

**SUMMARY OF THE CONSOLIDATED REPORT**

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## SUMMARY OF THE CONSOLIDATED REPORT ON SYSTEMS FOR MONITORING WORKING CONDITIONS RELATING TO HEALTH AND SAFETY IN EUROPE

### Introduction

Adequate and up to date information on working conditions is becoming more and more important in the EC Member States. Public authorities, employers (organizations), employees (labour unions), researchers and professionals show a growing awareness and need for continuous information. Not only changing technologies and their consequences or requirements regarding the safety and health of the work force stimulate the awareness and request for regular and integral information. Also high levels of work incapacity or disability rates as well as changes in the demographic or qualification structures in the labour force necessitate an insight in the developments of the contents and conditions of work.

In the light of these developments it seems fruitful to compare structure, output and utilization of those systems that, on a more or less regular basis, attempt to provide information on working conditions.

So the European Foundation for the Improvement of Living and Working Conditions in Dublin decided to carry out a study in the period mid 1989 - mid 1990 with the purpose of gathering information on "all" existing systems and instruments for monitoring working conditions related to safety and health. The systems and instruments included in this project have been studied in all Member States and in relevant international organizations (WHO, EEC).

The aims of the project were:

- to make an overall assessment of the existing instruments for identifying risk factors, and working conditions in general, in as far as they are creating risk situations;
- to contribute to the establishment of more consistent indicators at Community level;
- to complement existing Community data and fill possible gaps in Community knowledge.

The descriptions focus on three major dimensions:

- methodologies (sample applied, data collection, etc.);
- objectives (specific goals);
- uses and end-users (intended and actual users);

One of the products of the project is the consolidated report, which gives an overview of the main systems and their utilization. This report discusses the methodologies, possibilities of rationalization, gaps between needs and available information, developments and recommendations to improve monitoring systems in the Community. Furthermore a catalogue of systems has been conceived, containing in a summarized way basic information on objectives, content and use of the systems.

#### A general overview

It was clear from the onset that there is a great diversity among the various Member States regarding number and scope of the various systems. In some countries 'monitoring' is largely limited to the recording and reporting of occupational accidents and diseases. In other countries more extensive 'monitoring' is conducted by additional regular surveys on working conditions or documentation systems of substances, certain sectors of industry, etc.

Regarding the focus of 'monitoring' it can be said that in most countries the main attention is given to the measurement and description of working place conditions or job characteristics, while in a minority of the countries additional attention is given to the measurement of the health situation of the (working) population.

As far as instruments with a supra-national character are concerned, two instruments which meet the selection criteria have been described. Firstly, in 1980 the WHO Regional Committee for Europe adopted a regional strategy resulting in the formation of 38 specific targets relating to health. Several of the targets are of direct relevance to the work environment. The general aim is to assess the progress of the development concerning these targets in the Member States.

Secondly we included the EEC Eurostat Labour Force Survey. This instrument is applied in a uniform way in all Member States

and contains a limited number of working conditions indicators (working time, shift-work). The main users can be found among governmental agencies dealing with (international) labour market issues.

The systems covered in the inquiry can be classified into three types, which differ vis-à-vis the degree in which they provide a direct insight in safety and health aspects of working conditions:

1. Systems directly describing actual working conditions of the work force in a country, region, sector, etc. The instruments falling into this category are surveys and (micro-)census;
2. Systems based upon (social security) data on reported occupational accidents and diseases, as well as work incapacity (sickness absence) are the major elements of this category. These systems generate information on outcomes of certain working conditions.
3. Other systems, containing indirect data to be processed or linked to gather information on working conditions. This category comprises data bases, registers as well as documentation systems on substances, exposures, tools, etc.

#### Systems directly describing working conditions

In many countries some information based upon census-data is available. However, it was generally found that information on working conditions is very poor. Furthermore this information is produced with rather long intervals. In contrast, work force surveys or general health status inquiries show already many advantages, and a lot of valuable information on working conditions can be obtained.

In general it may be stated that surveys conducted directly among employees contain most information on health and safety aspects of working conditions. Despite the risk of subjectivity of answers to survey questions, our inquiry indicated

that this type of survey can provide most detailed information as to work places, sectors, physical and socio-psychological risk factors, or perceived consequences. Furthermore it allows accounting for confounding factors, as also person-related aspects may be measured.

The use of the information lies in the description of the state of affairs and developments in working conditions, the identification of sectors, jobs or work places with certain health risks, and the availability of some "standards" which can be used as a reference for specific studies.

#### Systems based on social security data

Most widespread are those systems which deal with the outcomes of unhealthy and unsafe working conditions: i.e. data sources comprising information on occupational accidents, diseases and work incapacity (sickness absence, disablement). The available information can partly be seen as the by-product of the administration of social insurance programmes. In some cases, however, these systems function, sometimes through samples, as major providers of information for preventive actions.

Statistics on occupational accidents are mainly used for descriptive purposes, for generating hypotheses or the detection of high-risk jobs, sectors or work places. Utilization for preventive action, design of safety regulations and evaluation (of safety programmes) are generally reported goals.

This most widespread type of monitoring system, however, shows many restrictions. Work place characteristics are measured indirectly, partially, and only for a non-representative sample of the work force ("victims"). In general these systems on itself therefore do not always provide adequate information on potential risk categories.

### Other systems: registers and documentation systems

Our third category of systems, which in a rather indirect way provides insight in working conditions, shows a very heterogeneous composition. Both "traditional" tools as occupational mortality statistics (e.g. United Kingdom) and a modern data base of exposed persons are included (e.g. Denmark).

These systems, dealing with discerned aspects of working conditions often show serious limitations as to risks covered, sector, region, or intended users (experts). Some of these systems are rather poor regarding information on working conditions, as the (most recent) job or profession of an employee is the only characteristic covered (e.g. mortality, cancer registers, lead exposures). Data from such systems seem to be used in particular for research purposes.

Other systems have been developed, providing more information for preventive action. Product and substance registers or data bases have come into development in the 1980's in France, Denmark and Germany. They intend to inform a wide range of users: labour inspectors, employers, employees, social partners, occupational health services, etc.

These systems have explicit preventive purposes, not only on national or sectorial, but in particular on work place level. Therefore, much attention has been paid to the accessibility.

### Conclusions

Systems entirely related to social security data (accidents, diseases, sickness absence) are very limited regarding the measurement of working conditions, population covered, recentness, reliability (under-reporting) and specificity of information.

Some interesting developments were noted, as in some countries (e.g. Germany) sick funds, occupational associations and researchers design data bases, which integrate work incapacity data and work place information for epidemiological research and in-company preventive actions.

Surveys carried out by interviewing employees or based upon employers' reports, seem to be a major step forward. Despite

the extensive research and financial support required, systems based on these instruments show several advantages compared to the instruments based on social security data. Many more sectors and employees may be covered, and more specified information on working conditions can be obtained. Also relationships with experienced health or safety can be studied.

Data bases comprising information on exposures, tools, substances and hazards, specified for jobs and sectors, were shown to be the most recent type of monitoring systems. Many systems started being built up for restricted types of hazards and exposures, and for a limited number of sectors. The data comprising the core information of the system may originate from a variety of sources: occupational disease benefit claims, labour inspectorate reports, epidemiological studies, risk analyses, etc.

Only in very few countries system outcomes and their utilization have been evaluated systematically. Much more was known on the goals intended than regarding the goals reached. Only for some systems (e.g. in Germany and the U.K.) informants or literature indicated serious reflection on the accuracy of systems vis-à-vis the realization of the goals (originally) intended.

Furthermore it was indicated that information directly related to (the measurement of) working conditions (surveys) finds its major use more in research and epidemiological purposes, whereas the systems measuring a very limited aspect of working conditions (exposures, hazards) are more frequently used for preventive and inspection activities.

The highest accessibility was found in data bases on hazards, tools, and substances. Systems based on information collected by surveys or from social security administrations generally showed some more restrictions as to availability of information.

The ideal use and interaction of systems internationally is still far from reality. Harmonization and integration already seem to state a problem within many countries themselves. In



no country just one single system was in operation. Some limitations often found, regarding existing systems, concern the lack of integration or the absence of a specific design of a permanent information system.

Overlap of information is sometimes a serious problem. The collection of the same information by different systems gives redundancy or contradictions, and does not contribute to a deeper insight or a wider scope. Some few examples could be found (Germany, U.K.) where projects are carried out to integrate systems within one country, but so far results are only limited.

Finally, technical linkage of systems seems to be obtainable nowadays. But, given the variety of systems and their contents, we are not very optimistic about the actual realization. Some promising prospects seem however apparent in the field of linkage of technical data bases (tools, substances etc.).

#### Recommendations

Firstly, the availability of a Community-wide overview can be seen as an important prerequisite for cooperation and exchange of information. So the catalogue of monitoring systems, of which the first edition will shortly be published, will need a regular update.

Secondly, it was shown that most monitoring systems mainly focus on the technical and physical aspects of working life (hazards, machines, occupational hygiene, etc.). Vis-à-vis the changes in technology other potential hazards need to be included more satisfactorily (e.g. mental strains, qualification, feelings of job uncertainty, etc.).

Thirdly, it has become clear that despite the developments going on in several countries, in other Member States information on working conditions is still quite poor.

To that end it would be very informative to investigate experienced working conditions in the Community countries in a standardized way (e.g. survey). Apart from the provision of recent and detailed Community-based information, such an inquiry

may have a stimulating influence on national research and prevention programmes.

Finally, international cooperation and network integration should be extended. International cooperation may be stimulating as it gives insight in how one's neighbours are dealing with the same problems. System holders could benefit from foreign experiences regarding the use of information for preventive, research and decision making purposes.