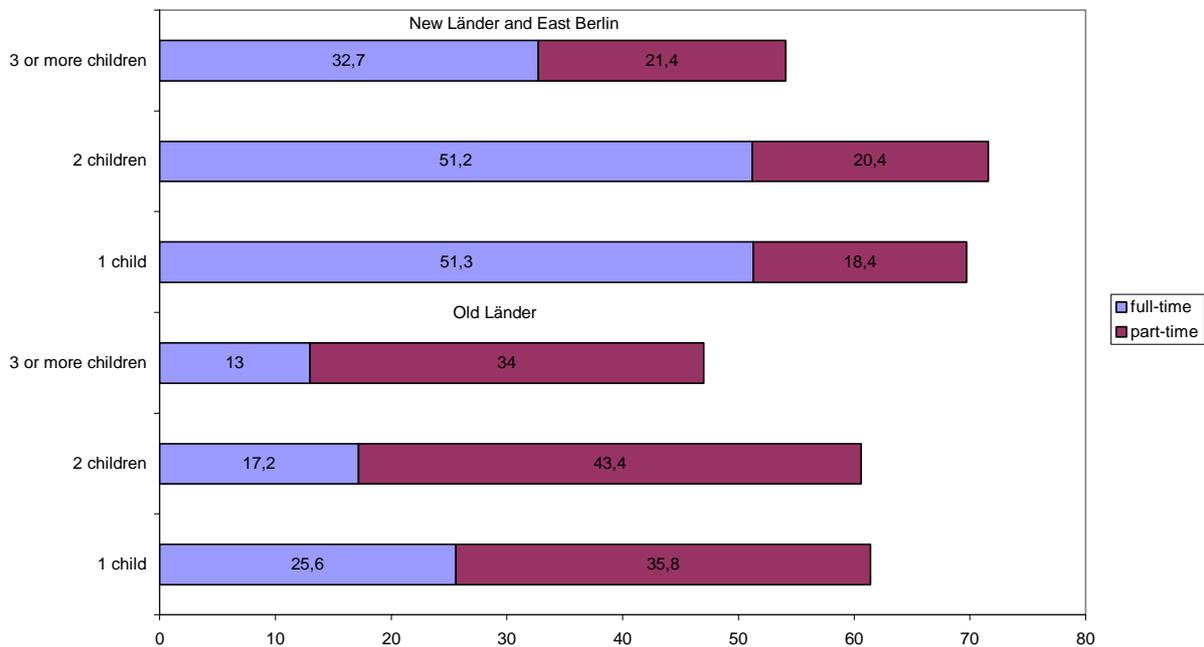
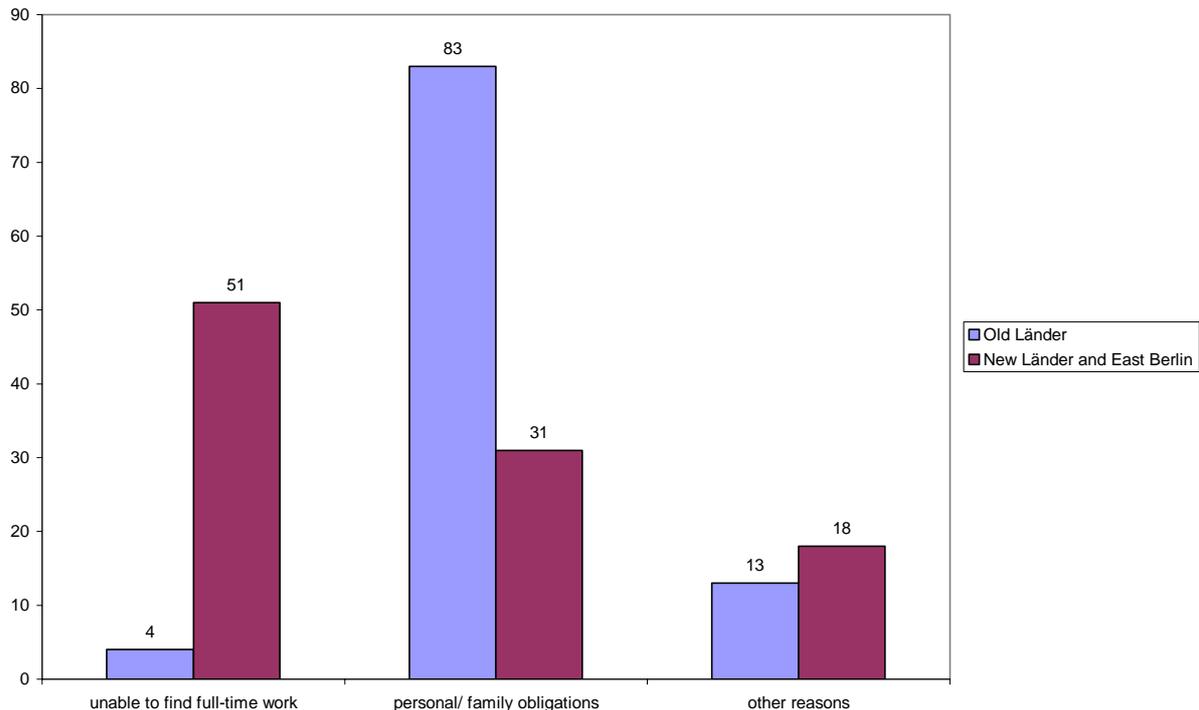


Figure 11 Part-time employed women with children in April 2002 according to reasons for working part-time (Federal Statistical Office of Germany, 2003a)



This difference between east and west German mothers is also reflected in the reasons given for working part-time. For the majority (83%) of west German women the main reason for working part time is family reasons, whereas for east German women the most common reason (53%) is because they were unable to find a fulltime job.

In contrast to fixed term contracts a larger proportion of employees in the old *Länder* work part time than in the new *Länder*. The part time employment rate has also increased more strongly in west than east Germany. In the new *Länder* there was an increase over the last ten years of 5% to 14%, in the old *Länder* there was an 8% increase to 23%. In total the old *Länder* have increased the number of part time workers by 50% since 1991, in the new *Länder* 26%.

Flexible work hours

Weekend, shift and night work has also become more common. In 2002 17.1 million people in Germany worked regularly or occasionally in the weekend, night or shiftwork. This is an increase since 1991 of 5% to 47% (Federal Statistical Office of Germany, 2003a). This change was to a certain degree based on the transition process the new *Länder* went through. In 1991 only 36% of new *Länder* workers worked 'abnormal' working hours whereas now the level is 49%, higher than in the old *Länder*. Flexible work hours is most prevalent in retail and hospitality/ gastronomy.

7 Qualitative and quantitative data collection

In addition to the data collected during the policy analysis and profile development stages of the HIA a review of literature on employment and health was carried out and primary qualitative data was specifically collected.

7.1 Participatory workshop

The purpose of participatory, qualitative approaches is to gather evidence from the experience, knowledge, opinions and perceptions of populations affected by the policy (stakeholders) and people with expert knowledge (key informants). For the pilot HIA a participatory workshop was carried out.

The participatory workshop attempted to gather relevant stakeholders and experts, with the aim of canvassing opinions on the implementation of the EES in Germany, possible health effects resulting from this and obtain advice on conducting the pilot HIA. It was initially planned that this would be a 'kick off' meeting for the formation of a steering group for the pilot HIA. However, due to difficulties in gaining the participation of a representative group of stakeholders and key informants it was decided not to go ahead with a steering group. Reasons for the difficulties encountered could include:

Unfamiliarity: organisations and people in Germany are generally not familiar with the concept of HIA especially at policy level. Difficulties were reported in identifying where HIA belongs within their organisations.

Information transfer: Stakeholders need to be introduced to the concept of HIA with sufficient depth so that they can participate well in the HIA but in a way that doesn't overwhelm them or worse – scare them off. It may have been that insufficient or inadequate information was sent out.

Lack of formal support: It is difficult to 'sell' HIA without official support and involvement from the policy makers.

The meeting was attended by;

- an expert in the implementation of the EES in Germany;
- an expert in the employment and health field;
- two employees of the Ministry for Environment and Conservation, Agriculture and Consumer Protection of the state of North Rhine-Westphalia;
- an employee of the Federal Ministry of Health and Social Security.

Unable to attend:

- a representative on the Unemployment Association;
- an expert in European Union politics;
- representative from the Federal Ministry of Economics and Labour.

We were unable to gain the participation of some other relevant stakeholders such as the employer and employment unions.

After introductions and presentations on; HIA, the European Employment Strategy and project background, a draft terms of reference was presented and discussed. This was followed by a moderated workshop.

Prepared questions were used to stimulate discussion and pin boards were utilised to map the responses received. For each question/issue participants were asked first of all to give their opinion and this was followed by a short discussion. However the format of the meeting was open and flexible and there was discussion carried at all stages. Before beginning the brainstorming the participants were given a short introduction to the social model of health and determinants of health and a summary of evidence on the relationship between employment and health. These were designed to act as prompts to get them thinking in health terms. In the presentation on EES we had introduced the ten EES priorities and focussed on the five recommendations for Germany made by the commission. Subsequently, the intended methodological approach of the project was discussed.

Participatory workshop results⁷

The main results of the workshop are addressed in the following sections. A full report of the results of the participatory workshop is in Appendix 4.

7.1.1 European Employment Strategy (EES) – Implementation in Germany

Here the following four main questions were dealt with:

1. Which of the five EES **priorities** for Germany are regarded as particularly relevant to the specific situation in Germany? (Participants asked to prioritise and evaluate them).
2. For which of these fixed five EES priorities are detailed positive results to be expected during the practical **implementation** phase up to the year 2010?
3. (Apart from EES) which **other influences** have an important priority role in the labour market and employment policy in Germany?
4. Which **scenario** do we realistically have to expect in Germany by the year 2010?

Priorities

The selected five priority areas recommended to Germany by the EU constitute areas of labour market strategies which, from the point of view of the EC, are most in need of improvement. The participants stated that the five priorities are all relevant for Germany. Specific economic and employment policies were mentioned that related the priorities (see Appendix 4)

Implementation

Results during the practical implementation phase up to the year 2010 are expected for all five EES priorities. Here, however, the realisation of individual measures and prospects of success of the individual strategy will to a considerable extent be influenced by societal and economic conditions (see also expected results "scenarios").

Other influences

During the discussion about national priorities for the labour market policy in Germany, in addition to the above-mentioned five EES priorities the following items were primarily mentioned: reduction of non-wage labour costs, particularly in the low-wage sector and; further strategies for reducing unemployment (inter alia by providing additional jobs and training vacancies).

Scenarios

"Scenario 2010": Here, to some extent, personal statements were made. On the one hand the ideal conception for the year 2010 was expressed which is a fairly high level of health and social wellbeing with reduced unemployment in Germany. On the other hand, the catchword of "working poor" was mentioned which refers to a situation of increasing pauperization of large population groups which despite reduced unemployment and a fairly high employment level have to live with a clear reduction of their income and their living standard. In two statements increased social inequality as an element of such a social and employment scenario for the year 2010 was mentioned. With regard to the flexibility trend on the labour market which is already becoming apparent at the moment, it was expected that by the year 2010 this instrument will lead to a further widening of the gap between voluntary flexibility among privileged groups of the population to increase their quality of life and

⁷ Some of the workshop participants withdraw their formal involvement in the steering group after the meeting. This means that the opinions expressed and information provided by these participants are personal opinions and not the view of the organisations they work for.

necessity to accept working conditions which require a high degree of (more unfavourable, non-self-determined) flexibility among non-privileged groups of people.

7.1.2 Identification of Health impacts

This part of the workshop was divided into two sub-sections: the identification of priority areas of health impacts and recommendations for carrying out the HIA.

The warning was given not to stress stereotype correlations such as for example between unemployment and health and to descend to the level of "truisms". The expected relationship between employment and health would involve a range of factors which would interrelate with each other in a variety of ways. It was recommended to focus on specific correlations which are influenced or activated by specific elements of the EES.

As an example the following items were mentioned:

- working conditions (differentiated by impact criteria for health);
- job safety (and its relevance for health and/or influence on absenteeism in firms and companies);
- connection between low income and health;
- significance of the social environment, of the social supporting structures for health.

In view of the short remaining project period and the pilot nature of the project it was recommended to concentrate on one of the altogether five EES priorities for Germany. A political priority of any one of the five strategies was not confirmed by the experts present at the meeting. It was recommended that the research team adopts a pragmatic approach to prioritisation. Availability of data and evidence should guide the prioritisation process.

The participants of the workshop recommended to extend the collection of data to specifically include Germany and to carry out targeted literary searches accordingly. Moreover the suggestion was made to also retrieve specific data and information from associations and actors who are in a specific way dealing with health impacts.

Suggested as possible focal points for the HIA were:

- Strategy 1 (activation/prevention of long-term unemployment): This and the national "*Job aktiv*" programme were mentioned as having potentially positive health effects. However with the above-mentioned precautionary measures to avoid stereotype presentations;
- Strategy 2 (coping with change and adaptation): Future broad population groups would have to reckon with large-scale changes in their job-life biographies. Possible negative health effects of compulsory flexibility on people were mentioned. Flexibility will bring positive health effects for some groups in society but for others it will be negative. However, the strategy is aimed at neutralising possible negative health impacts which could be caused through increased job-related flexibility. The made-up word of "flexicurity" characterising this objective was recommended to the project group for special consideration in their future reflections and setting of priorities.

7.2 Selection of HIA focus

During the policy analysis stage of a HIA decisions need to be made as to what aspects of the policy should be focussed on and what possible health impacts should be analysed. This is in addition to the boundaries already laid down in the Terms of Reference (TOR). This is a very important stage of the HIA as here decisions are made on the limits of the HIA - what will be looked at, what not and in what depth. There are a variety of tools and methods available to assist in this decision making process. The approach taken will to a certain extent depend on the particular HIA in question.

There have been underlying principals and values developed for the policy HIA methodology which are to be taken into account during the whole HIA process. These values and principles also guide the decision as to what aspects should be focussed on during the HIA.

Principles and values of the EU policy HIA methodology

1. **Shared Ownership** - the assessment should be jointly owned by the assessors, DG proposing the policy, DG SANCO and the Secretary General's office
2. **Democratic/Public involvement** - the populations affected should be involved in the process, eg through their elected representatives or where the likelihood, latency, scale and severity of the impacts warrants the involvement of members of affected communities themselves
3. **Reducing health inequalities** - the HIA should assess the differential distribution of impacts across the population; a special focus is on reducing health inequalities
4. **Objective** - the identification of data sources and samples, the collection and analysis of data, and the identification of evidence of impacts from this data should be based on recognised research quality standards, ensuring the objectivity in the assessment
5. **Transparent** - the assessment should have explicit, open methods and procedures, including decision-making
6. **Sustainable** - both short and long term impacts should be identified as well as the sustainability of recommendations
7. **Practicable** - the methods used and recommendations developed should be practicable and achievable

7.2.1 Prioritisation criteria

Alongside these underlying values criteria were developed for making a systematic decision as to the focus for this HIA. The HIA we are carrying out is within the framework of a larger project. The HIA should test out the methodology we have developed within this project and the results will be fed back into the project and be used to further develop the methodology and recommendations for the project initiator DG SANCO. The pilot nature of this HIA means that our focus is on testing out the methodology rather than carrying out a fully comprehensive HIA of the EES in Germany. Therefore the HIA of the EES in Germany will not necessarily be as comprehensive as a 'non-pilot' HIA.

Some of the criteria developed for selecting the focus of the HIA are generic, others are specifically related to the current HIA. For example, for the pilot the availability of evidence was an important criteria for selecting the focus of the HIA. This was because we wanted to test out EPHIA and, more specifically, attempt to model some of the possible health impacts of employment strategy on health. However, possible significant health impacts should not be ignored in health impact assessments because of a lack of available research on a particular issue. Alternative criteria could be developed and applied in other HIAs.

The following criteria were used to select the focus of the HIA:

1. Policy context

The HIA should focus on significant features of the policy.

2. German policy context

The priority should address an area that is a significant feature of German policy that Germany also takes specific action on.

3. Recommendation/ support from steering group, key informants and stakeholders

4. Significant potential health impacts

5. Evidence

There should be robust evidence indicating possible health impacts

6. Availability of evidence

Evidence, relating where possible to health impacts in Germany, should be available and accessible.

7. Availability of data

Relevant data relating to the German situation should be available, preferably including trends and predictions.

8. Practicable

The impact assessment should be achievable within the boundaries of the HIA. This includes factors such as available time and resources.

9. Specific relevance to policy

The issue should have specific relevance to the policy in question.

10. Good example

Should display and test out the HIA process developed within the project with an appropriate level of complexity. It should be an issue of public interest

11. Recommended as a priority for Germany

The Commission makes country specific recommendations for the implementation of member state's employment policies. The HIA should focus on these recommendations for Germany.

7.2.2 Application of criteria

As already discussed in policy analysis (1) there have been 10 priorities identified in the employment guidelines for 2003 for member states to focus on ('10 commandments'). These priorities support the three overall objectives of full employment, quality and productivity at work and cohesion and an inclusive labour market. The ten priorities are the starting point for selecting the focus of the HIA.

- 1 help unemployed and inactive to find a job, prevent long-term unemployment (activation prevention)**
- 2 encourage entrepreneurship and improve climate for business start-ups
- 3 promote adaptability of workers and firms to change (adaptability)**
- 4 provide more and better investment in human capital (life long learning)**
- 5 increase labour supply and promote active ageing
- 6 promote gender equality in employment and pay (gender equality)**
- 7 combat discrimination against disadvantaged groups
- 8 improve financial incentives to make work pay (making work pay)**
- 9 reduce undeclared work substantially
- 10 promote occupational and geographical mobility

We further limited the choice to the five priorities recommended to Germany by the Commission to focus on (in bold). This is because these priorities are of particular relevance to Germany and are areas which the Commission expects Germany to take action in. The steering group also recommended beginning the selection process with these five priorities.

The synopsis below of the application of these criteria to the five priorities for Germany is a summary of the selection process. The decisions made were based on the information gathered in the project at that stage.

Table 3 Priority selection matrix

Criteria	Priority				
	Activation prevention	Adaptability/ flexibility	Lifelong learning	Gender equality	Making work pay
policy context	++	++	+	+	+
German context	++	++	+	+	+
recommendation/ support	+/-	++	+	-	+
health impacts	++	++	+	?	+
evidence	++	+	-	-	-
evidence availability	++	+	?	-	-
data availability	++	+	?	+	-
practicable	+	+	-	-	-
specific to employment policy	+	+	-	-	+
good example	+	+	+	+	+
priority for Germany	+	+	+	+	+

+ fulfils criteria

- does not fulfil criterion adequately

The signs used are ordinal so there is comparison between the criteria, for example there was more available evidence on adaptability/ flexibility than lifelong learning. Negative signs within the synopsis do not signify that the priority is not able to fulfil that criteria at all, but for the purpose of the pilot project it was unable to satisfy that specific criteria. I.e. a negative sign next to evidence does not mean that there is no evidence available about the relationship between financial incentives to work and health but in the context of the research carried out in the project only limited evidence was found.

7.2.3 Selection

The following prioritisation is based on the selection process (Table 3):

1. adaptability/ flexibility, prevention/activation;
2. gender equality, lifelong learning, making work pay.

For the purposes of the pilot HIA it was decided to focus on the health impacts of one of the five priorities recommended for Germany. 'Prevention and activation' and, 'adaptability/ flexibility' fulfilled the criteria adequately. Ultimately the decision was made to focus on 'adaptability/ flexibility'. A main reason for this is that it was decided that the HIA should focus on the health effects of employment (rather than health effects of unemployment vs. employment). If the EES is successfully implemented there will be a significant increase in employment and corresponding decrease in unemployment. The EES particularly encourages an increase in flexible forms of employment. How work is carried out will have impacts on health.

The decision to focus on one priority does not mean that the other recommended priorities for Germany don't have impacts on health. For example, measures to promote gender equality and life long learning can be expected to have generally positive health impacts. The implementation of country specific recommendations made by the commission at member state level could also lead to impacts on health that may not be immediately obvious when looking at the priorities themselves. For example the priority 'making work pay' is aimed to

encourage people to work, one way this is planned on being implemented in Germany is by reducing the duration of unemployment benefit claims. One possible negative health effect resulting from this is social exclusion. Or as Koller put it; "it might turn out to be a one-way street into non preventable existential financial and social decline" (Koller et al., 2003).

Adaptability and the associated flexible forms of employment are key features of the EES. It is one of the ten priorities the commission identified as a result of the mid term review of the EES in 2002 and is in the employment guidelines for 2003. The commission has specifically recommended Germany to focus on promoting flexibility in it's employment policy. Germany has responded to the call and need for more flexibility by taking measures such as the 'Act on Part-Time Work and Fixed term employment contracts (2001)'. More recently the German Government has developed a programme for reforming and reorganising the employment policy and the social system called Agenda 2010. The issue of flexibility is specifically addressed under aspects such as redundancy law reform.

Feedback we received from the workshop (see section 7) also supported the impression of the importance and relevance of the issue flexibility, especially in the context of flexicurity. During our literature search we found a significant body of research addressing health issues related to flexible forms of employment. A substantial amount of this research is being carried out on what is often termed precarious or marginal forms of employment. These include types of employment such as fixed term contracts, temporary work, telework and part time work. Job insecurity is often a characteristic of these types of employment. A great deal of this research is recent and gave the impression that flexibility is a topical area at the moment and is seen to be an important health issue by health researchers and research initiators. There is also research being carried out in this area within the German context.

We have also located German data in addition to the core indicators already identified for the country profile (see section 6) including;

- Numbers of part time workers including trends for Germany (including East and West), male/ female, foreigners, age, type of work
- Types of contracts (short term, permanent) including trends for Germany (including East and West), male/ female, foreigners, age, type of work
- Predictions related to future numbers of part-time/full-time workers
- Associations for Germany between types of employment and health indicators.

Some groups within society profit from flexibility, while for others working conditions and possibilities deteriorate. Factors such as qualification level, age, sex and area of work decide to a certain extent who wins and loses (Klammer et al., 2002). Research has shown that women tend to be over represented in the loser group (Klammer et al., 2002).

The EES promotes and encourages flexible forms of employment. Flexible forms of employment encompass a wide range of employment situations which are difficult to generalise. There are obvious differences between a well paid professional who decides voluntarily to accept a fixed term contract because they believe it will advance their career prospects and someone who would prefer to have a permanent position and is unable to find one, so accepts a fixed term position. However information gathered in this pilot HIA indicate that there are significant health impacts resulting from these types of employment and this HIA will attempt to investigate these impacts within Germany.

7.3 Health impacts

The policy analysis, stakeholder workshop, literature review of employment and health and the development of a health and employment model formed the basis for selection of the HIA focus. Evidence from the literature defining the relationship between policy interventions, the effects on health determinant and health outcomes, and 'determinants of determinants' was collected and analysed. This, along with information received at the workshop, was used to

identify possible health impacts that could result from the implementation of the EES in Germany.

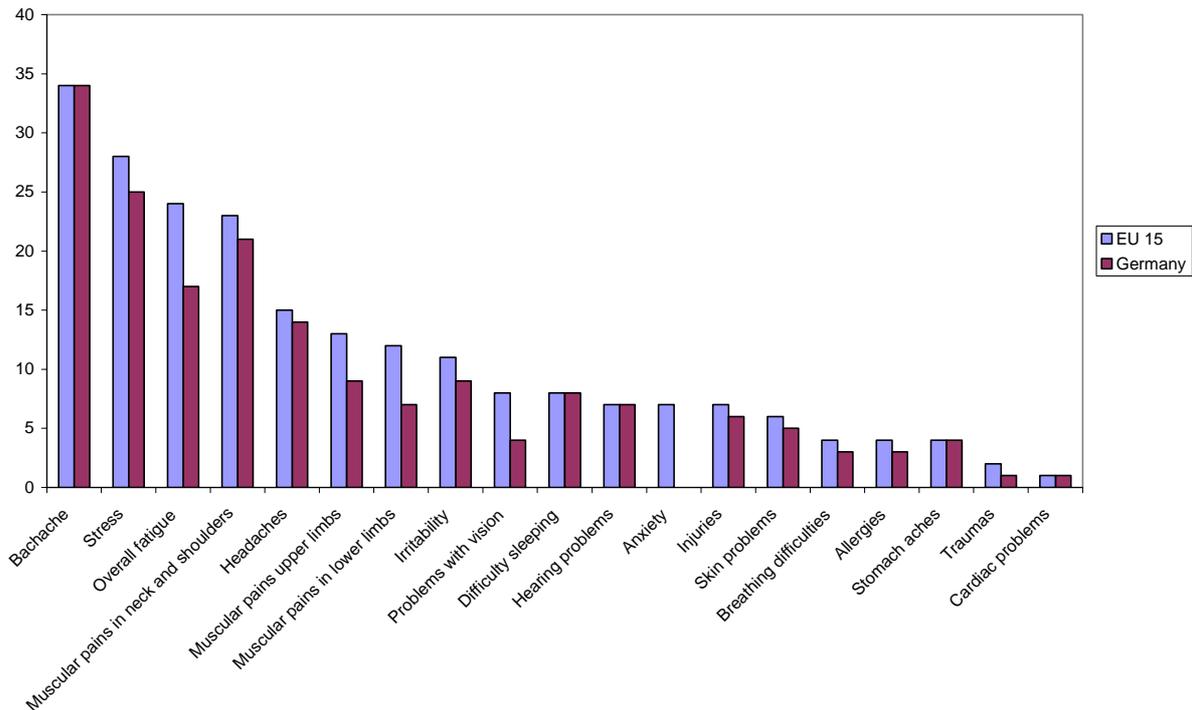
7.3.1 Employment and health

In general, having a job is better for health than having no job (WHO, 2003). However the type of job a person has and the working conditions he or she is exposed to will also affect health. Research has shown that:

- The risk of cardiovascular and other diseases is higher in people with jobs characterised by low control (Ferrie, 1999). In low control jobs individuals have very little control over the day to day organisation of their work;
- Cardiovascular risks are high in people in jobs with high effort and low reward (Ferrie, 1999);
- The anticipation of job loss or job insecurity in general has been shown to negatively effect mental health (particularly anxiety and depression), self reported ill health, heart disease and risk factors for heart (WHO, 2003);
- Insecure jobs tend to involve high exposure to work hazards of various kinds (Benach et al., 2002);
- Working conditions of non-permanent workers are generally worse than those of permanent workers (Benach et al., 2002);
- High levels of perceived co-worker, supervisor or trade union support can help to offset some of the negative effects of job insecurity (European Foundation for the Improvement of Living and Working Conditions, 2002).

The European Foundation for the Improvement of Living and Working Conditions' (EFILWC) showed that in Europe in 2000 60% of workers considered that their work affects their health (Germany 59.5%) (Paoli and Merllié, 2001). 28% of workers in the European Union believe their health or their safety is at risk because of their work (Germany 23%) {European Foundation for the Improvement of Living and Working Conditions, 2003 112 /id}.

The figure below from the third European survey on working conditions 2000 depicts the percentage of European and German workers reporting specific work related health problems.

Figure 12 Health problems due to work (Qu 35) as perceived by European and German workers in 2000

Source: (Paoli and Merllié, 2001)

7.3.2 Health impacts focus: flexible forms of employment and health

In addition to the general literature review on the topic of employment and health, a specific review of existing literature on the relationship between flexible employment and health was carried out with a particular focus given to research carried out in Europe and Germany. This literature review was not intended to be exhaustive but the inclusion of leading reviews (Brenner, 2002; Dooley et al., 1996; European Foundation for the Improvement of Living and Working Conditions., 1999; Quinlan et al., 2001; Underhill, 2002; van der Vliet and Hellgren, 2002) means that a wide range of existing literature was covered. The purpose of the following summary of possible effects of flexible employment on health is to provide a knowledge basis for predicting the types of effects the EES might have on health in Germany and also the possible magnitude of these effects. This information can then be incorporated into models and applied to different scenarios.

Conditions of employment

Conditions of employment refers to the type of contract an employee has such as permanent or fixed term, part-time full-time etc. As new forms of work organisation and flexible employment are likely to share some of the unfavourable characteristics of unemployment, it seems plausible that they could also produce adverse effects on health (Benach et al., 2000). Downsizing, which can lead to increased job insecurity, has been shown to be a risk to the health of employees. A significant linear relation between the level of downsizing and long periods of sick leave, due to musculo-skeletal disorders and trauma, has been demonstrated (Vahtera et al., 1997). Domenighetti et al. (1999) carried out research on the health effects of job insecurity among employees in the Swiss general population and found an association between perception of job insecurity and health status, health related

behaviour and social distress⁸. It has also been found that the advantages provided by a positive work situation do not compensate for the perception of job insecurity arising from a non permanent contract (Goudswaard and de Nantueil, 2000). Fear of unemployment seems to have stronger unfavourable effect in high educated employees than in less educated, probably because investment in career and in personal expectations are, in that group, generally higher (Domenighetti et al., 1999).

Others studies have shown:

- **Psychological ill health:** Job insecurity is often associated with psychological ill health (Burchell, 1995; Ferrie, 1999; Ferrie, 1999; Robinson, 1986). One study, for example, showed that perceived job insecurity was the single most important indicator of a number of psychological symptoms, such as mild depression (Dooley et al., 1987). Goudswaard and de Nantueil (2000) commented that new psycho social risks do not replace, but rather combine with, on-going traditional physical factors.
- **Self reported health status:** Self-reported health status tended to deteriorate among workers anticipating job change or job loss in a group of middle-aged white-collar civil servants (Ferrie et al., 1995).
- **Job dissatisfaction:** Fixed term and temporary workers have significantly higher rates of dissatisfaction than permanent fulltime employees (Benach et al., 2002)
- **Worse career prospects:** Absence of career opportunities for non-permanent workers is a main contributing factor to insecurity (Goudswaard and de Nantueil, 2000). While part-time and temporary jobs can function as stepping stones into the labour market and facilitate labour market participation for certain types of persons, the evidence so far is that employees under these forms of contracts risk discrimination in pay and pension and have less opportunities to participate in continuous training and to improve their career prospects {Commission of the European Communities, 2004 135 /id}.
- **Less access to training:** In almost half of the case studies carried out by Goudswaard and de Nantueil (2000) flexible workers had little or no access to training.
The demand for non-permanent contracts often follows, or at least goes together with, a redistribution of tasks among the permanent population, whereby the internal division of labour is increased. Within such a context, the chance for non-permanent workers to access regular training or to be promoted are strictly limited: this is only possible if they get a permanent position beforehand, even at a low-skilled level, which means that the selective process to reach higher positions is re-enforced. The use of non-permanent workers seems to be part of a new recruitment process, whereby the probationary period is increased, without having to give those workers the commitment due to permanent workers (Goudswaard and de Nantueil, 2000).
- **Possible difficulties in planning for the future, getting bank loans, having children...** (European Agency for Safety and Health at Work., 2002, 31).
- **Reported bad health:** In a study carried out in Germany it was found that full time employed people with fixed term contracts were about 40% more likely to report poor health than those full time workers with permanent contracts (OR 1.38, 1.10-1.72) (Rodriguez, 1999; Rodriguez, 2002).
- **Part-time income:** part-time work in most cases means only part-time income. In a social system based on the insurance principle, this automatically means low claims on social benefits and therefore a more vulnerable social situation than full-time workers will have to face {Huster, 2003 136 /id}.

On a more positive note for flexible workers, studies have also shown:

⁸ In particular, employees in high insecurity group, compared to those in low one, have significantly higher odds ratios for seven indicators out of ten [not being in good health OR 1.6 (CI 1.0-2.7); high level of subjective stress OR 1.6 (CI 1.1-2.3); low self-esteem OR 2.9 (CI 1.5-5.7); daily or weekly consumption of tranquillisers OR 2.1 (CI 1.0-4.3); regular low-back pain OR 2.0 (CI 1.3-3.2); regular smoking OR 1.6 (CI 1.0-2.4); avoiding medical consultation or caring for themselves for fear of missing work OR 3.4 (CI 1.9-5.9)].

- **Health related absenteeism:** Part time employees have less health related absenteeism than full timers (Benach et al., 2002);
- **Stress:** Temporary and part time workers report less stress than full-time workers (Benach et al., 2002).

It can be expected that particularly voluntary forms of flexible work may allow people to create a healthy balance between work, family and leisure time.

Work conditions

Work conditions refers to what actually occurs at the work place. Insecure status undoubtedly worsens working conditions- in identical jobs, a precarious status entails poorer working conditions for precarious workers than for other workers (Letourneux, 1998). Quinlan, Mayhew and Boyle (2001) reviewed research in the area of precarious employment and occupational health and safety (OSH). 76 out of the 93 studies reviewed found a negative association between precarious employment and OSH. Since completing this research they have identified a further 20 published studies (Quinlan and Mayhew, 2001). Almost all of these studies reinforced the conclusion from their first study that precarious employment is associated with demonstrable adverse health outcomes. Goudswaard and de Nantueil state that flexible workers have an increased exposure to risk but that this risk is difficult to quantify (Goudswaard and de Nantueil, 2000).

Studies have also shown:

- **Work environments:** Flexible workers are exposed to more hazardous and dangerous work environments than permanent employees (Benach et al., 2002). Analysis by Letourneux (1998) shows that temporary employees work more often in painful or tiring positions when compared to permanent employees (57% and 42% respectively), are more exposed to intense noise (38% and 29% respectively) and perform repetitive tasks more frequently (46% and 36% respectively). In Germany research has shown that people with fixed term contracts are subject to more mobbing than permanent workers (10% vs 7% BIBB/IAB survey 1998/99).
- **Lower control:** Non-permanent workers are subject to greater demands, have lower control over the work process and low rewards — all of which have been associated with adverse health outcomes (Bosma et al., 1998).
- **Erosion of OSH procedures, strategies:** Workers in subcontracting situations or under non-permanent contracts suffer from present lack of OSH training (Goudswaard and de Nantueil, 2000). In Spain and France, for example, temporary workers showed much higher levels of occupational accidents as compared to permanent workers (Durán et al., 2001; François, 1993). In a report by the European Agency for safety and health at work on the changing world of work (2002), it was concluded in Germany that; with the erosion of traditional work structures there is also an erosion of the inherited procedures, strategies and concepts in occupational safety and health. Occupational safety and health must take account of the new patterns of work. (European Agency for Safety and Health at Work, 2002, 52).
- **Fatigue:** Small employers, self-employed and full-time fixed-term employment showed significant high levels of fatigue compared to full-time permanent employment.
- **Work organisation:** Flexible workers; perform work that is more monotonous and repetitive, have less opportunity to acquire new skills or training, have less autonomy and are not as involved in decision making (Letourneux, 1998).

Table 4 Synopsis of literature review of flexible forms of employment and health

	Flexible (part time, temporary, fixed term)	Normal (full time permanent contract)
Conditions of employment		
Job insecurity	+	-
Poor self reported health status	+	-
Job dissatisfaction	+	-
Access to training	-	+
Career prospects	-	+
Stress	-	+
Health related absenteeism	-	+
Work conditions		
Occupational health and safety	-	+
Exposure to hazardous/ dangerous work conditions	+	-
Working in painful/ tiring conditions	+	-
Control over work processes	-	+
Job demands	+	-
Rewarding job	-	+
OSH training	-	+
Occupational accidents	+	-
Fatigue	+	-
Monotonous/ repetitive work	+	-

+ higher/ more

- lower/ less

Flexible forms of employment and vulnerable groups

- **Disabled:** Disabled people generally suffer from higher job insecurity and lower employment status. Alongside a higher than average unemployment rate of 16.1% (national average 10.5%) the average length of unemployment is 13.4 months (2001). This is more than twice that of under 50 year olds (6 months) (Rauch and Brehm, 2003). The employment situation a disabled people in Germany has recently worsened (Huster et al., 2003). Disabled people may have more difficulty in moving back into the labour market after periods of unemployment which are likely to be a feature of a flexible labour market.
- **Older workers:** Like disabled people, older workers (> 50 years) also face difficulty in gaining new jobs leading to long term unemployment and associated negative health effects. In June 2002, the average duration of unemployment among those younger than 50 years was six months; the average duration of unemployment among skilled workers over 50 was 13.7 months. If they additionally had health handicaps the average duration is prolonged up to 15.9 months. For the unskilled older unemployed these figures were even higher; without health problems the average duration was 16.6 months, with health handicaps 20.2 months. Older unemployed persons and, regardless of their age, disabled persons - have specific problems to end unemployment. On average it takes them 13.3 months to end unemployment (Huster et al., 2003).
- **Younger workers:** Younger workers have a particularly high percentage of fixed term contracts {Statistisches Bundesamt, 2003 40 /id} and therefore more exposed to insecure work conditions and associated ill health. It could be presumed that young people may suffer less than some other groups from the negative health effects of flexible forms of work. However young people in fixed term employment may face additional difficulties in

planning for the future, for example buying a house, decisions whether and when to have children etc. which could also negatively impact on health.

- **Women:** Women are affected more often than men by flexible non standard work (Klammer, 2000a). Women work on average less hours than men and many work part time. The average number of transitions between employment, unemployment, different kinds of employment, different amounts of working hours, periods out of the labour market etc. have gone up and the phases and borderlines have become less clear (Klammer, 2000b). Where this reduction in working hours is chosen as a way of improving a work-life balance, the health impacts are likely to be positive. However, part-time working, through limitation of occupational choices, control over work and financial reward for example, may also lead to stress and reduce the well-being of women whose work is organised in this manner (Cathal report 38). It is also important to note that women are 'buffers' within flexibility strategies. Goudswaard and de Nantueil (2000) state that women are likely to be impacted on by policies related to flexible forms of work, either benefiting from or suffering as a result of such overall policies.
- **Non-Germans:** The employment situation of non Germans in Germany is "very bad" (Huster et al., 2003). Non Germany are particularly at risk of social exclusion partly due to their high unemployment rate (Huster et al., 2003). Alongside older workers and disabled people, non-germans may face particular difficulties finding new work at the end of fixed term contracts (high unemployment rate and long term unemployed) .

Although some vulnerable groups may be more exposed to some of the negative effects of flexible forms of employment, flexible forms of employment may also offer 'outsiders' the opportunity to enter the labour force. Research has shown a correlation between strict employment protection measures and the employment level of young people (Organisation for Economic Co-operation and Development, 1999). Strict employment protection may act to protect the 'core' work force but keep outsiders (women, young people, foreigners etc.) out.

7.3.3 Employment and health models

There are a number of potential pathways through which flexible employment might have negative impacts on health. (Have removed other models- see U:\HIA\policy HIA\Pilot\report\3.2 literature review flexible employment and health.doc). A structural model can be used to illustrate components of a system and how they are connected to each other.

For the purposes of this project we have developed our own structural model of the relationships between employment and health. We have based this on the DPSEEA framework developed by Corvalan, Briggs and Kjellström (Corvalan et al., 1996). Briggs describes the DPSEEA model (Figure 13):

Driving forces (D), that lead to Pressures on the environment (P), which in turn change the State of the environment (S), resulting in human Exposures (E₁) and thence to health Effects (E₂). Actions (A) may then be taken at any point in this chain to mitigate or avoid unwanted health effects (Briggs, 2003).

Figure 13 DPSEEA Model (Corvalan et al., 1996)

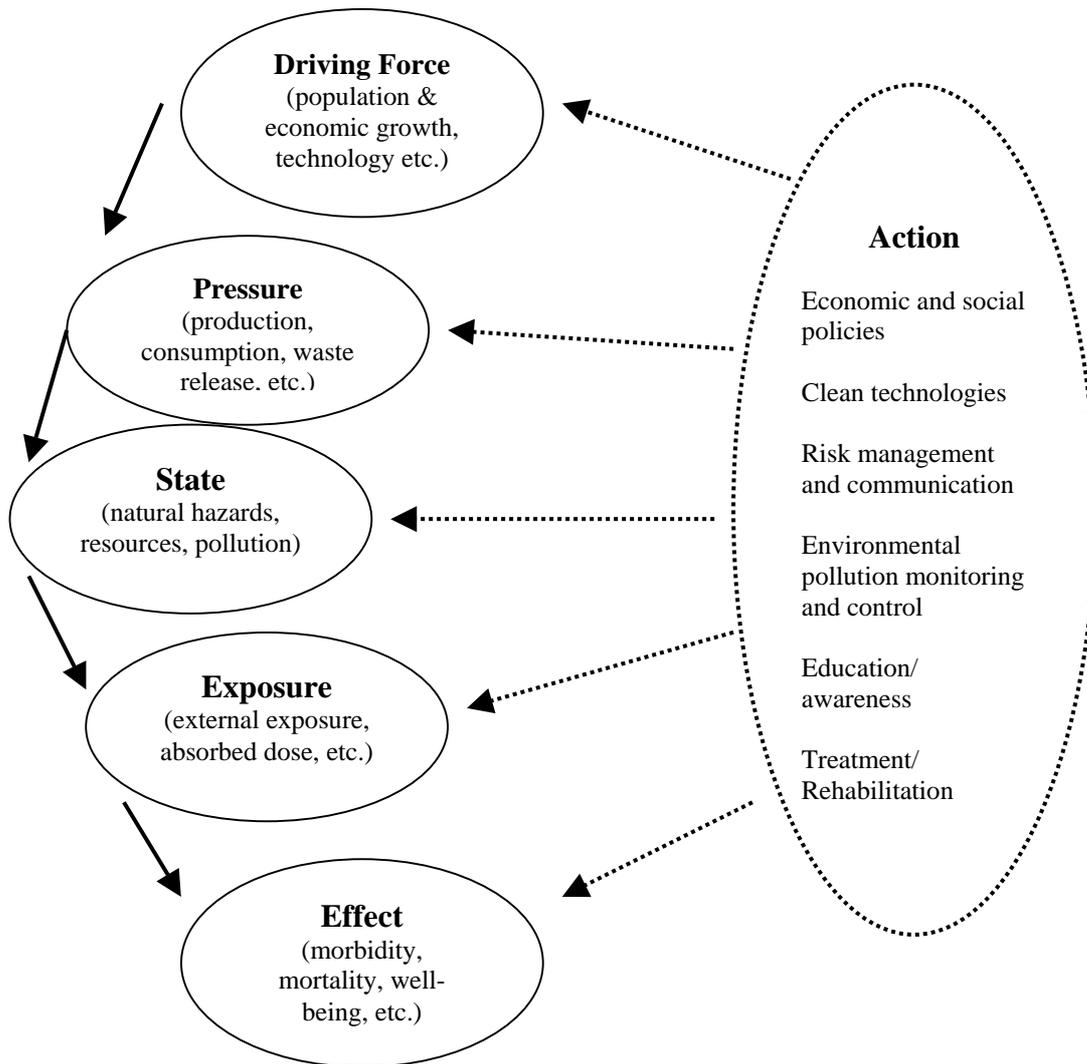
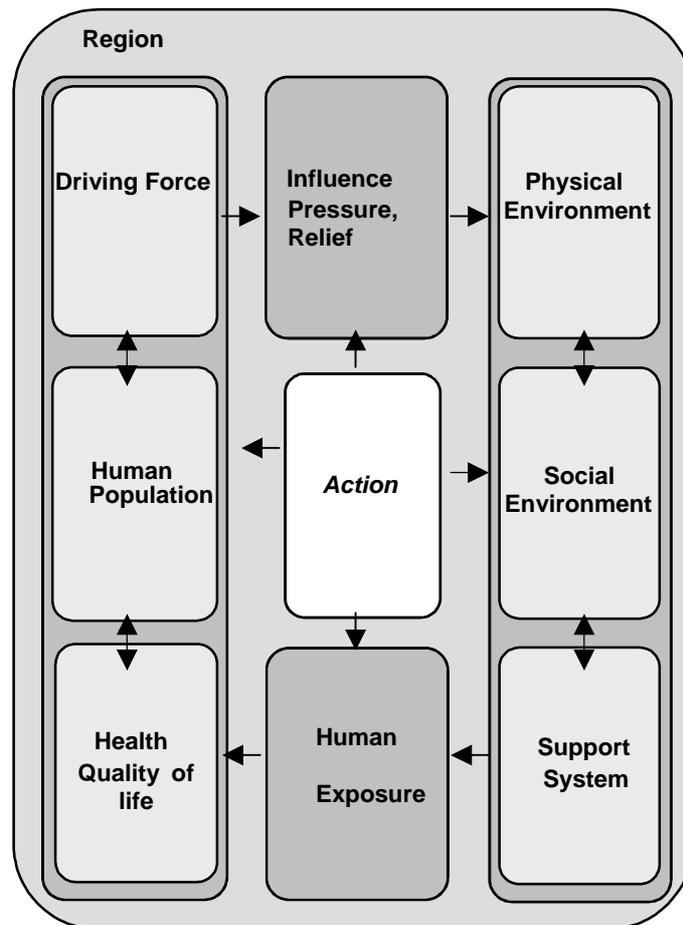


Figure 14 Structural model (Fehr, 2001)

The DPSEEA model was conceived primarily to describe associations between environmental pollution and health (Briggs, 2003). Fehr (2001) adapted the DPSEEA model to incorporate the following 9 elements;

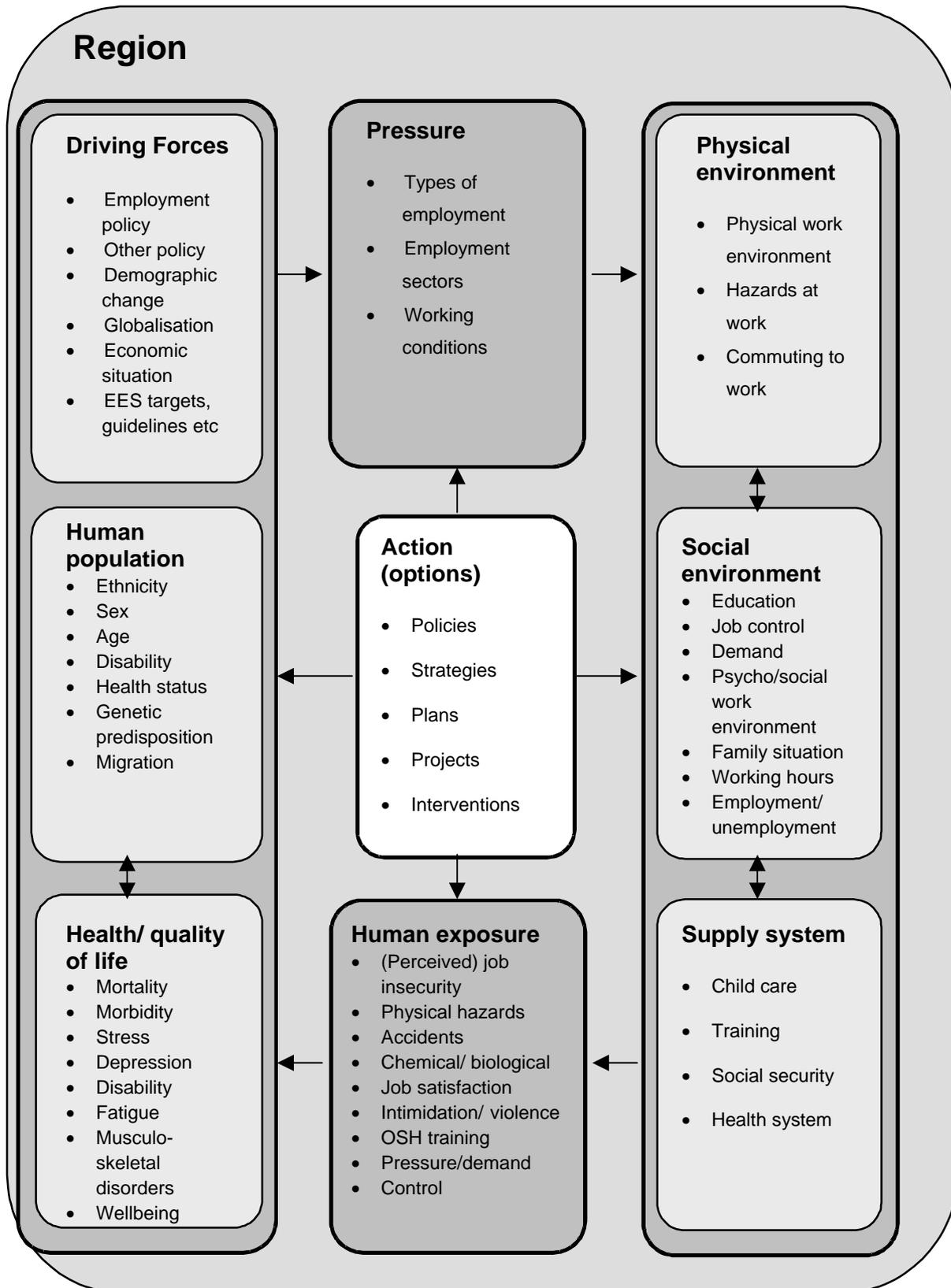
1. Region
2. Human population- demographic description including vulnerable groups
3. Development dynamic (driving forces) including socio-economic factors, employment situation and globalisation
4. Influence/effect of pressures and reduction in pressures on the environment.
5. State of the physical environment including available resources and pollution
6. State of social environment including supportive as well as stressful functions
7. Structures and processes of the health system
8. Human exposure to 'Noxins' and supportive factors
9. State of health and quality of life.



The extension of the DPSEEA model includes the components region and human population as important framework factors. It also incorporates the social environment in addition to physical components. This structural model allows for the explicit incorporation of more distal determinants of health or 'determinants of determinants' such as elements of the social environment. In addition to providing a structured way of considering the different factors that play a role in the relationship between employment and health this model includes the possibility to identify causal relationships.

Based on relationships between employment and health identified in literature, other employment and health models and feedback from stakeholders and project partners we have used the adapted version of the structural model to create our own model of the relationships between employment and health. This model provides a basis for our understanding on employment and health and is used throughout the HIA.

Figure 15 Structural model of employment and health



Structure based on DPSEEA adapted by Fehr

8 Impact analysis

Impact analysis involves assembling evidence of impacts from the different data sources, qualitative and quantitative, and assessing factors such as:

- Health impacts - the health determinants affected and the subsequent effect on health outcomes;
- Direction of change positive or negative health impacts;
- Latency - when the impact will occur - short, or long term;
- Scale - magnitude of the impact and the size/proportion of the population affected.
- Measurability - refers to the measurability of the impact, quantitative (impacts that can be measured by direct indicators), qualitative (non-quantifiable opinions or perceptions), estimable (quantifiable impacts that cannot be measured directly, but can be estimated by proxy measures);

This can include an analysis at population and sub-population levels to consider the implications for health inequalities.

Impact assessment can be carried out using both quantitative and qualitative methods. Using matrices as a tool for organising and focusing ideas about health impacts is a common way of visualising and structuring the impact assessment process. There is a range of quantitative methods and tools available that could be used in health impact assessment. In the pilot HIA for Germany quantitative modelling was used to assist in the prediction of possible health impacts of an increase in flexible forms of employment within Germany.

Although quantitative modelling is well established in other related fields such as environmental impact assessment and risk assessment, the use of quantitative modelling for health impact assessment is still in its infancy. There are particular difficulties in trying to develop models for health impacts resulting particularly from policies. The causal relationships are complicated and there is often limited research available verifying these relationships. Also when causal relationships are well established there may not be appropriate data available. However it can be useful to provide an estimation of the magnitude and direction of impacts and can be used to compare different impacts. By using alternative scenarios the effect of different policy options can be estimated. The results of quantitative methods such as modelling can provide useful input for the participatory HIA process. The results can be used as a starting point for further discussions within the assessment team and with stakeholders and project initiators. Here there may be different opinions on the 'rightness' of the modelling outcomes expressed. This can provide the opportunity for reflection on the assumptions and beliefs that go into a model. This may help to clarify the relationship between the policy in question and health impacts and can also feed into the prioritisation process. Modelling may also identify areas where further research is needed or additional data. This is an additional valuable HIA outcome.

8.1 Flexible forms of employment and health

The impact analysis focuses on the health effects of flexible forms of employment. Flexibility is a key component of the European Employment Strategy (EES) and has been recommended by the European Commission to as a key priority for Germany to focus on. The increasing demand for flexible labour markets, employment and work organisation is a key feature of modern work and is an important component of the EES. The number of fixed term and part-time employees in Germany is increasing (see 6.1.2) (Federal Statistical Office of Germany, 2003a). It is expected that this increase will continue. The EES encourages increased flexibility in types and conditions of employment. Flexibility is seen to be a prerequisite for economic competition and also as a solution to unemployment (European Commission, 1995). Encouraging flexible forms of employment is a core component of the EES.

Alongside the well established research on the effects of unemployment on health there is now an increasing amount of research being carried out into the effects of flexible forms of employment on health. One reason for this is the increasing commonness of these forms of work.

Flexibility is often also called precarious or atypical work and includes subcontractors, part-timers and non-permanent workers within the context of this HIA refers to employment status and work times that are different than the traditional permanent full time position. Included in this definition are part time employment, fixed term contracts, temporary work and shift work.

The literature reviewed indicated that some aspects of flexible forms of employment may negatively impact on health. Particularly job insecurity, which is associated with some forms of flexible employment, has been associated with ill health (Burchell, 1995 ;Domenighetti et al., 1999;Ferrie, 1999;Robinson, 1986;Quinlan et al., 2001;Rodriguez, 2002). A summary of some of the available literature on job insecurity and health is presented below in Table 5.

In addition to the qualitative information we gathered on health impacts, modelling was used to estimate the possible health impacts in different scenarios. It is often not possible to model all relevant health impacts and would generally not be practical in terms of available time and resources. HIA modelling can be used for focussing on specific aspects. Ideally, we would have fed the results of the modelling in the prioritisation stage into discussion with the steering group, relevant stakeholders and key informants.

It was decided to model health effects related to two major forms of flexible employment, limited term and part-time employment. Germany has also taken specific action on these forms of employment. One health indicator was selected for each type of employment to model the effects of changes in these types of employment on health. The choice of the two different indicators for the two types of employment was based on the availability of studies already carried out which had found significant results and were applicable to the German situation.

Table 5 Synoptic table: evidence flexible employment and health

	Study focus	Author, year of reference, sampling time Location	Method	Indicators	Findings
1.	Types of employment and health	<ul style="list-style-type: none"> • (Benach et al., 2002) • 2000 • Europe 	Cross sectional study (N= 15558). Data from 2 nd and 3 rd European survey on working conditions	Self reported health indicators: fatigue, backache, muscular pains, stress, job dissatisfaction, health related absenteeism. Types of employment; socio-demographic variables, work environment variables, physical variables. Psychosocial variables, country variables	Non permanent employment more likely to report dissatisfaction (adjusted OR 95% CI 1.55, 1.26-1.92). Part time employees significantly less absenteeism due to work related health problems. Non permanent workers report less stress.

	Study focus	Author, year of reference, sampling time Location	Method	Indicators	Findings
2.	Relationship between job insecurity and self reported health status	<ul style="list-style-type: none"> • (Domenighetti et al., 1999) • 1997 • Switzerland 	Phone survey (N= 2024; response rate 63%)	Self reported job insecurity, self perceived health status including, stress, self esteem, sleeplessness, use of tranquillisers, medical consultations, lower back pain, smoking, avoiding medical consultation because of fear of missing work.	In particular, employees in high insecurity group, compared to those in low one, have significantly higher odds ratios for seven indicators out of ten (CI 95%)[not being in good health OR 1.6 (CI 1.0-2.7); high level of subjective stress OR 1.6 (CI 1.1-2.3); low self-esteem OR 2.9 (CI 1.5-5.7); daily or weekly consumption of tranquillisers OR 2.1 (CI 1.0-4.3); regular low-back pain OR 2.0 (CI 1.3-3.2); regular smoking OR 1.6 (CI 1.0-2.4); avoiding medical consultation or caring for themselves for fear of missing work OR 3.4 (CI 1.9-5.9)
3.	Chronic job insecurity and change in job security on health	<ul style="list-style-type: none"> • (Ferrie et al., 2002) • 1995/96 and again in 1997/99 • England 	Longitudinal cohort study of white collar British civil servants (N=3360). Clinical data and self administered questionnaire	Self reported health, minor psychiatric morbidity, physiological measures	Self reported morbidity higher among participants who lost job security. Those exposed to chronic job insecurity had highest self reported morbidity.
4.	Future uncertainty and socioeconomic inequalities in health	<ul style="list-style-type: none"> • (Ferrie et al., 2003) • 1985-1988 and again in 1997-1999 • England 	Longitudinal study of white collar British civil servants (N = 7270). Clinical data and self administered questionnaire	Perceived job and financial insecurity, personal details, minor psychiatric morbidity, physiological measures	Findings provide evidence that, particularly for men, financial insecurity, rather than job insecurity, seems to be the more central anxiety influencing risk of self reported morbidity in white collar workers aged over 45.

	Study focus	Author, year of reference, sampling time Location	Method	Indicators	Findings
5.	Relationship between Employment and health	<ul style="list-style-type: none"> • (Platt et al., 1999) • 1993-1998 • Europe 	Bibliographic review of literature on employment and health. 17 studies related to job insecurity	Job insecurity self rated physical health	There is evidence in the literature that job insecurity leads to worse self-rated physical health and an increase in some clinical symptoms. However, as a result of inconsistencies in research design and outcome measures, comparison between studies is difficult and meta-analysis impossible.
6.	Precarious employment and OSH	<ul style="list-style-type: none"> • (Quinlan et al., 2001) • 1984-2000 • International 	Reviewed 93 published journal articles, monographs and books	Wide range of indicators including: absenteeism, OSH knowledge, self reported health, injury rates	76 out of 93 studies found precarious employment associated with a deterioration in OHS in terms of injury rates, disease risks, hazard exposures or worker knowledge of OSH regulations. 14 out of 24 studies found a negative relationship between temporary work and OHS.
7.	Transition from insecure to secure employment and health	<ul style="list-style-type: none"> • (Virtanen et al., 2003) • Finland 	Prospective cohort study with four year follow up (N= 4851)	Self reported workload level, job security, job satisfaction, absenteeism	Receiving a permanent job after fixed term employment is associated with favourable changes in job security and satisfaction. However there was an increase in sickness absence.
8.	Marginal employment and health	<ul style="list-style-type: none"> • (Rodriguez, 2002) • 1991-1993 • Germany and England 	Analysis of panel studies (N= 10104 Germany, 7988 Britain)	Self reported health status	In Germany, full-time fixed term employees were about 40% (OR 1.42 99% CI) more likely to report poor health than those with permanent work contracts.

8.2 Impact of fixed term employment on self reported health status

Rodriguez (Rodriguez, 2002) found that fixed term fulltime employees in Germany are 42% more likely to report having poor health than permanent fulltime employees. These findings are consistent with the hypothesis that unstable and temporary jobs can create a feeling of insecurity that can lead to chronic psychological distress which may have a negative impact on health status (Rodriguez, 2002).

It was decided to use the results of the Rodriguez study and apply it to different scenarios in order to attempt to estimate the possible magnitude of health effects relating to changes in the proportion of permanent full time and limited term fulltime employees. This piece of research was selected for a variety of reasons:

- Applicability to Germany- the research was carried out in Germany and England;
- The research is consistent with other research indicating a link between job insecurity and negative health impacts;
- Odds ratios were reported;

- The odds ratios derived are significant ($P = 0.01$).

The study had two main objectives;

1. to investigate whether temporary work arrangements have an impact in predicting perceived health status,
2. to analyse the possible impact of part-time work in predicting health (Rodriguez, 1999 at 4; Rodriguez, 2002).

Three years of panel data (1991-93) were analysed. The German data come from the ongoing Sozio-Oekonomisches Panel (SOEP). The total number of respondents in Germany was 11 980.

Perceived health status was used as the health dependent variable. Rodriguez described the methods used:

To test the hypothesis that different working time arrangements and fix-term contracts could have an impact on perceived health status, we ran a logistic regression in which the outcome variable was divided into two groups, one including reports of good or excellent health, and the other including fair, bad or very bad health.

The analytical model controlled for individual characteristic such as age, sex, marital status, and years of education; household characteristics such as type of housing (rental versus ownership), total household income, and number of household members. More importantly, to control for a possible reverse causation effect and the fact that people with poorer health could be more likely to work less hours and less likely to have permanent employment, the model included adjustments for previous health status (i.e., health status as reported the year before). In addition, to control for previous experience with job instability, the model factored in unemployment status in 1991 (Rodriguez, 2002; Rodriguez, 2002).

According to the SOEP, 25 % of full-time permanent employees and 23 % of full-time limited term employees report poor health. However, when the individual characteristics mentioned above are controlled for full-time employed people with fixed term contract arrangements are about 40 per cent more likely to report poor health status than those who have permanent work contracts. In other words, at first glance it appears that limited term workers might be even healthier than full-time workers, but the reasons for their apparent better or equivalent health status are differences between the two groups in characteristics such as education, age and sex. If the same kind of people were working in limited term contracts as work in full-time contracts then the people with fixed term contracts would be 40% more likely to report poor health.

The same significant findings are not observed in the United Kingdom or among those working without permanent contract in part-time employment. One possible reason for this is that in Germany there are a large number of people in fixed-term employment schemes. The fact that this is generally an involuntary choice to work in a fixed term contract may exacerbate the possible negative health effects of this form of work.

8.2.1 Methods

The reported odds ratio (OR) of 1.42 (99% CI 1.13-1.79) (Rodriguez, 2002) was applied to the present employment situation in Germany and 3 scenarios.

The three scenarios are;

- 5% of employees currently working in permanent contracts shift into fixed term contracts,
- 10% of employees currently working in permanent contracts shift into fixed term contracts,
- 15% of employees currently working in permanent contracts shift into fixed term contracts.

For all scenarios it was assumed that there is no change in the number of people in the total labour force.

In order to carry out this modelling certain assumptions needed to be made:

1. The OR of 1.42 is correct;
2. The two groups share the same characteristics. The OR only applies when the population groups are similar in regards to; age, sex, years of education, marital status, household income, number of household members, home ownership, time spent on unpaid house keeping work, previous health status and unemployment history. It therefore needs to be assumed in the calculations that the fixed term employees and the permanent employees share the same characteristics. This could to a certain extent happen if the successful implementation of the EES leads people that are now in permanent positions working in fixed term contracts;
3. The self reported health status of full time permanent employees remains constant over time.

Data from the German Federal Statistics Office was used for the baseline situation (baseline = year 2003). In the year 2003 out of a total of 25.5 million people working in full-time contracts in Germany, 22.3 million worked in permanent contracts and 3.2 million in fixed term contracts. In all scenarios the total number of fulltime contracts remain the same (25.5 million). According to the results from the German SOEP, which Rodriguez based her calculations on, 25% of full-time permanent employees report poor health. We applied the OR to this figure to calculate the percentage of full-time fixed term employees who would also report poor health ($1.42 \times 0.25 = 0.36$). We needed to do this because this odds ratio only applies when the two groups share the same characteristics. If 25% of permanent fulltime workers report poor health and limited term workers report 42% more often poor health than the permanent workers then 36% of limited term workers would report poor health.

We applied these percentages to the baseline situation and calculated how many limited term and permanent fulltime employees in Germany report poor health. From this we calculated the cases of reported poor health that were attributable to working in a fixed term contract (see Table 6).

We then carried out the same calculation for the three scenarios. For all scenarios we assumed there is no growth in the actual labour force. For each scenario we first calculated the change in number of contracts. For example in the 5% scenario out of 25.5 million fulltime employees the number of permanent employees drops from 22.3 million to 21.2 and the number of fixed term employees increases from 3.2 million to 4.3. We then applied the percentages derived from the SOEP and OR to the two groups and calculated the number of people reporting poor health and the number of people reporting poor health which was attributable to having a fixed term job (see Table 6). In addition to the attributable cases, the number of cases that result from the shift in scenarios was also calculated. This is the impact on reported poor health due to the scenarios (see Table 6)

8.2.2 Results

The modelling based on the three scenarios developed indicates that a shift towards more people working in fixed term employment could lead to an additional one to four hundred thousand people with poor health status.

Table 6 Changes in reported health status due to shift from permanent full-time contracts to fixed term full-time contracts.

Scenario shift from permanent to fixed term contracts	permanent contracts (millions)		fixed term contracts (millions)		reporting poor health (millions)	
	# jobs	# people reporting poor health	# jobs	# people reporting poor health	total	Attributable cases due to shift towards fixed term contracts
Baseline	22,3*	5,6	3,2*	1,1	6,7	0
5%	21,2	5,3	4,3	1,5	6,8	0,1 (99% CI 0.04 -0.22)
10%	20,1	5,0	5,4	1,9	6,9	0,2 (99% CI 0.07-0.44)
15%	18,9	4,7	6,6	2,3	7,1	0,4 (99% CI 0.11-0.66)

(Statistisches Bundesamt, 2003) Reference year 2002.

If only 5% of all full-time permanent contracts are shifted towards fixed term contracts, this would lead to an extra 100 000 people reporting poor health. Due to the uncertainty about the relationship of the attribution of reporting poor health to people having fixed term contracts this number may actually range between 40 000 and 220 000 people.

If 15 % of these permanent contracts shift to fixed term on average we would expect approximately an extra 400 000 people reporting poor health in range of 110 000 to 660 000 people.

Figure 16 Shift in types of jobs

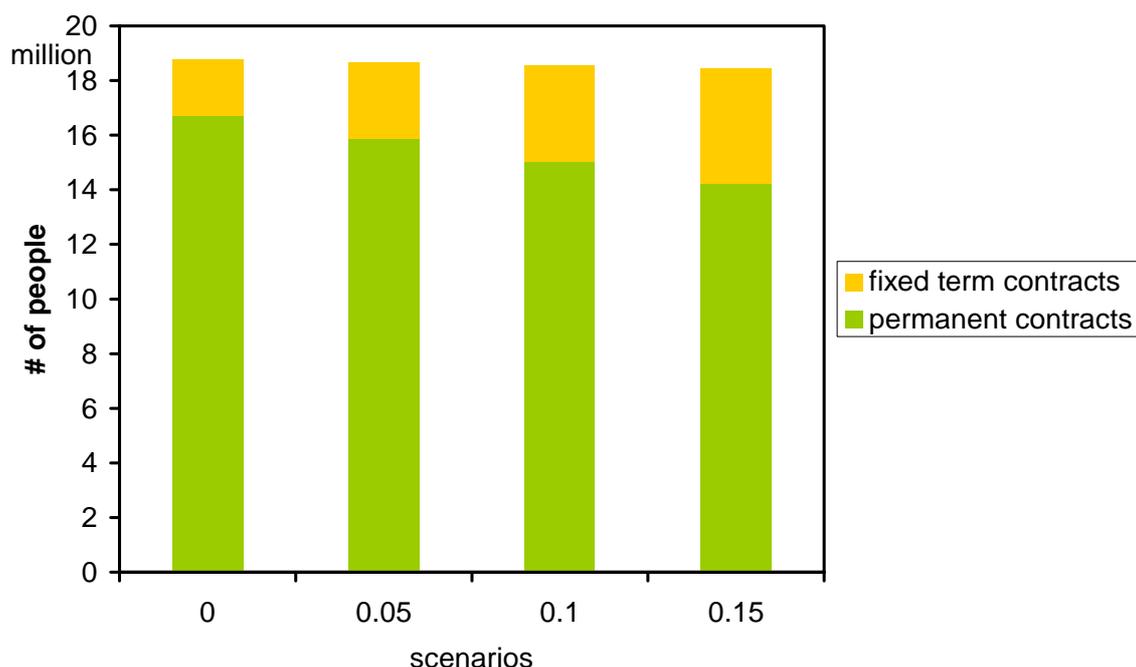


Figure 17 Number of people reporting poor health according to job type

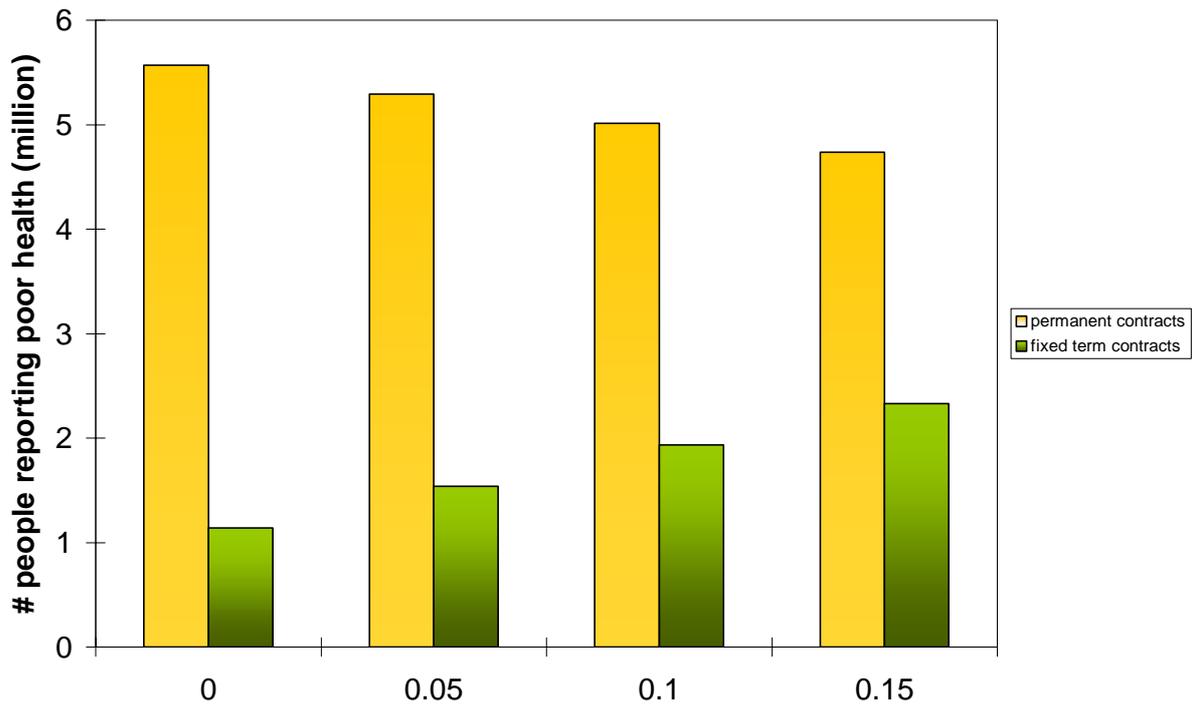


Figure 18 Health impact due to shift in job type: from permanent to fixed term

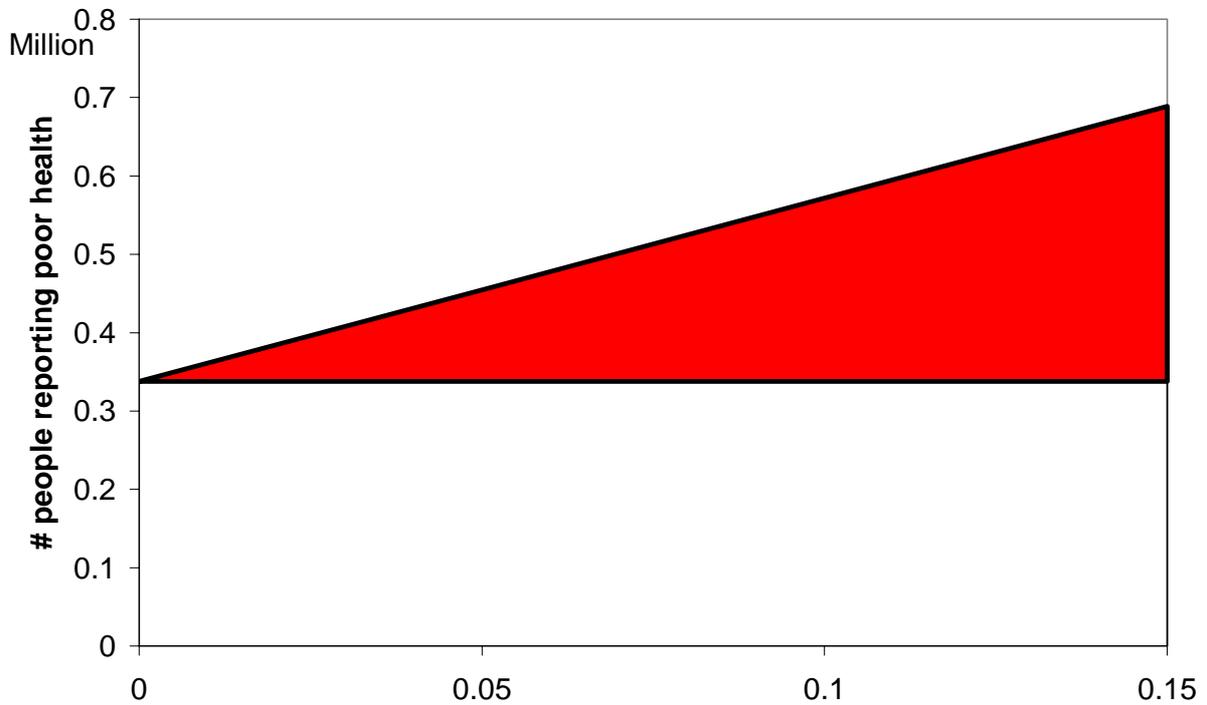
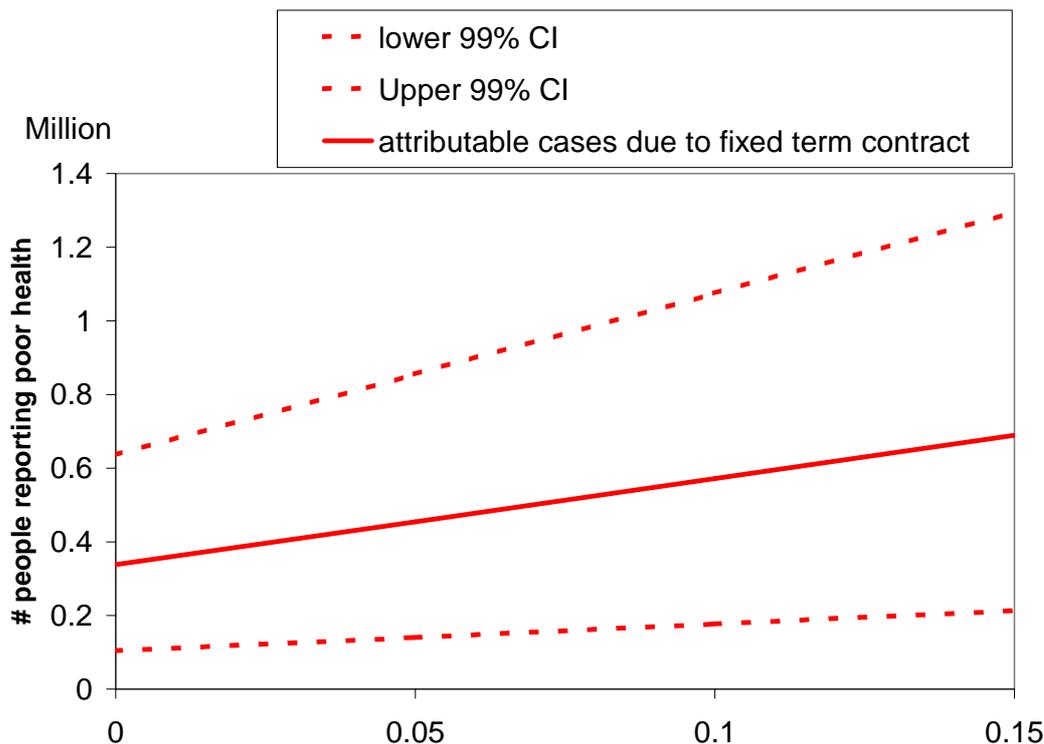


Figure 19 Attributable cases reporting poor health due to fixed term contracts under different scenarios



8.3 Estimation of impact of part and fulltime work on work related absenteeism due to health problems

Research has indicated that there may also be positive health benefits of working in flexible forms of work. For example, analysis of the Third European Survey on Working Conditions carried out by Benach et al. (Benach et al., 2002; Benach et al., 2002) has shown that part time workers report less absenteeism from work caused by work related health problems than fulltime workers. Part time and non permanent workers also report lower levels of stress than full time and permanent workers.

The Foundation for the Improvement of Living and Working Conditions carried out its Third European survey on working conditions in 2000. The two previous surveys were carried out in 1990 and 1995. For the 2000 survey, a total of 21,703 workers were interviewed in face-to-face interviews, which were conducted in their own homes. Around 1,500 workers were interviewed in each Member State, with the exception of Luxembourg where the number of persons interviewed totalled 527. There were 15,558 people included in the analysis.

Part time workers were found to be almost 20% (OR 0.81 95% CI= 0.73-0.89) less likely than fulltime workers to report being absent from work for at least one day during the last 12 months due to work related health problems.

Table 7 Absenteeism due to work related health problems

Covariates (baseline)	absenteeism OR (95% CI)
Age (15-24)	1
25-34	0.99 (0.85-1.17)
35-44	1.15 (0.98-1.34)
45-54	1.05 (0.89-1.23)
55 and over	0.98 (0.81-1.18)
Gender (Men)	1
Women	0.89 (0.82-0.97)
Company size (none/1 to 9)	1
10 to 499	1.51 (1.38-1.66)
500 and over	1.67 (1.44-1.93)
Hours per week (full-time)	1
Part-time	0.81 (0.73-0.89)
Work shifts (No)	1
Yes	1.66 (1.50-1.83)

OR = odds ratio; 95% CI = confidence interval

Note: All odds ratios (OR) are compared to the specific reference category

It was decided to use the results of the Third European Survey on Working Conditions and apply it to different scenarios. The scenarios were designed to provide an estimation of the magnitude of the possible effect of increases in the proportion of part-time workers in Germany on absenteeism.

8.3.1 Methods

The reported odds ratio (OR) of 0.81 (95% CI =0.73-0.89) (Benach et al., 2002) was applied to the present employment situation in Germany and 3 scenarios. The three scenarios are;

- 5% of employees currently working in fulltime contracts shift into part-time contracts,
- 10% of employees currently working in fulltime contracts shift into part-time contracts,
- 15% of employees currently working in fulltime contracts shift into part-time contracts.

In order to carry out this modelling certain assumptions were made:

1. The OR of 0.81 is correct;
2. The two groups maintain the same characteristics as now;
3. The total number of people in the labour force stays the same.

Data from the German Federal Statistics Office was used for the baseline situation. In the year 2003 out of a total of 32.5 million people working in Germany, 25.6 million worked in full-time positions and 6.9 million in part-time positions. In all scenarios the total number of fulltime contracts remain the same (32.5 million).

According to the Third European Survey on Living and Working Conditions 14% full-time employees report health related absenteeism due to work within the last 12 months. The odds ratio was used to calculate the percentage of part-time employees who would also report health related absenteeism ($0.81 \times 0.14 = 0.113$). I.e. 14% of full-time workers report health related absenteeism due to work whereas 11% of part-time workers report absenteeism.

We applied these percentages to the baseline situation and calculated how many part-time and fulltime employees in Germany report absenteeism. We calculated that at baseline (year 2003) 3.57 million full-time workers and 0.78 million part-timers would normally report absenteeism. In order to calculate the cases of reported absenteeism that were attributable to working in a part-time contract the difference between the two absenteeism rates was taken ($0.14 - 0.113 = 0.027$) and then multiplied with the number of part-time workers (see Table 8). I.e. 2.7% of part-time workers don't report absent because they are working part-time, or the other way round, if the part-time employees had full time jobs then an extra 2.7% of them (ex part-timers) would report absenteeism due to work related health problems.

We then carried out the same calculation for the three scenarios. For each scenario we first calculated the change in number of contracts. For example, in the 15% scenario out of 32.5 million employees the number of full-time employees drops from 25.6 million to 21.8 and the number of part-time employees increases from 6.9 million to 10.2. We then applied the derived percentages to the two groups and calculated the number of people reporting absenteeism and the number of people reporting absenteeism which was attributable to having a part-time job (see Table 8). In addition to the attributable cases, the reduced number of cases that result from the shift in scenarios was also calculated. This is the impact on absenteeism due to the scenarios (see Table 8).

8.3.2 Results

The modelling shows that a shift from full-time contracts to part-time contracts could result in a reduction of between 34 000 and 102 000 reported absenteeism due to work related health problems.

Table 8 Changes in reported absenteeism due to work related health problems resulting from changes in number of full-time and part-time contracts

Scenario: shift from full-time to part-time contracts	full-time contracts (in million)		part-time contracts (in million)		Reporting health related absenteeism	
	# jobs	# people reporting health related absenteeis m due to work	# jobs*	# people reporting health related absenteeis m due to work	total	Impact: attributable # reduced cases due to shift towards part-time contracts (million)
Baseline	25,6	3,57	6,9	0,8	4,4	0
0,05%	24,3	3,39	8,2	0,9	4,3	0,034 (95% CI 0.020-0.048)
0,1%	23,0	3,22	9,5	1,1	4,3	0,068 (95% CI 0.040-0.094)
0,15%	21,8	3,04	10,7	1,2	4,3	0,102 (95% CI 0.059-0.145)

(Statistisches Bundesamt, 2003)

Figure 20 Shift in types of jobs from full-time to part-time

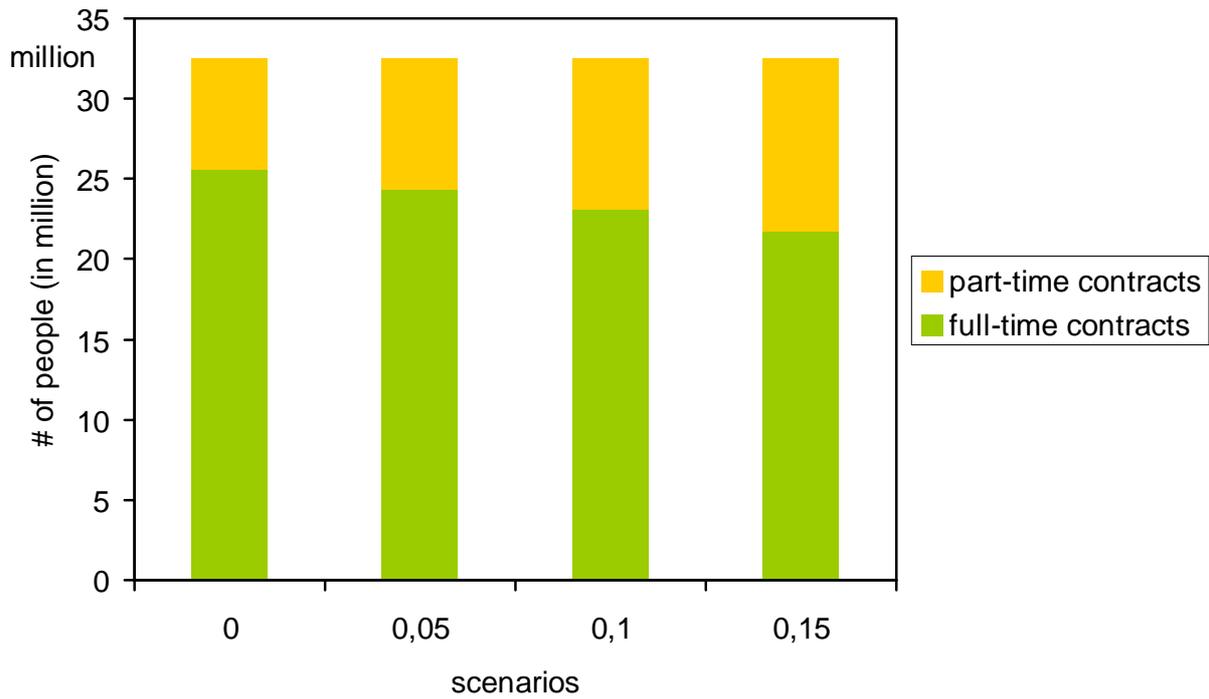


Figure 21 Number of people reporting absenteeism according to job type

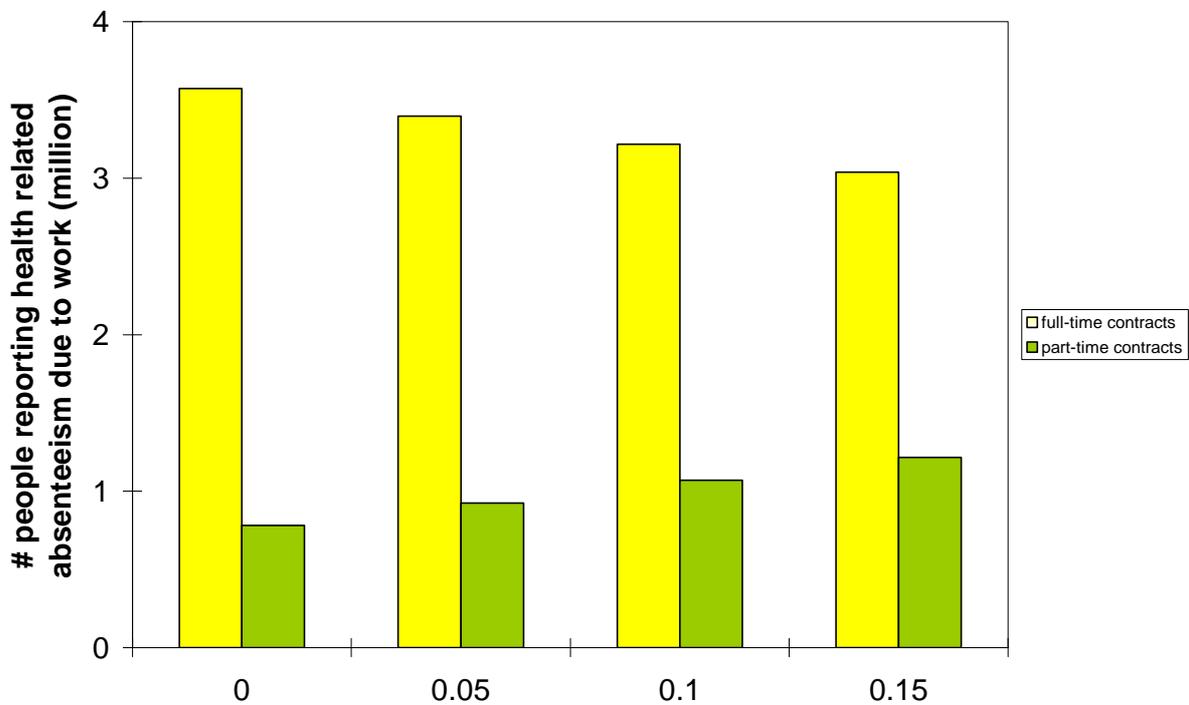


Figure 22 Health impact (reduced amount of absenteeism) due to shift in job type: from full-time to part-time

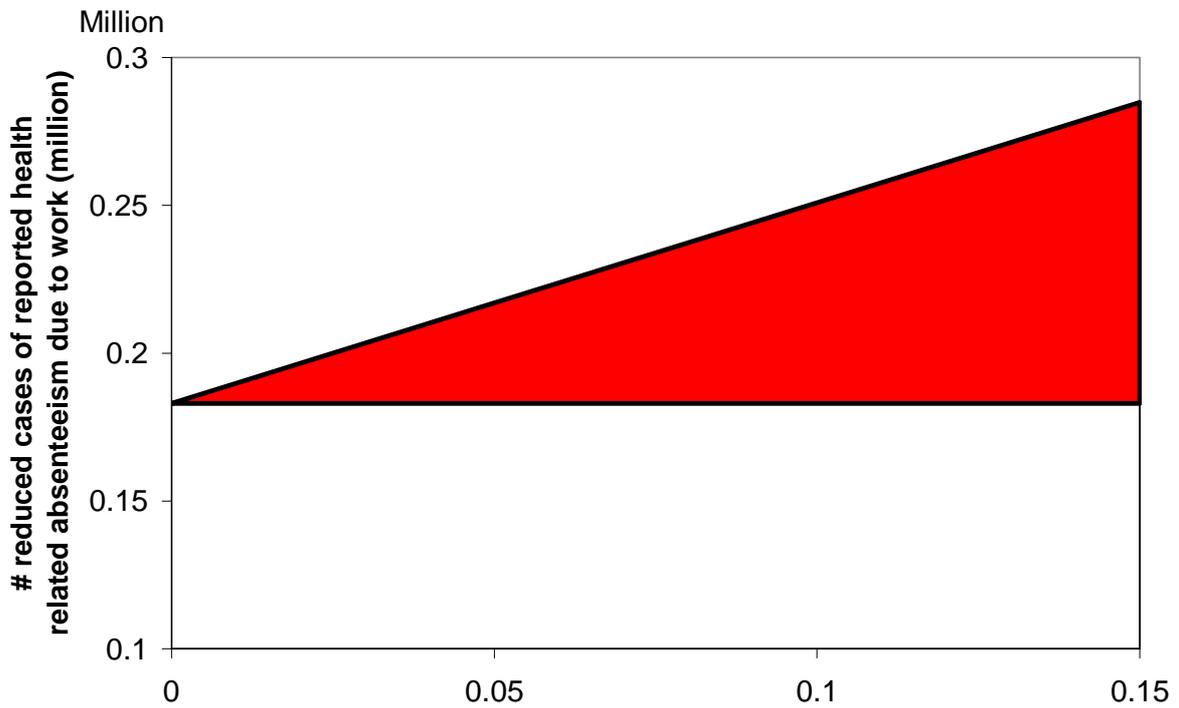
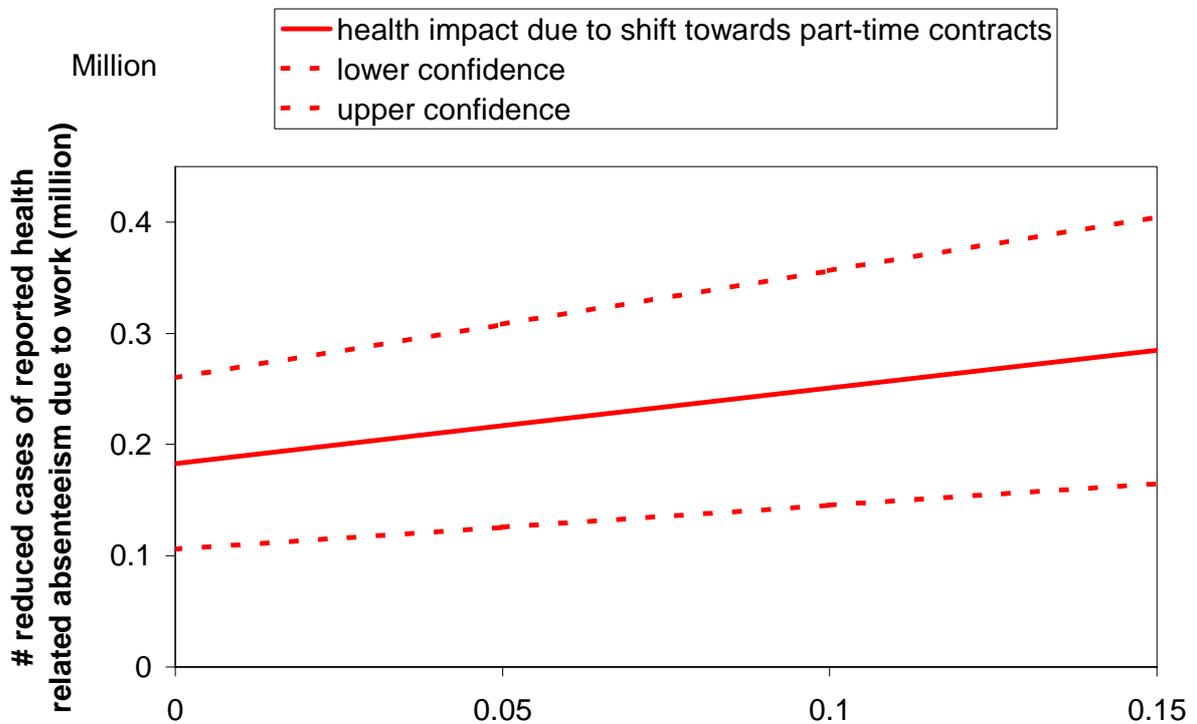


Figure 23 Number of reduced cases of absenteeism due to part-time work



8.4 Discussion

The health impact assessment carried out indicates that flexible forms of employment have a range of negative and also positive health impacts. There is a lot of concern expressed in the available literature on flexible forms of employment and health that there are health risks associated with these types of work. Research is showing that the health of flexible workers is affected by their work. Benach et al. however made an apt comment when looking at the impact of flexibility on working conditions; "it is important to underline the fact that such impacts should not be locked into a narrow-minded view, for example one which propounds the idea that flexibility strategies inevitably lead to better or poorer working conditions" (Benach et al., 2002).

8.4.1 Fixed term contracts and perceived health status

The EES encourages flexible forms of work. If the goals of the EES were successfully implemented within the member states then it could be expected that there will be an increase in limited term contracts. In Germany recent changes in employment protection legislation are aimed at this (Federal Government of Germany, 2003 129 /id /pt "see "). We have modelled the possible impact of increases in numbers of fixed term employees in Germany on one indicator, self reported health status.

The results from the modelling give an indication of how changes in employment could effect health. The impact of fixed term contracts on health will particularly affect some population groups. The health impacts will be more strongly felt in the new *Länder* where almost 14% of employees work in fixed term contracts in comparison to 9% in the old *Länder*. Young people are also particularly affected by fixed term employment. Fifty percent of fixed term employees are under the age of 35 (IAB, 2000 143 /id). Fixed term employment ranges from 37% in the 15-20 year old age group to 4% in the 45-50 year olds. Women will also be more affected than men by these negative health impacts (10% vs. 7% (IAB, 2000 143 /id)).

An issue where there is presently inadequate available research on is how voluntariness affects the health impacts of flexible employment. It has been suggested by some researchers that this is an issue that needs to be considered (Rodriguez, 2002 50 /id) (Goudswaard, 2000 64 /id). If having an involuntary fixed term contract is more likely to affect health negatively then in Germany this would mean different impacts in the old and new *Länder* with 18% of east Germans saying they were unable to find a permanent position in comparison to 8% in west Germany (Federal Statistical Office of Germany, 2003 40 /id).

The scenario used was very simple with only variable being adjusted- shifts in employment from permanent to fixed term.

The odds ratio is valid under the assumption that the population characteristics in both groups are the same. A quantification of the health impacts on different population characteristics was not possible. E.g. some people are more likely to work in fixed term contracts (young people) but we are not able to quantify the relationship between these particular population groups, working in a fixed term contract and reporting poor health.

Need to differentiate more between different subgroups- for example people who choose to work in fixed term contracts in comparison to people who work in fixed term contracts because they were unable to find other kinds of work.

8.4.2 Part-time work and absenteeism

Health effects related to part-time work will particularly impact on women as 86% of all part time workers are women (Federal Statistical Office of Germany, 2003a). 40% of women who work, work part-time. The research we based our modelling did not differentiate between men and woman. There may, however, be gender differences that affect the impact of part-time work on health. This could include differences such as the amount of non-paid work

women do. In Germany women on average spend 31 hours a week doing unpaid work, 12 hours more than the 19.5 hours men spend on unpaid work {Statistisches Bundesamt, 2004 144 /id}.

The indicator here was selected from available literature. One of the reasons for choosing the indicator absenteeism was the reliability of the research. However, even if research indicates that there is a correlation between two factors it is not always clear what causes the correlation. In the current example it is particularly interesting to note that there are two strongly contrasting possible explanations for why part-time workers report less absenteeism due to work related health problems;

1. Part-time workers are in general healthier than full time workers
2. Part-time workers are not generally healthier but do not remain absent from work when they are sick.

Both explanations are plausible. Research has shown that part-time workers generally report less stress at work (Benach et al., 2002). Working part-time may allow people to have a better balance between work and free time. They have more time for family, for leisure activities and generally keeping themselves healthy.

Evidence however suggests that the reason for lower absenteeism may be fear of job loss rather than better health. In the German Absenteeism Report 2003 (2004) it was reported that 2/3 of German employees fear negative repercussions if they report sick from work. More than half wait until the weekend to recover and 20% took a holiday day rather than report sick. Absenteeism in Germany is also generally decreasing possible due to increased perceived job insecurity {Badura, 2004 133 /id}. Workers in atypical jobs may tend to have higher levels of job insecurity which could lead to part-time workers having more fear of losing their jobs than full-time workers. Part time workers may also be able to more easily delay 'being sick' to days when they don't work.

Research has also indicated that there is a stronger link between having a stable job and absenteeism as there is between work that entails discomfort and absenteeism. So a temporary worker who has always had to work in an awkward position is on average less often absent than a worker with a permanent contract who hardly ever has to work in such a position (Letourneux, 1998).

Here we have a situation where there is evidence indicating a negative relationship between working part time and absenteeism due to work related health problems however it is unclear whether there is a clear relationship between absenteeism and health. This example illustrates the importance of analysing the available evidence adequately. Further research examining the reasons for absenteeism need to be carried out.

8.4.3 General discussion of modelling

One of the reasons for attempting to carry out modelling in health impact assessment is to improve the transparency of the impact assessment process. The assumptions made in the calculations are explicit, which means they are open to be challenged. This can provide a good basis for discussing health impacts.

There are some limitations to the modelling carried out:

The applicability of the modelling is limited by the narrow focus. There are a range of indicators related to employment and health available and research where these indicators were used. Indicators were selected that were used in research which produced significant results, were supported by other literature had a large sample size. However these were just two indicators from numerous possibilities.

A very simplified causal relationship was modelled with only two main variables taken into consideration however in reality the relationship between flexible types of employment and health is complicated (NB. for the limited term/ permanent calculations other factors were controlled for) (see Figure 15). It is difficult to analyse the relationship between flexible forms of employment and health because within the multiple forms of employment there is also a wide range of different situations. Different aspects of flexible forms of employment can be focussed on but it is difficult to isolate these aspects from other factors. No correlations between two models were analysed although in reality there may be some.

Benach, Gimeno and Benavides (2002) commented on the complexity of employment; there also exists a variety of dynamic forms of employment — ranging on a continuum from unemployment through underemployment to satisfactory employment or even overemployment (as in forced overtime). In addition, the frontier between many types of flexible employment and unemployment is becoming blurred. For example, Burchell (1995) has argued that there may be a vicious cycle in which many unemployed individuals are more likely to have been previously in temporary jobs and many of those temporary jobs, in turn, lead to spells of unemployment. In fact, many workers in 'flexible' jobs hold similar labour market characteristics as unemployed people and go themselves through periods of unemployment (USDL, 1994).

The scenarios used were very simple. The only factor that changed in the scenarios was the distribution of people working in particular types of contracts. We did not take into account issues such as changes in age structure of workforce or change in workforce size. Due to data limitations we were also unable to specifically examine population sub groups such as men/women, disabled people, migrants etc. It could be expected that there are sex and age related differences in outcomes. However Benavides and Benach (1999) found that associations between types of employment and health outcomes almost always persisted after adjustment for individual working conditions.

The research that provided the odds ratios used for the modelling also has limitations. The odds ratio used to model the impact of limited term employment on self reported health was calculated for data collected in 1991-1993. The researchers attempted to control for the potential problem of endogeneity (the people with poorer health could be more likely to work less hours and less likely to have permanent employment) however it is possible that these efforts were not sufficient. Nevertheless the research was based on data specific to Germany with a large sample size with a total number of 10 104 respondents.

The second study that was used to base our calculations was an analysis of the Third European Survey on Living and Working Conditions (Benach et al., 2002). The odds ratio used for modelling were based on European rather than German specific data. The authors of the analysis recommend that in future the sample size should be increased. In the most recent survey in 2000 the sample size was 15558. This would assist in enabling more refined hypotheses to be tested and using more powerful epidemiological designs which "integrate individual and contextual variables" (Benach et al., 2002). A further recommendation was the development of ways to further integrating quantitative and qualitative studies capable of understanding the relations between types of employment and health.

9 Establish/evaluating priority impacts

During the data collection stage a range of impacts may be identified. Already at this stage there will be some kind of selection process whereby a range of impacts will be analysed. The analysis provides more in-depth information on the estimated health impacts resulting from the policy in question. At this stage these impacts are evaluated. I.e. at this stage a value is placed on the impact and priority impacts are identified. These are the impacts which are determined to be the most significant and for which specific recommendations will be

developed. Are general ranking process may be carried out. However in some HIAs an explicit ranking process will be unpractical and unnecessary. Also, additional criteria to those already identified in the EPHIA methodology could be applicable in other HIAs. The development and application of criteria adds to the transparency of the decision making process.

The most important element of this stage is the 'valuation' of the impacts. For example the impact assessment may have revealed that an identified impact will significantly affect particular vulnerable groups. It may be decided that recommendations or policy alternatives be developed which would minimise the impacts on these groups. It may also be decided that another identified impact, although being wide spread, has a low likelihood of impact and the severity of the impact is also low. For this impact it may be decided that specific recommendations will not be developed but it will be mentioned within the final report.

With a policy as broad as the EES there would normally be a wide range of impacts identified. However, as mentioned previously (see 7.2) we have concentrated on one aspect of the EES- flexible forms of employment. We have modelled of the possible health impacts of two types of flexible forms of employment, fixed term contracts and part time contracts. The results of the modelling can not be taken at face value. They do, however, provide an estimation of the magnitude of possible health impacts. They were also used as a basis for discussion within the German research group during the prioritisation process. Ideally, after the research group had carried out an initial prioritisation, the results would have been presented to and discussed with the steering group. Although we have only focussed specifically on two possible impacts resulting from flexible forms of employment it was decided to apply the prioritisation criteria developed for EPHIA for the purpose of piloting the methodology.

The following criteria were used for ranking the impacts:

- **Strength of evidence:** considers data sources/type identifying the impacts on health determinants and health outcomes.
Ranking- weak (1), medium (2), strong (3);
- **Likelihood of impact:** describes the probability with which the impact will occur.
Ranking- Speculative (1), probable (2), definite (3);
- **Severity:** the health dimension effected and its scale.
Ranking- mild (1), moderate (2), severe (3);
- **Health inequalities:** contribution to reducing/enlarging health inequalities.
Ranking- small (1), medium (2), large (3);
- **Health targets:** relation to existing health targets, identified public health outcomes.
Ranking- weak (1), medium (2), strong (3).

9.1 Application of prioritisation criteria

criteria	Fixed term/ Permanent Contracts- health status	Part-time/ Full-time Contracts- absenteeism
Strength of evidence	2	1
Likelihood of impact	2	1
Severity	2	1
Health inequalities	3	3
Existing health targets	1	1

9.1.1 Strength of evidence

Fixed term/ Permanent Contracts- health status: There is a growing body of evidence indicating that flexible forms of employment can have negative health effects. Particularly perceived job insecurity has been associated with negative health effects (see 7.3.2). However there is less available evidence about the effects of these forms of employment on the health of various sub population groups. The research chosen as a basis for modelling was carried out Germany so is particularly applicable.

Part-time/ Full-time Contracts-absenteeism: The strength of evidence available indicating a relationship between working part-time and absenteeism due to work related health problems is less clear. Although there is evidence available that part time workers report less absenteeism the reasons for this are not clear. There are two options:

1. Part-time workers are healthier than full-timers;
2. Part-time workers are not healthier than full-timers but have less absenteeism.

9.1.2 Likelihood of impact

Fixed term/ Permanent Contracts- health status: The evidence analysed indicates that it is likely that fixed term employment negatively impacts on health. However this depends to a large degree on the individual situation of the person in a fixed term positions. Issues such as reasons for working in a fixed term contract, perceived job security and employment policy and legislation will affect the likelihood of impact.

Part-time/ Full-time Contracts-absenteeism: Although there is clear evidence that there is a relationship between working part-time and absenteeism the likelihood of impact on health is less clear because the reasons for the lower levels of absenteeism are not clear.

9.1.3 Severity

Fixed term/ Permanent Contracts- health status: If the job insecurity related to having a fixed term contract remains constant, changes resulting from shifts towards more fixed term contracts would have significant impacts on self reported health status. A 5%-15% shift resulting in additional 100 000 – 400 000 cases of poor self reported health status.

Part-time/ Full-time Contracts-absenteeism: In comparison to the impacts resulting from shifts from permanent to fixed term contracts, the (positive) impacts resulting from shifts from part time to full-time employment are less severe. A 5%-15% shift resulting in a reduction of between 34 000 –102 000 cases of absenteeism due to work related health problems.

9.1.4 Health inequalities

Fixed term/ Permanent Contracts- health status: It is likely that already vulnerable groups will be negatively affected. There is also a perceived risk that increasing flexible forms of work and related relaxing of job protection laws may lead to a widening of the gap between winners and losers. Groups that may be particularly affected by flexible forms of work are:

- young people;
- disabled people;
- women;
- foreigners;
- older people.

Part-time/ Full-time Contracts-absenteeism: Women are particularly affected by part time work.

9.1.5 Existing health targets

Fixed term/ Permanent Contracts- health status: Current health targets for Germany not directly applicable (diabetes, breast cancer, tobacco, growing up healthy, health competence). It is planned to develop reducing back pain and depression as future targets. Depression and back pain can be both caused by employment. Flexible workers are exposed to more hazardous and dangerous work environments than permanent employees (Benach et al., 2002).

Part-time/ Full-time Contracts-absenteeism: Current health targets for Germany not directly applicable (diabetes, breast cancer, tobacco, growing up healthy, health competence).

9.2 Result of prioritisation

After comparing the health impacts resulting from increases in fixed term and part time employment it was determined that the health impacts resulting from an increase in fixed term employment were of priority. As mentioned previously, normally there would have probably been a wider range of health impacts identified and assessed. In the current situation there were a range of health impacts identified (see 7), however, only two health impacts were subjected to a more in-depth impact analysis. This means that the prioritisation stage of the procedure had less significance within the whole procedure than it might have in other HIAs.

10 Develop Recommendations

The prioritisation process leads to the selection of impacts for which recommendations are developed. In this HIA health impacts related to flexible forms of employment were investigated. The prioritisation process led to the health impacts of fixed term employment being identified as a priority impact. Recommendations have however been developed for the general field of flexible forms of employment.

The overall aim of the EES of full employment can be seen to be health promoting. Research shows that in general working is healthier than being unemployed. However, employment can also impact negatively on health. For example, the EES addresses the issue of occupational health and safety. It is not one of the ten priorities, however, it is specifically addressed within guideline 3 'adaptability' and 5 'promoting active ageing' (Council of the European Union, 2003). The EES also acknowledges the risks of employment by specifically encouraging member states to balance flexibility with security. Other aims of the EES to reduce discrimination and to address gender inequality will also positively impact on determinants of health.

Employment can expose people to factors that can affect their health such as; (perceived) job insecurity, physical hazards (noise, vibration, ergonomic etc.), chemical/ biological hazards, degree of satisfaction (job), intimidation/ violence, mobbing, OSH training, pressure/demand (high/low), control (high/low) (see Structural model of employment and health).

Flexible employment is likely to share some of the unfavourable characteristics of unemployment and may have similar negative effects on health (Benach et al., 2000). Evidence shows that people working in flexible forms of employment are often exposed to higher levels of hazardous working conditions, (perceived) job insecurity and job dissatisfaction. Flexible workers in general also have lower levels of control at work, less exposure to continuing education at work and less OSH training.

The increased risks that flexible forms of work appears to carry with it are however not inescapable. Particularly at implementation level it is possible to take action to avoid these risks to health. Below, are recommendations developed to help address risks related to flexible forms of employment.

10.1 Recommendations

There is a risk that within the group of people working in flexible forms there are two sub groups- the winners and losers. The winners will tend to be well educated people for whom flexible forms of employment might offer career advancement or opportunities to better

combining work and private life. People in this group will often have a higher degree of financial security which will enable them to work part time while still earning enough for a satisfying lifestyle. They will also be the kind of people who find new jobs at the end of fixed term contracts without much difficulty. The losers, on the other hand, work in flexible forms of employment because either they were unable to find permanent full-time employment or have personal/ family reasons which mean they are unable to work in 'normal' position. These people may tend to belong to already vulnerable groups such as older workers or disabled people who already face difficulties finding new jobs when unemployed. These are also the people that will tend to be exposed to health impacts resulting from hazardous working conditions, job insecurity, poor OSH conditions etc.

Recommendation 1: Mainstream flexible forms of work. Mainstreaming would involve encouraging 'non typical' flexible workers into flexible work (for example encouraging specifically males into part-time work). Mainstreaming flexible work could result in some of the negative framework factors such as social benefits systems being adapted to fit these kinds of work. For example, as men are more often confronted with discontinuous work biographies and resulting problems such as social protection there seems to be a growing interest in the topic (Klammer, 2000b). When non-typical work becomes typical then the structures will generally be adapted to fit these types of employment.

Recommendation 2: Introduce a screening process at national level of employment related policy for possible discriminatory effects for flexible workers. E.g. having children, obtaining loans, retirement, health insurance. This screening process should also specifically consider population groups which are particularly vulnerable to the negative health effects of flexible forms of employment such as women, older workers, disabled people and migrants/ foreigners.

Recommendation 3: During the course of the HIA limitations in the available data and research were identified. In order to address these limitations it is recommended that:

- use and where necessary refine and expand existing monitoring tools. For example the European Surveys on working conditions should be monitored to identify changes in work related health issues,
- more specific data on flexible employment which covers topics such as non voluntary working arrangements should be collected,
- data that allows more differentiated analysis of who works in particular jobs should be collected including identifying differences between groups such as males and females, non nationals and disabled people. At the German level the SOEP should continue to provide valuable information on the employment and health situation in Germany,
- further research on the effects of different working relationships on health should be encouraged,
- the comparability of national data should be further improved- e.g. disability, unemployment rates,
- ways should be developed to further integrate quantitative and qualitative studies capable of understanding the relations between types of employment and health.

11 Process evaluation

The process evaluation is an evaluation of the how the HIA was carried out and the extent to which the TOR were achieved. The purpose of the HIA was to pilot EPHIA. The evaluations carried out by was used to refine and where necessary modify EPHIA.

When comparing the terms of references with the what actually happened in the pilot HIA differences have been identified;

1. Attempts to set up a steering group were unsuccessful due to lack of participation by relevant key informers and stakeholders. For future policy level HIAs effort should be

made to utilise already existing groups and networks. Reasons for the difficulties encountered could include:

Unfamiliarity: organisations and people in Germany are generally not familiar with the concept of HIA especially at policy level. Feedback from the steering group was that some (particularly ministries) just didn't know where it fit's in their organisation which resulted in letters being passed around from one tray to the next,

Information transfer: Stakeholders need to be introduced to the concept of HIA with sufficient depth so that they can participate well in the HIA but in a way that doesn't overwhelm them or worse – scare them off. It may have been that insufficient or inadequate information was sent out,

Lack of formal support: It is difficult to 'sell' HIA without official support and involvement from the policy makers,

Low motivation: there may be lower motivation on the part of stakeholders to become involved in policy HIA because they do not feel as directly impacted on by the policy in comparison to projects.

2. The project research group identified a core set of indicators related to employment and health. The initial indicators identified for the profile were not all utilised in the project report this resulted in a degree of inefficiency in the profiling. Further work needs to be carried out to identify what indicators may be relevant for policy HIA in general. Other indicators should be identified during the policy analysis and data collection stages.

There were also some problems in locating and accessing some indicators (for example disability information, specific data on vulnerable groups). Many indicators were not available from EUROSTAT which led to the need to use country specific data sources which reduced comparability between country level pilot HIAs.

3. The initial aim of the HIA was to carry out a HIA of the whole EES. The EES is such a broad policy it was not possible to identify all relevant health impacts and to make predictions as to future impacts. A decision was made to focus on flexible forms of employment. This was further narrowed down in the impact assessment stage to focus on two health impacts: the effect of fixed term employment on perceived health status and part-time employment on absenteeism. This allowed the research team to develop models and scenarios for these health impacts but meant that a comprehensive HIA of the EES was not carried out.
4. In the terms of references it was planned to create scenarios based on the baseline situation, situation without the EES and with full implementation of the EES. It proved beyond the scope of the time and resources available to develop these scenarios. It was decided to create very simple scenarios to illustrate the magnitude of the possible effects resulting from changes in the number of people working in different types of work. This modelling was limited by issues such as lack of available quantitative research on the relationship between flexible forms of employment and health, lacking quantified dose response relationships for different groups (i.e. men, women, non nationals, age groups). The scenarios developed were also very simplified. It is important to involve experts early on in this process. As well as providing advice on how to carry out the impact assessment they will often know what resources are available and where to locate it.

12 Monitoring and outcome and impact evaluation

Outcome and impact evaluation is carried out after the HIA is completed. For outcome evaluation we suggest evaluating in 2010 to what extent predicted health impact have occurred. Impact evaluation of the influence the HIA has had on the policy process could be done in 1 year. Aspects to consider: dissemination of the results; response to the HIA;

changes in employment policy. However it may be difficult to distinguish the changes that may be due to the HIA or even EES policy from independent national employment policy.

Existing monitoring tools should be used and where necessary refined and expanded. For example the European Surveys on working conditions should be monitored to identify changes in work related health issues. The survey could also be further developed to consider in more detail issues related to flexible employment and health. National level monitoring tools such as the SOEP and the microcensus should also be utilised for monitoring.

Literature

Reference List

1. Anonym (2004), Fehlzeiten-Report 2003 Wettbewerbsfaktor Work-Life-Balance. Zahlen, Daten Analysene aus allen Branchen der Wirtschaft. Springer, Heidelberg.
2. Benach, J., Benavides, F., Platt, S. et al. (2000), The health damaging potential of new types of employment: A challenge for public health researchers. *American Journal of Public Health* 90, 1316-1317.
3. Benach, J., Gimeno, D., Benavides, F. (2002), Types of employment and health in the European Union. Office for Official Publications of the European Communities, Luxembourg.
4. Benavides, F., Benach, J. (1999), Precarious employment and health related outcomes in the European Union. Office for Official Publications of the European Communities, Luxembourg.
5. Bosma, H., Peter, R., Siegrist, J. et al. (1998), Two alternative job-stress models and the risk of coronary heart disease. *American Journal of Public Health* (88), 68-74.
6. Brenner, H. (2002), Employment and Public Health 1 & 2: Final Report to the European Commission Directorate General Employment, Industrial Relations and Social Affairs . VC 2001/0224. Directorate General Employment, Industrial Relations and Social Affairs.
7. Briggs, D. (2003), Making a difference: Indicators to improve children's environmental health summary. <http://www.cepis.ops-oms.org/bvsana/fulltext/Summary.pdf>: <http://www.cepis.ops-oms.org/bvsana/fulltext/Summary.pdf>
8. Burchell, B. (1995), The effects of labour market position, job insecurity and unemployment on psychological health, Paper presented to the XVIIth International Working Party on Labour Market Segmentation, Sienna
9. Commission of the European Communities (2002), Communication from the Commission to the Council, The European Parliament, The Economic and Social Committee and the Committee of the Regions Taking Stock of Five Years of the European Employment Strategy COM (2002) 416 final
10. Commission of the European Communities (2003), Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions the future of the European Employment Strategy (EES) "a strategy for full employment and better jobs for all" COM (2003)6 final
11. Corvalan, C., Briggs, D., Kjellstrom, T. (1996), Development of environmental health indicators. In: Briggs, D., Corvalan, C., Nurminen, M. (Ed.), Linkage methods for environment and health analysis: General guidelines. A report of the Health and Environment Analysis for Decision Making (HEADLAMP) project. World Health Organisation, Geneva, 19-53.
12. Council of the European Union (2003), Council decision of 22 July 2003 on guidelines for the employment policies of the Member States 2003/578/EC
13. Domenighetti, G., D'avano, B., Bisig, B. (1999), Health effects of job insecurity among employees in Swiss general population. *Cahiers de recherches économiques* 9907. Université de Lausanne, Ecole des HEC.
14. Dooley, D., Fielding, J., Levi, L. (1996), Health and unemployment. *Annual Review of Public Health* 17, 449-465.
15. Dooley, D., Rook, K., Catalano, R. (1987), Job and non-job stressors and their moderators. *Occupational Psychology* 17, 449-465.
16. Durán, F., Castellanos, F., Benavides, F. et al. (2001), Informe sobre riesgos laborales y su prevención. La seguridad y la salud en el trabajo en España. Presidencia del Gobierno, Madrid.
17. European Agency for Safety and Health at Work (2002), Research on the changing world of work. Office for Official Publications of the European Communities, Luxembourg.

18. European Agency for Safety and Health at Work. (2002), New forms of contractual relationships and the implications for occupational safety and health. Office for Official Publications of the European Communities, Luxembourg.
19. European Commission (2000a), An agenda of economic and social renewal for Europe: Contribution of the European Commission to the Spring European Council COM 2000/7
20. European Commission (2000b), Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions: Social policy agenda COM 2000/379 final
21. European Commission, D. G. f. E. I. R. a. S. A. (1995), Employment in Europe 1995. Office for Official Publications of the European Communities, Luxembourg.
22. European Council (2003), Council Decision of 22 July 2003 on guidelines for the employment policies of the Member States. Official Journal of the European Union L 197, 13-21.
23. European Council, Commission of the European Communities (2002), Joint employment report 2002.
24. European Foundation for the Improvement of Living and Working Conditions (2002), Employment status and health, 1-7.
25. European Foundation for the Improvement of Living and Working Conditions. (1999), Changing labour market conditions and health: A systematic literature review (1993-98). Office for Official Publications of the European Communities, Luxembourg.
26. Federal Government of Germany (2003), Federal Republic of Germany National Action Plan for Employment Policy 2003. Federal Government of Germany.
27. Federal Ministry of Economics and Labour (2003), Economic Report 2003: Bridges to the labour market. Federal Ministry of Economics and Labour.
28. Federal Statistical Office of Germany (2003a), Leben und Arbeiten in Deutschland: Ergebnisse des Mikrozensus 2002. Statistisches Bundesamt, Wiesbaden.
29. Federal Statistical Office of Germany (2003b), Population of Germany Today and Tomorrow. Statistische Bundesamt, Wiesbaden.
30. Fehr, R. (2001), Ökologische Gesundheitsförderung – Analysen – Strategien – Umsetzungswege. Verlag Hans Huber, Bern.
31. Ferrie, J. (1999), Labour market changes and job insecurity: a challenge for social welfare and health promotion. WHO Regional Publications. European Series 81.
32. Ferrie, J., Shipley, M., Stansfeld, S. et al. (2003), Future uncertainty and socioeconomic inequalities in health: The Whitehall II study. *Social Science and Medicine* 57, 637-646.
33. Ferrie, J., Shipley, M., Marmot, M. et al. (1995), Health effects of anticipation of job change and non-employment: Longitudinal data from the Whitehall II study. *British Medical Journal* 311, 1264-1269.
34. Ferrie, J., Shipley, M., Stansfeld, S. et al. (2002), Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures, and health related behaviours in British civil servants: The Whitehall II study. *Journal of Epidemiology and Community Health* 56, 450-454.
35. François, M. (1993), Précarité et travail. Quels effets sur les conditions d'emploi et de sécurité? *Travail* 30, 44.
36. Goudswaard, A., de Nantueil, M. (2000), Flexibility and Working Conditions: A qualitative and comparative study in seven EU member states- A summary. European Foundation for the Improvement of Living and Working Conditions, Dublin.
37. Huster, E., Benz, B., Boecke, J. (2003), First report on the implementation of the German NAPinc 2001 - 2003. European Union, DG Employment and Social Affairs.
38. ISG, WSI (2002), Wirkungsbewertung nationaler Politiken in Zusammenhang mit der Europäischen Beschäftigungsstrategie: Endbericht.
39. Klammer, U. (2000a), On the path towards a concept of "flexicurity" in Europe. WSI Hans-Böckler-Stiftung, Düsseldorf.
40. Klammer, U. (2000b), Working women in the age of flexibility: new diversities, new needs for social protection. WSI Hans Böckler Stiftung, Düsseldorf.
41. Klammer, U., Tillmann, K., WSI (2002), Flexicurity: Soziale Sicherung und Flexibilisierung der Arbeits- und Lebensverhältnisse. Ministerium für Arbeit und Soziales, Qualifikation und Technologie des Landes Nordrhein-Westfalen, Düsseldorf.

42. Koller, B., Bach, H., Brixy, U. (2003), Ältere ab 55 Jahren - Erwerbstätigkeit, Arbeitslosigkeit und Leistungen der Bundesanstalt für Arbeit. IAB Werkstattbericht 05. IAB, Nürnberg.
43. Letourneux, V. (1998), Precarious employment and working conditions in the European Union: Summary. Office for Official Publications of the European Union, Luxembourg.
44. Organisation for Economic Co-operation and Development (1999), Employment Outlook 1999. OECD.
45. Paoli, P., Merllié, D. (2001), Third European Survey on Working Conditions 2000. Office for Official Publications of the European Communities, Luxembourg.
46. Platt, S., Pavis, S., Akram, G. (1999), Changing labour market conditions and health: A systematic literature review (1993-1998). Office for Official Publications of the European Communities, Luxembourg.
47. Quinlan, M., Mayhew, C. (2001), Evidence versus ideology: lifting the blindfold on OHS in precarious employment. Industrial Relations Working Paper Series 138.
48. Quinlan, M., Mayhew, C., Bohle, P. (2001), The global expansion of precarious employment, work disorganisation and occupational health: A review of recent research. International Journal of Health Services Research 31 (2), 335-414.
49. Rauch, A., Brehm, H. (2003), Licht am Ende des Tunnels: Ein aktuelle Analyse der Situation schwerbehinderter Menschen am Arbeitsmarkt. IAB Werkstattbericht 6/17.04.03. Bundesanstalt für Arbeit, Nürnberg.
50. Robinson, J. (1986), Job Hazards and Job Security. Journal of Health Politics and Policy Law 11, 1-18.
51. Rodriguez, E. (1999), Marginal employment and health in Germany and the United Kingdom: Does unstable employment predict health? Discussion Paper FS I 99 -203. Wissenschaftszentrum Berlin für Sozialforschung.
52. Rodriguez, E. (2002), Marginal employment and health in Britain and Germany: does unstable employment predict health? Social Science & Medicine 55, 963-979.
53. RWI, ISG (2002), Assessment of the impact of national policies in connection with the European Employment Strategy: Summary.
54. Underhill, L. (2002), Extending knowledge on occupational health & safety and labour hire employment: A literature review and analysis of Victorian worker's compensation claims. WorkSafe Victoria.
55. USDL (1994), Report on the American Workforce. US Department of Labour, Washington DC.
56. Vahtera, J., Kivimaki, M., Pentti, J. (1997), Effect of organisational downsizing on health of employees. The Lancet 350, 1124-1128.
57. van der Vliet, C., Hellgren, J. (2002), Performance, decision latitude, and health in the modern working life: A literature review of swedish research. 3. National Institute for Working Life, Stockholm.
58. Virtanen, M., Kivimaki, M., Elovainio, M. et al. (2003), From insecure to secure employment: Changes in work, health, health related behaviours, and sickness absence. Occupational and Environmental Medicine 60, 948-953.
59. WHO (2003), Social determinants of health: The solid facts 2nd edition. WHO Regional Office for Europe, Copenhagen.
60. Wilthagen, T., Rogowski, R. (2003), Legal regulation of transitional labour markets. In: Schmid, G., Gazier, B. (Ed.), The Dynamics of Full Employment: Social Integration through Transitional Labour Markets. Edward Elgar, Cheltenham, 233-273.
61. Zappalà, L. (2003), The regulation of temporary work in the light of Flexicurity: Between soft law and hard law. WP C.S.D.L.E. "Massimo D'Antona" 21. Facoltà di Giurisprudenza – Università di Catania, Catania.

Appendix 1 Draft terms of References

Entwurf

Arbeitsvereinbarung des GVP-Beirates für das Pilot-Projekt "Policy HIA for the EU"

1. Aufgaben des GVP-Beirats

Der deutsche GVP-Beirat übernimmt folgende Aufgaben:

- Beitrag zur Festlegung der Arbeitsvereinbarung für das deutsche GVP-Pilotprojekt
- Begleitung des deutschen GVP-Pilotprojektes
- Förderung einer effektiven und effizienten GVP, z.B. durch Unterstützung beim Zugang zu Daten oder Datenquellen
- Beteiligung als Informant oder als von der zu untersuchenden Politik betroffener Interessenvertreter
- Benennung weiterer wichtiger Informanten und Interessengruppen
- Unterstützung und Beratung des GVP-Teams
- Unterstützung bei der Umsetzung der Handlungsempfehlungen aus dem GVP-Pilotprojekt
- Beitrag zur Evaluation des GVP-Pilotprojektes
- Unterstützung bei der Verbreitung von Erkenntnissen aus dem GVP-Pilotprojekt.

2. Teilnehmer

2.1 Der GVP-Beirat besteht aus folgenden Kernmitgliedern: [Namen im Anhang 1]

- GVP-Team
- Vertreter der Gruppe der Arbeitgeber
- Vertreter der Gruppe der Arbeiter
- Vertreter der Nichterwerbstätigen
- Schlüsselinformanten aus dem Bereich Gesundheit und Beschäftigung
- Schlüsselinformanten aus dem Bereich der Beschäftigungspolitik.

2.2 Den Vorsitz des deutschen GVP-Beirats übernimmt der Projektleiter.

2.3 Kooptierte Mitglieder

Das GVP-Pilotprojekt kann zu bestimmten Zeiten die Hinzuziehung von kooptierten Mitgliedern zum GVP-Beirat erfordern. In ähnlicher Weise möchten Beirats-Mitglieder evtl. Kollegen als kooptierte Mitglieder vorschlagen. Kooptierte Mitglieder werden vom Vorsitzenden zur Projektteilnahme eingeladen, und sie nehmen für die Dauer ihrer jeweiligen Projektbeteiligung an den Besprechungen teil. Im Falle einer Abstimmung sind kooptierte Mitglieder nicht stimmberechtigt.

3. Besprechungen

3.1 Besprechungsformalien

Punkte für die Tagesordnung sind dem GVP-Team spätestens 8 Arbeitstage vor dem Besprechungstermin zu übergeben, zusammen mit Unterlagen und Berichten, die mit der Tagesordnung verteilt werden müssen. Die Tagesordnung und alle dazugehörigen Unterlagen werden 5 Arbeitstage vor dem Besprechungstermin verteilt (Papier- oder elektronische Version).

Besprechungen finden sowohl persönlich als auch in Form von Telefonkonferenzen statt.

3.2 Häufigkeit der Beratungsrunden

Ca. 3 Beratungsrunden finden wie folgt statt:

Juni 2003: Besprechung, September 2003: Telefonkonferenz, Oktober 2003: Besprechung.

4. Berichte

4.1 Projektberichte

Zwischen- und Abschlussberichte werden vom GVP-Team erarbeitet und dem GVP-Beirat vorgelegt.

4.2 Entscheidungsprozess

Aus dem GVP-Pilotprojekt ermittelte Empfehlungen für die Beschäftigungspolitik werden dem GVP-Beirat unterbreitet. Abschließende Empfehlungen für Policy-Modifikationen werden den Entscheidungsträgern nach Zustimmung durch den GVP-Beirat vorgelegt.

5. Ressourcen

Die GVP wird von dem GVP-Team des Iögd in Verbindung mit Kollegen der "Policy HIA for the EU"-Forschungsgruppe durchgeführt. Eine Beschreibung des GVP-Verfahrens und Untersuchungsumfangs für das deutsche Teilprojekt "Policy HIA for the EU" ist Bestandteil dieser Arbeitsvereinbarung und findet sich im Anhang 2.

6. Erwartete Ergebnisse

- Beteiligung von Interessen- und Informantengruppen oder Einzelpersonen an der Durchführung der GVP
- Analyse der Auswirkungen der Beschäftigungsstrategie auf Gesundheitsdeterminanten und Gesundheitsendpunkte
- Priorisierung der gesundheitlichen Auswirkungen
- Empfehlungen zur Überarbeitung der Beschäftigungsstrategie
- Bericht über die gesundheitlichen Auswirkungen der Beschäftigungsstrategie in Deutschland
- Verbesserung der GVP-Methodik für EU Policies
- Empfehlungen für künftige GVPs von EU Policies.

7. Zeitplan

Siehe beigefügte Gantt-Tabelle (Anhang 3).

8. Rechte auf geistiges Eigentum

Das GVP-Team achtet bei entsprechender Veranlassung auf die Einhaltung der geistigen Eigentumsrechte, gemäß den Richtlinien der University of Liverpool und den vertraglichen Absprachen mit der Europäischen Kommission.

9. Vertraulichkeit

Die Vorgänge sind bis auf weiteres entsprechend Artikel 5 des "Grant Agreements" vertraulich.

GVP-Verfahren und –Untersuchungsumfang für das Pilot-Projekt "Policy HIA for the EU"

1. Gesamtziel

Durchführung einer detaillierten Gesundheitsverträglichkeitsprüfung zur Analyse der möglichen Gesundheitsauswirkungen der Europäischen Beschäftigungsstrategie entsprechend den Festlegungen in EC COM (2003) 6 auf die Gesundheit der Bevölkerung Deutschlands, mittels der Methodik des Projektes "Policy HIA for the EU".

2. Teilziele

1. Durchführung einer detaillierten Analyse der Europäischen Beschäftigungsstrategie und damit einhergehender Policies
2. Bestimmung und Beschreibung der von der Europäischen Beschäftigungsstrategie betroffenen Bevölkerungsgruppen mit besonderer Berücksichtigung gesundheitlicher Chancenungleichheiten
3. Festlegung einer Stichprobe und von Methoden zur Auswahl von Interessengruppen aus der betroffenen Bevölkerung
4. Auswahl und Analyse qualitativer und quantitativer Daten aus verschiedenen Datenquellen anhand geeigneter Methoden
5. Analyse der Auswirkungen auf wichtige Gesundheitsdeterminanten und Gesundheitsendpunkte aus dem zusammengetragenen Nachweis für drei Szenarien:
 - a. Ausgangslage
 - b. Prognosen für den Fall ohne Europäischen Beschäftigungsstrategie
 - c. Prognosen für den Fall mit Europäischer Beschäftigungsstrategie
6. Aufstellen einer Rangordnung der Auswirkungen und Entwicklung von Empfehlungen für das Ministerium für Wirtschaft und Soziales.

3. Verfahren und Methoden

Schritt 1: Einrichtung eines GVP-Beirats

Schritt 2: Politikanalyse, Vorhabenanalyse

- Bestimmen, Zusammentragen und Analyse der Europäischen Beschäftigungsstrategie und der dazugehörigen Dokumente
- Bestimmen, Zusammentragen und Analyse anderer Politiken in Verbindung mit der Europäischen Beschäftigungsstrategie, z.B. Wirtschaftsstrategie
- Bestimmen, Zusammentragen und Analyse von Nachweisen des sozialen, wirtschaftlichen, politischen und kulturellen Kontextes der Politik.

Schritt 3: Raum- und Bevölkerungsanalyse

- Festlegung relevanter Datensätze auf nationaler Ebene
- Entwicklung eines nationalen Profils
- Bestimmung gegenwärtiger Ungleichheiten innerhalb Deutschlands für den gewählten Datensatz.

Schritt 4: Informationsabfrage bei Experten und Betroffenen

Appendix

- Festlegung, Entwicklung und Anwendung partizipativer Methoden und Instrumente zur Erhebung qualitativer Daten von Schlüsselinformanten und Interessengruppen
- Festlegung, Entwicklung und Anwendung von Methoden zur Erhebung quantitativer Daten.

Schritt 5: Folgenabschätzung und -bewertung

Zusammentragen von Daten aus sämtlichen Quellen, Aufzeigen der wichtigsten betroffenen Gesundheitsdeterminanten und ihrer nachfolgenden Auswirkungen auf Gesundheitsendpunkte für die Szenarien a, b und c unter den Überschriften folgender Gruppen von Gesundheitsdeterminanten:

- Persönliche Faktoren
- Sozio-ökonomische Umweltfaktoren
- Physikalische Umweltfaktoren
- Öffentliche Dienste und Politiken.

Auswahl geeigneter Instrumente zur Gesundheitsverträglichkeitsanalyse und Bestimmung von:

- Gesundheitliche Auswirkungen
- Richtungswechsel
- Latenz
- Messbarkeit
- Umfang.

Schritt 6: Priorisierung der Auswirkungen

Festlegung der wichtigsten Auswirkungen in Abstimmung mit den Schlüsselinformanten und Interessengruppen anhand der nachfolgenden Kriterien für eine Rangordnung:

- Stichhaltigkeit des Nachweises
- Wahrscheinlichkeit der Auswirkung
- Schweregrad
- Beitrag zur Reduzierung/Zunahme von Ungleichheiten im Gesundheitswesen
- Bezug zu vorhandenen Gesundheitszielen.

Schritt 7: Handlungsempfehlungen

Entwicklung evidenzgestützter Empfehlungen zur Reduzierung von Gesundheitsrisiken und Vergrößerung des Gesundheitsgewinns.

Schritt 8: Monitoring und Evaluation

Monitoring-Vorschläge:

- Umsetzung der EU-Policy
- Prognostizierte gesundheitliche Auswirkungen.

Evaluationskriterien:

- GVP-Management: Umsetzung der definierten Aufgaben
- GVP-Auswirkungen: Einfluss auf die Entscheidungsprozesse der Umsetzung der EU-Policy
- GVP-Verfahren/Methoden: GVP-Methodik für EU-Policy
- Partizipation: Auswirkungen auf Partizipationsprozesse
- Auswirkungen auf die für die GVP eingesetzten Ressourcen
- Prognose von Auswirkungen auf die Gesundheit (Peer review).

1. GVP-Untersuchungsumfang

Tiefe der Bewertung: Bei der Bewertung handelt es sich um eine detaillierte GVP.

Geographische Grenzen: Gegenstand der GVP ist die Bewertung der Auswirkungen auf die Gesundheit der Menschen innerhalb der Grenzen Deutschlands.

Zeitlicher Rahmen: Die Bewertung erstreckt sich auf die Einschätzung der gesundheitlichen Auswirkungen bis zum Jahre 2010. - Die Bewertung ist bis November 2003 abzuschließen.

Politischer Kontext: "Die Zukunft der EBS" (KOM (2003) 6 endgültig) zeichnet im Anschluss an ihre Überprüfung im Jahr 2002 in Grundzügen eine revidierte europäische Beschäftigungsstrategie auf. Ihr folgen im Frühjahr 2003 die Beschäftigungsrichtlinien. KOM (2003) 6 und die Beschäftigungsrichtlinien liefern den Mitgliedstaaten Empfehlungen (oder Meinungen) der EK zur Beschäftigungspolitik. Sie sind für die Mitgliedstaaten rechtlich nicht bindend. Die EBS ist eine Politik aus dem "Annual Policy Work Programme for Extended Assessment (ExA) der EK, das im Rahmen ihres integrierten 'impact assessment' Programms durchgeführt wird. Die Ergebnisse der ExA sollen im Herbst 2003 vorliegen.

Appendix 2 German employment policy grouped according to relevant EES guideline

EES Guidelines	(planned) Policies/interventions
1. Active and Preventative Measures for Unemployed and Inactive	<ul style="list-style-type: none"> • Modernisation of employment and benefits service, including: <ul style="list-style-type: none"> - 'Fördern und Fordern/ promote and demand' principle; - Intensified efforts to get long term unemployed and young unemployed into work; - Unemployment benefit reduced to 12 months. Over 55s 18 month; - Social welfare and unemployment benefit (after one year) combined; - Creation of job centres- combines unemployment and social welfare; - Employees obligated to inform job centre as soon as they are informed of job loss; - Employer has to allow employee to look for new job; - Job centres will match unemployed to jobs; - Personnel service agents (PSA) combines temporary work with qualification. Unemployed receives work contract, pay and social insurance protection. When not doing temporary work the 'unemployed' will be supported in further qualifying themselves and finding work outside the PSA.
2. Foster entrepreneurship and promote job creation	<ul style="list-style-type: none"> • Promotion of business start-ups through access to information, counselling and consulting services. Particular focus given to women and foreign workers; • Improved access to capital for Small/ medium enterprises (SME); • 'Initiative Bürokratieabbau/Initiative Reduction in Bureaucracy'. Includes limiting number of trades where master title compulsory and making it possible for experienced craftspeople without master title to become self employed even in trades with compulsory master title; • Up to 100 000 € credit for employing an unemployed person; • Unemployed can set up own businesses 'ich AGs/ me inc.'. Unemployed can receive up to three years government support- 25000€/year limit on earnings; • Education programmes to promote culture of self employment in young people, students etc.
3. Address change and promote adaptability and mobility in the labour market	<ul style="list-style-type: none"> • 'Gesetz über Teilzeitarbeit und befristete Arbeitsverträge-TzBfG/ The Act on Part-Time Work and Fixed-Term Employment Contracts'. Features of the act include: <ul style="list-style-type: none"> - Right to work part-time when employed for longer than 6 months in a firm with more than 15 employees where there is no commercial reasons against it; - Age limit of 58 for restrictions on multiple limited term contracts (where companies are unable to provide justification).

EES Guidelines	(planned) Policies/interventions
	<ul style="list-style-type: none"> • Redundancy law reform: <ul style="list-style-type: none"> - Non permanent contracts limited to two years and maximum 3 extensions, which should provide protection from 'chain short term contracts' while preserving companies ability to employ new workers easily; - Small businesses (< 5 employees) can employ short term contract workers without redundancy protection; - Business related redundancy – three things to consider; length of employment, age, dependents. Redundancy process streamlined; - New businesses can give short term contracts for up to 4 years without having to give a reason. • 'Job Aktiv'-Unemployed without tight social ties or responsibilities must increase willingness to shift location after 3 months unemployment. • More vocational training to make workers more flexible.
4. Promote development of human capital and life long learning	<ul style="list-style-type: none"> • Government intends to: <ul style="list-style-type: none"> - Intensify occupational orientation opportunities in schools; - Increasing number of vocational training positions; - Promoting continuing education.
5. Increase labour supply and promote active ageing	<ul style="list-style-type: none"> • Measures to encourage women to work; • Low income jobs; • Paradigm change to encouraging older workers; • Small and medium enterprises (SME) given incentives to employ older workers; • Retirement age raised in 1996 to 65.
6. Gender equality	<ul style="list-style-type: none"> • Dual approach gender mainstreaming and specific promotion of women's rights; • Centre of excellence " Women in information, society and technology"; • Programme "Equal opportunities for women in research and university teaching" and "Centre of Excellence Women and Science"; • Initiatives to screen for gender specific discrimination in pay; • Act on Part-time Work and Fixed-Term Employment Contracts and the <i>Bundeserziehungsgeldgesetz</i> (Federal Educational Allowance Act) with its regulations on parental leave (simultaneous leave by both parents, claim to part-time work); • The right to a place in a child care facility was established in 1996 and created a place for each child between three and school age. However, the supply does not yet meet the

EES Guidelines	(planned) Policies/interventions
	<p>demand, particularly in the old <i>Länder</i>. The situation in the new <i>Länder</i> is much better;</p> <ul style="list-style-type: none"> • Research being carried out on how to make businesses more family friendly.
7. Promote the integration of and combat the discrimination against people at a disadvantage in the labour market	<ul style="list-style-type: none"> • Foreigners with residency have same access as German citizens to employment measures; • Foreign workers particular focus of occupational counselling; • '<i>Gesetz zur Sicherung der Eingliederung Schwerbehinderter in Arbeit, Beruf und Gesellschaft</i>' Act on Securing Inclusion of Severely Disabled Persons in Work, Occupation and Society'. On 1 October 2000 the '<i>Gesetz zur Bekämpfung der Arbeitslosigkeit Schwerbehinderter</i>'/Act on Combating the Unemployment of Severely Disabled Persons' was passed. The new structure of the Act containing a fee a company needs to pay should it not employ disabled persons and the obligation to employ them, as well as the creation and expansion of an all-comprising network of professional inclusion services and tools aimed at a sustainable reduction of the unemployment rate of severely disabled persons.
8. Make work pay through incentives to enhance work attractiveness	<ul style="list-style-type: none"> • Tax reform- lower tax rates for low wage earners; • Marginal employment increased from 325 to 400€ an month. Up to this limit employees don't have to pay tax or other contributions; • 400-800€ gradual (linear) increase in tax rate; • Unemployed can set up own businesses '<i>Ich AGs</i>'/'Me Inc'. Unemployed receive up to three years government support- 25000€/year limit on earnings; • Unemployed workers over 50 receive 50% of the difference between old and new income if they start work on a lower income than their previous job; • People who retire early will suffer significant reductions in pension benefits- staying in work after the age of 65 will be rewarded; • Persons who raise children or provide nursing care for relatives in need of care are supported in taking on part-time work by an increase in pension contributions to ensure a sufficient old-age protection; • Cuts in unemployment benefit for under 55s from 26 to 12 months (max 18 for over 55s); • Unemployment assistance and social assistance will be combined- this is intended to provide an incentive to work; • Refusal of 'adequate' employment offer or insertion measure or lack of personal initiative results in benefit cut by 30%.
9. Transform undeclared work into regular	<ul style="list-style-type: none"> • Changes in tax for low wage earners should make legal work more appealing; • '<i>Ich AGs</i>'; Unemployed can set up own businesses;

EES Guidelines	(planned) Policies/interventions
employment	<ul style="list-style-type: none"> • Making access to working in trades easier; • Reducing bureaucratic burden on small enterprises; • General contractors liable for social security contributions of workers; • Increasing fines for undeclared work; • Entrepreneur's who violate regulations on illegal employment excluded for up to 5 years from tenders for public contracts.
10. Address regional employment disparities	<ul style="list-style-type: none"> • The '<i>Gemeinschaftsaufgabe (GA) Verbesserung der regionalen Wirtschaftsstruktur</i>' Joint Task Improvement of the Regional Economic Structure' of the Federation and the <i>Länder</i> which particularly supports industrial investments for the creation of new jobs or the safeguarding of existing ones; • Investment allowance for the new <i>Länder</i> favouring particular industrial investments; • The regional support programme within the framework of the European Recovery Programs (ERP) that provides low-interest loans in addition to the allowances of the GA; • The guarantee-programme of the '<i>Deutsche Ausgleichsbank</i>' German Compensation Bank' for the new <i>Länder</i> and the Eastern part of Berlin providing additional guarantees.

Appendix 3 Core indicators

Population status

Indicator Nr. 1.1 Total population stratified by gender
Available indicator: Population according to sex; Tab. 1

Year	Sex		
	male	female	total
31.12.1991	38839103	41435461	80274564
31.12.1992	39300081	41674551	80974632
31.12.1993	39518484	41819609	81338093
31.12.1994	39644965	41893638	81538603
31.12.1995	39824823	41992676	81817499
31.12.1996	39954835	42057327	82012162
31.12.1997	39992311	42065068	82057379
31.12.1998	40004142	42032869	82037011
31.12.1999	40090776	42072699	82163475
31.12.2000	40156536	42103004	82259540
31.12.2001	40274676	42165633	82440309
31.12.2002	40344879	42191801	82536680
(C)opyright Statistisches Bundesamt, Wiesbaden, 2003			
Stand: 23.12.2003 / 10:04:46			

Population status

Indicator Nr. 1.2, 1.3, 1.4. % of children (0-14), % population of working age (by ten year age bands), % of population over 65
Available indicator: under 15, 65 and more and working age population by number and %; Tab. 2

Year	Age group					
	under 15		65 and over		working age population 15 <65	
	total	%	total	%	total	%
1970-1984						
1985	9126436	12	77694471	12	59441332	77
1986	9017816	12	77722194	12	59431286	76
1987	8940796	11	78116124	12	59759601	77
1988	9123525	12	78672207	12	60033665	76
1989	9436407	12	79364504	12	60313848	76
1990	9790007	12	79984244	12	60450232	76
1991	10059863	12	80594371	12	60668653	75
1992	10328196	13	81179232	12	60851846	75
1993	10525470	13	81421960	12	60741478	75
1994	10646822	13	81660965	13	60713437	74
1995	10727341	13	81895637	13	60718372	74
1996	10792371	13	82051698	13	60718424	74
1997	10819845	13	82028947	13	60591415	74
1998	10814003	13	82086582	13	60586165	74

(C)opyright Statistisches Bundesamt, Wiesbaden, 2003

Population by ethnicity

Indicator Nr. 2.1 % of population registered as members of ethnic minority group

Available indicator: Foreign population in Germany since 1960; Tab. 3

Foreign population in Germany since 1960			
Year	Foreign population	Proportion of the foreign population in the total population	Social security registered employees
1960-1984			
1985	4.378.900	7,20%	1.536.000
1986	4.512.700	7,40%	1.544.700
1987	4.240.500	6,90%	1.557.000
1988	4.489.100	7,30%	1.607.100
1989	4.845.900	7,70%	1.683.800
1990	5.342.500	8,40%	1.793.400
1991	5.882.300	7,30%	1.908.700
1992	6.495.800	8,00%	2.119.600
1993	6.878.100	8,50%	2.150.100
1994	6.990.500	8,60%	2.109.700
1995	7.173.900	8,80%	2.094.000
1996	7.314.000	8,90%	2.050.500
1997	7.365.800	9,00%	1.997.800
1998	7.319.600	8,90%	2.023.800
1999	7.343.600	8,90%	1.915.200
2000	7.296.800	8,90%	1.974.000
2001	7.318.600		

Source: Statistisches Bundesamt, 2003

Population by socio-economic status

Indicator Nr. 3.1 % population with income below 60% national median

Available indicator: Poverty rate 1973 – 1998, % population with income below 60% national median; Tab. 4

Poverty rate 1973 - 1998								
Year	1973	1978	1983	1988	1993		1998	
West Germany only					west	east	west	east
Below 60%/ national median	8,7	9	11	11,8	12	6,1	13,1	8,4
Source: Hauser, R. und Becker, I. Einkommensverteilung im Querschnitt un im Zeitverlauf 1973 bis 1998								

Population by household composition

Indicator Nr. 4.1 % of households in each of 5 classes: 1-person, lone parent, couples with / without children, other
 Available indicator: households total, single person, single parent, married with children, married without children, 3 generations together , total number and %; Tab. 5

Unit	Households										
	total	single-person		Single parent		Married without children		Married with children		3 Generations together	
	1000	1000	%	1000	%	1000	%	1000	%	1000	%
1976-1984											
Jan 85	26367	8863	34	1601	6	5954	23	8244	31	452	2
Jan 86	26739	9177	34	1668	6	5915	22	8292	31	429	2
Jan 87	27006	9354	35	1685	6	5973	22	8261	31	417	2
Jan 88	27403	9563	35	1685	6	6134	22	8247	30	399	1
Jan 89	27793	9805	35	1673	6	6245	22	8317	30	356	1
Jan 90	28175	9849	35	1635	6	6387	23	8481	30	353	1
Jan 91	35256	11858	34	2245	6	8201	23	10750	30	429	1
Jan 92	35700	12044	34	2286	6	8412	24	10702	30	402	1
Jan 93	36230	12379	34	2335	6	8560	24	10635	29	394	1
Jan 94	36695	12747	35	2370	6	8720	24	10468	29	387	1
Jan 95	36938	12891	35	2421	7	8874	24	10334	28	351	1
Jan 96	37281	13191	35	2458	7	8982	24	10117	27	364	1
Jan 97	37457	13259	35	2468	7	9131	24	10018	27	355	1
Jan 98	37532	13297	35	2508	7	9218	25	9868	26	338	1
Jan 99	37795	13485	36	2592	7	9326	25	9730	26	327	1
Jan 00	38124	13750	36	2627	7	9448	25	9614	25	313	1
Jan 01	38456	14056	37	2707	7	9569	25	9436	25	290	1

Source: Statistisches Bundesamt, 2003

Population by disability

Indicator Nr. 5.1 % population registered disabled

Available indicator: Hampered in daily activities by any physical or mental health problem, illness or disability; Tab. 6

		Germany (including ex-GDR from 1991)		
UNIT		%		
TIME		1996	1999	
HAMPERED	SEX			
Severely hampered	Total	7.4	10.8	
Severely hampered	Males	7.1	9.0	
Severely hampered	Females	7.7	12.4	
Severely hampered	Unknown	-	-	
To some extent	Total	15.4	29.7	
To some extent	Males	15.1	26.6	
To some extent	Females	15.8	32.4	
To some extent	Unknown	-	-	
Not hampered	Total	77.1	59.5	
Not hampered	Males	77.8	64.4	
Not hampered	Females	76.5	55.1	
Not hampered	Unknown	-	-	

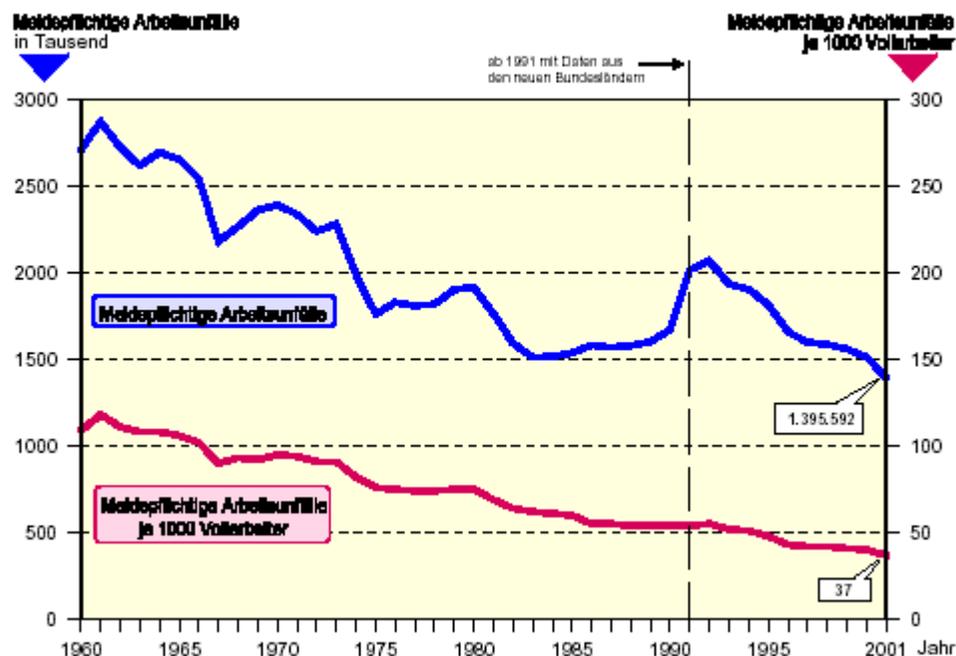
Source: ECHP - UDB, 12/2001

Health status- morbidity

Indicator Nr. 6.1 % Occupational injuries, (by occupational sector)

Available indicator: notifiable occupational accidents and frequency of occupational accidents per 1000 full time employees from 1960 to 2001; Diagram. 1

Meldepflichtige Arbeitsunfälle und Häufigkeiten der meldepflichtigen Arbeitsunfälle je 1000 Vollarbeiter von 1960 bis 2001



Source: Bericht über Sicherheit und Gesundheit bei der Arbeit 2001

Translation:

Meldepflichtig Arbeitsunfälle – Notifiable occupational accidents

Je 1000 Vollarbeiter – per 1000 full time employees

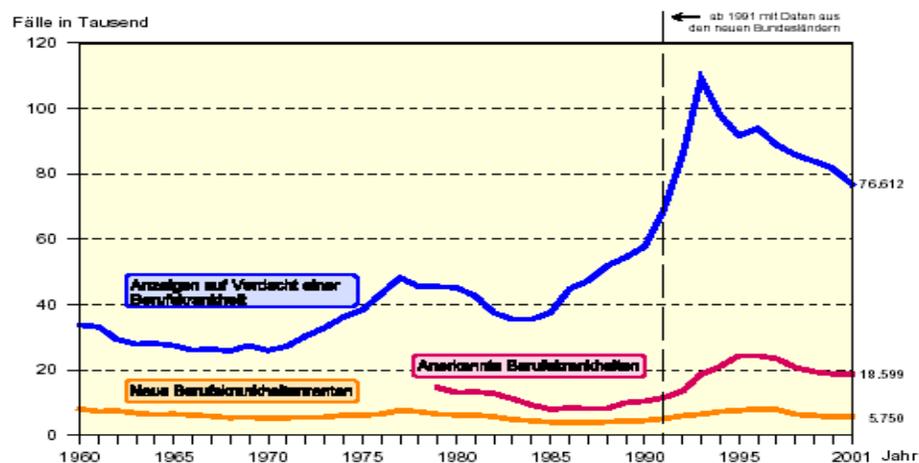
Ab 1991 mit Daten aus den neuen BundesLänder – from 1991 onwards includes data from the new Länder

Health status- morbidity

Indicator Nr. 6.1 % Occupational disease, (by occupational sector)

Available indicator: Notified suspected occupational disease and new early retirement due to occupational disease; Diagram 2

Anzeigen auf Verdacht einer Berufskrankheit und neue Berufskrankheitenrenten von 1960 bis 2001



Source: Bericht über Sicherheit und Gesundheit bei der Arbeit 2001

Translation:

Fälle in Tausend – cases in 1000

Anzeigen auf Verdacht einer Berufskrankheiten - Notified suspected occupational disease

Neue Berufskrankheitenrenten - new early retirement due to occupational disease

Anerkannte Berufskrankheiten – recognised occupational disease

Ab 1991 mit Daten aus den neuen BundesLänder – from 1991 onwards includes data from the new Länder

Health determinants employment

Indicator Nr. 7.1 % of working age population employed, stratified by gender and age groups
Available indicator: Structure data for Social security registered employees; Tab. 7

Structure data for social security registered employees at their workplace				
Year	Age groups Age from ... to... years	Total	Male	Female
1964-2000				
30.06.2001 ¹	under 20	1 048 880	604 251	444 629
	20 - 25	2 570 623	1 292 018	1 278 605
	25 - 30	2 930 909	1 572 233	1 358 676
	30 - 35	4 059 245	2 313 258	1 745 987
	35 - 40	4 418 928	2 535 638	1 883 290
	40 - 45	3 920 536	2 158 428	1 762 108
	45 - 50	3 363 203	1 800 312	1 562 891
	50 - 55	2 770 328	1 508 604	1 261 724
	55 - 60	1 958 169	1 110 214	847 955
	60 - 65	675 865	484 789	191 076
	65 and over	100 428	64 842	35 586
	Total	27 817 114	15 444 587	12 372 527
¹ Calculated from the Employment statistics of the Bundesanstalt für Arbeit. Mai 2002.				

Health determinants employment

Indicator Nr. 7.2 Working population by occupational class

Available indicator: Employment area; Tab. 8

Employment area							
	total	Agriculture, Forestry and fishery workers	produzierendes Gewerbe ohne Baugewerbe	Construction	Trade, hospitality and transport	Finance, rental, and business	Public and private service
unit	1000	1000	1000	1000	1000	1000	1000
year							
Oct 91	38443	1469	11050	2878	9405	3809	9832
Oct 92	37912	1286	10264	3005	9389	3987	9981
Oct 93	37490	1207	9555	3143	9383	4150	10052
Oct 94	37648	1174	9188	3292	9360	4342	10292
Oct 95	37686	1084	8992	3300	9382	4493	10435
Oct 96	37493	1018	8718	3181	9384	4657	10535
Oct 97	37576	1010	8639	3065	9425	4861	10576
Oct 98	38192	1006	8670	2943	9586	5180	10807
Oct 99	38692	983	8556	2905	9789	5540	10919
Oct 00	39277	976	8630	2761	9983	5874	11053
Oct 01	39237	970	8559	2588	10007	5975	11138
Oct 02	38875	961	8353	2417	9937	5990	11217
Jan 03	37913	900	8115	2201	9746	5863	11088

Health determinants employment

Indicator Nr. 7.3 % of working population registered as ethnic minority group members

Available indicator: Foreign population in Germany since 1960; see Tab. 3

Health determinants unemployment

Indicator Nr. 8.1 % labour force registered unemployed < 1 year by gender, age

Indicator Nr. 8.2 % labour force registered unemployed > 1 year by gender, age

Indicator Nr. 8.3 % of unemployed registered as ethnic minority group

Available indicator: Registered unemployed; total, under 25, under 20, 55 and older, long-term unemployed, disabled, seeking part time work, non German; Tab. 9

Unemployed												
	total	total	total	under 25 Years	under 25 Years	under 25 Years	under 20 Years	under 20 Years	under 20 Years	55 Jahre and older	55 Jahre and older	55 Jahre and older
year	total	male	female	total	male	female	total	male	female	total	male	female
1990	2426332	1236217	1190115	382190	196129	186061	94046	47356	46690	-	-	-
1991	2768927	1346545	1422382	408752	207628	201124	91938	46242	45696	-	-	-
1992	3126217	1526441	1599776	415762	217253	198509	86506	44559	41947	-	-	-
1993	3688922	1863947	1824975	469030	254386	214644	90070	47501	42569	571689	327144	244545
1994	3559732	1815242	1744490	416211	222059	194152	86581	44165	42416	677492	383036	294456
1995	3790624	1980714	1809910	442043	249036	193007	99209	52799	46410	777070	432872	344198
1996	4148145	2227519	1920626	469213	275445	193768	103666	57397	46269	891824	500165	391659
1997	4521583	2404699	2116884	487457	287397	200060	109360	60633	48727	952937	523015	429922
1998	4197313	2251987	1945326	452402	269016	183386	103192	57291	45901	938990	515261	423729
1999	4047221	2133816	1913405	412865	247323	165542	97033	54652	42381	906447	492406	414041
2000	3808884	2024725	1784159	406001	246379	159622	93973	52855	41118	773315	414501	358814
2001	3963503	2159731	1803772	449254	279891	169363	95786	55682	40104	652053	347004	305049
2002	4225104	2359964	1865140	488278	307154	181124	89990	53020	36970	575859	307765	268094
2003	4257425	2366541	1890884	474928	301435	173493	67838	39817	28021	522652	281313	241339

Appendix

Unemployed												
	Longterm unemploy ed	Longterm unemploy ed	Longterm unemploy ed	Disabled	Disabled	Disabled	Seeking part-time work	Seeking part-time work	Seeking part-time work	Non German	Non German	Non German
year	total	male	female	total	male	female	total	male	female	total	male	female
1990	-	-	-	130512	84742	45770	239149	5837	233312	208756	130881	77875
1991	-	-	-	143623	91486	52137	247436	8328	239108	246241	157860	88381
1992	-	-	-	163279	104541	58738	262911	8255	254656	313440	203873	109567
1993	-	-	-	176558	115442	61116	280646	7283	273363	412981	275785	137196
1994	1122659	-	-	175210	115784	59426	268137	7117	261020	427496	281906	145590
1995	1128885	541635	587250	175320	115216	60104	290126	8061	282065	472166	313423	158743
1996	1224218	605324	618894	187173	122422	64751	318142	8921	309221	536324	358084	178240
1997	1540033	761494	778539	197524	127565	69959	343511	9615	333896	563315	370775	192540
1998	1443027	710467	732560	192470	122673	69797	346976	10400	336576	538176	348236	189940
1999	1380932	678691	702241	190200	119171	71029	352772	11312	341460	503181	321563	181618
2000	1309663	637994	671669	177595	109287	68308	345355	12380	332975	460419	288578	171841
2001	1272601	626506	646095	163985	100992	62993	365538	15161	350377	499711	316395	183316
2002	1355646	700829	654817	156268	97233	59035	386973	18101	368872	535233	342807	192426
2003	1495624	790428	705196	167877	104261	63616	384893	18665	366228	537873	343420	194453

NB data also available for east and west Germany.

Appendix 4 Participatory workshop results

(translated from Workshop Report, Rudolf Welteke)

European Employment Strategy (EES) – Implementation in Germany

Here the following four main questions were dealt with:

1. Which of the five EES **priorities** for Germany are regarded as particularly relevant to the specific situation in Germany? (Participants asked to prioritise and evaluate them).
2. For which of these fixed five EES priorities are detailed positive results to be expected during the practical **implementation** phase up to the year 2010?
3. (Apart from EES) which **other influences** have an important priority role in the labour market and employment policy in Germany?
4. Which **scenario** do we realistically have to expect in Germany by the year 2010?

Priorities

The selected five priority areas fixed for Germany by the EU constitute areas of labour market strategies which from the point of view of the EC are most in need of improvement. On the individual priorities the following assessments were given:

- EES Strategy 1 "Activation/Prevention": This is the sector which in Germany is mostly addressing with the "Job aktiv" programme and its corresponding sub-items. Success is expected in the short and medium term. The activation aspect is aimed at long-term unemployment which is particularly high in Germany compared with other European countries. The prevention aspect is aimed at the first four months of unemployment. Here the so-called "profiling" should be mentioned which is aimed at the detailed recording of specific characteristics and variables of the corresponding person and thus provides the basis for drawing up an individual support scheme.
- EES Strategy 2 "Coping with change and adaptation": here results are more likely to be expected in the long run. With regard to its contents this strategy primarily responds to the increased introduction of part time jobs and term contracts. It should also be considered that for more and more people in Germany geographical changes and changes in the job profile will be the rule. It is thus a central strategy which in the long run should allow people to adapt mentally and socially to the so-called modernisation of the working world. At the same time it stabilises the employment initiative aimed at reducing unemployment among the population by bringing more people back into work through part time work.
- EES Strategy 4 "Life-long learning": This is also a long-term central strategy. On the one hand, it intends to clearly strengthen the continuing education and education sector, upgrading both the providers' position and encouraging as many people as possible to realise and use the corresponding services. On the other hand, the implementation of this strategy at the national level also implies that the relative proportion of the population with upper secondary level education will be raised. This strategy also corresponds with the trend of "modern" restructurings resulting from the demands and developments in the labour market and is closely related to the above-mentioned strategy 2. Willingness and ability for life-long learning will in future be the obligatory characteristics of every member of the society of the future and this strategy is intended to support people in general and in particular problem groups in their inevitable efforts to deal with future. The discussion

about this strategy moreover includes a socio-political side effect, i.e. a discussion about values concentrating on what "human capital" can and should include and on what should also be taken into consideration. Here among other things aspects of how a person is appreciated in his job and the many aspects of the health at work issue are to be dealt with.

- EES Strategy 6 "Gender equality": The implementation of this development approach which is also important under labour market aspects includes issues such as increasing the number of available child care places and a radical augmentation of the number of day schools, issues which are presently highly topical in today's political discussions. Under this angle also more and more women should be encouraged to fill leading positions. This strategy corresponds to the Gender Mainstreaming Programme of the Federal Government.
- EES Strategy 8 "Making work profitable...": This strategy is in very concrete terms reflected in today's labour market discussions in Germany which are concentrated on reducing periods for the payment of unemployment benefit and on combining unemployment benefit and income support. Certain political groups regard these instruments as a suitable means for reducing unemployment figures. A sceptical remark was made by the participants of the workshop: this strategy can only lead to positive effects if sufficient jobs are available. If this cannot be achieved, mechanisms like these will lead to a further pauperization of population groups.

The participants of the workshop mentioned aspects of how to motivate people to take and hold jobs in the long run: motivation through the consistent introduction and propagation of health promotion within companies; motivation for occupational training and education. In this context the social inclusion action plan was also mentioned.

Implementation

Results during the practical implementation phase up to the year 2010 are expected for all five EES priorities. Here however, the realisation of individual measures and prospects of success of the individual strategy will to a considerable extent be influenced by societal and economic conditions (see also expected results on 4 "scenarios").

Other influences

During the discussion about national priorities for the labour market policy in Germany, apart from the above-mentioned five EES priorities, the following items were primarily mentioned:

Reduction of non-wage labour costs, particularly in the low-wage sector
Further strategies for reducing unemployment (inter alia by providing additional jobs and training vacancies).

Scenarios

"Scenario 2010": Here, to some extent, strongly personal statements were made. On the one hand the ideal conception for the year 2010 was expressed which is a fairly high level of health and social wellbeing with reduced unemployment in Germany. On the other hand, the catchword of "working poor" was given which refers to a situation of increasing pauperization of large population groups which despite reduced unemployment and a fairly high employment level have to live with a clear reduction of their income and their living standard. In two statements increased social inequality as an element of such a social and employment scenario for the year 2010 was mentioned. With regard to the flexibility trend on the labour market which is already becoming apparent at the moment, it was expected that by the year 2010 this instrument will lead to a further widening of the gap between:

- voluntary flexibility among privileged groups of the population to increase their quality of life and

- necessity to accept working conditions which require a high degree of (more unfavourable, non-self-determined) flexibility among non-privileged groups of people.

Health impacts of the European Employment Strategy and of the (national) labour market policy

This part of the workshop was divided into two sub-sections:

- Identification of **priority** areas in the intersection between employment policy and health relevant issues (Question: Which health impacts of employment strategies should be particularly taken into account in Germany?)
- Recommendations for action for the project actors of the advisory board (Question: Which aspects should be particularly emphasised when dealing with the issue of "Health impacts of employment policy")

A distinction between contents-related and methodological aspects of these two questions was made when working out the results. For approaching this field from the methodological point of view, a wide range of possible elements exists which might be helpful when dealing with this issue:

- health determinants (factors)
- health indicators (preferably from current health reporting activities)
- evidence from study results (via literary searches)
- information from experts I (informal single questioning, questionnaire survey, project advisory committee)
- information from experts II (expert opinion)
- model cases
- others / further approaches

The "Policy HIA" project group had already considered and selected items a) health determinants and c) collection of evidence (overview from Great Britain) and well as d) expert information (here: establishment of a project advisory committee) as elements of the project.

The participants of the workshop recommended to extend the collection of evidence on item c) to specifically include Germany and to carry out targeted literary searches accordingly. In particular the expectation was raised that when sifting through literature and data sets in Germany, a certain prioritisation could be achieved in this thematic field, a side effect which would otherwise be rather difficult from a purely theoretical point of view. Moreover the suggestion was made to also retrieve specific data and information from associations and actors who are in a special way dealing with health impacts, for example institutions dealing with work and health (work protection, BAU etc) but also chambers of physicians and WSI. For proceeding further it could moreover be recommendable to start with certain groups of diseases which are particularly important in connection with occupational diseases such as for example musculo-skeletal diseases.

The warning was given not to stress stereotype correlations such as for example between unemployment and health and to descend to the level of "truisms". What would have to be expected would be a correlation between various factors which could be of influence here and which could be presented through a matrix of interdependencies. Moreover it would be recommendable to take a differentiated look at the correlations which are influenced and/or activated through the corresponding EES single strategies.

As an example the following items were mentioned:

- working conditions (differentiated by impact criteria for health)
- job safety (and its relevance for health and/or influence on absenteeism in firms and companies)
- connection between low income and health
- significance of the social environment, of the social supporting structures for health

Prioritisation

With reference to the further approach for prioritising the question was raised if in view of the remaining project period of six months one should concentrate as an example on one of the altogether five EES strategies which are especially relevant to Germany and if such a selection could possibly be made under political aspects. A political priority of any one of the five strategies was not confirmed by the experts present at the meeting. It was on the contrary stated that no effort should be made to evaluate and prioritise any one of the five strategies under primarily political aspects. It was said that, as already stated earlier on, it was important to win data first and then come to an assessment of the evidence in the field of employment policy and health. The political relevance of the individual strategies and their consequences should only be worked out and evaluated in a subsequent step.

Another (method-related) discussion line concentrated on the "quantification" aspect. One expert stressed how important it is to use, process and present in the project report quantified and quantifiable information. Mention was made of the option to express potential project results as far as possible in monetary terms. In view of the short project period still remaining this approach will probably not come to fruition during this project phase.

Based on these considerations concerning the consequences of certain employment strategies and in particular the balancing between benefits and negative effects (when looking separately at the positive and negative health effects on the one hand and when comparing economic and health effects on the other hand) the final discussion then concentrated on content matters and a corresponding recommendation to the project group:

One participant had already mentioned earlier on that positive health impacts were expected from strategy 1 (activation/prevention of long-term unemployment) and the national "Job aktiv" programme. This expectation also considers the generally known negative health impacts of long-term unemployment. This aspect should be outlined in the project report – however with the above-mentioned precautionary measures to avoid stereotype presentations.

Final remarks on strategy 2 (coping with change and adaptation) were made to the effect that in future broad population groups would have to reckon with large-scale changes in their joblife biographies. This adaptation process made necessary through the types of economic activity and thus changed worklife conditions should be influenced through strategy 2 and the EU policy it embodies in such a way that in future the increasingly required flexibility of the individual working person and/or job holder would be related to the upkeep of his/her health. That means that this strategy is aimed at neutralising possible negative health impacts which could be caused through increased job-related flexibility. The made-up word of "flexicurity" characterising this objective was recommended to the project group for special consideration in their future reflections and setting of priorities.