



# Risk Assessment at the Workplace

A Guide for Union Action

# Risk Assessment at the Workplace

A Guide for Union Action



© European Trade Union Technical Bureau  
for Health and Safety  
Bd Emile Jacqmain, 155  
B-1210 Brussels  
Tel : 32-2-224 05 60  
Fax : 32-2-224 05 61  
E-mail : [tutb@etuc.org](mailto:tutb@etuc.org)  
<http://www.etuc.org/tutb>

*European Trade Union  
Technical Bureau  
for Health and Safety*



## **EUROPEAN TRADE UNION TECHNICAL BUREAU FOR HEALTH AND SAFETY**

**The European Trade Union Technical Bureau for Health and Safety was established in 1989 by the European Trade Union Confederation, with the aim of promoting a high level of health and safety on European workplaces.**

### **Trade Union Observatory on the application of European directives**

**Since the adoption of the Single European Act in 1986, Community working environment policies have made great progress. The TUTB follows the elaboration, transposition and implementation of European legislation.**

**It created an *Observatory on the application of European directives*, which carries out comparative analyses of the impact of Community legislation on the different systems of prevention in the EU Member States and defines common trade union strategies.**

### **Expertise and research**

**The TUTB provides expertise to the Workers' Group of the Advisory Committee for Safety, Hygiene and Health Protection at Work.**

**It set up networks of trade union experts in the fields of technical standardisation (ergonomics, safety of machinery) and chemical substances (classification, assessment of the risks connected with dangerous substances and the setting of occupational exposure limits).**

**The TUTB is an associated member of the European Committee for Standardization (CEN) and takes part, as observer, in the networks of the European Agency for Health and Safety in Bilbao.**

**TUTB publications are published in three languages: English, French and German. The TUTB NEWSLETTER, published three times a year, is available on request.**

**More information about our activities and publications is available on our Internet web site: <http://www.etuc.org/tutb>.**



# Risk Assessment at the Workplace

A Guide for Union Action

**Pere BOIX,**  
Director of ISTAS (Trade Union  
Institute for Work,  
Environment and Health),  
CC.OO. Spain

**Laurent VOGEL,**  
TUTB Research Officer

# Préface



## Table of contents

### 2 Préface

### 5 Foreword

#### 7 Section 1

##### **For a trade union risk assessment strategy**

#### 7 From occupational risks to risk assessment

#### 7 Risk assessment and renewing prevention practices

#### 8 What practice teaches: the other nine-tenths of the iceberg

#### 9 Risk assessment: brake or accelerator for prevention?

#### 10 The strategic framework: an opportunity to be grasped

#### 11 Coherent union action across-the-board

#### 13 Section 2

##### **The key features of the method**

#### 13 Subjective experience: priority for trade union action on occupational health

#### 15 Equality and working conditions

#### 17 Exclusive or inclusive work: permanence counts

#### 18 Organization of time and work intensity

#### 19 Section 3

##### **Our approach and current models of risk assessment**

#### 21 Section 4

##### **A «working guide» for the workplace industrial relations system**

#### 24 Strengthening linkages for trade union preventive action

#### 25 Workers' involvement

#### 27 Negotiating with the employer

#### 27 Knowledge for action

#### 29 Section 5

##### **Tools for trade union management of workplace risk assessment**

#### **31 WORK BOOK N° 1: Analysis of the situation**

Guidelines for a trade union strategy

#### **43 WORK BOOK N° 2: Preliminary risk identification**

Guide to work process description

#### **51 WORK BOOK N° 3: Inspecting for problems**

Checklist for identifying problems in the workplace

#### **61 WORK BOOK N° 4: Proposed solutions**

Problem identification and alternative assessment guide

#### **69 WORK BOOK N° 5: Questionnaire on health risks and damage**

Subjective identification of occupational health problems

# Foreword

**T**his guide suggests a methodology for workplace risk assessment for use by trade union activists involved with occupational health. But its underlying principles apply equally well on a wider scale to all union action on health at work.

This guide draws on trade union experience in different countries, and stems directly from two seminars staged in 1995 and 1997 by the TUTB and AFETT (European Association for Training Workers in New Technologies).

This guide uses the expression “risk assessment” throughout, because that is the term used in the Community Directives incorporated into the different national legal systems. Users will find that the aim is not so much to look at risks in the narrow sense as to assess workplaces and working conditions in the round.

What we propose is a general framework which applies to all work situations, so it will obviously need adapting to fit specific situations. Generally, two types of scenario are likely to arise: one relating to identified priorities, like preventing musculoskeletal disorders, for instance; the other relating to specific sectors, activities or occupations. An example is the TUTB Guide to Health and Safety for European Works Councils, which contains a specific questionnaire on lift maintenance/servicing. Working with the different trade union confederations concerned, the TUTB will be building up a database of questionnaires and other specific assessment tools in the near future for use by all trade union organizations.

It is an ambitious proposal which demands strong trade union support. Generally, it should strengthen our arm as organizers of labour. But there are situations in which for one reason or another the proposed approach cannot be applied. So it must be adapted or alternatives must be found. The essential thing is to trigger a momentum which builds up velocity. Getting to grips with a specific problem, even with limited objectives, helps workers build up confidence and gradually map out a strategy driven by their own specific needs. So, in workplaces where the union has little experience in action for health, a specific objective can be set for priority action, after which the experience gained can be channelled into work on other issues.

The guide falls into five parts.

**Section One** positions risk assessment within developments in prevention policies and considers the implications for trade unions. We emphasise the need for independent union action and its aims.

**Section Two** broadly outlines the proposed method through the key aspects which add up to make our proposed risk assessment method chime with the union’s general activities.

**Section Three** positions our approach with regard to current practice. We distinguish five broad categories of risk assessment and examine the pros and cons of each.

**Section Four** explains how independent union action will be confronted with proposals made by the other players in the workplace (employer, preventive services) resulting in concrete decisions on risk assessment. This means fitting our proposal into the framework of workplace industrial relations. Obviously, not all eventualities can be properly accounted for here. So broad guidelines are set which must be adapted to the practical situation of each workplace.

**Section Five** contains questionnaires and checklists to help put the method into practice. These are not intended to cover all the risks of every workplace. They are meant to be changed and adapted to the practical needs of a particular situation.

We would appreciate the feedback and input, suggestions and criticisms of anyone and everyone who decides to use them.



## Section 1

# For a trade union risk assessment strategy

### From occupational risks to risk assessment

It may seem obvious what «risks» are. They are part of everyday life. But when applied to occupational health, the concept of risk is less straightforward than it might seem. It may carry different meanings.

The idea of «occupational risks» is over a century old. It refers to certain situations or events which may damage a worker's health, that damage being recognized and compensated as an employment injury or occupational disease.

This concept of occupational risks is a social construct which isolates specific aspects of work (e.g., noise levels, chemical substances) and links them to a specific disease state or damage to health. The advantage of this construct is that lengthy forensic processes are not needed to establish the cause of the situation; the drawback is that it rules out anything which does not fall neatly within the definitions proposed. Like all social constructs, it reflects the power relationships and values of the society to which it relates.

- For many decades, a large section of the medical establishment refused to admit silicosis as an occupational disease, and its eventual recognition owed more to power relationships than the advance of scientific knowledge.
- The evidence from most European countries is that far more men than women suffer from prescribed occupational diseases. Is that because women's jobs are that much healthier? Or is it more likely that scientific research, the unions and the relevant authorities have paid more attention to men?

Above all, however, the concept of occupational risks covers only selected areas of workers' health. Daily wear and tear, and the toll it takes in premature ageing, mental work load and sexual harassment are largely ignored because they are not financially compensated.

This is what makes the risk assessment approach complex. It cannot just be a matter of checking off a closed list of recognized risks, but must take account of the interactions between different factors. For example, the same level of exposure to toxic chemicals may have different effects depending on the pace and hours of work, the accumulated effects of other risk factors, training and information, etc. It also has to take account of workers' changing needs.

### Risk assessment and renewing prevention practices

Throughout the Sixties and Seventies, waves of industrial unrest challenged the traditional views of occupational risks. Three aspects in particular were emphasised:

- The focus on financial compensation for some types of health damage had to give way to a prevention focus;
- The occupational health approach had to be extended to work organization generally, not just physical factors recognized as the cause of occupational diseases or employment injuries;
- Prevention should be refocused on eliminating risks at source through ongoing improvement of working conditions based on all workers' needs, however visible or invisible to compensation systems and job types.

Seen in this context, risk assessment is not just a matter of identifying likely causes of employment injuries or occupational diseases. It can be very simply described as an approach which aims to evaluate all working conditions so as to predict their likely negative impact on health and safety. It is a forward planning approach essential to systematic, planned preventive action. It is the opposite of an insurance-based approach which measures the likely costs of a situation purely on the basis of past experience.

## What practice teaches: the other nine-tenths of the iceberg

In fact, risk assessment can be a source of considerable confusion. Like all occupational health instruments, it is riven by tension between opposing industrial interests. There is an employer's view of risk assessment that we must learn to analyse and combat, and a trade union approach. The opposing basic principles must be understood so as to map out an independent position which upholds the collective interests of workers.

This debate is particularly relevant today in European Union countries, not least because the Framework Directive and various individual Directives make it the employer's duty to carry out risk assessments. That has meant all EU countries passing national regulations that require employers to evaluate the risks and consult workers on their evaluation. Strikingly, however, there is no European model or system of risk assessment. There are different national practices and many industry schemes. National legislation, too, has often defined risk assessment in the vaguest of terms, allowing very different practices which are not necessarily coherent in prevention terms, to exist side by side.

Four general remarks can be made about recent practice.

1. Only a minority of firms have carried out proper risk assessment. Generally, in all EU countries, many firms have either not carried out risk assessments, or have treated them as just more paperwork. One frequent way of dealing with this «paperwork» has been to contract the risk assessment out to an external agency with no real influence on integrating prevention management into the work organization. There is certainly much more paper generated on assessment than real assessments carried out with the intention of putting prevention systems in place. In the worst cases, these paper assessments are purely nominal: the employer signs a written statement certifying that he has had the assessment performed without drawing up a prevention plan.
2. Where risk assessments have been carried out, only a minority of firms have

really involved their workers; most assessments have been performed by experts without proper consultation of the workers. In many cases, they have not taken real-life work situations properly into account, but simply drawn up checklists of risks and determined whether what were considered as appropriate levels of control were applied.

3. Only rarely have the public authorities devised controls on the quality of risk assessment. In some countries, legislation and regulations have encouraged widespread flouting of the obligation by allowing employers not to document their risk assessment in writing.
4. Only in very few cases have the public authorities introduced means for framing industry- or region-wide policies based on workplace risk assessments. Risk assessment is under-used as a public health instrument for improving prevention policies.

The inevitable conclusion from all this is that risk assessment can hold back or drive forward a prevention policy, depending on how it is conceived. That requires a clear understanding of context, concepts and methods, and giving critical thought to the ways unions can act.

## Risk assessment: brake or accelerator for prevention?

The idea of risk assessment as introduced into the European Directives was not entirely clear-cut.

The employers see it mainly as an instrument of deregulation, part of a general trend towards weakening government regulations intended to protect the life and health of workers. The employers want to simplify legislation, to restrict its scope to setting general objectives couched in as vague terms as possible, to relax external controls (especially by the factory/labour inspectorate); for the public authorities to move from enforcement to an advisory role. By this token, legislation should be only a general framework, leaving each firm to set its own prevention priorities based on its own risk assessment. Also, the legitimacy of prevention rules and practices would no longer depend on their protecting life and health alone; they would also have to pass the economic test of bringing proven financial benefit to the firm. The employers' lobby is divided over the question of worker participation. Some regard it as an unnecessary burden, while others see it as an important instrument of knowledge and consensus.

The British conservative government's take on this was highly significant. It viewed risk assessment primarily as an instrument for self-regulation in which the employer would have discretion to decide how far a risk was «acceptable».

Mr Rimington, former director of the Health and Safety Executive (British labour inspectorate responsible for negotiating Community Directives on the British government's behalf), offers the remarkably frank explanation: *«During the hasty negotiations on the Framework Directive, the United Kingdom found itself in a minority going nowhere arguing its core principle that health and safety should be based on what is reasonably practicable, which included costing of risks. We managed to replace it with the principle - which we consider equivalent - that health and safety measures should be based on a risk assessment»*<sup>1</sup>.

1. Quoted in Dalton, A.J.P. (1998), *Safety, Health and Environmental Hazards at the Workplace*, London: Cassel, p. 46

We propose the following five criteria to ensure that risk assessment really helps strengthen prevention.

1. It is not the job of risk assessment to determine whether or not risks are acceptable. The basic rule is that risks must be eliminated wherever it is possible to do so. The test must be whether it is technically possible, regardless of what impact it may have on business profits. The risks to be assessed are those which cannot be eliminated at a given point. It is no substitute for clear rules laid down by the public authorities (like setting maximum daily and weekly working hours, banning asbestos, replacing carcinogens by less dangerous substances, etc.).
2. Risk assessment is not intended to be a sort of «certificate of compliance» for the firm. It is not an administrative procedure intended to keep the labour inspectorate or insurance organizations happy. Existing regulations must be treated as the lowest standards which must be met in all circumstances. But the rules do not necessarily cover all situations. They sometimes set very general objectives. The assessment must check that appropriate solutions have been found for all ascertained risks, even where the rules do not expressly provide for that particular solution.
3. Risk assessment is not a snapshot of a moment frozen in time. It must lead on to an action plan of preventive measures. Both the initial assessment and the action plan must be reviewed at regular intervals (e.g., every year) and when new circumstances arise (technical progress, workers' complaints, new information on health hazards, changes in regulations, etc.). Assessments crafted like literary masterpieces resulting in comprehensive, detailed case studies written by specialists but with minimal impact in terms of improved working conditions must be avoided.
4. Risk assessment is an instrument for employer/employee debate, to confront different priorities and clearly identify health needs. What is not needed are assessments which seek to deny the problems, make technical expertise a pretext for refusing to heed workers' views. Especially to be avoided are mechanistic assessments which produce a list of priorities without involving the persons directly concerned. Quantitative instruments inform, but are no substitute for, labour/management discussions in the workplace.
5. The risk assessment should result in public debates outside the workplace, based on a sharing of problems and experiences. In a sense, it is an instrument for political debate. For example, many assessments highlight the poor working conditions of insecure and especially temporary workers. These issues must be addressed in firms, but effective solutions will often be found only at a more general level.

## The strategic framework: an opportunity to be grasped

The foregoing explains why we are raising the question of a specific union input to risk assessment. There is no question that risk assessment is an employer's obligation, intended to guide his preventive measures, but we believe it is better not to sit idly around waiting for them to complete that assessment.

Unions could content themselves with exercising a sort of external control through the machinery provided for consultation on risk assessment. It is easier to wield the stick of legal obligations to make employers correct their omissions and commissions, but it is a very limited instrument for influencing the overall preventive approach. It severely restricts the scope for workers' initiative.

Our proposal aims to influence the decisions on prevention measures by maximizing workers' active involvement through independent trade union priorities. The aim is to incorporate workers' views in the planning of prevention measures with three ends in view:

- to extend the scope of health and safety to all situations which affect the welfare of workers at work;

- to give workers at risk a say in framing prevention policies;
- to involve workers and secure their active support in negotiating preventive actions.

Our proposed methodology for systematic union action stems essentially from an analysis of the present state of play in prevention.

Growing numbers of workers have seen their working conditions deteriorate and traditional prevention instruments decline in effectiveness in recent years. This regression is due in part to increased job insecurity. At the same time, some of the major advances made by trade unions in the '70s have largely fizzled out.

We therefore think it vital for unions to renew the fight for working conditions.

That means rebuilding our knowledge base on working conditions. Work has changed vastly in the space of a generation. While it continues to have an enormous impact on workers' health, the conditions in which health is improved and damaged have changed. At the same time, employers are trying to undermine the most innovative aspects of recently-adopted working environment regulations and hark back to the management of traditional risks with measurable direct costs to the firm: prescribed occupational diseases, reported employment injuries and absenteeism.

We therefore argue that trade unions must have the capability to perform their own assessment of workplaces and working conditions, and to compare and contrast their findings with the employer's proposals and the guidelines of preventive services. Only then will there be meaningful consultation of workers' representatives on the different aspects of prevention. Otherwise, consultation may be just going through the motions.

We are not arguing for the trade union assessment to replace the employer's assessment (or that carried out by the preventive services at the employer's request) any more than it should be subordinate to it. It should enable the union to take effective, independent action from negotiation of the employer's risk assessment and at all the different stages of it, as well as in planning, implementing and evaluating the resulting preventive measures.

## Coherent union action across-the-board

One key achievement of union action in the '70s was to show that occupational health was not just a matter of action on recognized occupational risks identified as the cause of employment injuries and occupational diseases, but covered a much wider field of concerns relating to work organization, choice of technology, workplace relations (relations with superiors, gender relations, the situations of and relations between different groups of workers, like immigrants, temps and other insecure workers). In short, there is no aspect of work and social relations expressed in work which does not impact health and welfare in some way.

We must therefore beware of making too-rigid a distinction between the different levels of union action. There is no sharp division between the «general business activity» of the firm (financial situation, jobs, investment, technological advances, etc.) and occupational health aspects (safety and hygiene). The choices made at source will have decisive consequences for health and any purely remedial action is much less effective than a forward-planned, really preventive approach.

One key element of risk assessment is to build a forward planning capability into the trade union approach. Traditionally, occupational health has nearly always given priority to reaction *after the event*: action is taken only when the damage becomes visible - often too late for some workers.

The preventive approach is necessarily complex. Rarely will it be reducible to simple causal relationships. So, where harmful substances are used in the workplace, it is not immaterial whether they are used by well- or ill-informed, shift or night workers, doing strenuous work, with sufficient job security to deploy defensive strategies, or prevented from doing so by job insecurity, etc.

All these strands can only be pulled together in order to take effective action on the fundamental choices if the different union and employee representation bodies in the workplace (health and safety committees or safety reps, works council, etc.) cooperate properly. Similarly, where workers from different firms are working in the same process, cooperation must be established between the union bodies and representatives in all the firms concerned.

Does that mean trade union activists have to become «one-man preventive service practitioners» and acquire a wide breadth of technical knowledge in ergonomics, epidemiology, etc.? We think not. It is not union activists' job either to replace, or relinquish their own responsibilities, to prevention specialists.

The key role of activists is to pull together workers' disparate experiences of working conditions to achieve change on three fronts:

- to make the invisible visible;
- to give collective meaning to individually experienced personal injuries;
- to frame a collective strategy for turning risk perception into preventive measures.

Trade union activists, therefore, have the irreplaceable task of developing an independent knowledge base and collective strategy. Their role in relation to other needs (devising technical solutions, deploying measures to quantify problems, organizing medical surveillance, etc.) is to encourage prevention practitioners to perform their tasks and compare and contrast workers' experiences with the data collected and solutions proposed by the preventive services.

## Section 2

# The key features of the method

**H**ere, we explain four choices which we regard as important and which run counter to much current risk assessment practice.

### Subjective experience: priority for trade union action on occupational health

The essence of trade union action in occupational health is to collect and put across workers' views. This is the union's most important input to risk assessment above and beyond simple external controls on the actions of the different players involved. Workers' subjective experiences are neither a simple «top-up» to other information, nor an irrelevant class argument. They are information central to the study, inasmuch as work is a conscious human activity in which the production process is inseparable from the accumulation of knowledge through which to control and improve it, find practical trade-offs between conflicting demands. Workers are confronted with their work every day. They develop irreplaceable experience of problems and difficulties in the production process, and live with the impact that work has on their health and well-being. This body of knowledge is both denied (especially in regard to recognizing real skills) and exploited by the firm for production purposes, but vastly under-used in determining the health impact of working conditions. The causes of migraine or back pain are rarely investigated until they lead to a visible loss of production or repeated absences.

What relevance does subjective experience have in risk assessment? It is a complex question and a significant social issue. A view of occupational health based on the intrinsic superiority of expert knowledge (technicians, doctors, toxicologists, etc.) echoes the segmentation of work which characterizes the production process, with clear divisions between designers, management, and operatives. This division of labour is a function of production choices (towards money demand to earn a return on investment) and its ownership (the producers are dispossessed of the products of their labour throughout the production process, which is arrogated by the owners of the capital). It is not fundamentally challenged by new types of work organization (like Toyotism or other post-Taylorist systems). It sees workers' subjective experiences as secondary data, extraneous to «objective truth». They may be treated as suspect (consider the efforts expended on identifying unfounded complaints), or accepted as subordinate (for educational purposes to «get the message across»). Box No 2, however, shows how far using workers' direct experiences may be a decisive element in prevention.

We take the opposite view - that subjective experience is central to the improvement of health as being a conscious or unconscious, individual or collective, deployment of human potentials for adaptation, enabling workers to interact with their environ-



ment with varying degrees of success in evading (psychological and physical) injury, disability, disease or death.

So workers' experiences are neither secondary nor extraneous data, but fundamental to enabling strategies for the improvement of health.

This is clearly not to say that all solutions can be drawn directly from workers' experiences. There are several reasons why. Firstly, because those experiences also involve defence mechanisms - a denial of risk or injury. These are complex mechanisms, stemming partly from a defence reaction, which is to deny the existence of risks that one cannot effectively counter. Also, experience singles out what can be immediately and directly evidenced. It tends to ignore or dismiss that which relates to long-term health damage. Finally, workers' experiences do not necessarily establish an overall framework of causal links: it is one thing to notice difficulty in breathing from Monday to Friday, but quite another to make the link between that observation and different working environment pollutants.

This can be illustrated by the following example. Workers in a service company complained of migraines and tiredness. A survey identified one of the causes as the data retrieval programme used. This was stage one: identification of risk factors. But there were other problems: poor ventilation, lack of hygiene in the canteen, risk of accidents leaving the car park, tension between departments, understaffed customer reception service. The lack of a workplace creche made it harder for the women to balance the competing demands of work and family. The assessment comprised a description of company-wide operations (risks do not exist in isolation) to single out the key factors. At this stage, worker participation will prevent priority being systematically given to risks with a visible financial impact or technical risks. It must also ensure that the views of traditionally under-represented groups in the firm are heard (subcontracted staff, temps, women, etc.). Workers' expectations must be taken into account because health and welfare can only be improved through strategies based on them. Through worker participation, the benefits and drawbacks of different solutions for those who have to use them in practice can be pointed out. Finally, participation in analysing problems and working out solutions will make it easier to rally support to overcome the employer's resistance and force through changes in work organization. Experience shows that trade unions are in a stronger position in disputes where preparatory work has been done with the rank-and-file on working out collective demands.

**How can workers' subjective experiences be used in risk assessment? We think three elements can be stressed.**

1. Risk assessment entails both identifying hazards and identifying problems as they emerge from consultation of workers (different methods may be used, like questionnaires, focus groups on hazards/disorders, and health or welfare issues, etc.). In other words, it requires a dual approach: from the risk towards elimination or control, for identifiable risks; from the problem towards identifying the causes and eliminating or controlling them. For example, workers may report tired eyes or skin irritation without having clearly identified any particular hazard.
2. The same combination of objectivity and subjectivity must be present in the description of risks. Proper assessment of risks must combine quantitative approaches (probability, population at risk, severity of harm) with a qualitative approach (workers' expectations and demands), otherwise the long-term consequences, and the welfare- and mental health-related aspects, will be overlooked. Practice has shown the failings in risk assessment when it moves from the field of traditional industrial hygiene and safety of machinery to medium- or long-term multifactorial hazards (e.g., musculoskeletal disorders).
3. It is also essential to refer to workers' experiences when developing preventive and protective measures. The proposed solutions must factor in real-life work situations, users' demands, comfort, etc. There is nothing worse than controls that are not applied: they create the illusion of preventive measures having been taken. There can be no prevention if the measures are not first checked to see if they are acceptable to the workers, and that means checking both the objective (e.g., suitability of a mask to filter the type of substance to be protected against) and subjective aspects. There is also a vast overlapping area where objective and subjective aspects are inextricably linked (requirements of comfort, communication, etc.).



## Equality and working conditions

We believe that only work which is gender-equal is healthy and socially acceptable. This is not a purely political affirmation, although it remains a worthwhile political battleground. It is based on two findings:

1. most work is not gender-balanced;
2. gender segregation of work makes hazards invisible.

The evidence of gender imbalance in work is that:

- women are not concentrated in the same production sectors;
- they lack the same training and career opportunities;
- they are more affected by job insecurity on both the legal (e.g., part-time employment contracts, the black economy, etc.) and social fronts (the fact that unwaged reproduction work is essentially women's lot is a major factor of job insecurity which significantly influences the conditions for improvement of their health).

There is a significant relationship between gender segregation in work and work-related health hazards, for both women and men alike. To take a few examples:

- many of the job requirements in essentially female occupations like nursing and child care (patience, extreme watchfulness for danger situations, attention, conscientiousness, etc.) are regarded as natural female characteristics rather than part of the job profile requiring particular skills. The result is that the demands these requirements may place on human health is ignored, and they are not socially recognised, which itself adds to the difficulty of protecting and improving health;
- in some male occupations like building and mining, the trade's self-image internalizes some kinds of health damage as evidence of manliness and puts the individual under extreme pressure to live up to the dominant group image (excluding those who fail to do so);
- workload analysis tends to reinforce the invisibility of women's work. Invisibility in time and societal space in general: women perform most of the unpaid work,

and that significantly affects their ability to perform paid work. Invisibility in paid work itself: repetitive work by women textile industry workers is considered both less skilled and less dangerous than that of men in the metalworking industry involving strenuous efforts in the manual handling of heavy loads.

Traditionally, gender equality and occupational health have been regarded as separate fields, both legislatively and in trade union organization. That separation creates two takes on the same reality.

But both views (very broadly outlined above) reflect the same single reality which is known to have different consequences on men and women workers' health. That aside, a few

Working environment from the equality viewpoint	Working environment from the occupational health viewpoint
<ul style="list-style-type: none"><li>▪ wage discrimination</li><li>▪ collective agreements setting skill categories less favourable to women</li><li>▪ women concentrated in «non-standard» jobs</li><li>▪ lower occupational mobility for women</li><li>▪ essentially male line organization, etc.</li></ul>	<ul style="list-style-type: none"><li>▪ hazards: physical, chemical, biological agents</li><li>▪ posture- and movement-related accident hazards</li><li>▪ safety of work equipment</li><li>▪ effectiveness of personal protective equipment</li><li>▪ «women» generally mentioned only in relation to reproductive health (protection of pregnant workers), etc.</li></ul>

practical questions are enough to show the merits of going beyond the flat, two-dimensional images of these views to a more rounded view in which equality and health issues are shown to be mutually interlinked.

1. The lack of creche facilities in or near the workplace will both add to women's workload (occupational health issue) and restrict their promotion or simply employment opportunities (equality issue).
2. Electronic circuit assembly is a good example of how very exacting demands (constituting a very heavy workload) are combined with a denial of skills (using the argument that «these are typically women's hand movements»). Women electronic circuit assembly workers are required to carry out high precision work, at a rapid pace subject to very strict constraints (posture, movements, restricted work areas, etc.). A large part of the workload and hazards are denied on the basis that they come naturally to women (manual dexterity, propensity for neat, precise work, ability to perform repetitive work, etc.). All these characteristics, however, actually seem to be quite unnatural considering the high turnover of women workers who do these tasks. Even that turnover itself is «justified» by the secondary, not to say intermittent, importance of paid work in women's lives. Conversely, the arduous working conditions in building and mining are inextricably linked in Western Europe with almost exclusively male employment.
3. Musculoskeletal disorders have reached epidemic proportions among women textile industry workers in Spain. Their nature as occupational diseases was long denied from the strict health and safety viewpoint (doctors tended to ascribe them to individual predisposition, the result of housework, etc.). Then, they were considered from an ergonomic viewpoint: posture and movement analysis showed the close link between their work and their disorders. Valid as the ergonomic analysis clearly is, it remains incomplete. For one thing, the recent epidemic also reflects major changes in society: in the past, women started work at a very young age, but many stopped work long before retirement age (through marriage, after the birth of a first or second child). The current generation of textile workers, however, is one whom changing economic conditions have aged by keeping them in work up to retirement performing generally repetitive tasks with few prospects for upwards promotion or sideways movement in other sectors. It is a decisive factor of the current «epidemic.» Also, there is a link which cannot be ignored between job dissatisfaction, feelings of worthlessness, and the weakening of defences against illness. In other words, how far can the specific question of musculoskeletal disorders be separated from a broader context in which the technical and social conditions of work gradually wear down individuals' resistance to illness?

Night work can only be properly addressed if the twin requirements of gender equality and improvement of health are understood in a social context where women bear the brunt of family responsibilities, where they are unable to go out alone at night for fear of attack, etc.

So, risk assessment must take on board the interaction between job segregation and health. It must allow for the fact that scientific studies provide only very piecemeal data on the relationship between women's health and work and that here more than elsewhere, expert knowledge and rules are not a sufficient yardstick. It should ask: how does inequality at work affect women's health? And then extend the question

to: how does inequality at work also affect men's health? Examples abound of the health impacts of monotonous and repetitive work, which affects women more severely than men. In personal service occupations (nursing, social work, teaching, counter and check-out staff), the dominant social values («women must be naturally pleasant, conscientious, cheerful») are a very heavy burden which adds to the difficulty of their working conditions. Obviously, risk assessment alone cannot address all the factors that perpetuate gender segregation at work because many of them are not workplace-related, but it can set the criterion that improvements in working conditions must always aim to produce jobs which give men and women equivalent health and welfare protection. We therefore argue that risk assessment cannot be a two-stage process, starting from a general gender-insensitive assessment and moving on to examine the specific problems of women as a «high-risk group.» Instead, the assessment should be gender-sensitive from the start, to identify the differential effects of the sexual division of labour on men and women.

Is this to say that trade union equality policy and occupational health policy are one and the same? We think not. Each policy addresses its own issues, but each can draw benefit from the other's experience. The problem could be expressed thus: trade union policy has to promote equality by, among other things, ensuring access for both sexes to all sectors and jobs in equal conditions (pay, status, etc.). Occupational health policy has to identify which jobs, due to health-related factors, are unsuitable to either sex, so as to transform the working conditions of those jobs.

For a more detailed analysis and case studies, readers are referred to Karen Messing's book, *Integrating Gender in Ergonomic Analysis. Strategies for Transforming Women's Work*, published by the TUTB in 1999.

## Exclusive or inclusive work: permanence counts

Permanence is a key factor to include. For employers, labour is a renewable commodity (a «human resource») in extremely variable conditions: highly-skilled jobs in which work experience is important require a stable labour force (which encourages improved working conditions), while other jobs can be filled with a fluctuating workforce whose numbers can be varied according to the firm's needs (temporary staff). For workers, there is another aspect to permanence (in the sense of stable employment in a firm or sector). It is in itself a factor of health: it is an established fact that unemployed persons, women who are exclusively home-makers, and generally, anyone excluded from the world of work, tend to suffer worse health than those in work. Aside from the material aspects whose importance must not be overlooked, stable employment is directly connected to other important aspects, like formation of cohesive units, personal development (not just in terms of production capacities), self-esteem, social identity, etc.

It has been shown time and again that new forms of work organization often create exclusion in the long term. A few people manage to «hold out» for a few years working non-standard hours, heavy overtime, a wide range of starting and finishing hours, and a generally more intense pace of work. We believe that such working conditions entail major risks, which may not manifest through illness in the short-term. So, job evaluations should consider not just adapting the work to the worker at that time, but also the ability of that work to continue adapting to the changing features of an ageing worker and the cumulative effect of the daily wear and tear of work.

## Organization of time and work intensity

Working time and its organization is not a risk in itself. It is almost always the basic unit by which work is measured, and as such, like any unit, it is an ultimately interchangeable factor. An hour is an hour, unless the calculation is refined by applying coefficients of adjustment. For example, an hour's overtime, or an hour's Sunday or night work may count as 1  $\frac{1}{2}$  or 2 hours.

Looked at from the viewpoint of occupational health and welfare, time loses this abstract, interchangeable quality. No two hours are the same, and the way time is organized has a major positive or negative impact on the improvement of health.

Two things seem particularly important:

- to check what constraints a specific organization of time imposes with particular reference to workers' private lives;
- to consider the organization of time in terms of predictability (working hours known well in advance or not), workers' opportunities to make decisions or exert an influence (flexible working hours which are not simply to suit the firm), and its relations to workers' lives at work.

Work intensity is also an important issue. It is so closely intertwined with working time that a correlation is often observed between moderately long hours of work and its intensity. Work intensity is what gives «depth» to each unit of time.

## Section 3

# Our approach and current models of risk assessment

2. Horst, Rakel (1996), *Workplace Risk Assessment. A Comparative Analysis of Regulatory Practices in Five EU Member-States*, Norwich: Environmental Risk Assessment Unit, p. 45.

There are many risk assessment methods - too many to describe here. One author who has studied different national models concluded not entirely seriously: *«why not a combination of Danish decision-making, German comparability (between different firms), British consistency, Dutch competence, the Swedish overall view, and a mixture of British and Danish (non-)complexity»*<sup>2</sup>. Perhaps he stopped there only because his study covered only five of the fifteen EU countries!

For practical reasons, our classification is based on the main «inputs» used. The overall basic principles are therefore derived from a consideration of the questions asked. Obviously, this is only a partial analysis, and many other aspects deserve to be studied. The following table therefore suggests five main types of risk assessment, focussed on:

I. Production cycle analysis
II. Risk factors
III. Problem analysis based on expert knowledge
IV. Problem analysis based on workers' knowledge
V. Systemic assessment of company occupational health management practice.

In practice, a combination of different basic types will most frequently be used. For example, the French «event tree» method starts from an objectively evidenced problem (an employment injury) but extends to many aspects of production cycle and business management system analysis. It can therefore be considered as a combination of groups I, III and V.

Above all, we do not say there is any one «right» option, and reject what other possible inputs have to offer. We believe that all questions have real relevance, but that because risk assessment is not intended to provide an encyclopaedic description of work, some inputs necessarily have to be given priority.

Our proposed approach is based on analysis of two priority levels.

Firstly, an analysis of the production cycle and the working conditions it dictates. This goes far beyond the idea of occupational risks alone to give unions command of all information on work organization. No doubt it is an ambitious and difficult approach, but the game is worth the candle, for it limits one of the most disastrous effects of the work segregation which dispossesses men and women workers alike of an overall vision of their own activity.

The second level is that of workers' experiences of how working conditions impact their health and welfare. That impact is obviously much more far-reaching than might be suggested by the «official» indicators alone in the form of reported employment injuries, prescribed occupational diseases and the rate of sick leave.

Table 1: **Risk assessment «inputs»**

<b>I. Production cycle analysis</b>	<b>II. Risk identification</b>	<b>III. Problem determination I. «Objective indicators» approach</b>	<b>IV. Problem determination II Subjective approach</b>	<b>V. Systemic assessment</b>
<p>Composition of workforce</p> <p>Production inputs and outputs</p> <p><i>Work organization:</i> - «software» (division of labour, line relations, cooperation, communication, etc.) - «hardware» (equipment, workplace design, etc.)</p> <p><i>Key instruments</i> * generally complex methods of reconstructing the production cycle often in the form of flow charts showing inputs and outputs, supplemented by more detailed questionnaires on specific aspects</p> <p><i>Problems and difficulties</i> Requires a relatively detailed analysis of work activity; Necessitates time, prior training and sound cooperation between the different workplace unions.</p>	<p>Chemical hazards</p> <p>Physical hazards</p> <p>Biological hazards</p> <p>Psychosocial hazards</p> <p><i>Key instruments:</i> * checklists reviewing the different categories of risk sometimes supplemented by an assessment of preventive measures taken</p> <p><i>Problems and difficulties</i> Often prioritizes known risks; does not always account for interactions between risks (in the strict sense) and other conditions (e.g.: accident risks are not the same for all categories of worker (temps, employees posted from outside firms, etc.); the concept of «risk» does not always fully account for situations whose health effects are not clear-cut.</p>	<p><i>In the workplace:</i> Data on employment injuries, occupational diseases, sick leave</p> <p><i>In society:</i> Overall figures linking indicators to sectors, occupations or exposure to specific risks</p> <p><i>Key instruments:</i> * statistics available in the firm and society * technical and scientific literature</p> <p><i>Problems and difficulties</i> The firm may recognize only indicators entailing an immediate and visible financial cost; indicators recognized in society depend very much on the labour movement's ability to influence research and give momentum to public health policies.</p>	<p>Data from individual complaints (possibly via the trade union, occupational health doctors, labour inspectorate, etc.)</p> <p>Data from questionnaire surveys, interviews, etc.</p> <p>Data from demands, disputes and organized action</p> <p><i>Key instruments:</i> * surveys, questionnaires * demand-based approaches</p> <p><i>Problems and difficulties</i> The visibility of problems is not directly connected with their severity (e.g.: insufficient information may result in carcinogens remaining completely invisible because they produce no immediate injury and act long-term).</p> <p>Collective demands may be held back by divisions, lack of confidence, etc.</p>	<p>Company safety policy</p> <p>Organization of safety in the workplace (responsible officials, preventive services, etc.)</p> <p>Provision for worker participation (health and safety committees, etc.)</p> <p><i>Key instruments:</i> * systems audits (especially based on quality certification standards)</p> <p><i>Problems and difficulties</i> Sound safety organization does not resolve the power issue: «how are priorities set?»</p> <p>Danger of entrapment by formalistic quality certifications which describe procedures without verifying outcomes.</p>

## Section 4

# A «working guide» for the workplace industrial relations system

This part is not easy to use. Industrial relations systems vary widely between countries and workplaces. Our starting point is that as a general rule, all firms have both general (e.g., works councils) and specialized health and safety (e.g., health and safety committees) provision for employee representation. Some of these are joint bodies (composed in principle of equal numbers of employers' and trade union representatives), others are not. The linkages between the workplace representation and trade unions may also vary widely (some bodies consist only of union representatives, others are elected by the entire workforce, etc.).

The essential thing is to identify functions independently of the structure, which may vary hugely.

To use a metaphor, trade union action for health at the workplace could be likened to a pendulum, swinging from independent action to agreement and back to independent action. Agreement itself may be based on two types of consideration: identifying issues of common interest<sup>3</sup> and consensus and identifying issues on which interests are opposed but where an acceptable compromise has been reached through the workplace power relationships.

- **Independent action** to have specific ideas on the problems and the most relevant solutions from the workers' view.
- **Agreement** as a means of incorporating as many as possible of these ideas in the workplace risk assessment and prevention plans.
- **Independent** action again to critically evaluate the company's actions and frame new proposals.

3. A common interest does not necessarily imply a common view. So, employers and workers may share a common interest in replacing carcinogens by less dangerous substances, the former because they have a statutory duty to do so, the latter because they intend to protect their life irrespective of the law.

Evaluation des risques		
Liste syndicale	Liste concordée	Evaluation critique
<b>Autonomie</b>	<b>Accord</b>	<b>Autonomie</b>
Propositions de prévention	Plan de prévention	Contrôle Et suivi
Planification de la prévention		

These are the strategic principles we have tried to put into practice in our proposed methodology for risk assessment. We must make it clear that our methodology is applicable to all problem-identification and -solving prevention measures in a workplace, even in very specific areas. To some extent, it aims to enable workplace industrial relations systems to address all health and safety issues. In this way, it aims to wrest the monopoly on these issues away from the specialists and experts, whether serving employers', trade union or other interests.

Our proposed methodology can be simplified into an eight-point flow chart:

Union management of the workplace risk assessment process

**1. Diagnosis of the situation: trade union strategy**

assessing the workplace situation

involving the workers

laying down the ground rules

GENERAL REPRESENTATION STRUCTURE

(works council, union branch or equivalent)

**2. Problem determination: trade union list**

work process analysis

workers' opinion

observation of working conditions

HEALTH AND SAFETY REP (or equivalent)

**3. Starting the assessment: negotiation**

concerted list

risk criteria

risk assessment plan

HEALTH AND SAFETY COMMITTEE (or equivalent)

**4. Collecting information on risks**

technical information

interaction between technical experts and unions

ensuring impartiality

HEALTH AND SAFETY REP (or equivalent)

**5. Risk assessment**

comparing data with criteria

describing the risks

setting priorities

HEALTH AND SAFETY COMMITTEE (or equivalent)

**6. Trade union assessment of alternatives**

proposing solutions

evaluating and choosing alternatives

map out negotiating strategies

GENERAL REPRESENTATION STRUCTURE

(works council, union branch or equivalent)



## 7. Negotiation of a prevention plan

preventive measures

implementation times

means and resources

HEALTH AND SAFETY COMMITTEE (or equivalent)

## 8. Union follow-up and control

are the measures being applied?

have working conditions improved?

are the workers satisfied?

HEALTH AND SAFETY REP (or equivalent)

**Stage 1:** Before initiating the risk assessment process, the joint shop stewards' committee must review the most relevant likely risks in the current situation. Three key issues:

a) general situation of the firm and prevention policy

b) rules governing participation («ground rules»)

c) workers' interests.

From this initial assessment and the salient characteristics of the production process, they must map out relevant strategies to optimize the conditions of the risk assessment, which may entail groundwork with management (procedure bargaining) and workers (information, awareness-building).

**Stage 2:** In line with the shop stewards' decision, the prevention rep identifies occupational health problems based on the subjective experiences of the workers concerned. The aim is not to sound out workers' impartial opinions, but to collect their personal experiences in order to build up a body of information from which the rep can make an initial assessment of actual problems («rapid assessment»). This information will include the rep's own knowledge of the production process, direct observation of work done, as well as existing company reports, records and books. The end result is a «trade union occupational health checklist», which may require priorities to be set.

**Stage 3:** With the union checklist, the union can start up independent bargaining with management on which problems need assessing and which can be resolved directly without further ado. This means comparing the union and employer's lists and trying to work out a joint list. The best place to do this is in the health and safety committee. The scope of bargaining should include attempting to reach a consensus on risk assessment criteria and methods. Negotiation of risk criteria (when does the risk become too great?) is key in that it dictates all later assessments on the need to act. That is why technical criteria have to be compared and combined with workers' subjective experiences to create a composite. Whatever else, it is not acceptable to set risk levels with disregard for the opinion of those who run them. When negotiating the risk assessment plan, a balance must be sought between technical processes and pre-set trade union strategies.

**Stage 4:** Collecting specific information with which to assess problems may be regarded as an eminently technical stage. But in some cases and for some specific

problems, trade unions will have to work with technical experts or compare views, as described in the problem identification stage. Be that as it may, this is the time to establish relations with technical experts so that the prevention rep, while respecting their right of independent action and professional independence, yields neither his control over the application of the criteria and methods established, nor his right to be kept informed of the results.

**Stage 5:** The information collected is usually written up into a technical report which the prevention rep must be able to assess critically, taking account of the necessary trade union consultation and opinion of the workers concerned. Based on his critical assessment, a fresh consensus must be sought with the employer's representatives on how the assessment findings are to be interpreted in the light of the pre-set criteria, and whether or not more information is needed before control measures are taken. Once again, the health and safety committee is the best place for this discussion.

**Stage 6:** Once all the information is in, the key question has to be addressed: what can be done? Here, the joint shop stewards' committee once again has to apply itself to working out the best ways of solving the problems identified, independently and in agreement with the workers. To that end, the prevention rep must explain the different alternatives available for each problem and discuss with the other shop stewards which of them are the best and how to go about implementing them.

**Stage 7:** The prevention rep is again mandated by the trade union structure to negotiate with the employer a plan of preventive measures to be applied which includes the type of measure to be developed, implementation times and effectiveness criteria, bearing in mind that the effectiveness of a prevention plan very much depends on the resources allocated and the time-frames set for its implementation.

**Stage 8:** The union must follow-up and control these plans to check their suitability or, if needs be, start the process over again from Stage 3. Once the plan has been agreed, the workers' health and safety reps must resume their independent action with three aims: ensuring that the firm implements the measures; ensuring that the measures are effective in preventive terms; and ensuring that the workers are satisfied with the changes made.

## Strengthening linkages for trade union preventive action

The risk assessment process is a key focus for organizing prevention in the workplace, and so requires a web of linkages to be forged between all the players. For the unions, risk assessment must be used to work out and consolidate the different frameworks of relations which the prevention rep needs to play his role as a workers' representative and create the optimum conditions for negotiating improved working conditions.

Firstly, the prevention rep must strengthen his linkages with the rest of the trade union structure and representation (works council, industry federation, regional/district branch, etc.) to ensure that the preventive action is not isolated but forms a coherent part of the overall trade union strategy.

The situation analysis, along with the proposed improvements and ways of making

them effective, must be organized with all parts of the trade union structure, which must take responsibility for the decisions and assume its role to the employer and the workers.

The first people with whom the prevention rep must obviously establish relations are the *workers of both genders*, directly or through different trade union or representation bodies. Relations with the workers must be ongoing and two-way. Ongoing because it makes the prevention rep's role as a representative meaningful, and because it is the key to getting agreement on prevention. Two-way, because information can be channelled both ways, views discussed and composite proposals produced, improved by past work on both sides. The key aspects of this relation with the workers are the decision to instigate the risk assessment process (willingness to participate), identification of problems to be assessed (incorporation of subjective experience) and proposed improvements to working conditions (support of workers).

Another level of relations is that established with prevention technicians-practitioners. Traditionally, these professionals are very much under the employer's sway. Relations with the prevention rep can act as a counterbalance to strengthen their independence. Also, comparing technical knowledge with workers' experiences is a necessary precondition for both sides to come up with effective prevention proposals, even different ones. Relations with technician-practitioners must be based on strict respect for one another's independence. They will cooperate particularly closely when setting risk criteria, collecting and combining information for the detailed problem assessment.

The necessary end result of the risk assessment process is the negotiation of proposals with the *employer's representatives*. That means that relations must be kept up with them from the outset, otherwise the entire process may collapse; this will create feelings of frustration among the workers and interfere with new initiatives. So the trade union strategy must be carefully mapped out, specifying clearly from the outset what the firm can do and what the «ground rules» are for working out and negotiating the prevention proposals. Once the problems have been assessed, attempts can be made to use workplace power relationships to exert pressure/negotiate for improved working conditions.

## Workers' involvement

What gives our proposal its validity is quite simply its value in eliciting workers' commitment to prevention as part of the trade union strategy to unite all workers in the struggle for occupational health. In other words, if the application of this methodology puts shop stewards in a stronger position to negotiate prevention measures, we consider that our proposal is valid. If not, other ways forward must be sought. The purported lack of interest by work colleagues in occupational health must not be taken as an excuse for trade unions to do nothing, but should be a stimulus to step up and retarget actions to sweep away the obstacles to participation.

While maximum participation is the general aim throughout our proposed process, there are specific times when participation is paramount.

One of these key moments is the initial problem identification. The prevention rep does not start identifying risks out of thin air. In our proposal, he must reconstruct

the work cycle, work out an initial risk scenario based on the available information and carry out site inspections. But, as stated earlier, the priority focus of all this information is the workers' subjective experiences. These are the yardstick against which to compare the risk scenarios and they define the rules for the site inspection.

Various factors involved in the formation of that subjective experience (experiences, information, ideas, etc.) may colour the way problems are perceived. That enables specific interactions to be set up between reps and workers (awareness-building, consciousness-raising, debates, information dissemination, etc.) to work out more positive attitudes to health protection, but always using the subjective feelings of those exposed to a risk as the starting point.

The tool we propose to collect workers' subjective opinions is the «*hazard and damage questionnaire*». In practice, this can be used in a variety of ways, depending on workers' readiness to participate. The minimum level of participation is that of key informants (people specifically concerned who know the problems inside-out), when the questionnaire can be used as a guide for collecting their personal opinions on the situation for all workers. If a large proportion of workers is willing to fill out the questionnaire, a full picture of the situation can be built up from the individual responses. Another step forward would be through discussion groups of all the workers concerned: the questionnaire can then be used as a guide to summarize the discussions, or the results of the individual survey can be put to it if they are available. If participation is high, large-scale forums can be called to stage a general debate on the information collected and call for wider involvement in the process.

More widespread participation will allow more ambitious objectives to be set, such as setting up ad hoc groups of particularly concerned workers to explore specific problems. Different forms of participation can be combined, such as meetings with key informants or discussion groups on initial problem identification, individual surveys to collect data on top of other information, and even mass meetings of different groups to compare information and examine possible solutions.

Also, consultation through formal questionnaire-style instruments is not always either necessary or appropriate. The better option is to collect opinions volunteered by workers at the different stages of the process. So, site inspection is not just a matter of observing, but more especially questioning and listening to the persons concerned so as to compare and add to our information.

Proposals, too, must be framed through procedures for direct consultation of workers. The same methods of participation used to identify problems can be used again, although individual participation is less relevant here while group encounters which enable wider-ranging debate are more useful. Other inventive ways of stimulating wide-ranging participation can also be devised, like poster displays of assessment findings for each work area and lists of action proposals with requests for approval, or suggestion boxes.

Finally, information is an essential means of stimulating participation across the workforce. Information channels on the conduct of the risk assessment process absolutely must be kept permanently open. Keeping workers informed must be a constant part of the prevention rep's duties: as awareness-building in the early stages, through support for the trade union proposals at all stages of negotiation, and as the basis of the choice of measures when the process is nearing conclusion.

## Negotiating with the employer

There are also times during the risk assessment process when negotiations with the employer come to the foreground. While union bargaining power generally depends on the workers' support, negotiators must never lose sight of the objectives, and must use appropriate strategies.

The first thing is to set up the assessment and define everyone's role. This is what we call «the ground rules» which the two sides must work out together. The trade union will want to specify the procedure in as much detail as possible and widen participation. Procedurally, negotiators will have to specify the successive stages, ways of getting and exchanging information, relations with technical expertise, deadlines, etc. For participation, they will need to set the times and frameworks for consultations, as well as independent union action (direct contacts with workers, own consultations, right to hold different opinions), reps' access to information, recognition of the right to take initiatives and make proposals, etc.

Negotiations will also have to take place with the employer to agree a list of problems, without which no real progress can be made on union participation in a risk assessment, and there is a danger of being driven into a process of ongoing conflict and disputes. The purpose of negotiations is to expand the traditional content of assessment centred on specific health and safety risks and at the same time avoid pointless assessments of problems for which solutions already exist. It is essential to prepare these negotiations properly, getting all the terms clear beforehand and working out solid lines of argument based on meticulously collected data.

Defining risk criteria and analysing assessment information may sometimes be quite complex matters requiring assistance from an independent trade union technical expert to negotiate them directly with their own advisers present in the negotiating bodies (health and safety committees) or by asking for the union's prior assistance.

Finally, proposed measures must be negotiated. Situations here may vary widely depending on the employer's willingness to negotiate and the workers' support for the trade union proposals. Negotiators must come prepared to counter employers' «reflex» reactions like claiming that costs will be too high, trying to water down prevention by putting personal protective measures first, blaming workers for putting themselves at risk, etc. Negotiators must set the objectives beforehand, select and rank a series of proposals and set implementation times. Each proposal must be worked out from and based on different factors: health benefits, technical viability, economic implications, potential benefits to the firm, etc. Finally, a negotiating strategy must be set and roles assigned to the reps on the negotiating team (direct relations, summary and assessment of the conduct of negotiations, observation and renewal, etc.).

## Knowledge for action

A risk assessment does not set out to describe all working conditions in minute detail. It is an instrument for prevention and union mobilization in the workplace.

So wide is the range of problems encountered, so complex the responses needed, and so difficult the task of organizing and negotiating on such vast issues, that interest will almost inevitably slacken from time to time.

Risk assessment must form part of a long-term trade union action plan. It is a key event in the strategy for rallying forces, which must promote unity between all trade union bodies in the workplace, break down the isolation of prevention reps and strengthen links between trade unions and the workforce. A trade union team which successfully gives practical, collective expression to diffuse and unexpressed needs acquires unquestionable legitimacy.

Risk assessment must be a tool for identifying priorities for action in actual workplace conditions. These priorities may sometimes seem insignificant compared to general needs. But the essential thing is to trigger a momentum for change without losing sight of other matters that must come onto the agenda sooner or later.

One final remark: the proactive trade union action which is essential to improve working conditions applies not just in, but also outside, the workplace. We believe that instruments for socialization must be developed in the near future which, based on workplace assessments, will enable problems to be detected and priorities set at the highest levels.

For interest, some possible «extensions» of the scope of risk assessment include:

- multinational groups of undertakings, especially in European Works Councils (the TUTB guide Health and Safety in European Works Councils, published in 1996, is recommended reading);
- a production sector, including the different levels of subcontracting, inasmuch as working conditions are largely dictated by the parent company's requirements, or because of the tendency to export risks from the main firm out to secondary or subordinate firms;
- an entire industry-related sector, a specific territorial level (regions, countries, groups of countries), especially European Industry Federation level. The recent French lorry drivers' strike showed the importance of discussing working conditions beyond the purely national framework;
- a specific area, where job insecurity is rising and certain production activities fragmenting.

## Section 5

# **Tools for trade union management of workplace risk assessment**



*Trade union management of  
workplace risk assessment*  
Work book n° 1

# Analysis of the situation

Guidelines for a trade  
union strategy

COMPANY: .....  
WORKPLACE: .....  
PREVENTION REP: .....  
DATE: .....



## Introduction

**T**his work book aims to promote thought and discussion around some general issues that can shape union strategy in the risk assessment process. It is general guidance, so collecting the information needed should not be too onerous.

### Objective:

To promote a debate among workplace union reps (or corresponding union body) on the UNION risk assessment STRATEGY needed to address two questions: a) what groundwork is needed to make union action most effective, and b) what are the broad lines of the union action plan on risk assessment.

### This work book contains:

- Company identification details.
- Three data sheets on aspects essential to analysing the situation: general situation in the workplace, company prevention policies, workers' interests.
- A list of preventive measures which are essential for the union strategy.
- Outline of the general union action plan.
- Appendix: union strategy flow charts (usable as guidance for drawing up the plan).

### How to use it:

- The prevention rep or health and safety rep writes a short description of the situation in the workplace and workers' attitudes to the three proposed data sheets.
- A discussion of the description is set up with the other union representatives to settle on what strategy to adopt.
- The agreed actions and implementation plan can be written down in the pages of this work book included for the purpose.

*NB:* it is vital that this work book be used only to lay down a coherent union strategy and action plan before embarking on a process as complex as risk assessment. If you think it can help you to do this, use it. If you think you can improve on it, please do so. If you don't find it useful, don't bother with it. Whatever else, don't rush into it without giving careful thought beforehand.

## General information

1.1 Core business .....

1.2 Collective agreement by which it is governed .....

Health and safety provisions of the agreement .....

.....

1.3 Number of workers

	Men	Women	Total
Permanent			
Temporayre			
Total			

1.4 Are there subcontractors in the workplace? ..... No. of subcontractors: .....

No.. of subcontractors .....

Men: .....Women:.....Total: .....

Are there temporary workers in the workplace?

Men: .....Women:.....Total: .....

1.5 Level of absenteeism last year .....

1.6 No. of employee prevention reps.....

Union membership .....

1.7 Health and safety committee: No ~ Yes ~ Composition .....

.....

1.8 Preventive service:.....

in-house ☐ Composition: .....

other ☐ Owner/Company:.....

none ☐

1.9 Company health and safety agreements .....

.....

.....

1.10 Economic factors which may affect implementation of preventive measures

.....

.....

.....

.....

.....

.....

.....

## General situation of the company

Assessment of the situation as regards:

	0	1	2
• Current economic situation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• economic trend in recent years .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• technological innovation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• technological level compared with the industry .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• productivity .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• environmental sensitivity .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• willingness to negotiate .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(0: good; 1: average; 2: poor)

Assessment the situation:

## Company prevention policies

Level of union satisfaction with:

	0	1	2
• general prevention planning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• definition of specific prevention objectives and implementation of concrete plans .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• funding for prevention objectives.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• suitability of technical resources necessary for prevention objectives .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• independence and professionalism of technical prevention staff .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• prevention objectives built into the company management system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• policy on informing workers about the risks of their work .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• policy on training workers in risk prevention .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• consultation and involvement of workers and their representatives .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• operation of health and safety committee.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• collective prevention given priority over personal protection .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• reporting, control and active search for health and safety problems .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• regular checks on work station health and safety conditions .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• attention paid to workers' health.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(0: high; 1: average; 2: low)

Assessment the situation:

## Workers' interest

### Workers' interest in risk prevention:

	0	1	2
• general level of information on health and safety matters .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• degree of concern with health and safety issues generally .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• concern with any specific health and safety issue (*) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• confidence in prevention representatives .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• satisfaction with how the union handles health and safety matters .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• confidence in the labour inspectorate .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• confidence preventive service technical staff .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• confidence in works doctor .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• willingness to take action or make complaints personally .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• willingness to join in collective actions or initiatives .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• willingness to take part in risk identification and assessment .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(0: high; 1: average; 2: low)

(\*) Please specify: .....

#### Assessment the situation:

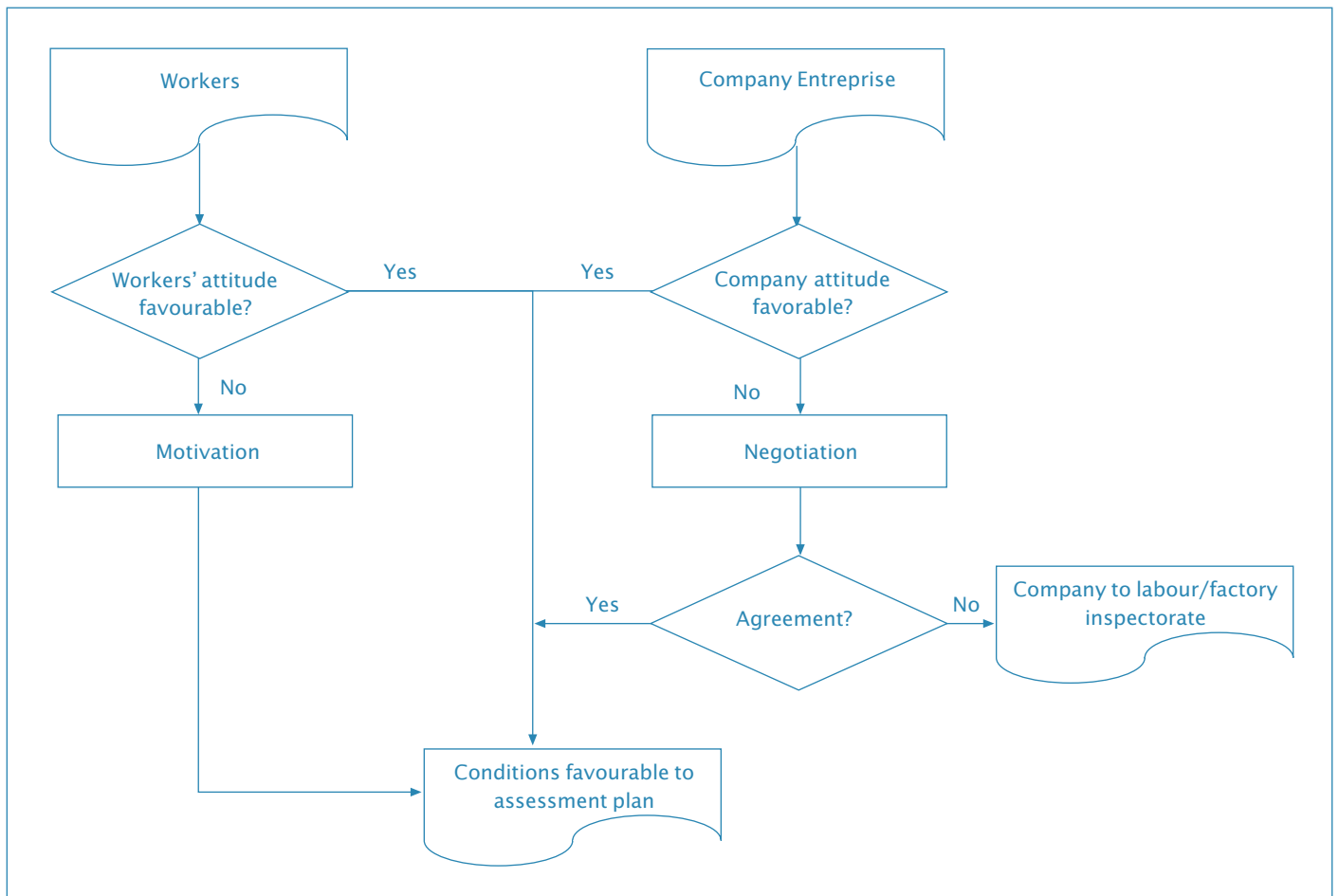
	Union strategy: groundwork		
	Favourable conditions	Unfavourable conditions	Groundwork needed
As regards company management			
As regards prevention service technical staff or professionals			
As regards the workers			

### Union implementation plan

## Appendix

### Flow charts on union strategies

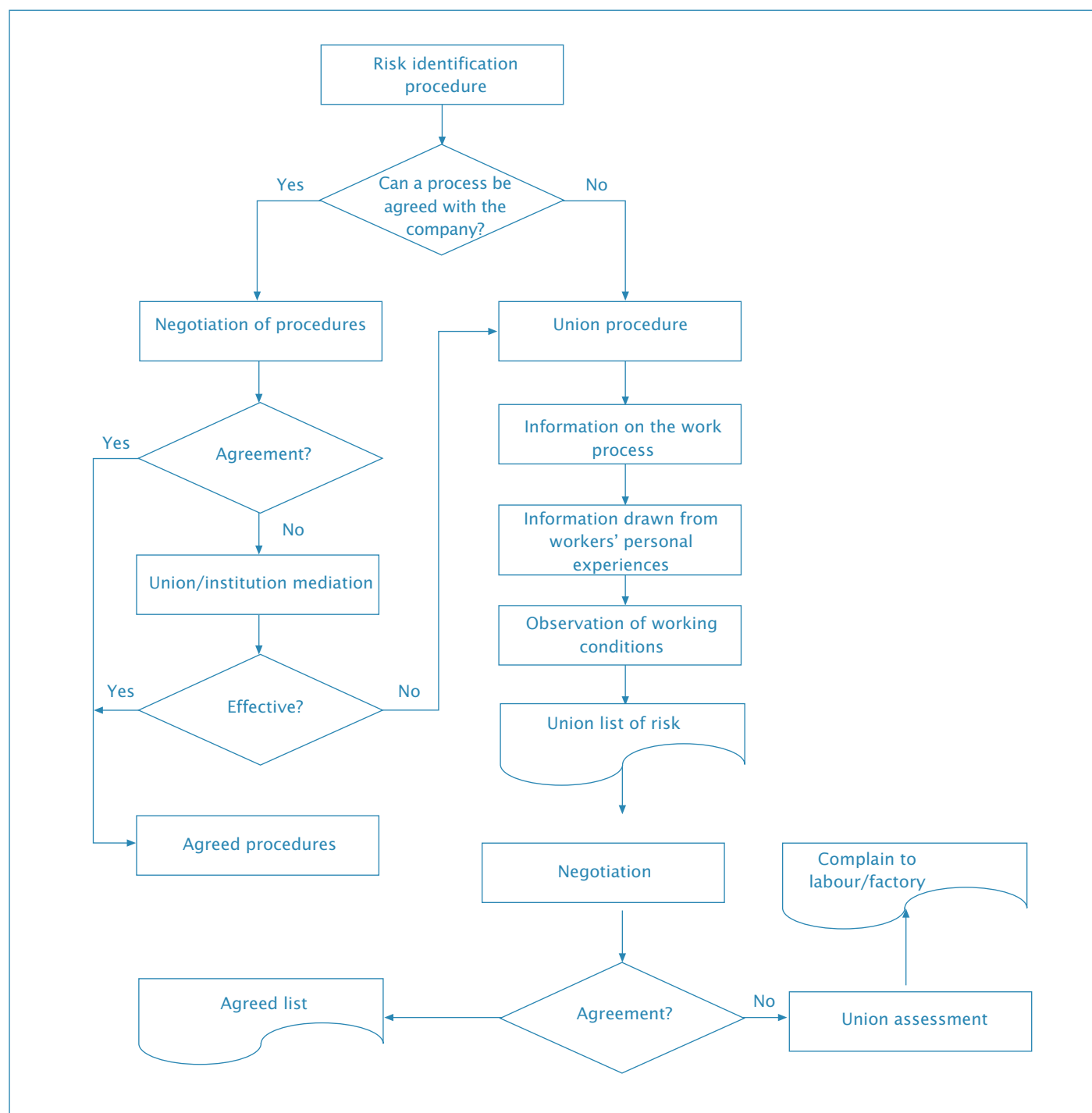
**Diagram 1: analysis of the situation**





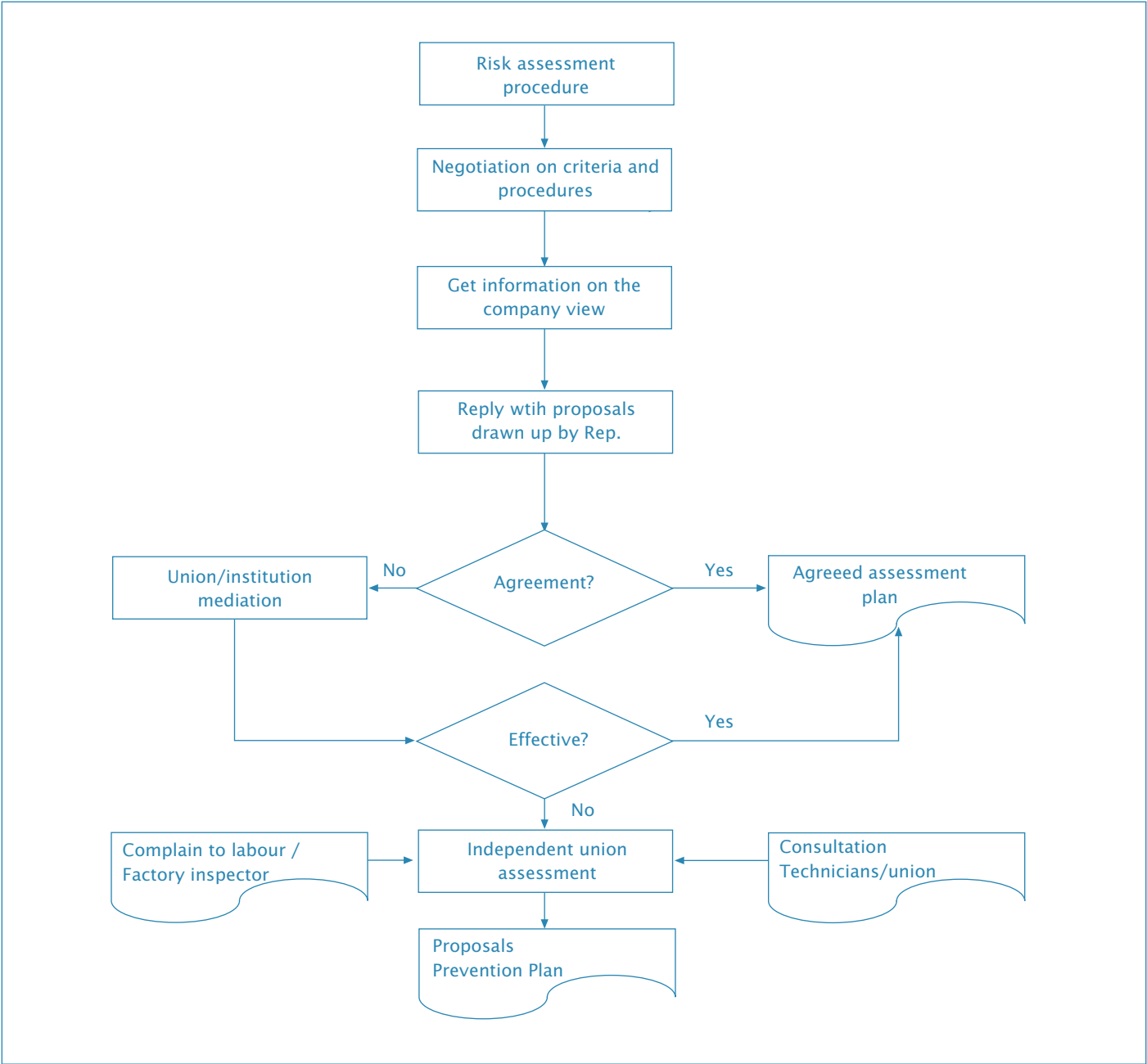
## Flow charts on union strategies

**Diagram 2: risk identification**



Flow charts on union strategies

Diagram 3: risk assessment





*Trade union management of  
workplace risk assessment*  
Work book n° 2



# Preliminary risk identification

Guide to work process  
description

COMPANY: .....

WORKPLACE: .....

WORK SECTION OR AREA: .....

PREVENTION REP: .....

DATE: .....

## Introduction:

**T**his work book and the activity we are suggesting comprise an approach to risk assessment based on an overall description of the work process. It may seem too difficult for reasons specific to the approach taken, namely:

1. dealing directly with the visible symptoms of a problem (noise, toxicity, etc.) is not the same thing as trying to understand the underlying reason why the problem has occurred (how the area is organised; work duration and process; why is it organised this way rather than that way, etc.);
2. understanding the basic principles of the work process gives a clearer understanding of the factors that create risks and makes it easier to propose ways of eliminating or controlling them at source;
3. reconstructing the production process is a way of getting the information needed to get an initial idea of the risks related to the different phases and operations of work.

## Aim

To identify existing risks and put them in context in the organization of the work process, using the information on the matter that you are entitled to have as a prevention rep.

## This work book contains

- An explanatory diagram on the proposed procedure.
- A sheet to collection information for the preliminary risk identification.
- An example of a reconstructed production cycle.
- A sample description of operations.
- Terminology / symbols.

## How to use it

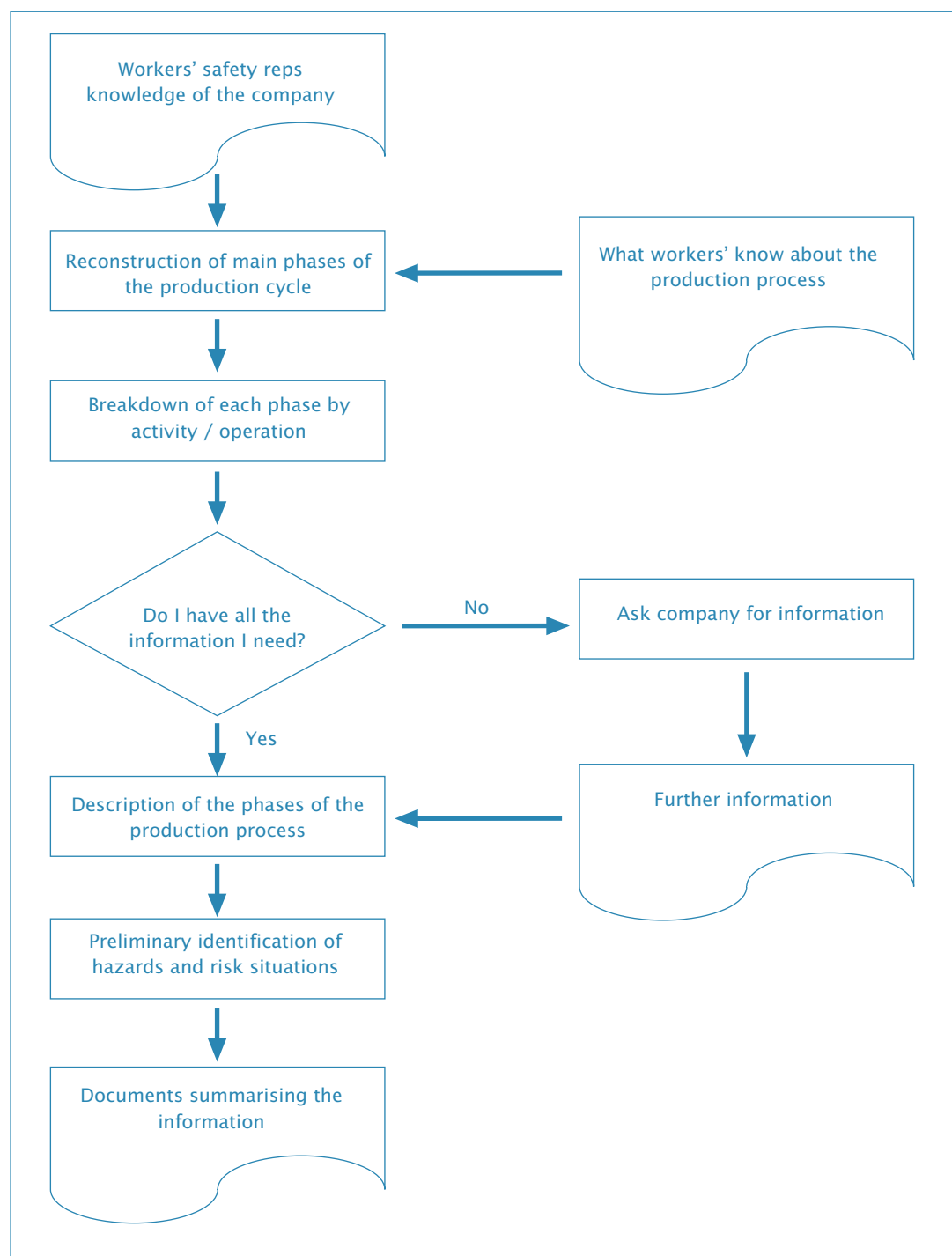
- You can apply this methodology to the different phases of the work process, or by breaking down the work according to its component operations (see terminology at the end of the guidebook). Broadly-speaking, industrial processes can be broken down into phases, whereas in the service sector, it is easier to analyse operations.
- Once you have drawn up the list of production cycles or different operations, you should try and classify them. The phases of the cycle can be broken down using a flow chart technique, describing the main operation for each of them. Operations can be described directly (See examples).
- Once you have sufficient information to be able to describe the different phases/operations of the work process, you should try and set down the most relevant risks in each phase/operation in the centre double-page spread.

## Observations

- Reconstructing the work process can be quite a complicated matter if you try and do it all in one go, come what may; the following information will improve our knowledge and we may only get the broader picture of the process at the end of the assessment process.
- If you are uncertain about something, talk it over with the workers directly concerned; they will very often be better informed about how the process really works than the company's technical reference material.
- Preliminary risk identification is carried out on the basis of the information available; you do not need to carry out practical checks at this stage, as all we are doing is trying to form an idea of the risks we are likely to come up against (we will find out the workplace reality in later stages).

## The phases of the preliminary risk identification process

You can carry out this stage diagrammatically, using the kind of flow chart shown below:



# Example of reconstructed production cycle

Production cycle – vegetable canning/bottling	
Diagram	Description
<pre>graph TD; V[Vegetables] --&gt; WC[Washing and cleaning]; WC --&gt; S[Scalding]; S --&gt; CB[Canning/bottling]; PL[Preserving liquid] --&gt; CB; CB --&gt; ST[Sterilisation]; ST --&gt; PSC[Product in the sterilised container]; PSC --&gt; LF[Labeling and finishing]; LF --&gt; FP[Finished product]; FP --&gt; STG[Storage];</pre>	<p>Once the vegetables are sufficiently ripe, they are picked and delivered to the processing and canning/bottling plant..</p> <p>In the preparation stage, the vegetables picked in the fields are cleaned to rid them of contaminants and extraneous matter acquired during harvesting, or to complete the relevant operations to move on to the next stages.</p> <p>They are scalded for a brief period to improve their conservation qualities.</p> <p>The blanched products are transferred on conveyor belts to the filling station where the preserving liquid is added. Other intermediate operations may take place between these two stages, like washing (steaming), exhausting and selection. The cans and bottles are automatically filled, and the vegetables are covered in appropriate preserving liquid to preserve the flavour and stability after sterilisation.</p> <p>Sterilisation ensures that the product will remain unspoiled for a substantial period of time by using the appropriate degree of heat for the relevant duration of heating.</p> <p>Finishing is where the product is completed to customers' specifications and requirements.</p> <p>The warehouse must be capable of storing millions of cans and bottles.</p>

# Example of identifying operations

Office work	
Description	Operations
<p>Typing letters and memos, taking care over the presentation. Keying-in data to an accounting programme. Maintaining a document registration database. The tasks are carried out at a special workstation and account for approximately 40% of the working day.</p> <p>Going to an adjoining, small, poorly-ventilated room to do photocopying. Standard photocopier which may take time to warm up. Operations are frequently interrupted by breakdowns. The workload can be high and urgent. Estimated time taken up with this task: 15% of a normal working day.</p> <p>Answering and routing incoming calls from the workstation. Logging and routing messages to other staff members. Handling outgoing calls. Dealing directly with calls and inquiries. These tasks are fitted-in between other operations. Estimated time: 15% of a normal working day.</p> <p>Greeting visitors and either handling inquiries or passing them on to the relevant person. Receiving and supervising written applications for services. Dealing directly with inquiries. Estimated time: 25%.</p> <p>Assigning a registration number to incoming and outgoing documents. Filing them and other internal documents. 5% of a work day.</p>	<p>WORK ON SCREEN</p> <p>PHOTOCOPYING</p> <p>TELEPHONE CALLS</p> <p>DEALING WITH THE PUBLIC</p> <p>DOCUMENT REGISTRATION AND FILING</p>





## Definitions and concepts

### Production process:

All the technical and organisational aspects involved in designing a sequence of steps carried out to produce an end product in the form of goods or services.

### Production cycle:

Series of actions making up part of the production process, carried out in a circular sequence: the end result of the cycle – a semi-finished product – represents the starting point of another cycle in which the actions of the original cycle are repeated.

### Work stage:

Any part of the work which leads to a change in sequence in the cycle: it involves a number of complex operations which are inter-related in specific ways, but does not necessarily result in a product.

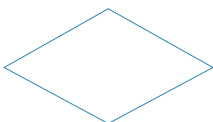
### Operation:

Basic or simple action : represents the unit of activity into which each work stage can be broken down. An operation may comprise different activities or tasks.

### Task:

Basic activity carried out by a specific worker or group of workers.

#### Flow chart symbols



This symbol («scroll») always represents something concrete entering or leaving an activity (input/output): raw materials, semi-finished goods and end product. Where operations are automated, it is not worth charting semi-finished products.

The rectangle indicates an activity, never an object. It can depict the different levels of the function, from the summary of an entire phase down to a detailed aspects of a given operation.

The lozenge is used to depict a decisive action which determines the continuity of the process in some way or other (e.g., quality control). In many cases, this will be an optional symbol, dependent on the particular view of the individual analysing the cycle.



**Trade union management of  
workplace risk assessment**  
Work book n° 3

# Inspecting for problems

Checklist for identifying  
problems in the  
workplace

COMPANY :.....  
WORKPLACE :.....  
WORK SECTION / AREA / OPERATION :.....  
WORKERS' SAFETY REP :.....  
DATE : .....


## Introduction




1. This workplace inspection book is designed to help you identify problems on the shop floor. We recommend that the workers' safety rep first reconstruct the work process by carrying out a preliminary risk identification on and getting workers' opinions, or a subjective identification of workplace health problems. But it can equally well be used without any preparatory work. It essentially comprises six checklists and a sheet summarising the problems identified.
2. The checklists are intended to call the safety rep's attention to six general aspects of working conditions: premises, equipment, substances, organisation and factors creating inequality. The best way to go about it may be to zoom in from the general to the particular: start by looking at the general hazards which might affect the workforce as a whole, then move on to a detailed look at each individual work station or operation, ending up by observing each particular task performed by the individual worker.
3. Before carrying out an inspection tour, the safety rep should do a number of things, including:
  - acquire (or draw) a plan of the workplace, showing the layout of areas, plant, equipment and people, and note on it all the problems discovered;
  - draw up a list of things requiring special attention (e.g., differences between what the workers say and the information in the safety rep's hands);
  - be certain that he can identify problem situations, and if not, get the necessary detailed information to enable him to gauge accurately whether a problem exists or not;
  - if carrying out the preliminary activities recommended in point 1, carry the findings into the checklists by entering the risks initially identified by the safety rep on the basis of available information in the column marked with symbol (1), and the problems reported by the workers consulted in column (2).
4. When a time for the inspection has been set, the safety rep must contact the workers to explain the purpose of what he/she is doing, ask them for their suggestions and discuss the findings of the inspection with them.
5. Because the checklist questions are very short and general, you should briefly describe any problem found in the box in the lower half of the page. Some problems might usefully be shown on a sketch map (using a different colour for each broad problem category). As well as inspecting the working conditions, the safety rep should take the opportunity of the inspection tour to discuss the problems with the workers concerned.

Symbol (1)  risks previously identified by the safety rep based on available information

Symbol (2)  problems reported by the workers consulted

## Checklist n° 1: Premises and plant




Tick the right-hand box  if you find any of these problems. Then give a short description in the large box underneath.

		Problems	
<input type="radio"/>	<input type="radio"/>	Work space cramped - overcrowded with people and/or equipment	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Untidy or dirty	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Too few or unsafe storage systems	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Unsafe walking surfaces (floors, corridors, stairs)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Unsafe traffic systems (lifts, vehicles, cranes)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risk of falls due to inadequate protection working near spaces and/or at a height	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	All electrical equipment safe to use?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Gas or compressed air equipment safe to use?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Adequate protection against fire and/or explosions?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Enough, easily-accessible emergency exits?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Premises properly ventilated/air-conditioned?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Properly lit for the work being performed?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Comfortably heated for the work being performed?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Level of room noise likely to distract attention from tasks?	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Enough cloakrooms and lavatories of good-enough standard?	<input type="checkbox"/>

### Description of problems


## Checklist n° 2: Machinery, technology, tools




Tick the right-hand box  if you find any of these problems. Then give a short description in the large box underneath.

		Problems	
<input type="radio"/>	<input type="radio"/>	Too few or inadequate safety systems	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inadequate preventive maintenance	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Too few or inadequate safety instructions	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Machinery or tools used in dangerous manner	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risk of accidents from knocks, trapping/entanglement or cuts	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risk of burns	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risk of electric shock from machines or tools	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inadequate noise protection	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Exposure to vibrations from use of machines or tools	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inadequate protection against ionising radiation	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Exposure to electromagnetic fields	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Eyestrain caused by light units on work equipment	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Exposure to sources of radiant heat	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inappropriate use of personal protective equipment	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	External noise nuisance	<input type="checkbox"/>

### Description of problems


## Checklist n° 3: Substances and materials used




Tick the right-hand box  if you find any of these problems. Then give a short description in the large box underneath.

		Problems	
<input type="radio"/>	<input type="radio"/>	Toxic chemicals and/or hazardous materials being used	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Containers not properly labelled	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inadequate information on risks of substances and materials	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Transport and/or storage of substances and materials not safe	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Poor air quality (smoke, gas, fumes, dust, smells)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risks of contact with eyes or skin	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risk of inhalation	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Exposure to carcinogens or mutagens	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Exposure to allergens	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Exposure to biological hazards	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Too few collective protection systems, or not good enough	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inappropriate use of personal protective equipment	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	External contamination (residues, emissions)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Risk of serious environmental accidents (fire, leakage, explosion)	<input type="checkbox"/>

### Description of problems

## Checklist n° 4: Ergonomic factors




Tick the right-hand box  if you find any of these problems. Then give a short description in the large box underneath.

		Problems	
<input type="radio"/>	<input type="radio"/>	Workstations generally poorly designed	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Work space too small for the task being done	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Poor staff and equipment layout	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Furniture, equipment and tools poorly designed	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Not enough or inadequate adjustable chairs and seating	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Too long spent in same work posture	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Have to work in uncomfortable postures	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Job does not allow frequent changes of posture	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Excessive repetition of movements	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Unnecessary handling of loads	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Improper handling of loads (weight, bulk, height, movement, ...)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Protracted handling of loads with too few breaks	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Unsuitable storage prevents loads from being properly handled	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Workers not given enough or proper training in ergonomic principles	<input type="checkbox"/>

### Description of problems

## Checklist n° 5: Work organisation factors


Tick the right-hand box  if you find any of these problems. Then give a short description in the large box underneath.




		Problems	
<input type="radio"/>	<input type="radio"/>	General work organization unsatisfactory	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Boring or monotonous tasks	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Work pace too fast or excessive pressure	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Lack of means to meet objectives or deadlines set	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Not enough teamwork or collaborative work	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Workers have too little control over their own work	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Unsuitable length of working day and/or working hours and shift organisation	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Problems balancing work and family or social life	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Participation and consultation procedures inadequate or lacking	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Few in-service training or promotion opportunities	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Poor relations with superiors or management	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Poor relations between workers	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Poor relations with customers or users	<input type="checkbox"/>

### Description of problems



## Checklist n° 6: Factors creating inequality

Tick the right-hand box  if you find any of these problems. Then give a short description in the large box underneath.

		Problems	
<input type="radio"/>	<input type="radio"/>	Inappropriate equal employment opportunities policy	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Discrimination against women in the workplace	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Different working conditions for men and women	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Work divided into «men's» work and «women's» work	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Instances of sexual harassment	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Discrimination on the grounds of ethnic, cultural, language, etc. differences	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Different working conditions by type of employment (permanent/temporary)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Different working conditions by company certification (under contract)	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Dangerous work assigned to temporary workers or subcontractors	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Inadequate protection for temporary workers or subcontractors	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	Temporary workers not given enough safety training or information	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	General lack of solidarity and support between colleagues	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	General lack of respect in relations	<input type="checkbox"/>

### Description of problems

## Resume: Problems identified

Order of priority	Proposals	Times
Problems to be solved immediately		
Problems needing to be assessed		

Description of process		Preliminary risk identification					
Technology	Work organisation	Work premises and facilities	Machinery, technology and tools	Substances and materials used	Ergonomic factors	Work organisation factors	Factors of inequality

## Problem identification and alternative assessment guide

DATE: .....

\_\_\_\_\_

[illegible]

## Introduction

### Aim:

To gather qualitative and quantitative information supplied in connection with the assessment of a particular problem or risk situation for use by the union in working out and evaluating PROPOSED SOLUTIONS.

### What this work book contains

- Problem identification sheet
- Proposed solutions sheet
- Union evaluation of proposals
- Guide for union evaluation of solutions

### Procedure:

1. If required by the type of problem, as well as filling in the problem identification sheet, ask for and study any information notes or technical evaluations to ensure that you have all the information needed to introduce preventive measures. The key question is:: do you know enough about the problem to be able to suggest solutions?
2. Once you have enough information, you as the safety rep need to work out alternatives to the risk situation. You can do that using the proposed solutions sheet, starting by detailing the aims to be attained (e.g., «prevent potential damage to hearing which could interfere with communication and so increase the danger»); then, draw up a list of all possible ways of achieving them. The aim here is not to put forward a practical proposal on how to solve the problem so much as to set out the conditions for a possible solution in line with criteria acceptable to the union.
3. From the various possible alternatives, you should select the most effective proposals and set priorities for workplace bargaining using the union evaluation of proposals sheet. The best way to do this would be to try and get discussions going with all workplace union reps. The guide for union evaluation of solutions could be useful in giving direction to the discussions.

## Problem identification

Statement of the problem

--

Sections or work areas affected

--

Are the rules being applied? YES NO	Breaches:
Can the causes of the problem be identified? YES NO	Proposals:
Can the risk be eliminated or controlled? YES NO	Description:
Is technical assistance needed to solve the problem? YES NO	Specify:
Has the problem resulted in damage? YES NO	Details:
Is there an interaction with other hazards? YES NO	Description:
Are people concerned? YES NO	Degree of concern:

**Workers exposed:**

- No.:
- characteristics:

# Proposed solutions

Aims to be achieved			
Description			
Ways of achieving the aims			
Area of application	Changes required to:		
	Eliminate the risk	Stop the risk spreading	Avoid exposure to the risk
Technical process			
Work organisation			
Other			

# Union evaluation of proposals

Proposals	Evaluation					Strategic priority
	Preventive aspects	Technical and organisational aspects	Union aspects	Socio-economic aspects	Other considerations	



## Guide for union evaluation of solutions

### Preventive aspects

1. The foreseeable effects on improving workers' health are:
  - 0 = unknown
  - 1 = uncertain
  - 2 = probably positive
  - 3 = certainly positive
  - 4 = very positive
2. The proposed solution may have effects on other existing risks:
  - 0 = create new dangers which were not there before
  - 1 = may make an occasional problem worse
  - 2 = no effect
  - 3 = may partly reduce other existing risks
  - 4 = eliminate other existing risks
3. The foreseeable environmental impacts are:
  - 0 = unknown
  - 1 = uncertain
  - 2 = probably positive
  - 3 = certainly positive
  - 4 = very positive / not applicable
4. If the measures are not taken, the following things may happen:
  - 0 = the problem will go away of its own accord
  - 1 = minor consequences for a small number of people
  - 2 = minor consequences for a large number of people
  - 3 = serious consequences for people and/or the environment
  - 4 = very serious consequences

### Technical and organisational aspects

5. Technical feasibility of the proposed solution
  - 0 = not technically feasible at all
  - 1 = very complicated, probably not viable
  - 2 = complicated but viable
  - 3 = probably feasible
  - 4 = practical with no technical complications

6. Availability of necessary technical resources

0 = none in the short- and medium-term

1 = none at present, but perhaps in the medium-term

2 = resources do exist, but not enough

3 = enough resources to increase the allocation slightly

4 = easily enough existing resources

7. The proposed solution

0 = increases the worker's responsibility

1 = is based on the use of personal protective equipment

2 = reduces exposure to some extent

3 = controls the risk at source satisfactorily

4 = completely eliminates the risk

8. The attitude of technical people to the solution is:

0 = opposed

1 = indifferent

2 = receptive

3 = interested

4 = very interested

## Union aspects

9. In legal terms, the problem to be solved should be considered as follows:

0 = there is no breach of a legal obligation

1 = it is covered by legislative recommendations for improvement

2 = the situation partially infringes the legislation

3 = the situation is a gross violation of general legislation

4 = the situation is a gross violation of specific standards/rules

10. Workers' understanding of and support for the solution :

0 = opposed

1 = indifferent

2 = willing to accept

3 = interested

4 = very interested

11. Potential impact of the solution on situations of inequality or discrimination :

- 0 = negative in the short- and medium-term
- 1 = may create distortions in the short-term
- 2 = none
- 3 = positive in the short- and/or medium-term
- 4 = very positive

12. Potential impact of the solution on employment levels:

- 0 = negative in the short- and medium-term
- 1 = may create distortions in the short-term
- 2 = none
- 3 = positive in the short- and/or medium-term
- 4 = very positive

## Economic and social aspects

13. The company's attitude to the proposed solution is:

- 0 = opposed
- 1 = indifferent
- 2 = willing to accept
- 3 = interested
- 4 = very interested

14. Financially-speaking, the solution should be regarded as:

- 0 = very costly and virtually impossible to implement
- 1 = will involve large initial outlays
- 2 = is easily affordable by the company
- 3 = cost-effective and achievable in the short-term
- 4 = quite cheap

15. Potential impact of the solution on productivity:

- 0 = negative in the short- and medium-term
- 1 = some distortions in the short-term
- 2 = none
- 3 = positive in the short- and/or medium-term
- 4 = very positive

# Questionnaire on health risks and damage

Subjective identification  
of occupational health  
problems

COMPANY: .....

WORKPLACE: .....

WORKERS' SAFETY REP: .....

DATE: .....

Information collected in this questionnaire refers to:

- ☐ the entire company / the workplace .....
- ☐ the section / the work area. (Please specify .....)
- ☐ the operation / the work station. (Please specify.....)

Use of the questionnaire

- ☐ Key informants. (First names and surnames .....)
- ☐ Discussion groups. (No.. of participants .....)
- ☐ Individual questionnaire (please give the following information:

Sex: ..... Age : .....

Years' service in the company : ..... in the section:.....  
at the work station .....

**Do you consider that your enterprise □ / section □ / work station has any of the following problems?**

	YES	NO
1. Uncomfortable because cramped or poorly laid out.....	<input type="checkbox"/>	<input type="checkbox"/>
2. Messy and dirty .....	<input type="checkbox"/>	<input type="checkbox"/>
3. Difficult to evacuate in case of emergency .....	<input type="checkbox"/>	<input type="checkbox"/>
4. Risk of falling or accidents caused by vehicles .....	<input type="checkbox"/>	<input type="checkbox"/>
5. Risk of falling objects.....	<input type="checkbox"/>	<input type="checkbox"/>
6. Risk of machinery-related accidents .....	<input type="checkbox"/>	<input type="checkbox"/>
7. Risk of accidents related to tools .....	<input type="checkbox"/>	<input type="checkbox"/>
8. Risk of accidents from overstrain .....	<input type="checkbox"/>	<input type="checkbox"/>
9. Risks of electrocution .....	<input type="checkbox"/>	<input type="checkbox"/>
10. Risks of fire or explosion .....	<input type="checkbox"/>	<input type="checkbox"/>
11. Too hot/cold .....	<input type="checkbox"/>	<input type="checkbox"/>
12. Too damp/dry.....	<input type="checkbox"/>	<input type="checkbox"/>
13. Draughty .....	<input type="checkbox"/>	<input type="checkbox"/>
14. Stuffy/not properly ventilated .....	<input type="checkbox"/>	<input type="checkbox"/>
15. Poor air conditioning .....	<input type="checkbox"/>	<input type="checkbox"/>
16. Lighting too dim or too much glare .....	<input type="checkbox"/>	<input type="checkbox"/>
17. Too noisy or noise interferes with work .....	<input type="checkbox"/>	<input type="checkbox"/>
18. Vibrations from machinery or tools .....	<input type="checkbox"/>	<input type="checkbox"/>
19. Radiation .....	<input type="checkbox"/>	<input type="checkbox"/>
20. Risk of infections.....	<input type="checkbox"/>	<input type="checkbox"/>
21. Smoke, gas, fumes, sprays.....	<input type="checkbox"/>	<input type="checkbox"/>
22. Risks from contact with liquids or splashing.....	<input type="checkbox"/>	<input type="checkbox"/>
23. Unpleasant or harmful dusts.....	<input type="checkbox"/>	<input type="checkbox"/>
24. Problems connected with use of personal protective equipment .....	<input type="checkbox"/>	<input type="checkbox"/>
25. Heavy, tiring physical effort.....	<input type="checkbox"/>	<input type="checkbox"/>
26. Handling of heavy loads.....	<input type="checkbox"/>	<input type="checkbox"/>
27. Keeping one position for too long .....	<input type="checkbox"/>	<input type="checkbox"/>
28. Stressful postures when performing tasks or operations.....	<input type="checkbox"/>	<input type="checkbox"/>
29. Too frequent, repetitive movements .....	<input type="checkbox"/>	<input type="checkbox"/>
30. Working day too longv .....	<input type="checkbox"/>	<input type="checkbox"/>
31. Poorly organized times and shifts .....	<input type="checkbox"/>	<input type="checkbox"/>

- |  |                          |                          |
|--|--------------------------|--------------------------|
| 32. Pace of work too fast .....  | <input type="checkbox"/> | <input type="checkbox"/> |
| 33. Monotonous, routine work, little variation in tasks .....          | <input type="checkbox"/> | <input type="checkbox"/> |
| 34. Working alone, too little contact with work colleagues.....        | <input type="checkbox"/> | <input type="checkbox"/> |
| 35. Do not have the right tools for the job.....                       | <input type="checkbox"/> | <input type="checkbox"/> |
| 36. Conflicts with customers or users .....                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. Poor relations between colleagues .....                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. Too little control over how work is done .....                     | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. Few promotion opportunities.....                                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. Aggression, sexual harassment or violence .....                    | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. Poor relations with superiors or management .....                  | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. Problems balancing work and family responsibilities .....          | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. Discrimination in the workplace .....                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 44. No knowledge or too little training about work-related risks ..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 45. Outside health or safety risks .....                               | <input type="checkbox"/> | <input type="checkbox"/> |

**Please rank the 5 main problems in order of importance:**

- 1.- .....
- 2.- .....
- 3.- .....
- 4.- .....
- 5.- .....

**Do you know if your company □ / section □ / work station has had any of the following health problems. Do you think they might be connected with the working conditions?**

	Case		Link with work	
	Yes	No	Caused	Made worse
Accidental injury				
Infectious diseases				
Migraines or frequent headaches				
Loss of hearing/deafness				
Eye problems				
High blood pressure				
Heart disease				
Varicose veins				
Kidney problems				
Metal or chemical poisoning				
Breathing problems				
Skin diseases				
Cancer				
Digestive problems				
Liver diseases				
Bone and joint problems				
Chronic muscle pain				
Slipped discs or back injury				
Low-back pain				
Nervous problems				
Stress/depression				
Mood swings/behavioural changes				
Disturbed sleep				
Excessive drinking and drug abuse				
Frequent taking of medicines				
High level of sickness				
Changing/leaving work on health grounds				
Aggressive or violent behaviour				
Menstruation disorders				
Reproductive and pregnancy disorders				
Other problems: (Please specify)				

Risk assessment at the workplace. A guide  
for union action  
TUTB, 1999

Published in French as "L'évaluation des ris-  
ques sur les lieux de travail. Guide pour une  
intervention syndicale"  
(ISBN : 2-930003-24-3)  
Translated into English by Glenn Robertson

© European Trade Union Technical Bureau for  
Health and Safety  
Bd Emile Jacqmain, 155  
B-1210 Brussels

Tel.: 32-2-224 05 60  
Fax :32-2-224 05 61  
E-mail : [tutb@etuc.org](mailto:tutb@etuc.org)  
<http://www.etuc.org/tutb>

ISBN : 2-930003-25-1  
D/1998/6107/26

Printed in Spain



## TUTB publications

### ■ Integrating gender in Ergonomic Analysis Strategies for Transforming Women's Work

Ed. Karen Messing  
Format 15,5 x 24 cm,  
2-930003-34-0, 192  
pages, 1999  
Price: 800 BEF (20  
euros)  
Available in English  
and French



### ■ Carcinogens in the working Environment.

The Implementation of Directive  
90/394/EEC in Germany

Ulrike WESTPHAL  
Format 21 x 29,5 cm,  
2-930003-28-6, 72  
pages, 1998  
Price: 800 BEF (20  
euros)  
Available in English  
and German



### ■ Stress, well-being and the Framework Directive

The Dutch Experience

Jan POPMA  
Format 21 x 29,5 cm,  
2-930003-X, 32 pages,  
1998  
Price: 600 BEF (15  
euros)  
Available in English



### ■ Working with VDUs.

The Implementation of Directive  
90/270/EEC in Sweden and  
Germany

Format 21 x 29,5 cm,  
2-930003-32-4, 44  
pages, 1998  
Price: 600 BEF (15  
euros)  
Available in English



### To be published in 1999:

#### Risk Estimation for Musculoskeletal Disorders.

Guidelines for Machinery Designers  
and Workers' Representatives

J. A. RINGELBERG