

# **The SOBANE strategy for the prevention of occupational health risks The Déparis guide**



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# Summary

- **The basic principles**
- **The strategy**
- **The methods**
- **Déparis**



- 1. Priority of prevention**
- 2. Complementarity of the OH partners**
- 3. Worker as the MAIN actor of prevention**
- 4. Training vs assistance**
- 5. Globality of the problemes**
- 6. Preventive vs compliance approach**
- 7. Management vs evaluation  
(quantification)**
- 8. SME**



# Principle 1: primacy of prevention

The european framework directive:

The employer insures the safety and health of all workers in **all** the aspects linked to their working situation

## → Accent

- Not on protection and medical supervision
- **but on risk prevention**



# Principle 2: Complementarity of the partners

**Workers**

**Management**

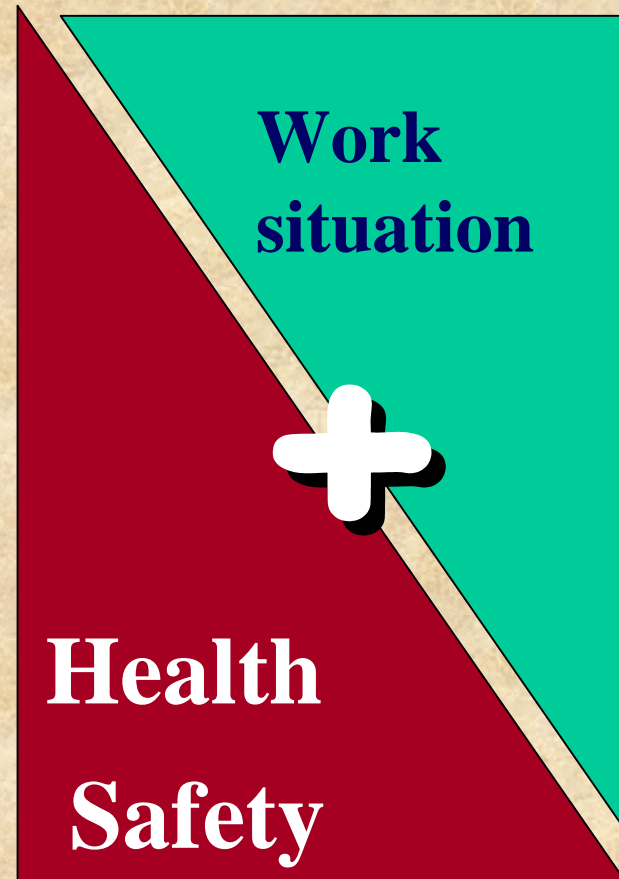
**Internal practitioners**

**Occ physicians**

**Occ Hygienists**

**Ergonomists**

**Experts**



# Principle 3:

## The main actor of prevention

**Objective: maintain or improve the well being of the worker**

**→ No pertinent action without the knowledge of the work situation that only the worker has**

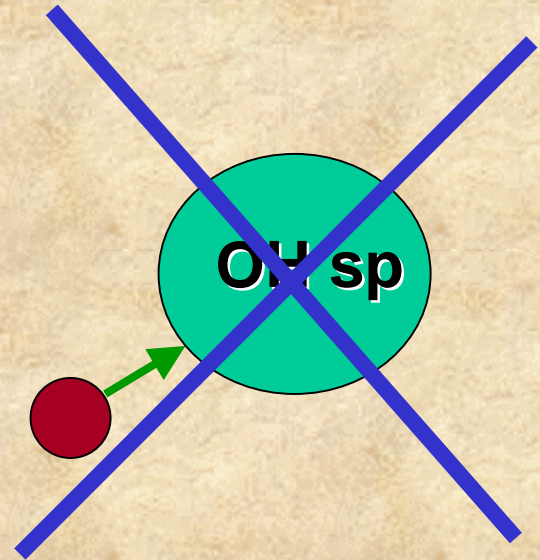
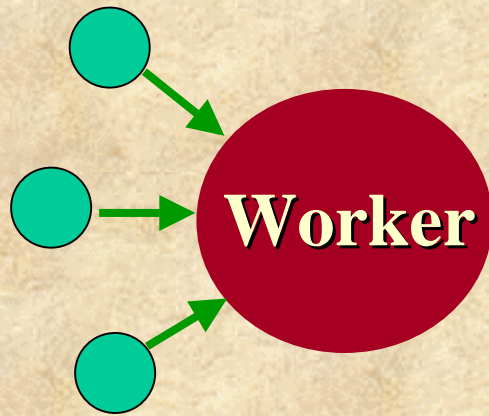
**The worker is**

- **the main actor of prevention**
- **and not only the objet of prevention**



➔ Participative approach

➔ Bottom up approach



# Principle 4: Training vs assistance

**Recognise explicitely**

**the ability and the integrity of**

- **the workers**
- **their management**

**Train them to take charge of themselves**

- **instead of assist them**





# Principle 5:

## The nature of the problems

- **The worker 'lives' his work situation**
  - **not as a set of distinct and independant facts**
  - **but as a whole**
- **All the problems are interrelated**
  - **Noise influences the relations**
  - **The technical organisation influences the MSDs**
  - **The division of responsibilities influences the work content**

*Everything is in everything*



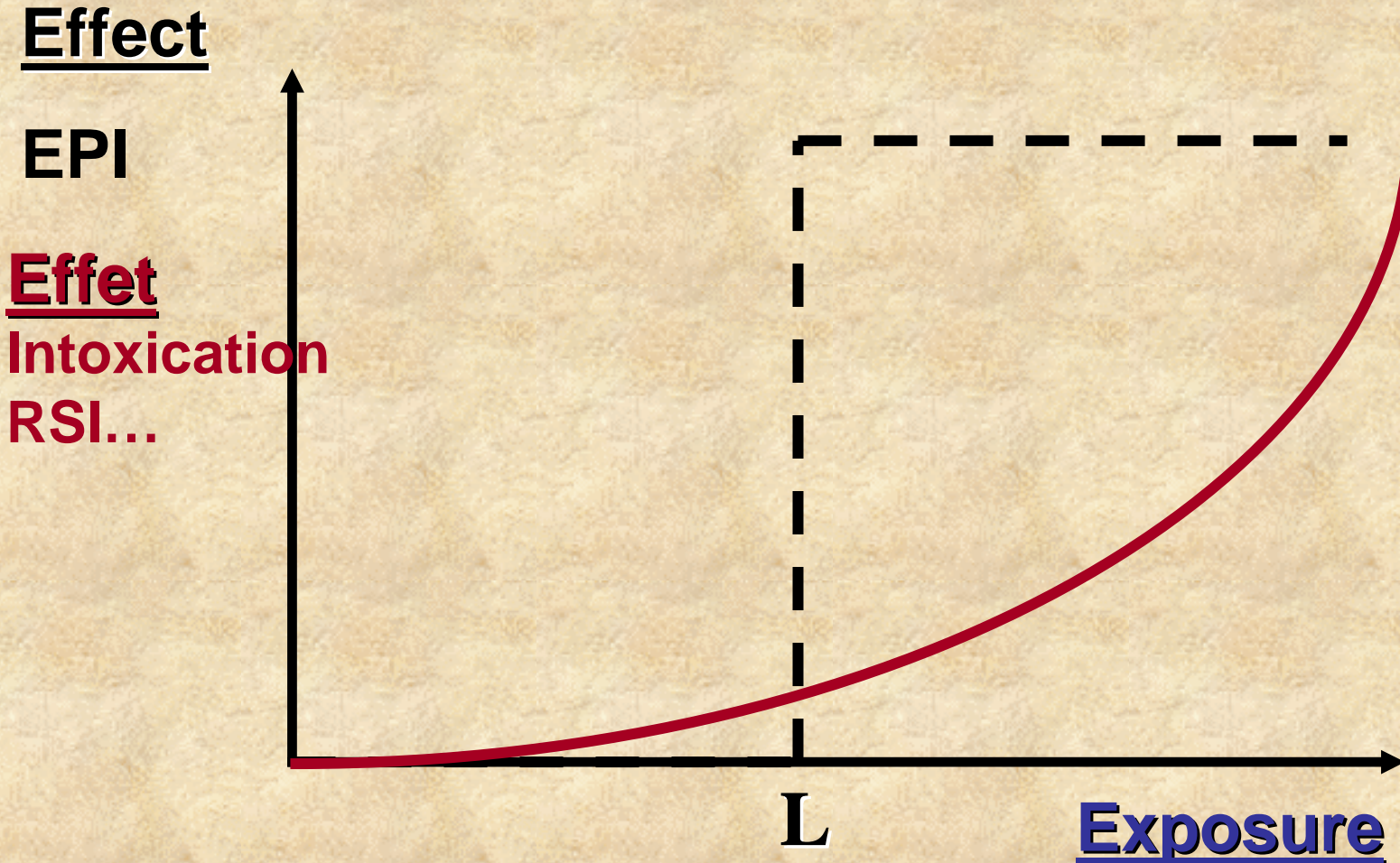
→ **Comprehensive approach:**

**Put every problem in its context**

**And not sequentially, as a function of external  
circumstances**



# Principle 6: Compliance vs **Prevention**



# Objectives

- **Not only** be under the legal values
- **But** search for the optimal stage of:
  - health and well being for the workers
  - technical and economical health for the company



# Principle 7:

## Prevention vs assessment

### Untruths

- «What is not quantified does not exist»
- «Quantitative evaluation leads to solutions»
  - How much vs why and how
  - The time weighted average vs the details
- «It is necessary to measure in order to determine whether a risk exists or not»
  - Prevention vs compliance



## → ACT

No assessment a priori, but a posteriori

**expensive**

**long and difficult**

**not representative**

Management instead of evaluation

*“It is not unusual to see more attention given to exposure assessment than to risk prevention.*

*The fascination exerted by sophisticated equipment and by numbers is, for some reason, greater than the interest in designing pragmatic solutions to prevent exposure“*

*B. Goelzer (1996)*

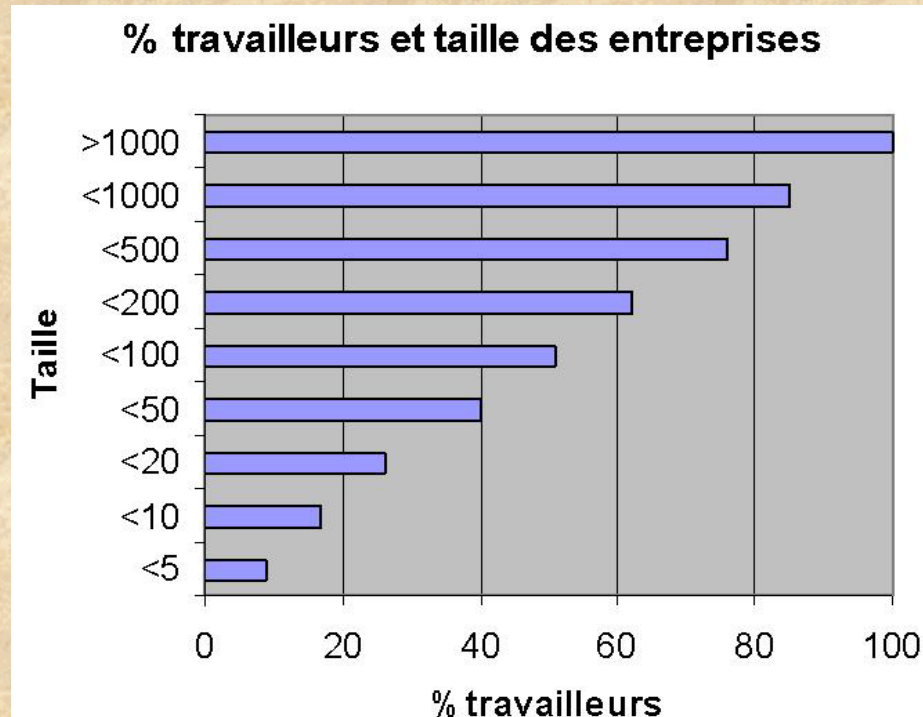


# Quantification when necessary:

- Scientific Research
  - dose-effect-response relationships
- Compensations
- Go further on a particular aspect
- **For the residual risk**
- Compare before - after



# Principe 8: SME



**➔ Develop methods applicable in SME and not only in large ones**





# The SOBANE strategy



# Health & safety partners

**Workers**

**Management**

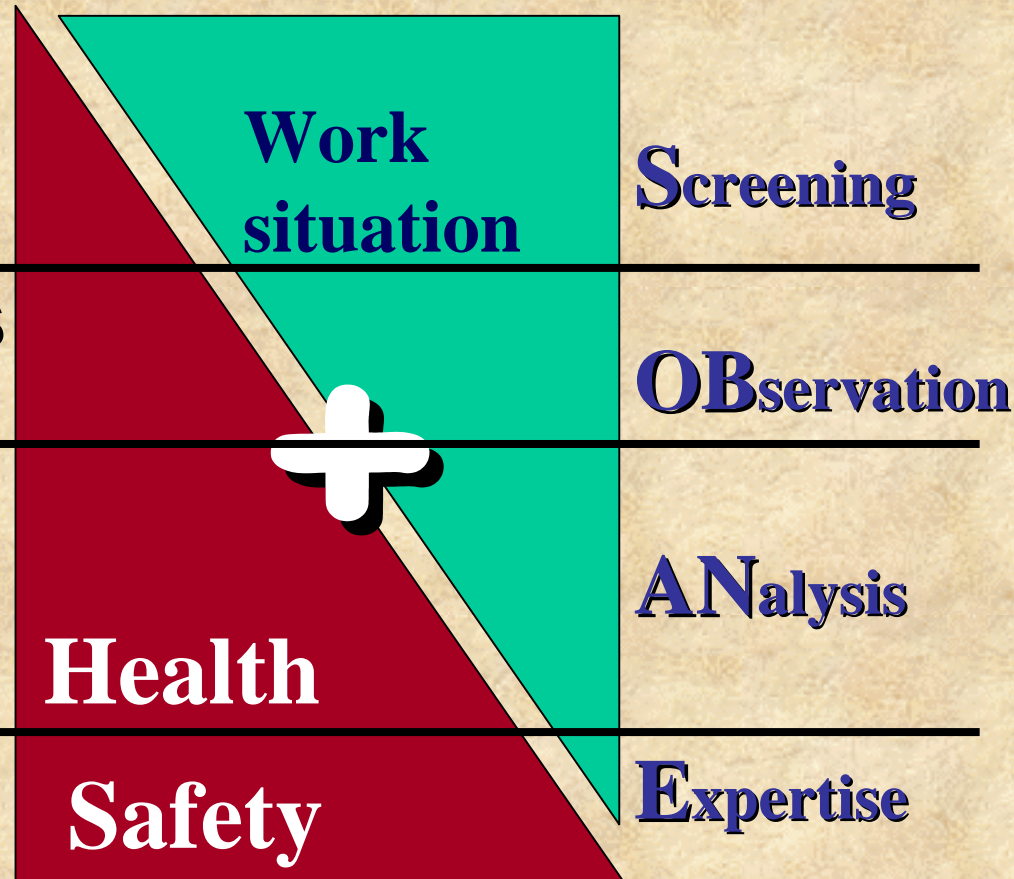
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**Ergonomists**

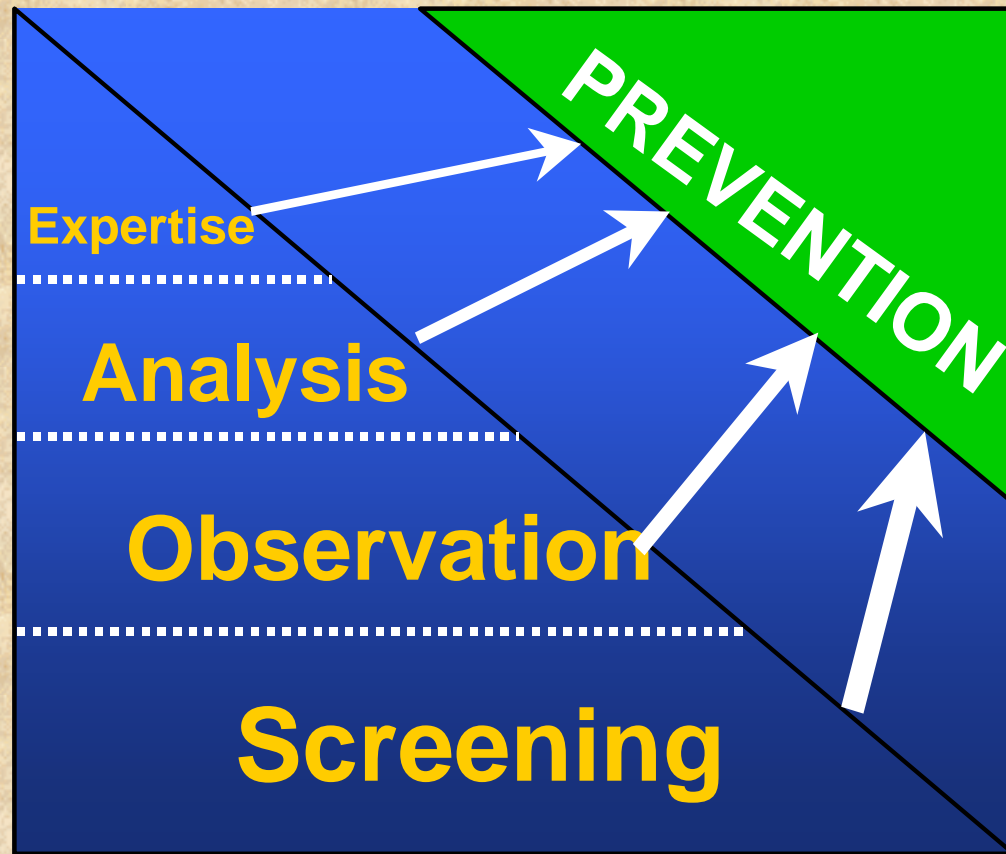
**Experts**



# Prevention strategy

## SOBANE

Sophistication  
cost  
Knowledge



Number of work situations  
Number of risk factors



	<b>Stage 1 Screening</b>	<b>Stage 2 Observation</b>	<b>Stage 3 Analysis</b>	<b>Stage 4 Expertise</b>
<b>• When?</b>	<b>Systematically</b>	<b>When a "problem" is detected</b>	<b>More complicated Cases</b>	<b>Very complex cases</b>
<b>• How?</b>	<b>Opinions</b>	<b>Qualitative observations</b>	<b>Ordinary measurements</b>	<b>Specialised measurements</b>
<b>• Cost?</b>	<b>Very low</b>	<b>Low</b>	<b>Average</b>	<b>High</b>
<b>• Duration</b>	<b>10 min</b>	<b>2 hours</b>	<b>1 day</b>	<b>A few days</b>
<b>• By whom?</b>	<b>Workers + company management</b>	<b>Workers + company management</b>	<b>Same + specialists</b>	<b>Same + specialists + experts</b>
<b>• Knowledge - working conditions - ergonomics</b>	<b>Very high Low</b>	<b>High Average</b>	<b>Average High</b>	<b>Low Specialised</b>



# Level 1, Screening

## Objectives

- Identify the major problems
- Remedy to obvious problems

## How:

- Simple and time effective method
- Simple vocabulary
- Performed internally by the workers and their management

If problems remain: **level 2: Observation**



# Level 2, Observation

## Objectives:

- go further into the unsolved "problems

## How:

- simple, quick and low cost method
- used systematically by the OH general practitioners
- with the workers and the management

If problems remain: **level 3: Analysis**



# Level 3, Analysis

## Objectives:

- when levels 1 and 2 did not solve the problems
- analyze further the situation in search for solutions

## How:

- method more difficult to understand and use
- longer and more costly
- used by the external OH practitioners with:
  - the needed education and training
  - the methodology and the techniques
- **WITH** the internal OH practitioners **AND** the workers



# Level 3, Analysis

**Evaluation of the residual risk**

**If still unacceptable: level 4, Expertise**





# Level 4, Expertise

## Objectives:

- **Eliminate the residual risks**

## How:

- **Specialized measurements or techniques**
- **With the cooperation of experts who bring to the participants at levels 1, 2 and 3 their methodological and technical competences**
- **Occasional and detailed studies**
- **According to precise specifications set up at level 3, Analysis**



	Screening	Observation	Analysis	Expertise
S	Spaces			
C	Machines			
R	Safety			
E	.....			
E	Pollution			
N	lighting			
I	Mental load			
N	Relations			
G	Responsabilitis			



# Characteristics

## **Global:**

- **study of all factors contributing to the health and well being**

## **Participative**

- **Workers play the essential role in the dynamics of improvement**
- **Occupational health specialists and experts are helping**

## **4 complementary stages**

- **Requiring complementary knowledge and competencies**



# Participative screening of the risks in a working situation

*Déparis*



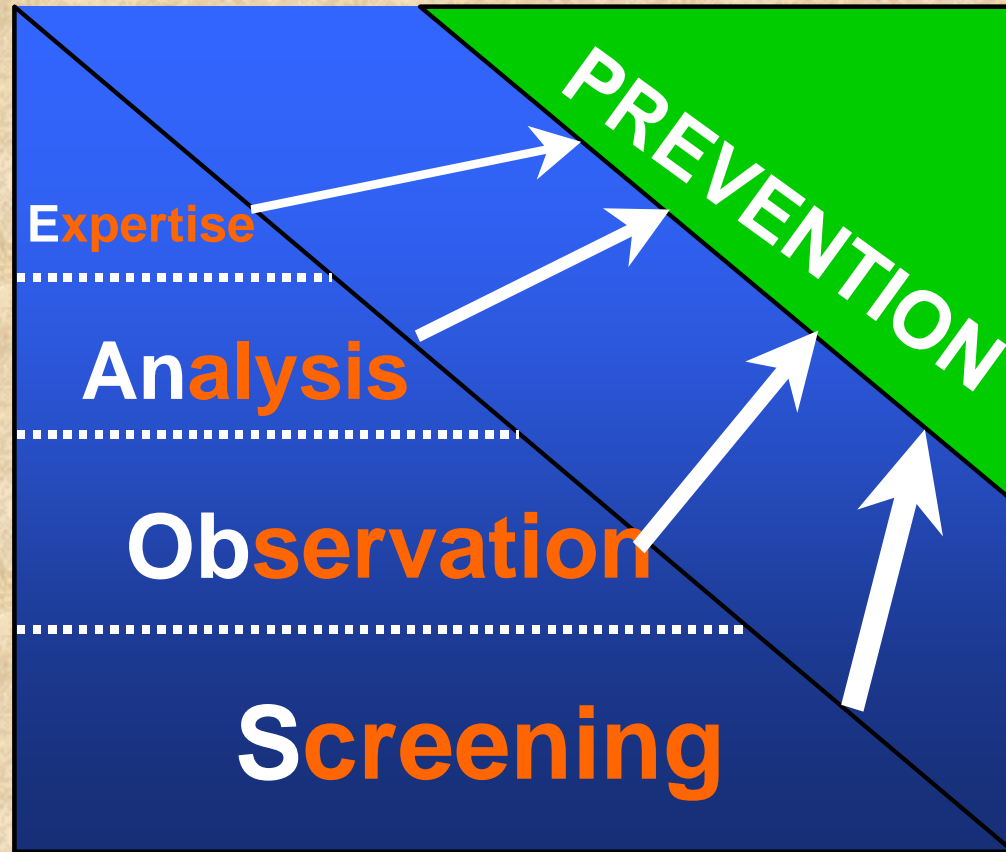
# Summary

- 1. Objectives**
- 2. Presentation of the tool**
- 3. Procedure of use**
- 4. Role of the OH practitioner**



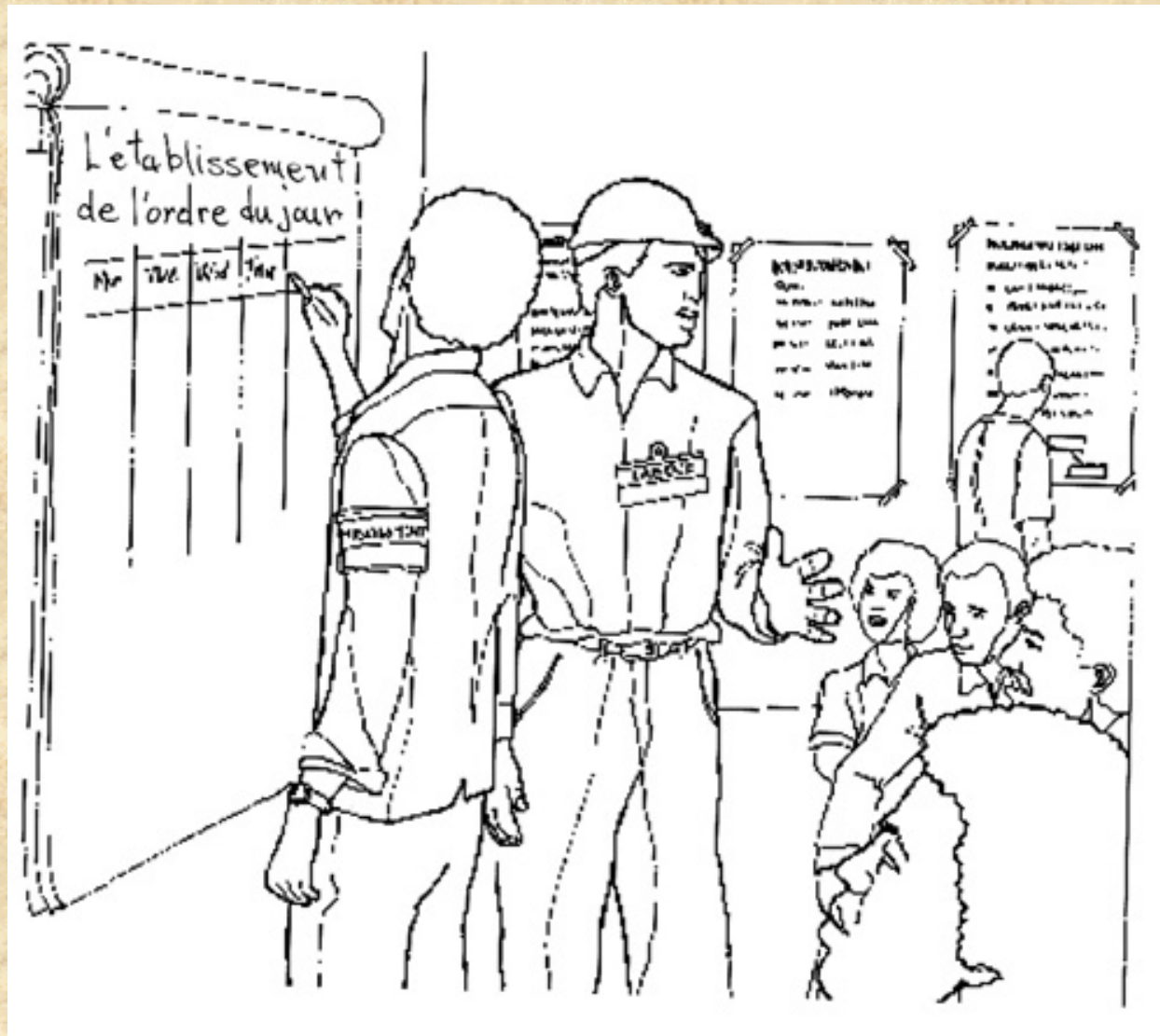
# The SOBANE Prevention Strategy

Sophistication  
Cost  
Expertise



Number of work situations  
Number of risk factors





# **18 tables, approaching 18 facets of the work situation**

- 1. Operating areas**
- 2. The technical organization between stations**
- 3. Sites of work**
- 4. Risks of accident**
- 5. Orders and signals**
- 6. Tools and material**
- 7. Repetitive work**
- 8. Handling operations**
- 9. Mental load**





- 10. Lighting**
- 11. Noise**
- 12. Thermal environments**
- 13. Chemical and biological risks**
- 14. Vibration**
- 15. Relationships between operators**
- 16. Local and general social environment**
- 17. Work contents**
- 18. Psychosocial environment**



*ITEM*

Desired situation

*What can be done in practical terms to improve the situation?*

To be discussed

Aspects to study in more details:



# Aspect

ITEM	
Desired situation	<i>What can be done in practical terms to improve the situation?</i>
To be discussed	
Aspects to study in more details:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Short description of the desired situation

List of aspects to be discussed



ITEM	
Desired situation	<i>What can be done in practical terms to improve the situation?</i>
To be discussed	
Aspects to study in more details:	<input type="checkbox"/> ☹ <input type="checkbox"/> 😐 <input type="checkbox"/> 😊

**Space where to note what can be made in **practical terms** to improve the work situation**


**Space to note the aspects which require a thorough study (*Observation or Analysis*)**

- Choice of a particular seat
- Choice of a more adequate tool
- Revision of the organization of work
- Reevaluation of the responsibilities given to the worker



# Total judgement on the priority

ITEM	
Desired situation	<i>What can be done in practical terms to improve the situation?</i>
To be discussed	
Aspects to study in more details:	<input type="radio"/> ☹️ <input type="radio"/> 😐 <input type="radio"/> 😊



- ☹️ **Unsatisfactory: situation likely to be dangerous to improve necessarily**
- 😐 **Average and ordinary: situation to improve if possible**
- 😊 **Satisfactory**



# Procedure

1. **Information by the direction on the aims and commitment to take account of the results**
2. **Definition of a small group of workstations forming a unit, a " work situation "**
3. **Designation of a coordinator by the direction with the agreement of the operators**
4. **The coordinator adapts the tool to the work situation concerned**



# Procedure

## 5. Constitution of a working group

- key operators designated by their colleagues
- at least 1 man and 1 woman if mixed group
- supervisory staff chosen by the direction

## 6. Meeting of the group in a quiet room close to the working situation

## 7. Explanation by the coordinator of the goal and the procedure



# Procedure

## 8. Discussion on each heading

- not to carry a score, but to determine
- what can be made to improve the situation
- for what it is necessary to ask the assistance of a specialist.

## 9. After the meeting, **synthesis** by the coordinator

- The list of the detailed solutions considered
- Points studied more in details

**Who does what and when**

**The short term action plan**





# ***Work areas***



















**What can be done to improve the situation?**

- **Evacuate the useless pallets and cart that clutter the zone**
- **Arrange the working area**
- **Limit the stocks to the minimum at the workplaces**
- **Move furniture to increase the distance by 0.7m between the machine and the pallet**
- **Organize a space for the pauses close to the windows, with sight on outside.**
- **Clean more frequently the working area to remove dusts and residues**

**Aspects to study more in details:  
Organization of the working area**



## Situation of work: Synthesis of the *Déparis* study of printing works

Work areas	
Technical organization between stations	
Sites of work	
Risks of accident	
Orders and signals	
Tools and materials	
Repetitive work	
Handling operations	
Mental load	
Lighting	
Noise	
Thermal environments	
Chemical and biological risks	
Vibration	
Relationships between employees	
Local and general social environment	
Work contents	
Psychosocial environment	



N°	WHO?	WHAT?	WHEN?	
			Projected	Carried it out
1	Operators	Store the pallets of paper and boxes in the room next to the workshop	/	/
2	Operators	Range the transpallet	/	/
3	Maintenance	Reduce the stock to 20 reams	/	/
4	Direction	Regulate the access to the workshop so that only the operators have access	/	/
9	OH practit.	Envisage a cutter with retractable blade	To analyze before /	
10	OH practit.	Install a case for the cutter on the wall, near the work table	/	/
11	OH practit.	Provide cotton gloves <ul style="list-style-type: none"> <li>• to protect from the cuts when handling the paper sheets</li> <li>• resistant to heat for the interventions near the furnace</li> </ul>	To analyze before /	



# Procedure of use

10. **Continuation of the study** for the unsolved problems, factor by factor, by means of the methods of level 2, *Observation*, of the strategy **SOBANE** or equivalent methods.
11. **Implementation of the action plans** at short, average and long terms
12. **Periodically, repetition of the operation**
13. **Revaluation of the situation** and modification of the action plans



# *Déparis*

- **Directly participative:**
  - **The workers are the main actors**
  - **Occupational health specialists and experts are helping**
- **No measurements**
- **No sophisticated concepts**
- **Orientation towards Why? and How?**
- **No rating scale**
- **Definition of the priorities**
- **Rapid and economical**



- **Dynamic management of the risks**
    - not only of the traditional risks (work in height, noise, pollutants...)
    - but of the **overall** work situation
  - **Mutual training (workers and management)**
  - **Motivations**
- 
- **Socially very committed**
  - **Difficult to organize the first time**



# Role of the OH practitioner:

Occupational hygienist, ergonomist, occupational physician, etc

- **Make the partners**
  - **Direction**
  - **Trade-unions**
  - **Workers**
  - **Safety and health Committee**
- **aware of the possibilities that *Déparis* offers to structure and initiate a *Screening* of the factors influencing the work situations:**
  - **accidents, behavior, satisfaction, well being, productivity...**



# Role of the OH practitioner:

- To adapt *Déparis* to the characteristics of the work situation in re-examining:
  - The terminology
    - for example: workshop or office
  - The aspects taken in consideration
    - for example: vibrations, VDU work...





# Role of the OH practitioner:

- To follow closely or lead himself the first application of *Déparis*
  - To avoid ambiguities
  - To follow the process
    - discussion
    - decisions
    - synthesis
- To periodically start again the use of *Déparis* while taking care that the process develops itself in the company

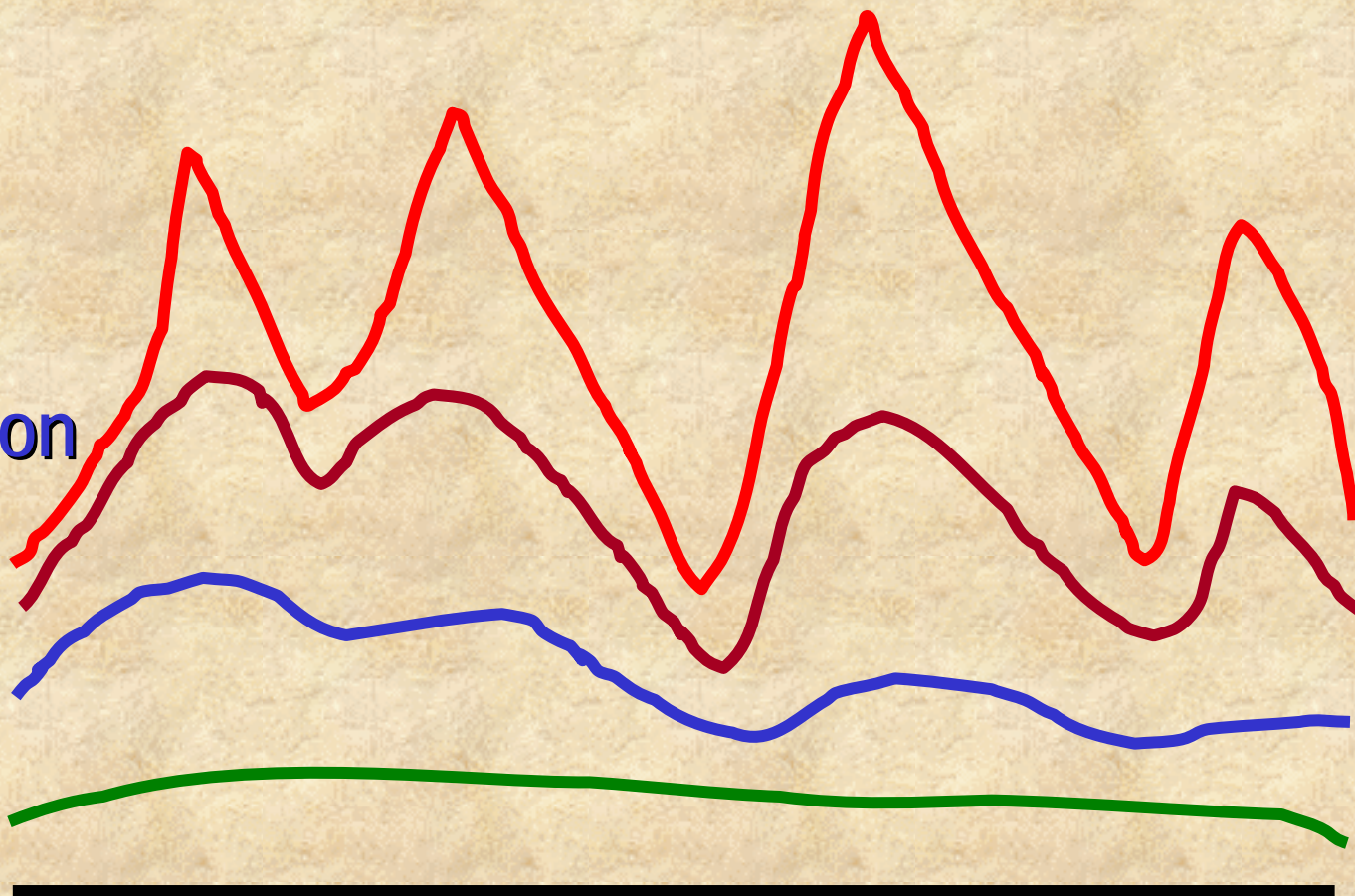


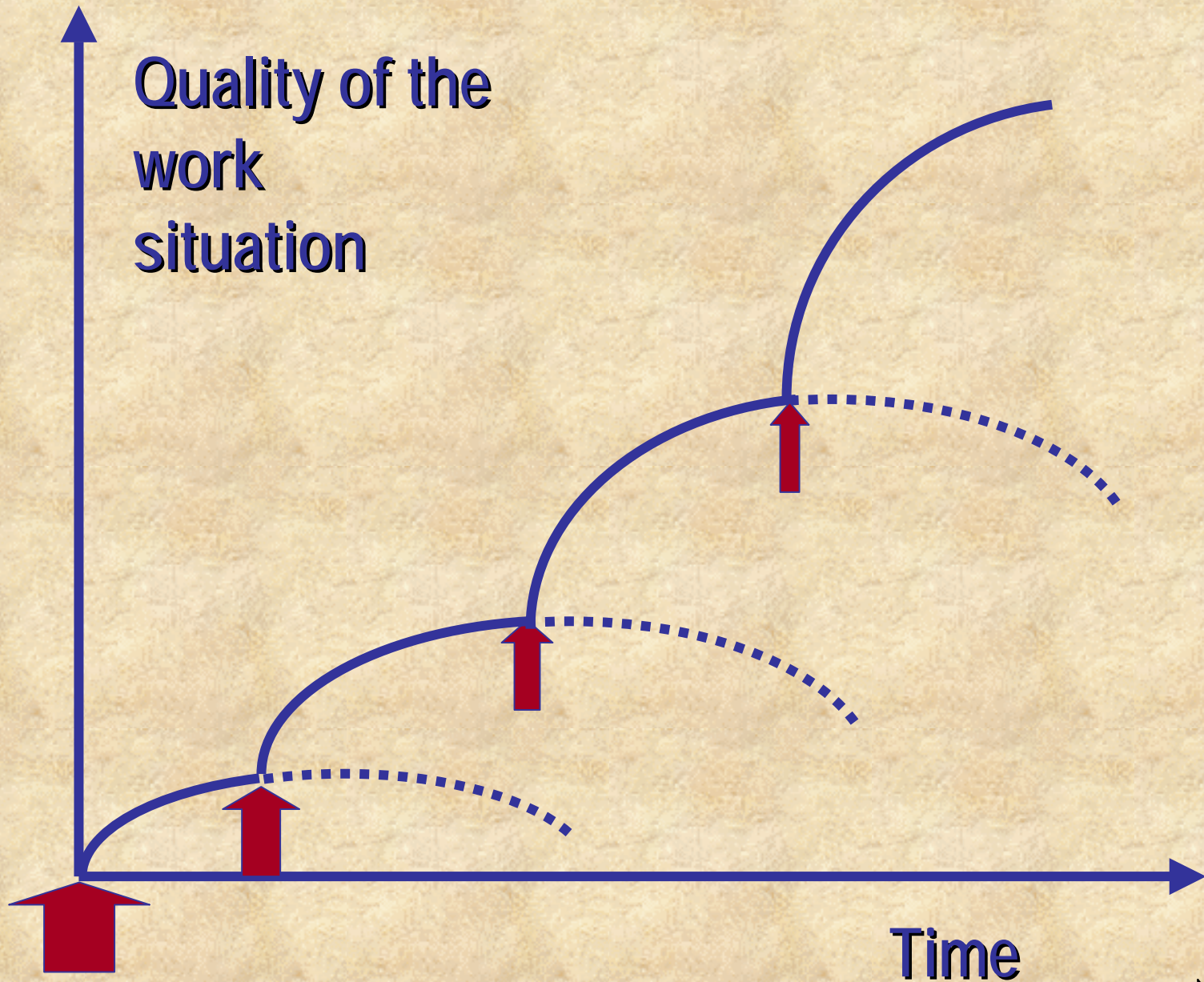
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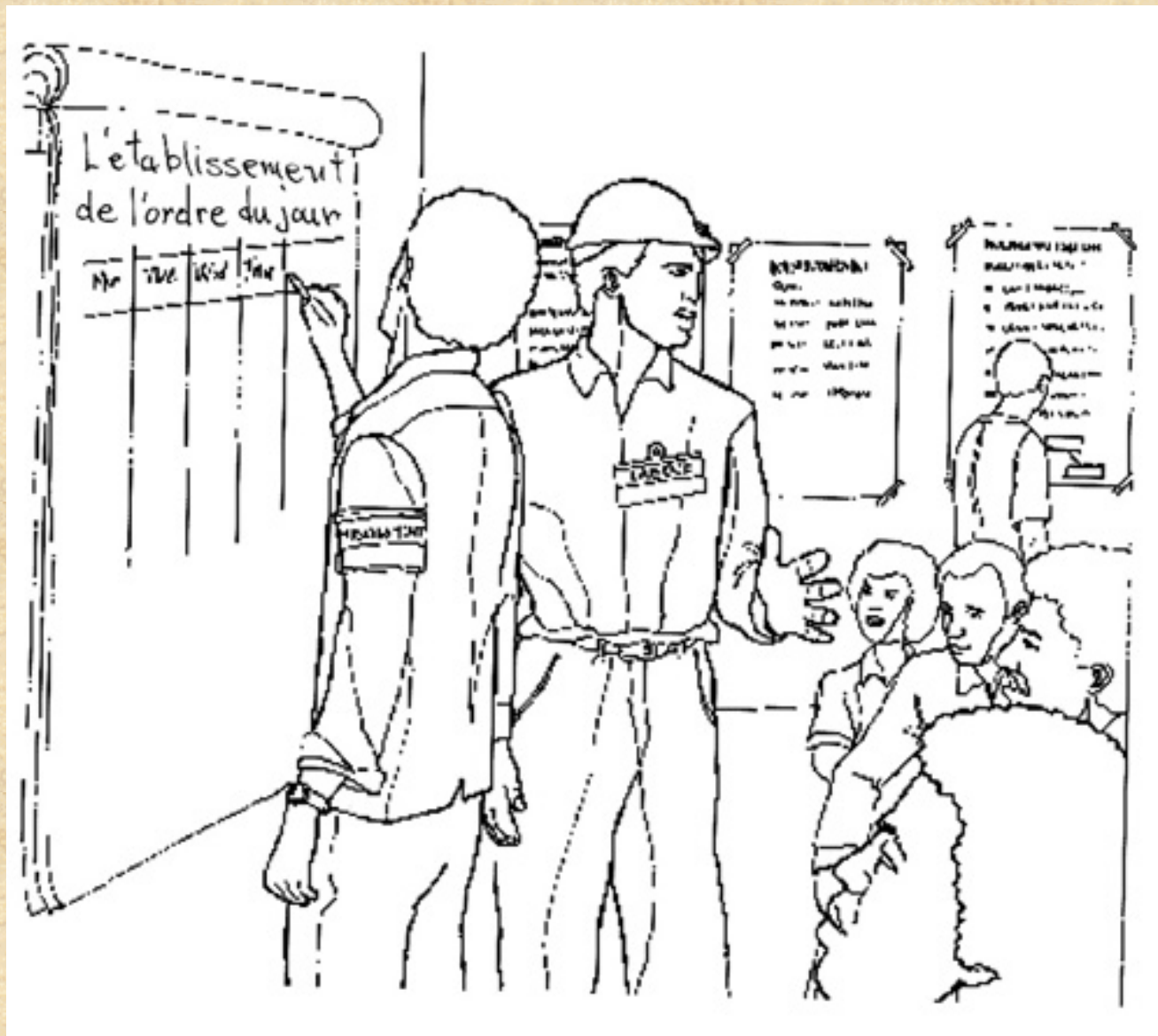
Training

Organization

Culture







... *Observation*

... *Analysis*

... *Expertise*



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**[www.sobane.be](http://www.sobane.be)**  
**[malchaire@hytr.ucl.ac.be](mailto:malchaire@hytr.ucl.ac.be)**

*Merci*

*Thank you*

