MASE/FRANCE CHIMIE

Common
Reference
Guide

MASE –ASSO.FR

Masecotte's
Advices

FRANCE CHIMIE

MASE
AMÉLIORER LA PERFORMANCE SSE

Together for safety, health and environment

SUMMARY

The annexes below are a summary of the reflections drawn up by a working group. They are based on knowledge of:
- the statutory regulations applicable to drafting a document,
- good practices, appraisals and methodologies.

They act as guidelines for any employer wishing to set up an HSE management system with a view to MASE/France-Chimie common system certification.

INTRODUCTION

The MASE/France-Chimie common system is an initiative set up by French companies, the aim of which is to offer the simplest and most effective improvement process possible, regardless of business or industrial sector.

Its main purpose is to assist members to :

- improve Health and Safety in the workplace and in the Environment (HSE) through a management system appropriate to the company,

- organise themselves better and communicate better, while improving employee working conditions,

- introduce a common language enabling company-wide improvement,

- manage risk resulting from joint activity (User Company - Supplier Companies) particularly for sites with manufacturing processes.

In addition to the Company Safety Improvement Manual, which includes:

- a description of the certification process,

- a reference guide to obtain MASE/France Chimie common system certification,

- a glossary and list of abbreviations.

A set of "Advices on..." documents is provided to members to help them implement a simple and effective management system that places people and HSE culture at the center of risk prevention strategy.
Members are free to use those advices as they wish. Not following the advices does not count as either a minor or major non-conformity for the purposes of the certification audit.

The first part of the booklet is composed of the first 11 "Advices on..." documents provided to members on revision of the manual V2014.

The second part is composed of 10 "Advices on..." documents published in 2018:

- Nine on the development of an integrated HSE culture
- One on security management.

PART 1

« Advice on... »
2014

No. 1

Advice on analysing the existing organisation when setting up the process

1. Purpose of the annex

The purpose of this annex is to help the employer assess the provisions already in place within their organisation. This self-assessment can be used to measure nonconformities between the existing level of their system and the level required for certification, and to draw up an initial action plan.

YES : the provision is in place.

NO : the provision is not in place or only partially in place.

WHY : explanation allowing analysis (as applicable).

PROOF : the provision is documented/inspected. Management can check and inspect it.

Commitments of company management:

Objective: Define how the company's HSE management is organised.

An employer wanting to put an HSE management system in place must ensure that their vision of HSE issues is correctly perceived by their employees. They share their commitments (policy) with their employees. They specify the actions they want to implement. They establish their strategy (targets, organisation, indicators, and action and document planning).

	YES	NO	WHY?	PROOF?
HSE policy: Document that formalises and brings together the commitments made by management. • Do I have a clear document that formalises my commitments and the principles to be complied with in the company including Health Safety Environment (HSE) issues?				
Targets: Used to define the goal, the target to be reached. • Have I defined specific targets to improve my organisation and HSE results?				
Organisation: Used to clarify the organisation, the job and role of every employee. • Are the functions of everyone in my organisation clearly defined?				
Coordination of the system by the employer: Allows the employer to monitor the functioning of their organisation in order to identify its strengths and weaknesses, and to react in the event of nonconformities so as to achieve their targets. • Do I conduct regular updates with the relevant people in the company to learn about, deal with and monitor HSE incidents? • Do I have a summary tool (cockpit chart, etc.) that allows me to monitor the progress of actions and the attainment of targets? • Have I defined and do I have indicators allowing me to monitor the attainment of objectives and implementation of actions? • Are preventive actions planned (audits, review, communication, HSE meetings, etc.)? • Is there a document resource (manual/instructions/procedures/other, etc.)? • Is there an appropriate communication/activity system involving all personnel (display of notices, meetings, etc.) so that everyone can feed back information?				

PROFESSIONAL SKILLS AND QUALIFICATIONS

Objective: Transmit to all employees the "knowledge", "skills" and "attitude" required to fulfil their professional duties.

The employer ensures that their employees have the knowledge, skills and attitude to fulfil their professional duties. The aim here is to allow every employee to better understand the concept of risk.

	YES	NO	WHY?	PROOF?
Recruitment/assignment • Do I have a recruitment mechanism for the jobs in the company?				
Induction, sponsoring, training of new employees and temporary staff: Used to provide the necessary information in order to ensure good integration into the company and to make new employees aware of job-related risks and HSE issues. • Have I put a mechanism in place so that all employees are supported in learning how to fulfil their professional duties?				
Monitoring of training/medical fitness: Used to monitor and update accreditations and medical fitness for each employee and adapt planning to the skills required for the work to be done. • Are accreditations, particular authorisations, medical inspections and the training programme monitored? (dates/deadlines)				
Assessment of staff (permanent and temporary) • Have I put a means of assessing permanent/temporary employees in place so that acquisition of knowledge can be validated?				

ORGANISATION OF WORK

Objective: Control HSE risks when performing tasks, works or services.

The employer, through their choice of organisation, must guarantee control of risk on their worksites. They do so by using methods and resources that ensure this control (DUER, prevention plan, schedule, subcontracting, etc.)

	YES	NO	WHY?	PROOF?
Risk analysis: Used to guarantee the best level of protection for employee health and safety. • Is the risk analysis applied to all tasks, works or services both on and off the company's premises (DUER, etc.)?				
Preparation/schedule: Used to manage personnel requirements (qualification/accreditation) for each piece of work. • Is there a schedule of tasks, works or services?				
Work instructions: Used to define the stages and implementation of the piece of work. • Are there work instructions for tasks, works or services?				
Equipment/facility: Used to prevent risks arising from the use of faulty equipment or site-related risks. • Is work equipment used in compliance with the manufacturer's recommendations/instructions?				
Subcontractors: Used to ensure that the employer's subcontractors share the same HSE values so they can work together. • Have I put in place / implemented the mechanism necessary for selecting subcontractors?				

EFFECTIVENESS OF THE MANAGEMENT SYSTEM

Objective: Assess the effectiveness of the management system.

The employer ensures that the organisation they have set up meets the expectations defined.

	YES	NO	WHY?	PROOF?
Inspection tools: factory floor inspections: Used to check application of the organisation on the factory floor and record problems encountered. • Do inspections and factory floor audits allow me to check that tasks are being carried out correctly? • Are problems observed fed back and analysed to prevent their recurrence?				
Nonconformity analysis: hazardous situations, near misses and accidents, etc. : Used to drill down to the direct and fundamental causes of nonconformities in order to put relevant actions in place. • Have I used a recognised methodology to analyse hazardous situations, near misses, accidents, etc.? • Are the actions decided on followed up?				
Action monitoring: completion: Used to monitor completion of the actions decided on and to indicate the degree of effectiveness. • Are all the actions decided on through the tools put in place (nonconformity analysis, factory floor audits, bottom-up feedback, internal audits, monitoring committee, action plan, etc.) centralised? • Are they planned? • Is their completion monitored?				
Internal system audit: Used to check the actual functioning of the system and its strengths and weaknesses. The five areas in the reference guide must be covered in the internal management system audit. • Have I planned to check that my entire organisation is functioning correctly through a comprehensive audit conducted at least once a year? Which will include: - Involvement of management - Personnel management and monitoring - Equipment and facilities management - Preparation and completion of work - Subcontractor management - Implementation and monitoring of actions decided on - Communication - Inspections, factory floor audits - Etc.				

CONTINUAL IMPROVEMENT

Objective: Assess the effectiveness of the management system.

The employer must review and reappraise their organisation in order to make new choices for the future.

	YES	NO	WHY?	PROOF?
Review: Used to take stock of the system over a given period using all the information collected through the tools put in place and through any nonconformities between targets and results. • Does it include quantitative data, a summary of the internal audit on the functioning of the organisation and tools, a summary of issues fed back from or detected on the factory floor, and the nonconformity analysis? • Have I ensured that the review is both quantitative and qualitative?				
Management system: Used to improve risk prevention. • Do the tools put in place help me in my choices?				
New targets: Used to target and accurately define priorities for the coming period. • Have I ensured that my new targets will be set in accordance with my review and the issues identified?				
New action plan: Used to define the actions to implement in order to attain targets, the person responsible and the completion date. • Have I ensured the redefinition of one or more actions with a view to attaining each target?				

No. 2

Advice on implementing the risk analysis

1. Purpose of the annex

The purpose of this annex is to suggest a risk analysis method to the employer.

There are many different risk analysis methods. The employer must define their own.

2. Definitions

Hazard: the intrinsic property of an element capable of compromising the physical integrity or health of people, or of threatening the safety of facilities or the environment.

Exposure: the act of subjecting an individual to the effect caused by the hazard.

Risk is the conjunction (simultaneous occurrence) of a Hazard and Exposure:

$$\text{Risk} = \text{Hazard} \ X \ \text{Exposure}$$

3. The different stages

Once the **risk** has been identified, it must be **assessed.** This assessment allows appropriate preventive actions to be put in place.

A conventional risk analysis involves a series of stages:

- Hazard identification
- A priori risk assessment
- Identification of situations with exposure potential
- Qualitative and/or quantitative assessment
- Residual risk assessment
- Recording and monitoring

The first two stages are used to collect all information relevant to the job (job description, hazards of the job, regulatory information, etc.) which also includes external, multi-source elements (joint activity).
Implementation of prevention measures, in compliance with the nine general prevention principles, allows identification of any residual risk which must then be reassessed.

3.1 Hazard identification
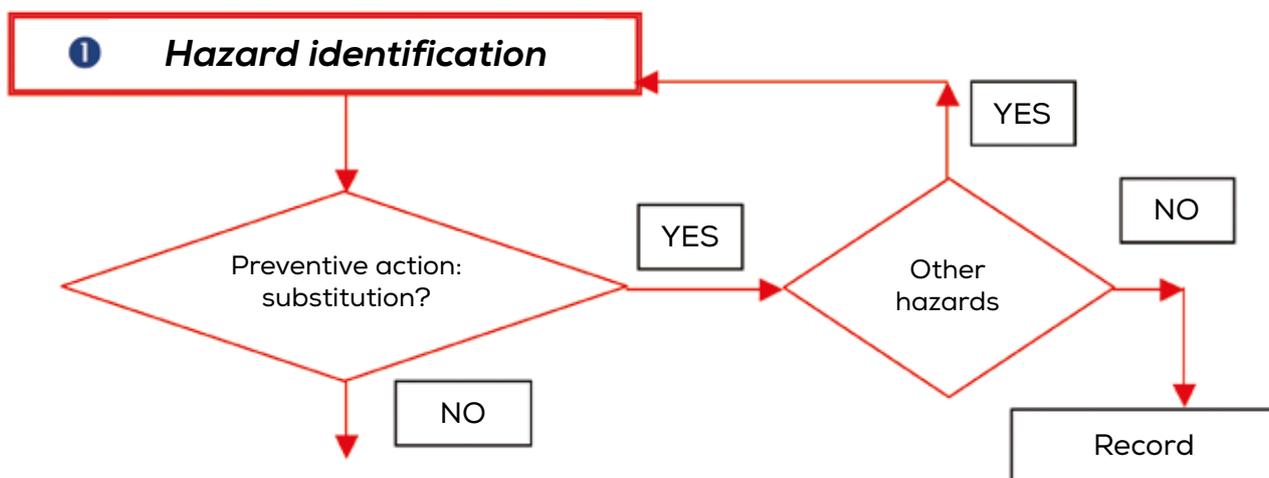
ANALYSIS PROCESS

Hazards are identified based on 5 main groups. The process must take account of the environment (location) of the tasks, works or services to be performed.

- ● Physical (noise, pressure, climatic conditions, radiation, vibration, temperature, electrical, etc.)
- ● Chemical (liquid, gas, solid, steam, aerosol, dust, nanoparticles, etc.)
- ● Biological (fungi, insects, bacteria, viruses, etc.)
- ● Ergonomic (working posture, workstation, physical movements at the workstation, etc.)
- ● Psychological (pressure, workload, harassment, etc.)

This list of hazard groups is not exhaustive.
This hazard identification process is based on the 5 main groups.

PREVENTIVE ACTION

Substitution, or failing this, reduction of the hazard.

3.2 A priori risk assessment

A priori risk assessment is used to list the risks encountered by personnel in their activities. It precedes assessment on the ground and consists of analysing the work stipulated and identifying hazards. It introduces the concept of Similar Exposure Groups.
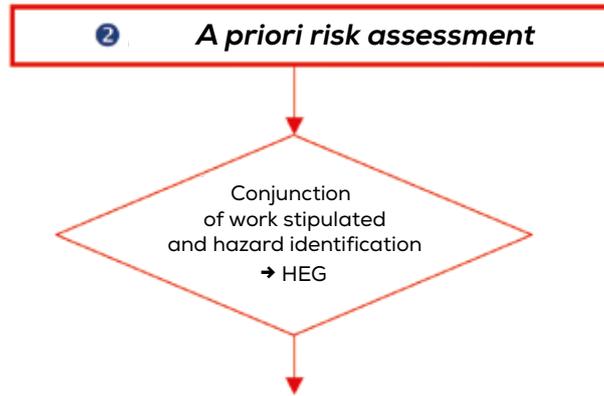
ANALYSIS OF STIPULATED WORK

This consists of analysing hazards in relation to jobs and stipulated working methods.

3.3 Identification of situations with exposure potential

Situations with exposure potential are identified on the ground while work is being carried out: this is the analysis of actual work.

ACTUAL WORK

Actual work is often different from stipulated work. In order to achieve their targets, the employee will make certain adaptations. Studying the employee at their workstation allows observation of nonconformities from stipulated work and the possible definition of other HEGs.
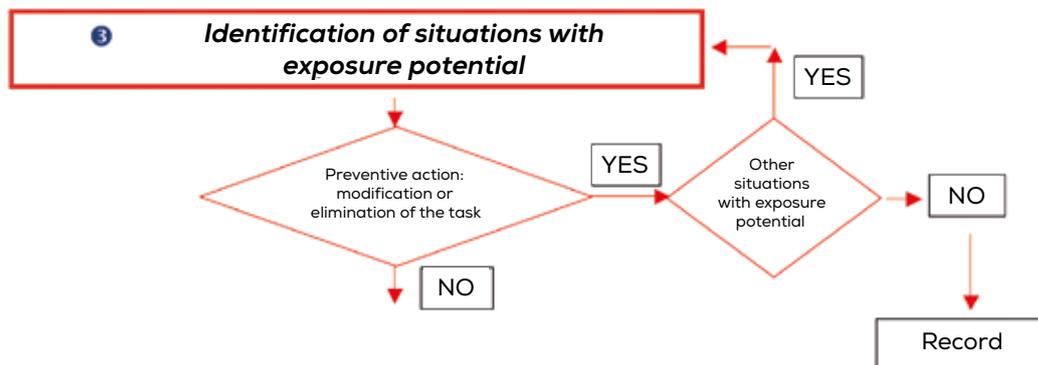
Analysis of actual work is used to determine the frequency, duration and level of exposure. This is the qualitative and/or quantitative risk analysis.

ANALYSIS PROCESS
The following question must be asked at this stage of the process: is there exposure as a result of the occupational activity?

PREVENTIVE ACTION
Elimination or modification of the task (adapt work instructions and reduce hazard exposure, etc.).

ACTUAL HEG
Allows better targeting of employees in relation to specific risks (e.g.: CMR).

3.4 Qualitative and/or quantitative assessment

❹ *Qualitative and/or quantitative assessment*

Preventive actions: information, training, CPE, PPE, etc.
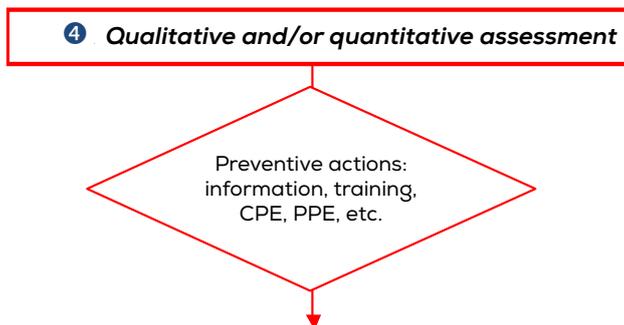
ANALYSIS PROCESS

The characteristics of duration, frequency and severity, among others, are taken into account in this stage. The assessment is graded so that risks can be ranked in order of importance.

PREVENTIVE ACTION

The purpose of any preventive action is to keep exposure or the probability of exposure to risk as low as reasonably practicable. Periodic reviews of prevention measures guarantee that the lowest level of exposure to risk is achieved, maintained and sustainable. The following aspects are considered at this level:

- Organisational modification of the job (instructions, procedures, etc.),
- Technical modification of the job: collective protective equipment (CPE),
- Provision of personal protective equipment (PPE),
- Training/information provision on the job (hazards, risks, effects on health, wearing PPE, etc.).

3.5 Residual risk assessment

Residual risk is the risk that remains after preventive measures have been put in place.

❹

YES

Actions correctives

NO

❺ *Residual risk assessment*

Record

YES

Persistent risk

NO
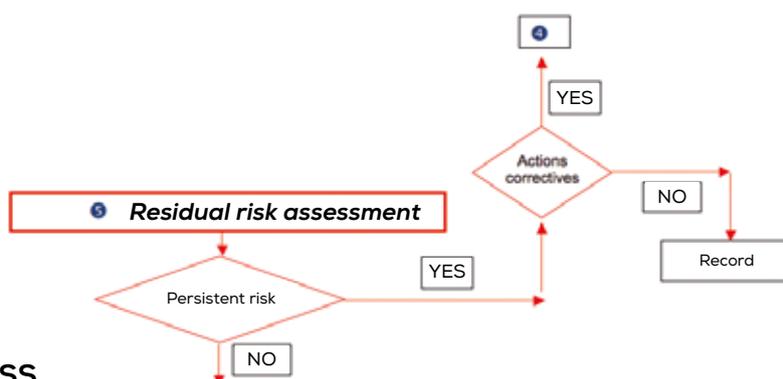
ANALYSIS PROCESS

Ask the question: is the risk controlled?

PREVENTIVE ACTION

Two scenarios are possible:
- The residual risk is identified during the risk analysis → it has therefore been taken into account during the implementation of preventive measures.
- The residual risk is identified after the implementation of preventive measures → a new qualitative and quantitative assessment must be conducted to ensure its level is as low as reasonably practicable.

3.6 Recording and monitoring

The risk analysis must be recorded in its entirety so that it can be used in relevant documents. For example, for the DUER, PPSPS, work instructions, orders, etc.

4. Client / Contractor interfaces

The company (Supplier Company) may be asked to perform work on a customer's premises (Client) or to perform work on a customer's equipment or materials on its own premises. In this case, employees may be exposed to hazards of the customer's company in addition to the risks inherent to their own activity.

Using information on the hazards of the Client and the work to be performed, the Contractor (or Companies) and the Client conduct the risk analysis jointly and formalise it through the prevention plan.

- **Risks specific to the Client:** the generic risks of the Client, which can be mapped by unit or activity zone.

- **Risks specific to the Contractor:** risks inherent to the actual activity of the SC; they are strongly correlated with the industry involved and transcribed in work instructions.

- **Multi-source risks:** risks resulting from the activity of the Contractor in the zone or unit of another company (Client or Contractor). They are linked to the working methods, equipment used, processes and environment of the UC. They lead to the modification of work instructions.

5. Risk analysis flowchart

❶ **Hazard identification**

YES

Preventive action: substitution

YES

NO

Other hazards

NO

❷ **A priori risk assessment**

Conjunction of work stipulated and hazard identification → HEG

❸ **Identification of situations with exposure potential**

YES

Preventive action: modification or elimination of the task

YES

NO

Other situations with exposure potential

NO

❹ **Qualitative and/or quantitative assessment**

Preventive actions: information, training, CPE, PPE, etc.

Corrective actions

❺ **Residual risk assessment**

Persistent risk

YES

NO

❻ **Recording and monitoring**

No. 3

1. Purpose of the annex

The purpose of this annex is to help the employer choose their indicators.

The indicators shown in this annex are given as examples; this list is not exhaustive. Every employer is free to choose the numeric and descriptive indicators used to monitor their system.

2. Definition

A system can only be effective if permanently monitored through the use of indicators.

The employer must regularly check the results produced.

Indicators are used to monitor whether the management system is functioning correctly.

They can be analysed to highlight the actual situation in relation to planned actions in order to adjust the action plan.

3. Choice of indicators

To be effective, an indicator must meet several criteria:
- Be appropriate to the company: in relation to the scope of the company's activity and its organisation.
- Be relevant: responds to a need, is representative in relation to what it is measuring, is realistic for attaining the target and is concrete.
- Be simple: understandable by everyone and easy to implement.
- Be reproducible: quantifiable and usable for both synthesis and analysis purposes in order to monitor its evolution and thus assess the efficiency of the different actions undertaken.
- Be reliable: realistic and credible in relation to what it is measuring.
- Be linked to a target: the target must represent a commitment to improve and must be realistic.

4. Indicator types

These indicators include:
- Indicators required by the association for MASE/France-Chimie common system certification.
- Monitoring and result indicators put in place by the employer.

5. Indicators required by the MASE association

These indicators must be provided by the employer every six months via the MASE website (workforce size, number of lost-time accidents, number of talks, number of audits, significant changes in the company, etc.).

This periodic check, in addition to certification, allows the MASE association to monitor developments in the HSE management system of every company, and to undertake a global

analysis of the HSE results of all its members.

Analysis of these global results can be compared to national results (official body references).

The employer can contact the regional administrator for guidance on how to enter data for the six-monthly follow-up.

Failure to provide this follow-up information can result in certification being suspended.

6. Indicators put in place by the employer

The employer defines the numeric indicators that most closely measure their performance.

The employer decides on indicators that they judge relevant to attaining the targets they have set. These indicators will be re-entered into a "Cockpit chart" so that they can be monitored and exploited.

7. Examples of system indicators

- HSE leaders rate: number of HSE leaders/total company workforce,
- Number of actions resulting from the risk analysis (DUER),
- Number of formal HSE communications issued by the employer over the year,
- Action plan implementation rate: actions implemented/total number of actions,
- Action plan effectiveness rate: number of preventive actions/total number of actions,
- Number of HSE actions undertaken following HSE meetings (Annex 4),
- Number of internal or external HSE nonconformity reports,
- Number of HSE meetings per person,
- Number of actions enabling an HSE improvement,
- Number of audits/worksite inspections,
- Absenteeism rate (WA, OD, unjustified, etc.),
- Turnover rate,
- Accidentology: frequency rate (FR1, FR2 and FR3) and severity rate,
- Individual review rate: number of individual reviews conducted/total company workforce, etc.

8. Examples of safety indicators

- Number of LTAs (lost-time accident),
- Number / rate of jobs modified,
- Number of NLTA (non-lost-time accident),
- Number of commuting accidents,
- Number of hazardous situations,
- Number of highway code offences received by the company on its car fleet,
- Number of traffic accident declarations (responsible or not),
- Number of HSE actions implemented enabling a reduction in the number of hazardous situations identified in the DUER,
- Number / analysis rate of accidents and hazardous situations,
- Safety topics rate: number of safety topics/total number of HSE meetings,
- Safety inspections rate: number of safety inspections/total number of HSE inspections,
- PDP or PPSPS rate: number of PDPs or PPSPSs/total number of company worksites,
- Safety training rate: number of safety training courses/total number of training courses in the company,
- Safety communications rate: number of safety communications/total number of communications,
- Vehicle status monitoring (service, general maintenance, regulatory vehicle inspection, vehicle/use suitability, etc.)

9. Examples of health indicators

- Number of situations with exposure potential (noise, vibration, cold, heat, HCA, CMR, MSD, etc.),
- Number / analysis rate of situations with exposure potential,
- Health topics rate: number of health topics/total number of HSE meetings,
- Health inspections rate: number of health inspections/total number of HSE meetings,
- Health training rate: number of health training courses/total number of training courses in the company,
- Monitoring of medical examinations,
- Number / rate of employees subject to closer medical supervision (SMR),
- Number / monitoring of exposure measurements (noise, screen, HCA, CMR, MSD, etc.),
- Number of occupational diseases, requested or recognised (OD tables) or diseases of an occupational nature,
- Number of tasks eliminated with exposure potential,
- Number of employees exposed to one or more stress factor(s),
- Rate of employees with medical restrictions: number of employees with job-related medical restrictions/total company workforce,
- Health communications rate: number of health communications/total number of communications

10. Examples of environment indicators

- Number / rate of potentially polluting situations,
- Number / rate of environment topics: number of environment topics/total number of HSE meetings,
- Environment inspections rate: number of environment inspections/total number of HSE meetings,
- Number / rate of environment training courses: number of environment training courses/total number of training courses in the company,
- Environment communications rate: number of environment communications/total number of communications,
- Monitoring of waste processing costs,
- Waste sorting (dedicated skips),
- Recycling rate (waste recycled / waste produced),
- Recycling (bulbs, batteries, ink cartridges, etc.),
- Waste recovery (transformation of waste into energy),
- Consumption monitoring / ratios (paper, office technology, fuel, oil, electricity, drinking or industrial water, gas, etc.),
- Carbon footprint,
- Promotion of public transport / car sharing / cycle use,
- Number of complaints from neighbourhood sources (odour, noise, other forms of pollution, etc.)

No. 4

Advice on running meetings

1. Purpose of the annex

The purpose of this annex is to help the employer organise their HSE meetings.

2. Definition

Management meetings are understood to be any event bringing together personnel to examine various topics, for example: talks, HSE toolbox talks, breakfasts, etc.

3. Organising a management meeting

This is a meeting planned and run by a person competent in the topic under discussion.
It allows everyone in the company to express themselves and allows bottom-up feedback to identify potential drivers of improvement that could be implemented.

PREPARATION

These meetings can be prepared following the process described below:
- Set the topic: the topic can be fixed in advance in accordance with an established schedule or based on current developments in the company or internal and/or external lessons learned. At this stage of the preparation and for the given topic the "message(s) to get across" must be identified,
- Set the duration: this will be based on the importance of the topic and the message(s) to be communicated,
- Research informative documents (brochures, articles, LL, films, photos, etc.) that can be used to construct the presentation,
- Prepare the presentation medium and the necessary equipment: depending on the topic, the presentation can consist of verbal commentary on a supporting document or be projected in different formats (video, slideshow, photos, etc.),
- Target the relevant personnel: the target must be appropriate to the topic examined (examples: solder fumes   welders, office technology risks   administrative personnel),
- Set the location, dates and times: varying the meeting locations may be of benefit. The locations, dates and times chosen must allow personnel to listen in the most receptive conditions possible,
- Plan notifications/invitations/attendance sheet,
- Etc.

MEETING PROCESS

It can be run as described below:
- Welcome participants,
- Present the topic and length of the meeting,
- Validate the attendance sheet: this must contain the topic examined and its main components, the date, the name and signature of the facilitator, the name and signature of participants,
- Ensure the participation of all participants by preventing a single person from monopolising the meeting,
- Stay on topic and observe the allocated times of the meeting,
- Record comments and planned actions on the topic examined (attendance sheet, minutes, etc.),
- Collect any requests for other topics expressed during the meeting,
- Etc.

PROCESSING AND FOLLOW-UP

Additional actions may take place after the meeting:
- Record the meeting (date, topic, comments and actions),
- Validate and plan actions,
- Provide information on actions selected and not selected,
- Add the relevant information to the action plan for follow-up,
- Archive the record,
- Etc.

These processing and monitoring operations act as input data for the review.

No. 5

Advice on audits

1. Purpose

The purpose of this annex is to help the employer make the audit tool effective.

2. Definition

The audit is a systematic, objective examination conducted on the basis of a reference guide. It is used to establish observations from the points audited (inventory) in order to identify nonconformities, offer guidance on improvement and highlight good practices / positive points.

There are several different types of audit:

- System audit,
- Preparatory audit (dry run),
- Factory floor audit (inspection), industrial sector audit, worksite audit, etc.
- Targeted audit (PPE, vehicles, plant facilities, tooling, equipment, etc.),
- Audit of a procedure, work instructions, etc.,
- Documentary audit, etc.

3. Audit process

Regardless of the audit chosen, it consists of several stages:

PREPARATION AND ORGANISATION

The employer must choose:
- The type of audit to be conducted and the scope (audit limit) to be audited
- The audit team (one or more auditor(s) must be competent or trained)
- Planning (date, activity, location, worksite, etc.) and the audit plan (system or preparatory audit)
- Organisation of the audit with transmission of documents (system or preparatory audit) between the audit team and the entity audited.

IMPLEMENTATION

The audit team must:
- Hold an opening meeting (introduction of the people involved, presentation and objective of the audit)
- Perform the audit by:
  - Using the plan (system or preparatory audit)
  - Following a predefined inspection form
    - Worksite form (display of notices, PDP or PPSPS, movement around the site, PPE, etc.)
    - Vehicle form (licence, service, condition, tyres, etc.)
    - Equipment form (inspection report, condition, CPE, etc.)
    - Etc.

• Noting positive points, guidance on improvement, minor or major nonconformities,
• Holding the closing meeting (presentation of the audit observations and conclusions so that the audited entity understands and accepts them).

TRACEABILITY

The audit team must:
- Draw up the audit report,
- Produce nonconformity reports,
- Circulate them to the employer.

The employer must:
- Put an action plan in place (areas for improvement, corrective or preventive actions) on the basis of the nonconformities observed,
- Monitor the actions undertaken and measure their effectiveness.

NB: the system audit consists of two components:
- the documentary analysis,
- the analysis on the ground: it is conducted either in the location where tasks, works or services are performed or using information from the ground (audit reports/factory floor inspections, etc.).

No. 6

Advice on implementing a review

1. Purpose

The purpose of this annex is to help the employer organise and conduct their review (preparation, implementation, and processing and follow-up of the review).

2. Definition

A review is a tool used to:

- Analyse results,
- Check the attainment of targets,
- Monitor the execution of action plans,
- Check the relevance of policy,
- Check the efficiency of the management system,
- Suggest changes to the management system.

3. Organising a review

The review is used to take stock of a completed period of time and set the course for the following period. It is mandatory and must take place at least once a year.

Important: Failure to complete a review results in a major nonconformity.

PREPARATION

The review can be prepared following the process described below:
- Define the date, time and location of the meeting,
- Determine the participants (non-exhaustive list):
  - Management, HR, HSE, equipment manager, first-level supervisory personnel, etc.,
- Collect input data (non-exhaustive list):
  - How elements in the previous review have been handled,
  - Results (indicators, incidents, work accident / occupational disease / permanent partial incapacity, etc.),
  - Energy index, carbon footprint, energy consumption,
  - Results of management meetings (topics, participants, feedback, actions, etc.),
  - Analysis of the action plan,
  - Review of inspections (audits, factory floor inspections, etc.),
  - Any exposure incidents (CMR, radiation protection, biological, etc.),
  - Measurement results (hazardous chemical agents, noise, dust, vibration, etc.),
  - Bottom-up feedback (hazardous situations, areas for improvement, etc.),
  - Analysis of regulatory and technical developments,
  - The risk assessment (physical, chemical, biological, ergonomic, psychological and social, etc.),
  - Comments from regulatory periodic inspections (electrical, fire extinguishers, materials, equipment, etc.),
  - Personnel monitoring (medical fitness, training, accreditations/authorisations, etc.),

- Waste monitoring (waste tracking form, sorting, recovery, etc.),
- Analysis of activities specific to the company (transport of hazardous goods, etc.),
- Review of temporary staff (fixed-term contracts, temporary workers, etc.),
- Review of the communication plan (display of posters, media, Internet, etc.),
- Etc.

IMPLEMENTATION OF THE REVIEW

- Welcome participants
- Validate the attendance sheet
- Present and analyse the input data
- If applicable, determine output data (non-exhaustive list):
  - Revision of the policy
  - Adjustment of targets and indicators
  - Updating of the action plan
  - Modification of the document system (management manual, procedures, etc.)
  - Inventorying of regulatory texts
  - Adjustment of human and/or material requirements
  - Updating of the training programme
  - General adjustment based on input data
  - Etc.

At the end of the review, the employer gives their verdict on the relevance and efficiency of the management system.

PROCESSING AND FOLLOW-UP

- Production and circulation of minutes to the relevant people,
- Inclusion of actions resulting from the review in the action plan,
- Circulation of updated documents if applicable,
- Archiving of review minutes.

No. 7

Advice on implementing an action plan

1. Purpose of the annex

The purpose of this annex is to help the employer implement an action plan to improve their management system and make it more efficient.

2. Definition

The action plan is a mechanism of the management system used to monitor the completion of actions (corrective, preventive, regulatory, etc.).

It contains the following headings as a minimum requirement: description, origin, nominated person responsible, completion deadline, monitoring or progress status, effectiveness measurement.

3. Implementing an action plan

The action plan may be selective:

- annual
- limited in its duration
- based on different areas or activities
- defined as a function of the scope (national, regional, agency, etc.)
- Etc.

For ease of follow-up, the employer can group it into a single document.

In order to implement an action plan, the employer must collect all of the relevant information from their management system (review, feedback from meetings, LL, consequences of a WA or OD, etc.).

4. Components of the action plan

The action plan must be easy to use, clear, ranked in order of importance and may contain the following (with the points in bold below as a minimum requirement):

- A revision date,
- A date on which the action is recorded,
- **Description of the action** (proposal or nature of the action to be implemented),
- **Origin of the action** (audit, inspection, talk, meeting, regulatory requirement, etc.),
- The nature and cause of the nonconformity (regulatory, system, etc.),
- The risk generated (HSE, financial, quality risks, etc.),
- **The nominated person responsible** for the action (in charge of implementing it),
- **The implementation deadline** (planned action completion date),
- **Monitoring or progress report** (progress indicator on implementation of the actions),
- The closing date of the action (final date for completion of the action),
- The total cost of the action (financial commitment including material, human and technical resources),

- Ranking of the action (priority level of the action as a function of risk),
- **Measurement of the action's effectiveness** (the risk has not reappeared, no other risks generated, elimination of the risk, absence of stress for employees, regulatory compliance, etc.),
- Etc.

This list is not exhaustive and must be adapted to the company.

5. Monitoring the action plan

The employer periodically monitors progress of their action plans. Monitoring can take place when the management system steering committee meets and must be recorded.
Actions not implemented from the previous period are brought forward to the action plan for the current period.
Action plan monitoring constitutes an item of input data for the review.
It guarantees correct functioning of the management system.

No. 8

Advice on managing temporary staff

1. Purpose of the annex

The purpose of this annex is to assist the employer in managing (statement of requirements, integration, assessment) their temporary staff.

2. Definition

Temporary staff is understood to mean people on fixed-term contracts and temporary workers. **Companies which use temporary staff must:**

- Anticipate workload fluctuations through the inclusion of seasonal phenomena and take account of foreseeable variations in workforce numbers (paid leave, training courses, etc.).
- Develop internal flexibility to cover high-risk jobs and prioritise assignment of temporary workers to other jobs.
- Ensure that the job does not involve prohibited work.
- Prioritise use of temporary staff for long-term assignments.
- Provide a medical examination by their company doctor if the employee is subject to closer medical supervision (SMR).

3. Organisation

STATEMENT OF REQUIREMENTS

The statement of requirements must be used to identify the particular characteristics of the job and their impact on the health and safety of temporary staff. **The following points in particular must be defined:**

- The characteristics of the assignment (profile required, duration, location and working hours),
- The characteristics of the job (nature of the job, detail of all tasks, machine(s), equipment, device(s), product(s), tool(s), etc. used by the employee),
- The existence of particular working conditions,
- The risks inherent to the job and corresponding preventive measures,
- The professional expertise, accreditations and qualifications required,
- The personal protective equipment necessary,
- Jobs involving specific risks, and the enhanced training provided,
- Any closer medical supervision the user company is responsible for,
- Contact details of the company doctor or occupational health department,
- Etc.

The statement of requirements must be formalised in a document.

INTEGRATION

On their arrival in the company, the integration process must ensure that the information necessary for the temporary employee to fulfil their professional duties is passed on to them.
In addition to regulatory obligations (induction, job training, jobs involving specific risks and enhanced training, etc.), **integration must include the following in particular:**

- Introduction of supervisory staff and their team.
- Support of temporary staff by a named person appointed by the employer of the host company (sponsor/tutor) who knows the work to be done and all of the rules to perform it safely.
- Assessment of knowledge acquired following job training.
- Formalisation and recording of the induction and training process.

ASSESSMENT

In order to ensure that the duties of temporary staff are always consistent with the specifications of the contract, on-the-job inspections must be organised.
At the end of the assignment, temporary staff are assessed.
Assessment of temporary staff must allow the employer to check the attainment of targets and compliance with the rules and good practices of the host company.

No. 9

Advice on exposure measurement

1. Purpose of the annex

The purpose of this annex is to help the employer in their obligations to measure exposure to hazards in order to prevent health risks at work and occupational diseases.

This prevention is based on both a qualitative assessment (the risk analysis) and on a quantitative assessment (metrology).

Using reliable (and not random) methods, the quantitative assessment identifies exposure levels in order to implement corrective solutions (global or individual) if necessary.

2. Definition

Metrology: the science of measurement in both theory and practice.

Personal sampling: used to sample the work area around the employee regardless of their location.

Area sampling (general air measurement): used to sample a defined area of the workplace and produce mapping.

Biological monitoring: urine or blood analyses which allow the company doctor to assess the actual exposure level to a chemical agent through use of biomarkers.

3. Exposure measurement process

The exposure measurement process must include:
- The purpose of the measurements,
- The measurement strategy,
- Choice of sampling methods and measuring devices,
- Interpretation of results,
- Feedback of information to the personnel affected.

3.1 Purpose of the measurements

The first step of metrology is to ask the following question: what will these measurements be used for? The whole theoretical and practical measurement process will be determined by the answer to this.

The purpose of the measurements is to respond to:
- A regulatory obligation,
- A workplace monitoring programme,
- Quantitative assessment of the risk analysis of certain tasks,
- A particular problem (accidental exposure),
- A comparison with occupational threshold limit values (TLV),
- A request issued by the labour inspectorate or company doctor,
- Determination or optimisation of collective and/or personal protective equipment.

3.2 Measurement strategy

Prior to all sampling operations, the following points must be specified:

- The choice (personal measurements, Similar Exposure Group (SEG) measurements) and resources (funding available, laboratories in the case of regulatory measurements, etc.) for conducting a quantitative assessment of an exposure situation,
- Consideration of the sampling situation (location, time, climatic conditions),
- Number of samples; at least 6 measurements for each HEG taken over several days is recommended to obtain a representative statistical result of potential exposure,
- The sampling period must take account of reference durations or doses,
- The recipients of results; before conducting the sampling, how the information will be sent to the various parties (employer, company doctor, staff representatives, personnel involved) must be clearly defined.

3.3 Choice of sampling methods and measuring devices

3.3.1. Sampling

The choice of sampling method and measuring device will depend on the type of hazard requiring quantitative assessment:

- Physical (noise, vibration, ionising radiation, temperature, etc.),
- Chemical (HCA/CMR, etc.),
- Biological (Legionnaires' disease, etc.),
- Ergonomic (handling, artificial light, Video Display Units, etc.),
- Etc.

3.3.2. Measuring devices

A universal measuring device does not exist. Choice of device will depend on:

- The type of hazard to be measured,
- Measurement frequency,
- The measurement strategy decided on,
- The response time required (instantaneous, continuous, regulatory, etc. measurement),
- The concentration of the hazard to be measured.

The more information is available on the hazard, the easier it will be to take a measurement and define the appropriate equipment.

For example:

For gases:

- Pumps and detector tubes: a sealed glass tube is filled with a granular material coated with an indicator that will react with a particular gas or vapour to give a colour change. This visible reaction is also proof that the gas or vapour to be measured is present. The concentration is read directly from the scale printed on the tube.
- Electrochemical sensors: the ambient air to be checked is diffused through a membrane into the liquid electrolyte of the sensor. The electrolyte contains a working electrode, counter electrode and reference electrode.

For noise:
- Sound level meter: a device used to record instantaneous measurements consisting of a microphone and electronic circuit. Measurements are taken at ear height. Used to identify the noisiest situations and locations in the workplace.
- Exposure meter: a device that records continuous measurements while the employee is working.

Devices are also available for other hazards:
- Dusts (pump),
- Light intensity (lux meter),
- Temperature,
- Ionising radiation (radiation detector, etc.),
- Vibration (accelerometer),
- Etc.

3.4 Interpretation of results

Interpretation of results must take account of:
- The measurement objective,
- The task performed (exceptional, repetitive, work atmosphere, etc.),
- The sampling conditions (working hours, climatic conditions, etc.),
- Comparison references.

3.5 Feedback of information to the personnel affected

The results of the measurements taken must be made available to relevant stakeholders (employer, HEG, employee, external companies if applicable, company doctor, staff representatives, administrative authorities in the case of regulatory inspections, etc.).
The results must be accompanied by explanations on the metrology described in the previous sections.

3.6 Processing and follow-up

All of the quantitative analysis is recorded.

It is used to:
- Update the HSE risk analysis,
- Adjust the prevention measures implemented,
- Update the DUER,
- Update the individual exposure prevention record (French acronym :FIPE).

All of these elements are communicated to the occupational health department and are used as the basis for informing personnel.

BIOLOGICAL EXPOSURE INDEX (BEI)

Regulatory texts stipulate that the quantitative risk analysis is also conducted using BEIs. These are the responsibility of the company doctor.

Advice on choosing, deploying, maintaining and managing personal protective equipment

1. Purpose of the annex

This annex complements recognised official documentation. Its purpose is to help the employer choose, deploy, maintain and manage personal protective equipment (PPE) and to train their employees in its use.

Personal protective equipment is the last defence against preventing damage to health or limiting the severity of that damage.

It is a preventive measure that should be used when all other measures (elimination of the hazard, deployment of collective protection) prove insufficient or impossible to implement.

2. Definition

Personal protective equipment (PPE) consists of devices or items that are worn or held by a person in order to protect against one or more risks likely to threaten their health or safety.

Wearing of PPE is designed to protect against any residual risk.

3. Choice of PPE

DIFFERENT PPE CATEGORIES

- **Category 1 PPE** protects against minor risks which do not affect vital areas of the body and whose effects cannot cause irreversible lesions (e.g. work gloves, etc.).
  A self-certification procedure is sufficient: a declaration through which the manufacturer or entity responsible for placing the product on the market confirms that their product is compliant with the provisions of the directive.
  Marking: the CE mark must be affixed to this equipment.

- **Category 2 PPE** protects against serious dangers (mechanical, physical, chemical) which affect vital areas of the body and whose effects can cause irreversible lesions (e.g. protective helmet for industry, high visibility clothing, etc.).
  This type of PPE is subject to an "EC type-examination" conducted by an authorised body: the approved inspection body establishes and certifies that the PPE model in question satisfies the relevant provisions of the directive.
  Marking: the CE mark and year of manufacture must be affixed to this equipment.

- **Category 3 PPE** protects against mortal danger. The "EC type-examination" is completed with a production inspection conducted by an authorised body (e.g. respiratory protection devices, PPE to protect against falls from height).
  Marking: the CE mark, year of manufacture and number of the approved laboratory must be affixed to this equipment.

CHOICE OF PPE

Following consultation with the health, safety and working conditions committee if there is one (otherwise with staff representatives), the employer determines the conditions under which personal protective equipment is made available and used, and particularly conditions governing the duration of its use.

They consider the severity of the risk, the frequency of exposure to the risk, the characteristics of each worker's job, and the performance of the personal protective equipment in question.

They must comply with regulatory and/or normative requirements.
Other requirements must also be considered when selecting PPE:

- **Task requirements:**
  - Reduced interference with work duties and mobility,
  - Functional convenience,
  - Compatibility with other equipment used,
  - Non-interference with sense perceptions,
  - Etc.

- **Comfort requirements:**
  - Lightness,
  - Adaptation to morphology,
  - Perspiration permeability,
  - Thermal comfort,
  - Compactness,
  - Etc.

- **Protection requirements:**
  - Effectiveness of protection,
  - Potential duration of protection,
  - Expiry date (implies manufacturer information),
  - Robustness,
  - Safety,
  - Etc.

- **Information requirements:**
  - Level of protection provided,
  - Use restrictions,
  - Expiry date (implies manufacturer information),
  - Instructions for use,
  - Storage, maintenance, cleaning,
  - Etc.

PROVISION OF PPE

The employer must provide and pay for PPE and work clothes. The employer is responsible for ensuring that they function correctly and for keeping them in a satisfactory hygienic condition through necessary maintenance, repair and replacement.

PERIODIC CHECKS

Some types of equipment require periodic general checking. French ministerial decrees specify which PPE is affected. They also specify the frequency of checks and, in some cases, their nature and content.

The purpose of checks is the timely detection of any defects likely to result in hazardous situations or any accessibility issues in breach of conditions on availability and use.

Periodic PPE checks must be conducted by qualified people either inside or outside the company.

The list of people authorised to check PPE is transmitted to the labour inspector. These people have the necessary competence to check the PPE in question. They also have the necessary competence to understand the corresponding regulatory provisions.

4. Maintenance/replacement of PPE

The employer is responsible for maintaining, repairing and checking PPE. It is the employee's responsibility to ensure that the protection they wear is in good condition.
Protective equipment that has deteriorated for any reason whatsoever, including the occurrence of the risk it is designed to protect against, and whose repair is unlikely to guarantee the level of protection provided prior to its deterioration, is immediately replaced and scrapped.

In addition, some PPE has an expiry date (protective helmet, filter cartridges, etc.). It is therefore important to be vigilant and replace this equipment in good time.

For all activities with a risk of contamination by CMR agents (carcinogenic, mutagenic or toxic for reproduction), **the employer must implement the following appropriate measures:**

- Provide protective clothing or any other appropriate garments, place it in a specified location, check and clean it, if possible before and in all cases after each use, and repair or replace it if defective,
- Ensure that workers do not leave the establishment with personal protective equipment or work clothes,
- If personal protective equipment and clothing are serviced outside the company, the employer responsible for transporting and servicing them is informed of the possibility and type of contamination.

Instructions for use are provided with work clothes and PPE. They contain information specifying:

- Storage conditions,
- Conditions of use,
- Performance,
- Usage restrictions,
- Any relevant marking (also found on a label inside the clothing),
- Care conditions (also found on a label inside the clothing).

5. PPE monitoring

MONITORING TECHNOLOGICAL DEVELOPMENTS

The employer conducts regulatory and technological monitoring of PPE so as to provide their employees with the best protection possible.

6. Traceability
The employer ensures traceability of PPE requiring maintenance, periodic checking or replacement as the result of an expiry date, etc.
The results of periodic checks are recorded in the company safety register, or if the checks are made by people outside the company, their reports are annexed to the register.

7. Information / Training

The employer must provide workers required to use PPE with appropriate information on:

- the risks PPE protects them against,
- PPE conditions of use, in particular the situations it is designed for,
- instructions related to PPE,
- the conditions under which PPE is provided.

This information must be updated as often as necessary so that equipment is used in compliance with its instructions for use.

Instructions for use must be drawn up by the employer. They must include comprehensible information on the risks the PPE provided protects relevant workers against, but must also include PPE conditions of use and best practices.

PPE instructions for use are provided to the CHSCT (or staff representatives as applicable).

In addition, documentation on the regulations applicable to the provision and use of PPE affecting the establishment's workers must also be provided to it.

8. Employees/Users

In accordance with their training and abilities, each employee is responsible for looking after their health and safety and that of other people affected by their actions or omissions at work. Refusal to wear the PPE provided to the employee is considered a serious breach of conduct.

As a result, the employee therefore has several obligations regarding the PPE provided:

- Use it correctly,
- Take care of it and ensure it is always effective,
- Inform the employer or their line manager of a situation that could seriously endanger the health and safety of the employee and the people in the company,
- Participate in any initiative to secure worker safety,
- Always check PPE conditions of use and its suitability for the tasks in question,
- Familiarise themselves with technical documentation on PPE use provided by manufacturers and the employer,
- Familiarise themselves with the rules provided by the CHSCT, company memos and general rules on PPE use.

No. 11

Advice on fitting out staff facilities

1. Purpose of the annex

The purpose of this annex is to help the employer fit out their staff facilities.

Prevention of damage to employee health also includes good personal hygiene and provision of appropriate staff facilities.

2. Définition

Staff facilities means the provision of:
- Changing rooms
- Sinks and appropriate accessories (soap, hand towels)
- Toilet cubicles

And if applicable:
- Showers
- Areas appropriate for eating meals

3. The employer's obligations

The employer must therefore provide workers with the means to ensure their personal cleanliness through the installation and maintenance of staff facilities.

INSTALLATION RULES

Changing rooms/Washrooms
Communal changing rooms and sinks are installed in a specific room of a suitable size, separate from work and storage areas, and placed in a location that workers can easily access.

If changing rooms and sinks are installed in separate rooms, it must be possible to pass from one to the other without crossing work or storage areas and without going outside.

In establishments where dirty work is carried out, showers must be provided to workers. The water temperature of the showers must be adjustable.

In establishments employing men and women, separate installations must be provided for male and female workers.

At least one toilet cubicle and one urinal must be provided for every 20 men and two cubicles for every 20 women. The workforce taken into account is the maximum number of workers present in the establishment at the same time. At least one cubicle must also contain a sink.

In establishments employing men and women, separate toilet cubicles must be provided for male and female workers. Toilet cubicles for women must include a container for sanitary products.

Eating area

Workers cannot be allowed to take their meals in areas assigned for work.

In establishments where at least 25 workers wish to regularly take their meals in the workplace, the employer, after seeking the opinion of the CHSCT or staff representatives as applicable, must provide them with a canteen facility. The facility must be equipped with sufficient numbers of seats and tables for ten users and include a tap providing hot water and cold drinking water. It must have a means of conserving or refrigerating foods and drinks, and equipment for reheating dishes.

In establishments where fewer than 25 workers wish to regularly take their meals in the workplace, the employer must provide them with an area where they can eat in without compromising their health and safety. Subject to authorisation from the labour inspector and after seeking the opinion of the company doctor, this facility may be located in areas assigned for work, provided that the activity does not include the use of hazardous substances or preparations.

Upkeep of facilities

The workplace and its facilities must be regularly serviced and cleaned. They must be kept free of clutter. The company doctor and CHSCT or staff representatives, as appropriate, give an opinion on the measures required to satisfy these obligations.

The floor and walls of the areas used for communal changing rooms, showers and sinks must be easy to clean.

These areas must be kept clean at all times.

The floors and walls of toilet cubicles must be made from impermeable materials for ease of cleaning.

The employer must ensure that the toilet cubicles and urinals are cleaned and disinfected at least once a day.

The employer must ensure that the canteen facilities or eating area and the equipment they contain are cleaned after each meal.

Provision of facilities for a supplier company

A contractual document (contract, PDP, PGC, etc.) stipulates how upkeep charges are distributed between supplier companies whose workers use the areas and facilities provided by the customer.

The usage rules applicable to the areas and facilities provided are explained to personnel when they visit the workplace.

PART 2

« Advice on... »
2018

No. 12

Advice on a holistic vision of an integrated HSE culture

1. Purpose

The purpose of this advice is to give employers a holistic vision of an integrated HSE culture, which is the overarching goal of the MASE-France-Chimie common system.

2. Definition

If a company has an integrated HSE culture, it means that:

- at all levels of the company, regardless of its activities, it is understood and accepted that HSE issues – particularly personal and environmental integrity – are an integral part of the company's overall performance;

- and that these HSE issues are effectively integrated into all decision-making procedures at all hierarchical levels.

An integrated HSE culture demonstrates, through the shared ways of thinking and doing in the company, that no single person has the knowledge necessary to meet HSE objectives. Everyone in the company has a proactive role to play: senior managers, front-line managers, organic and temporary employees, work groups, support services (i.e. HSE, policy, HR, purchasing, engineering, etc.), employee representative bodies and subcontractors.

3. Expected results

An integrated HSE culture is designed above all to prevent serious and major accidents, which may pose a threat to personal integrity or jeopardise the very survival of the company (see **"Advice on preventing serious and major accidents"**). However, since it involves substantive work and input from all stakeholders regarding the organisation's fundamentals, it also helps to prevent less serious accidents and improve the company's performance in general.

4. Links with the MASE-France-Chimie common system

This "Advice" is linked to the entire MASE-France-Chimie common system, particularly:

- Chapter 1.1 Commitments of company management: it is essential that the employer, through leadership and HSE policy, provides the momentum to develop an integrated HSE culture;

- Area 2: Professional skills and qualifications: the transmission of skills and attitude is very important for establishing and perpetuating the integrated HSE culture.

5. The three pillars of HSE performance

The achievement of HSE objectives is based on three pillars.

Technical factors

HSE success hinges on substantive measures to improve the quality and maintenance of technical resources purchased or manufactured (i.e. equipment, tools, CPE, PPE). Specialist knowledge must be combined with feedback from sharp-end workers.

The Security Management System (SMS)

The SMS pillar involves formalising all the policies, processes, safety procedures and regulations, work sequences, standards and feedback flows put in place to ensure safety. It is broadly described throughout the MASE-France-Chimie common system. But making more and more rules is not enough to achieve HSE objectives and, in some cases, it can be counterproductive. The rules must be applicable and must be properly adhered to by the parties concerned.

Human and Organisational Factors (HOF)

This involves addressing all the factors that promote (or challenge) safe and efficient human activity (see figure 1):
- individual preparedness (training, support, etc.),
- the work environment (design, preparation, resources, etc.),
- the operation of work groups (stability, integration of new members, opportunities for cross-functional debate, etc.),
- organisation and management (managerial style, appropriate response to non-conformities, etc.).

Better management of HOF has a positive effect not only on HSE outcomes, but also on the company's overall performance.


Organisational and human factors*
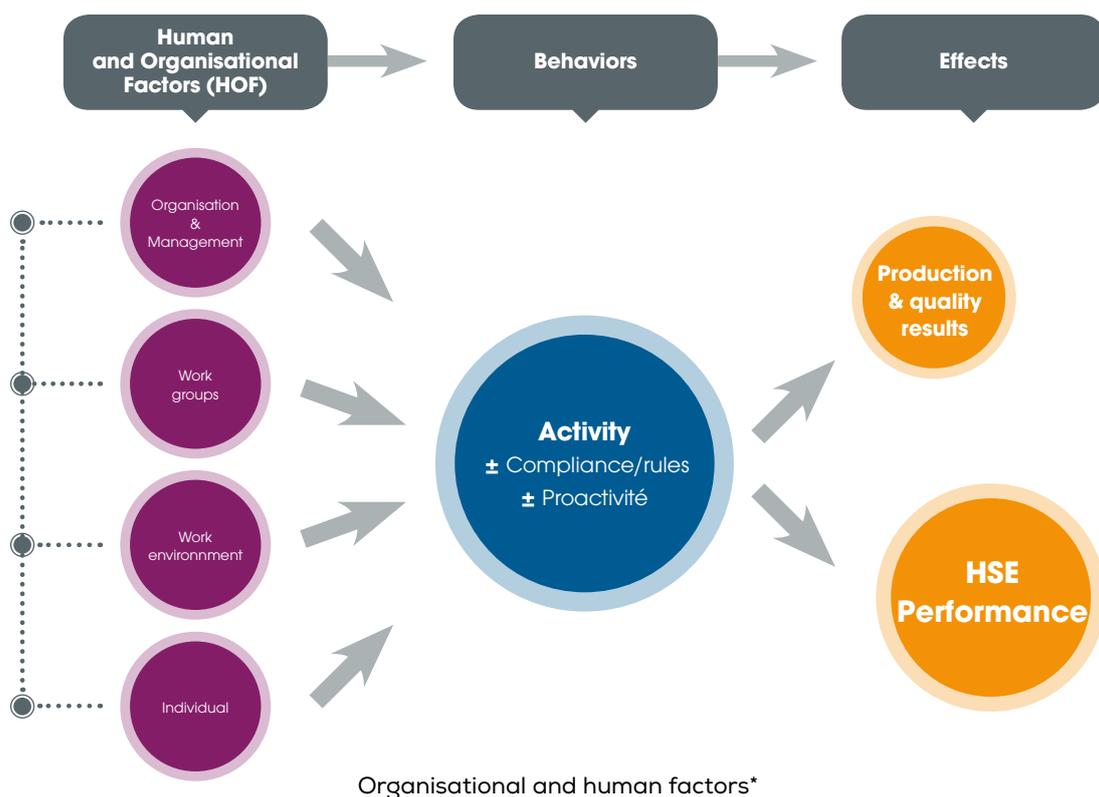
Figure 2 shows the links between the integrated HSE culture, the three pillars, and HSE performance.
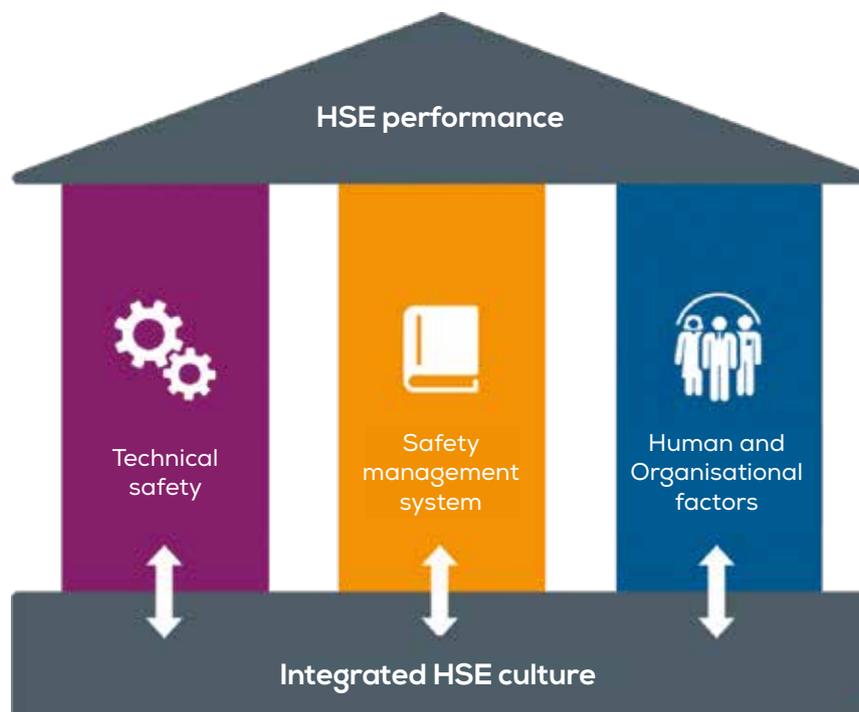
The three pillars of HSE performance *

The HSE culture has a two-way link with all three pillars.

- The HSE culture is grounded in effective practices in terms of HSE, technical safety and the management system. If technical resources are flawed or substandard, or if the rules are not applicable, the stakeholders will become disengaged.
- The HSE culture will influence technical design discussions and the drafting of procedures. If operators are involved in designing installations and procedures, the latter will be better accepted and adapted to work situations.

The actions taken must be consistent across the three pillars.

6. Proactive and real-time prevention
Risk prevention is based on both proactive and real-time measures (see figure 3).

Proactive prevention

Work situations are anticipated during the design and planning phases, leading to the implementation of HSE provisions: rules, CPE, PPE. This is called the "rule-based HSE" dimension.

Real-time prevention
In real-time work situations, things do not always go exactly as anticipated. How HSE issues are managed will depend on the behaviour and decisions of the managers and staff there at the time.

This is the "managed HSE" dimension, which relies on the professionalism of managers and staff.

* Source : Institut pour une Culture de Sécurité Industrielle (ICSI).

The two aspects of an integrated HSE culture *

| Rule-based HSE: plan as much as possible | + | SSE gérée: deal with the unexpected | = | HSE performance |

- Expertise
- Technical barriers
- Rules and procedures

- Skill
- Learning ability
- Adaptation

Compliant behaviour   **Compliant behaviour**
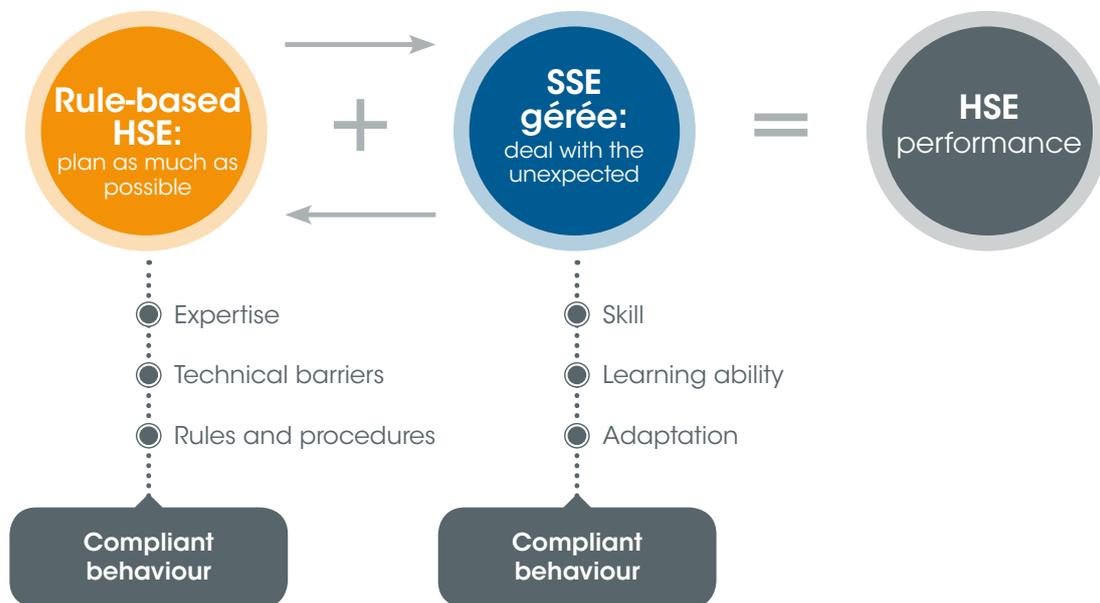
It is illusory to think that HSE outcomes can be determined exclusively by a set of pre-established rules and provisions: the quality of the real-time response is always decisive.

The company's various actors must therefore do two things:
- prepare for work operations as well as possible;
- make sure that the managers and staff who will have to deal with HSE issues in unexpected situations are competent to do so.

The two aspects are mutually overlapping: real-time behaviours are guided by discussions carried out during the preparatory phase, and preparations are improved by feedback on new situations.

7. Involvement of managers and staff

epending on the extent to which management and staff are involved in HSE matters, four categories of SSE culture can be distinguished.

The four categories of HSE culture (according to M. Simard)*

Staff involvement

Type B + −	Type D + +
Shop-floor culture	Integrated culture
Type A − −	Type C − +
Fatalistic culture	Bureaucratic culture

Management involvement
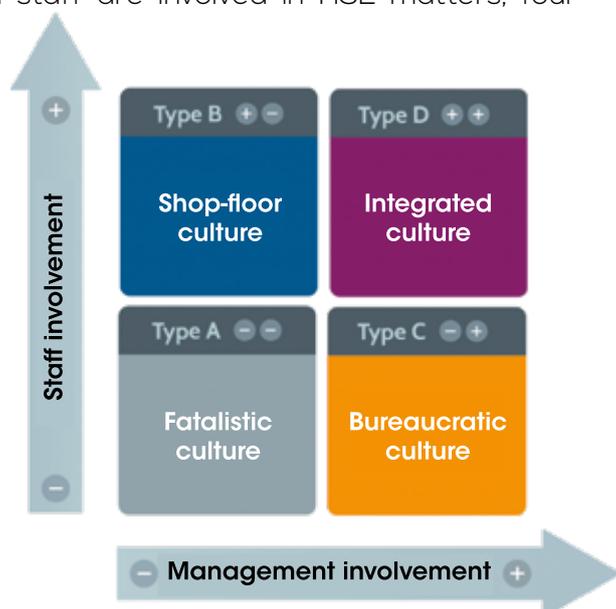
- **A fatalistic HSE culture** is a culture in which the actors believe it is impossible to influence the level of HSE performance : accidents are blamed on "bad luck".
- **A shop-floor HSE culture (1)** is a culture in which the management does not attach much importance to HSE, but workers develop and perfect their own precautionary measures to protect themselves against the hazards of their occupation, and pass them on from generation to generation (like miners taking canaries down the mine).
- **A bureaucratic HSE culture** develops when the company – and the management that represents it – become responsible for HSE performance. It relies on experts, integrates HSE issues into investment decisions, develops a formal safety system, and expects managers to pass down orders and make sure they are obeyed. The preventive measures developed in this top-down manner may conflict with standard occupational practices. Sharp-end workers may be reticent or may struggle to implement the requirements of the formal system.
- **An integrated HSE culture** also aims to optimise HSE outcomes, but is based on a common, company-wide belief that no single person has the knowledge necessary to achieve a high level of HSE performance. Prevention programmes must incorporate a broad range of skills, encourage the flow and comparison of information, and be reflected in all decisions at all levels and in all the company's processes.

8. The components of an integrated HSE culture

The different components of an integrated HSE culture are listed below, and are the subject of detailed "Advice".

hared awareness of major risks

All the company's stakeholders must have a shared awareness of the serious and major risks to which the company's activities may expose its employees, other people, or the environment (physicochemical hazards, falls from height, electrocution, violence against workers, traffic accidents, etc.). The implementation of the MASE-France-Chimie common system has helped to substantially reduce frequency rates in the companies concerned. However, focusing exclusively on the frequency rate and on analysing previous accidents is not enough to create a shared awareness, since accidents that have already occurred are, statistically speaking, fairly minor. The company must prepare for and address the risks that pose the greatest threat to individuals and to its own survival (i.e. fatal and major accidents), even if these risks have never resulted in an actual accident.

A shared awareness of serious and major risks is created by:
- hazard assessment studies,
- analyses of previous accidents and near misses (high-potential incidents), occupational illnesses and environmental impacts,
- risk assessments, especially relating to critical tasks,
- the quality of interactions between UCs and SCs, particularly when drawing up prevention plans.

See **"Advice on preventing serious and major accidents"**.
The prevention of the most serious risks consists primarily in the development of "lifesaving rules" (see **"Advice on developing a just HSE culture"**).

(1) An occupation is a professional group that, as a result of interactions between its members over the course of history, develops its own specific rules for dealing with problematic situations, in addition to or alongside formal company rules. These rules are passed on to new members of the group, and help to guide their behaviour.

he commitment of the entire management line

The company's management plays a major role, particularly in developing two specific features of an integrated HSE culture: a questioning culture and a culture of transparency. The commitment of the entire management line, reflected in the importance attached to HSE issues in decision-making and discussion processes, is essential to the development of an integrated HSE culture.

Front-line managers in particular must strike a balance between rule-based HSE and managed HSE requirements on a daily basis, as part of the preparation and implementation of worksite operations. See **"Advice on developing the role of front-line managers in HSE management"**.

LEADERSHIP

Leadership is based on several fundamental principles:
- Establish a vision of the desired safety culture;
- Share it with others;
- Give safety its rightful priority;
- Behave in a credible and exemplary manner;
- Foster team spirit and mutual assistance;
- Be present in the field;
- Recognise best practices and impose fair and equitable sanctions.

It is important that these seven principles are adopted at every level of management to ensure a consistent managerial approach to developing an integrated HSE culture.

A QUESTIONING CULTURE

The company's management cannot afford to be complacent about risk management, even if the HSE figures are good. It must cultivate doubt ("the next accident has never been so close") and attention to detail ("the devil is in the detail"). It must learn from accidents, near misses and high-potential incidents, in order to identify and address root causes (learning culture).

It must promote and support HSE leadership across the entire reporting line, particularly among front-line managers. As a result, all managers visibly demonstrate the importance of HSE in all their decisions, and set the highest standards in terms of HSE. They ensure compliance with "lifesaving rules" and occupational standards. They foster dialogue with employees and cross-functional debate in order to change situations and rules, and thus address HSE concerns more effectively. They adopt a participative approach to improving work situations and organisational effectiveness. They recognise actions that contribute to HSE improvements.

A CULTURE OF TRANSPARENCY

The company's management must encourage the circulation and appropriate handling of information on hazardous situations. It must identify and address factors that trigger employee silence – i.e. a situation where information available to front-line workers is not communicated to the management for fear of reprimands; to this end, the management must create a climate of fairness in which everyone is able to anticipate how the company will react in the event of a non-conformity, in order to foster trust and develop a speak-up culture.

These issues are covered by the following advice:
- **"Advice on developing the role of front-line managers in HSE management"**;
- **"Advice on developing a just HSE culture"**;
- **"Advice on escalating and processing information"**.

HSE PERFORMANCE IS EVERYBODY'S BUSINESS

HSE performance hinges not only on the decisions of senior management, front-line managers and workers, but also those of support services (purchasing, HR, engineering, policy, etc.). Each department is aware of its HSE responsibilities.

Problems arising simultaneously across several departments do not lead to a "blame game" but to the joint analysis and implementation of preventive measures. Employee representative bodies work closely with the management on HSE matters. HSE issues are considered at every stage of the relationship between the UC and the SC (referencing, procurement, worksite preparation, real-time operations, service assessment and feedback). Cooperation in the prevention of potentially serious incidents translates into joint actions, such as shared management commitments to HSE principles, joint field visits, information sharing, and improvement actions.

HSE PERFORMANCE AND QUALITY OF WORK

HSE performance is closely intertwined with the professionalism of individual workers. Worker training and accreditation, risk assessment, the conditions under which work operations are organised and carried out, and feedback procedures should enable compliance with best practices ("industry standards"). HSE performance is an important factor in quality of work, and high-quality work today should mean safety tomorrow.

SHARED VIGILANCE

An integrated HSE culture translates into shared vigilance. Any employee, regardless of rank, may warn his/her colleagues about a hazardous situation or a practice that doesn't seem very safe. Everyone accepts such warnings as normal practice.

INFORMATION FLOWS

The escalation, discussion and processing of information on risks, difficulties and errors are essential to prevent accidents.

These issues are covered by the following advice:
- **"Advice on developing shared vigilance";**
- **"Advice on escalating and processing information";**
- **"Advice on developing and implementing industry standards".**

9. Assessment and the process of change

To develop an integrated HSE culture, the company's management must first conduct an assessment of its current HSE culture, with the full involvement of the various stakeholders (managers, HSE specialists and employee representative bodies). This assessment is then discussed by all the stakeholders to determine the strengths of the current HSE culture and the areas in which it needs to be improved to ensure more effective management of serious and major risks. The company's management sets a three- (or five-) year deadline for achieving the goals set, and appoints a diverse steering committee to manage the change project. The proposed approach is described in detail in the **"Advice on driving the transition towards an integrated HSE culture".**

No. 13

Advice on preventing serious and major accidents

1. Purpose

The purpose of this advice is to help the company's stakeholders focus their safety approach on preventing serious and major accidents.

2. Definition

A serious and major accident is:
- accident resulting in death or injury with lasting effects;
- an incident (relating to safety, quality, reliability or any other aspect) that has a significant impact on facilities, people or the environment.

A risk is defined by two factors (probability and potential seriousness). For relatively frequent incidents, probability can be estimated from the known frequency rate. It is difficult to estimate the (very low) probability of very serious incidents. The product of "probability x seriousness" can be a misleading indicator when it comes to the most serious risks. What matters most is the careful management of incidents likely to have the most serious potential consequences.

3. Expected results

- Prevent serious and major risks, without being distracted by less important actions.
- Conduct an in-depth study of potentially very serious situations, highlight the technical, organisational and managerial root causes, and address major HSE issues on this basis.

4. Links with the common system

- Commitments of company management (area 1): making it clear that the company's priority is to prevent serious and major accidents is essential to achieve sustainable progress.
- Effectiveness of the management system (area 4): prioritising serious and major accidents guides the various aspects of the management system, particularly the objectives and the gathering of information necessary for feedback.

5. Identify high potential incidents rather than focusing exclusively on the frequency rate

The frequency rate (FR) is the number of lost time accidents occurring per one million hours worked, over a period of 12 months. In France, it is monitored by the CARSATs (regional pension and occupational health insurance funds).

For example:
- one accident per year in a company with 60 employees equals a frequency rate of 10;
- one accident per year in a company with 300 employees equals a frequency rate of 2;
- in a company with a frequency rate of 2, a team of 6 people has an accident every 50 years;
- in a company with a frequency rate of 15, each employee statistically has one accident in his/her career.

The frequency rate provides a hindsight perspective of events that have actually occurred. Fortunately, the majority of these events are minor accidents. By definition, the FR does not provide any information on the prevention of serious or major accidents likely to occur:

- major accidents have occurred in companies that have had an excellent FR for several years;
- many companies have reported a decline in FR but no simultaneous fall in the number of fatal accidents.

The HSE policy must focus primarily on preventing serious and major accidents that are not reflected in the frequency rate. To do this, it must identify and address the potential seriousness of events that have not had any major consequences.

THE PITFALLS OF BIRD'S TRIANGLE AND THE PREVENTION DIAMOND

The famous "Bird's Triangle" shows a proportional relationship between events of differing seriousness. However, the proportional relationship between minor accidents and serious accidents would only be valid if the mechanisms were the same. In fact, only a part of the triangle's base (high-potential incidents) results from mechanisms likely to cause a serious accident.

Bird's Triangle
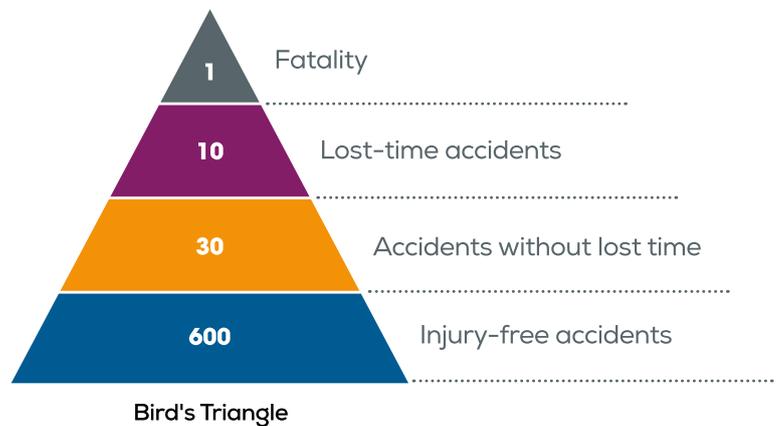
The base of the triangle contains many incidents that could not degenerate into a serious accident, and a small number of situations or incidents – known as "high potential incidents" – which, had the circumstances been slightly different, could have caused a serious or major accident. The undifferentiated treatment of the triangle's base disperses preventive action.

The employer must put in place an HSE policy enabling it to **identify, analyse and manage** high-potential incidents with the same degree of commitment as if a serious accident had actually occurred. The policy must enable the employer to distinguish such incidents from events without serious consequences, and from hazardous situations that have already been reported. This policy is represented by the "prevention diamond":

The prevention diamond
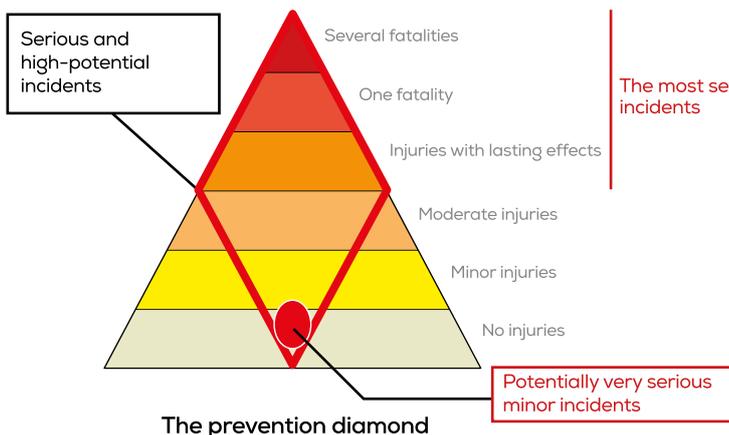
The least serious incidents are assessed one by one to determine their potential seriousness. Root cause analysis and prevention efforts are focused on high-potential incidents.

The diagram of the "prevention of diamond" illustrates the necessity of identifying one of these high-potential incidents.

6. Prioritise the prevention of serious and major accidents by addressing the root causes

The breakdown of the causes of minor accidents and high-potential incidents is generally not the same. The company plays a much greater role in the most serious events and in high-potential incidents because they can only occur where a series of technical and organisational barriers have been overcome. The failure of these barriers is the root cause of such events: they need to be identified and addressed(1).

To prevent serious and major accidents, the company must therefore work on the three pillars underpinning its safety (see **"Advice on a holistic vision of an integrated HSE culture"**) :
- technical factors,
- the safety management system and rules,
- human and organisational factors.

It must involve sharp-end workers and front-line managers in:
- identifying and analysing the precursors to serious accidents (high-potential incidents),
- and implementing – with the support of HSE specialists where necessary – prevention measures adapted to the actual situations that have occurred. It must ensure that the methods for achieving these goals are known to and implemented by the operational teams.

7. Identify and share information on the most significant risks

7.1 For the user company

User companies (UCs) formally identify the most significant risks by means of hazard assessment studies and risk assessments. However, these studies and assessments are increasingly carried out by experts, using highly technical methods. This can reduce awareness of **process risks** among operators and, more importantly, supplier companies. The user company is responsible for:
- involving operators in these studies and assessments;
- formally presenting the main findings in a form that is accessible to all of its employees, and to those of its supplier companies (SCs).

Depending on the nature of the activities and the related procedures, it is also responsible for effectively communicating this information through:
- calls for tender that clearly present the safety requirements related to the industrial context and operations,
- a supplier company selection process that prioritises safety and quality policy (2),
- quality prevention plans,
- quality safety inductions,
- quality work permits,
- high-quality interactions with SCs before, during and after worksite operations (at all hierarchical levels).

It encourages the escalation of risk information by SCs and fosters the development of a speak-up culture through a system of fair response to non-conformities (see **"Advice on developing a just HSE culture"**).

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(1) There are specific methods for analysing root causes. They involve the systematic assessment of Human and Organisational Factors (such as organisational issues, managerial choices, decision making processes, leadership style, and the errors and inadequate training of work groups and individuals), and of possible combinations of causes (systemic approach).

(2) In many cases, the "safety" chapter in the SC's documents relates to occupational safety, whereas industrial safety for the UC is covered by the "quality" chapter in the SC's documents.

7.2 For the supplier company

Supplier companies are confronted with two categories of serious risk:
- those specific to their occupation;
- those generated by the user company's processes.

With regard to specific occupational risks, the supplier company must develop a procedure to identify "the worst-case scenario", based on the respective knowledge and skills of sharp-end workers and HSE experts. Technical and organisational barriers will then be defined on the basis of this scenario. The procedure must be updated regularly following the analysis of high-potential incidents and accidents. It is reflected in the single risk assessment document (DUERP in French).

With regard to risks generated by the user company's processes, the SC:
- contributes, through its questions and requirements, to the quality of the prevention plan;
- ensures that its own "lifesaving rules" are compatible with those of the user company;
- introduces protocols for communicating information to its own employees, prior to the commencement of works (see **"Advice on developing the role of front-line managers in HSE management"**). It refers them in particular to the contracting terms and conditions, and instructs them not to conduct any operations in the UC's facilities that do not comply with its own industry standards;
- supports the escalation of risk information by its employees, and the communication of this information to the UC; ensures that this information is processed and that the UC and the SC respond appropriately (see **"Advice on escalating and processing information"**);
- complies with the obligation to remove its employees when the working conditions are not safe, and reaches an agreement with the UC on this issue;
- may decide not to respond to a call for tenders if it is concerned that major risks are not adequately addressed.

8. Maintain constant vigilance and adopt appropriate indicators

Effective worksite preparations are essential but not sufficient to prevent the most serious risks.

Vigilance must be maintained at all times through:
- the daily presence of front-line management at the sharp end of operations, and the regular presence of senior management (see "Advice on developing the role of front-line managers in HSE management");
- shared vigilance within work groups (see "Advice on developing shared vigilance");
- regular discussions within the work group and with front-line management;
- the efficient escalation, analysis and processing of information on risk situations, high-potential incidents and accidents. The identification of root causes is essential to addressing risk situations, which are precursors to serious accidents. The primary goal is to identify recurring disruptive events (organisational, environmental, interference between activities, etc.) that have undermined the prevention measures put in place (barriers or defences).

Since FR is in no way an indicator for preventing major risks, the company implements specific indicators. These may relate to performance (number of high-potential incidents or situations analysed and addressed, etc.) and to the resources implemented (quality of assessments and prevention plans, team meetings, etc.).

No. 14

Advice on developing a just HSE culture

1. Purpose

The purpose of this advice is to help employers develop a "just culture" that facilitates the effective vertical, horizontal and transversal flow of information (particularly regarding HSE), and thus prevents employee silence.

2. Definition

Employee silence refers to a situation where important information is available at the sharp end but is not communicated upwards; therefore, it cannot be integrated and addressed at the appropriate decision level.

A just culture is defined as a corporate culture in which management's response to reports of exemplary behaviour, non-conformities or hazardous situations is predictable. This culture is based primarily on a shared analysis and response policy appropriate to the events and situations encountered. Where a just culture exists, everyone in the company knows what is acceptable and what is not. Positions of principle aside, everyone agrees that the reward/penalty system is appropriate and in line with a shared mindset. This is essential to developing a **climate of trust** in which risk information flows freely, and therefore to preventing employee silence.

3. Expected results

The creation of a just culture should increase the level of trust and therefore facilitate the discussions and the upward communication needed to continuously improve safety. It is an important step towards an integrated HSE culture (see **"Advice on a holistic vision of an integrated HSE culture"**).

4. Links with the common system

- Commitments of company management (area 1): it is an important step on the part of management to encourage an appropriate and uniform managerial response by developing a just culture in which the necessary discussions can take place;
- Professional skills and qualifications (area 2): HSE attitude and culture;
- Effectiveness of the management system (area 4): by analysing an incident it is possible to establish the root causes;
- Continuous improvement (area 5): employees must feel free to speak out about failures and even errors, so that the necessary improvement measures can be taken.

5. Employee silence is a major obstacle to improving safety, and for the company itself

A lack of upward communication has many consequences:
- risk situations can build up without management's knowledge;
- management is unable to acknowledge exemplary behaviour and share it throughout the company;
- a vicious circle can develop, in which the lack of continuous improvement undermines upward communication;

- managers may wrongly believe that their methods are working, and therefore fail to make the necessary adjustments.

The causes of employee silence are both psychological and organisational. One of the most common causes is **uncertainty as to how managers will react:** will they react positively (1) or negatively (2)? This uncertainty is sustained by the fact that reactions may differ depending on the manager, the employee or the situation.

To encourage trust and foster a speak-up culture, the company must ensure that **managers react consistently** and therefore predictably. This means developing a shared and accepted policy that dictates how managers respond to desirable and undesirable events.
First of all, it is often necessary to emphasise the positive role played by the workforce in prevention efforts, and to encourage the recognition of constructive HSE actions, initiatives and proposals. This creates a climate of trust and rectifies the far too common tendency to react negatively.
Addressing the root causes of non-conformities should be given priority over addressing individual events (see **"Advice on preventing serious and major accidents"**).

6. The building blocks of a just culture

6.1 Inform employees of the difference between an error and a violation (or transgression)

The creation of a just culture requires a shared understanding of the difference between errors and violations (or transgressions):
- An error is a situation where an action fails to achieve its goals (for example, calling the wrong number). It is an unintended non-conformity, with undesired effects. An error is always unintentional. Sanctioning an employee for an isolated error contributes decisively to employee silence. The probability of error increases in cases of work underload (due to lack of attention) and work overload (due to time pressures).
- A violation or transgression is a situation where a rule or standard is knowingly breached (3).
- The words 'fault' and 'responsibility' are used in disciplinary and legal contexts. They are not analytical terms and should not be used in a causal tree. Only after an event has been analysed and understood should the question of fault or responsibility arise.

Therefore, when an event is reported, it is important to differentiate between errors and violations caused by the situation, and unacceptable violations.

6.2 Draw a clear line between the acceptable and the unacceptable

Some rule-breaking behaviours are unanimously considered unacceptable, e.g. smoking in a refinery (excluding smoking areas). Various factors are involved in the establishment of rules (such as rules of procedure). But when there are too many non-hierarchical rules, some of them are more likely to be breached. This can lead to what is called the **'normalisation of deviance':**
- to safeguard production, managers sometimes have to allow – or indeed order – employees to break some of the rules without first conducting an adequate risk assessment and, in some cases, without any explanation or compensatory measures;
- when it is customary to break some of the rules, it becomes easier to break the others too.

(1) A positive reaction might be a simple thank you... (2) More often than not, an employee will interpret something as a punishment while his/her manager does not. Employees who, in their view, have been summoned or reprimanded for no valid reason 51 may feel they are being punished. (3) However, in some cases, it is impossible not to break the rules. For example, if the rules are contradictory or if they are inadequate to deal with a situation.

To prevent major risks, the company may adopt a small number (1) of important rules called "lifesaving rules" (golden rules/cardinal rules), which :

- focus on preventing the most serious risks (see "Advice on preventing serious and major accidents");
- are short, clear and as positive as possible;
- are familiar to everyone;
- are applicable without exception, or, if an exceptional derogation is necessary, it is issued in writing by a manager or his/her representative, and compensatory measures are put in place;
- are doubly enforceable: employees can be required to comply with them, but an employee may confidently refuse to perform a task if the conditions for complying with a lifesaving rule are not satisfied.

Lifesaving rules are established in a participative manner. They are implemented gradually, with a transition period during which the teams concerned verify that they are fully applicable.

6.3 Define a shared policy for managing reported issues and non-conformities

To encourage trust and foster a speak-up culture, the company takes steps to ensure that managers respond **appropriately and consistently** when alerted to a risk situation, an undesirable event or a non-conformity. The same response scale is used throughout the company.

This policy includes at least the following components:

- When a risk situation, undesirable event or non-conformity is reported to a manager, the latter first of all responds positively, even if the news is bad (see "Advice on escalating and processing information");
- The manager immediately takes any precautionary measures required (securing the area in question, ordering work to stop if necessary, and removing the employee from the situation);
- The manager, the interested parties and, where necessary, the HSE department analyse the situation to identify potential risks. If the risk is significant, they proceed to determine the root causes of the non-conformity. The manager has the tools required to analyse the root causes:
    - technical causes (the condition of machinery, equipment and tools, the quality of information available, etc.),
    - organisational causes (the design process, the drafting and updating of procedures, the maintenance process, the recruitment, training and accreditation process, inadequate worksite preparation, poor coordination between departments or between the UC and the SC, time pressures, interruptions, etc.),
    - managerial causes (conflicting or poorly defined objectives [orders], inadequate cascading of messages, infrequent presence of front-line managers at the sharp end of operations, poor communication, etc.);
- Once the analysis is complete, a two-pronged approach is adopted:
    - the root causes are addressed independently of the person(s) involved in the incident, the aim being to take substantive action to prevent a similar situation arising again. The front-line manager is assisted in this by the company's support services and his/her own hierarchy. The action taken is explained to the teams concerned;
    - managerial measures are taken, focusing on the person(s) involved in the incident: positive recognition, support, additional training, sanctions where necessary, etc.

The just culture: the two-pronged approach *

Defence in depth

Handling of technical and organisational root causes

Undesirable event

Analysis

Managerial handling
Support, training, recognition, sanction

Just culture
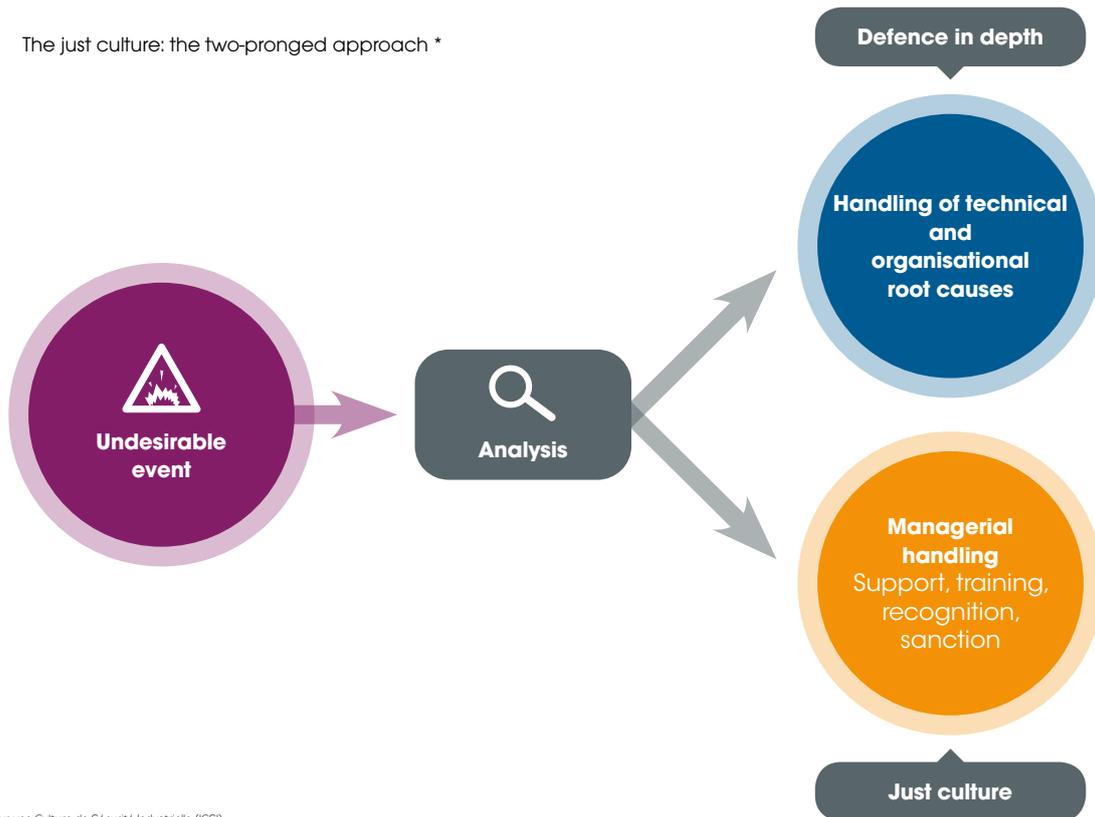
* Source: Institut pour une Culture de Sécurité Industrielle (ICSI).

To encourage a consistent and **appropriate management response,** the company develops and conducts a **systematic investigation** of incidents where an employee (regardless of his or her rank) seems to have behaved inappropriately:

- did the employee (inadvertently) make a mistake or did he/she (knowingly) break a rule?
- was it a lifesaving rule?
- was the rule clear and known to all?
- was the rule applicable? Was it possible to follow the rule in this situation? Did the employee have the means to follow the rule?
- was the situation unclear, or were there any production or time pressures?
- could the employee achieve his/her objectives without breaking the rule?
- were there any previous cases where the management allowed or even encouraged an employee to break the rule?
- had the employee already been involved in similar incidents?
- would other employees probably behave the same way if they found themselves in the same situation?

The answers to these questions determine:

- the respective responsibility of the employee and of other aspects of the organisation,
- the need for personalised support (additional training, discussion of the event with the team or with the other departments concerned, etc.),
- and the legitimacy of any sanctions imposed according to a clearly established scale that is used and accepted throughout the company and is in line with the rules of procedure (summons, warning, reprimand, withdrawal of accreditation, suspension, dismissal in exceptional cases).

The managerial handling policy must promote the **positive recognition** of employee feedback and suggestions; negative sanctions should be used only in rare and clearly defined cases. It is usual to consider that 80% of employees who report an undesirable event should receive some form of positive recognition.

The positive recognition of employees or teams who make a real contribution to prevention through upward communication, best practices, constructive initiatives and safety improvement suggestions must not have an infantilizing effect (gift vouchers, etc.). It should **enhance their role in safety management** by giving them the authority to deal with reported issues, facilitate team discussions and inform other teams and departments, as well as providing them with professional development training and furthering their career development (their contribution should be taken into consideration during their annual performance review).

The effective handling of technical and organisational issues reported by employees and teams, and the consequent recognition of these employees and teams play an important role in encouraging upward communication.

6.4 Steps to building a just culture

Senior management:
- determines the risk of employee silence and the managerial attitudes that encourage it;
- shares the duty and commitment of managers and employee representative bodies to create a just organisational culture that encourages trust and fosters a speak-up climate. This process may take time;
- works with all interested parties to develop clearly defined lifesaving rules and standards, and implements them gradually after making that they are applicable;
- decides which tools will be available to managers for dealing with undesirable events and recognising the positive contribution made by employees and teams to safety;
- presents these rules and tools to the staff representative bodies;
- trains and supports the entire management line (expert assistance for managers handling the first cases);
- reviews the situation after an agreed period of time: has the number of reported issues increased? How effective have assessments and follow-up measures been? What problems have managers encountered?
  How do employees and staff representative bodies view the policy put in place?
- makes and communicates the necessary changes.

7. The specific challenges of the UC/SC relationship

The user company and the supplier company may be at different stages in their progress towards a just culture.

Should an undesirable event occur in the UC involving SC employees, the UC's representatives must ensure that **the joint analysis** of the event and its root causes (regardless of the company in which they originated) is thorough and accurate, so that the SC can respond appropriately to any consequences for its employees and the UC can deal appropriately with the SC.

The UC must develop positive ways of recognising the contributions made by SCs, particularly in terms of escalating risk information.

More generally, the UC and the SC must consult each other on the best way to respond to situations that impact on safety and involve employees from both companies. This joint approach should enable everyone to anticipate the response of either company in the event of a transgression from common standards, and in cases where constructive actions, initiatives and suggestions have prevented serious and major risks.

No. 15

1. Purpose

The purpose of this advice is to help employers create a management line that is able to promote and maintain an active and holistic vision of an integrated HSE culture.

2. Definition

The term "management line" refers to all the managerial echelons in a company.

3. Expected results

The management line participates proactively in creating and establishing an integrated HSE culture in the company.

This requires consistent and appropriate leadership between the different management levels.

This leadership is based on several fundamental principles:
- Create and communicate the desired safety vision;
- Give safety its rightful priority;
- Behave in a credible and exemplary manner;
- Foster team spirit and mutual assistance;
- Be present in the field;
- Recognise best practices and impose fair and equitable sanctions.

This has a significant impact in terms of:
- preventing employee silence by encouraging escalation,
- creating a just and equitable culture throughout the company.

These two points are discussed in specific "Advice".

Consistency within the management line is the backbone of any integrated HSE culture. It creates the conditions for front-line managers to liaise between management and sharp-end workers on a day-to-day basis (see **"Advice on developing the role of front-line managers in HSE management"**).

4. Links with the MASE-France-Chimie common system

This "Advice" is linked to the entire MASE-France-Chimie common system, particularly:
- Chapter 1.1 Commitments of company management
- Chapter 1.2 Health Safety Environment Policy
- Chapter 1.4 Organisation
- Chapter 1.7 HSE Information and Activity
- Chapter 2.3 Attitude

5. Hierarchical levels

Although companies may differ in terms of size or their position within a larger group, it is generally accepted that three levels of management exist:
- senior management,
- middle management,
- front-line management.

In some companies, the distinction between the first two levels may be blurred. In this "Advice", we have decided to group these two levels together.

SENIOR AND MIDDLE MANAGEMENT

This level includes the company director, business and contract managers, department managers, the HSE manager and staff department managers (HR, purchasing, etc.).

FRONT-LINE MANAGEMENT

This level includes supervisors, worksite managers, team leaders, maintenance managers, etc. These managers are in direct contact with sharp-end workers. They report to senior and middle management.

6. Management model

The management model is based on a cascade of meetings and information flows. The aim is to encourage and organise escalation (see the **"Advice on escalating and processing information"**).

6.1 Front-line management meeting.

Front-line managers organise a meeting at least once a month with their teams. The meeting must be interactive and involve all the participants.

An agenda is drawn up beforehand, including items such as:

A quantitative and qualitative review of the month's prevention-related activities:
- Are we using the tools available to us?
- Are we using these tools correctly?
- What have we learned from using these tools?
- Have we completed the actions planned previously?
- Have the results been satisfactory?
- Have we reached our targets?
- The planning of prevention actions for the following month
- Team discussion on:

  - risk situations,
  - opportunities for progress,
  - feedback from other teams,
  - key safety messages,
  - best practices,
  - industry standards,

  - suggestions made by team members…
  - identification/suggestion of ways to recognise actions that have contributed most to creating an integrated safety culture.

A report is drafted and distributed at the end of the management meeting..

6.2 Senior management meeting

Senior managers hold a monthly meeting with their front-line managers after holding their own steering meeting. Again, an agenda is drawn up beforehand:

Update on actions decided the previous month:
- Have we completed the actions planned previously?
- Have the results been satisfactory?
- Update on actions to be carried out over the next month and, in particular, the time and resources allocated to front-line managers for planning and preparing future actions.
- Prioritise decisions where necessary.
- Ensure consistent behaviour and action throughout the management line.
- Share feedback: it is essential that the meeting leader shares his/her personal experiences and what he/she has learned from them.
- Recognise the actions that have contributed most to the establishment of an integrated safety culture.
- Celebrate small successes, step by step, to maintain a positive dynamic.
- Discussion with front-line managers on:
  - feedback from other steering meetings,
  - key safety-related messages,
  - best practices,
  - the correct use and the quality of the tools put in place,
  - suggestions/information from the team (regarding hazardous/risk situations, etc.),
  - interactions between the management and employee representative bodies.

A report is drafted at the end of the management meeting.

6.3 Management loop

Feedback is then provided to the front-line management. The management loop is thus closed. It is imperative that everyone is informed of meeting dates, and attends every meeting.

In practice, a schedule such as the following may be put in place:
- First week of the month, front-line management meeting.
- Second week of the month, middle management meeting.
- Third week of the month, senior management meeting.
- Fourth week of the month, feedback to front-line management.

6.4 Management at the sharp end

It is imperative that, in addition to implementing this management model, senior and middle managers regularly join the teams at the sharp end of operations. By doing so, they will be able to verify that the work is being done properly.

They will also be able to make sure that their requirements are aligned with the priorities of front-line managers to ensure that the latter are fully engaged. Above all, they will be able to ensure that front-line managers have everything they need to succeed (information, training, tools, authority, resources, etc.). It will be possible to "shape" and coach front-line managers so that the different echelons of management are fully aligned.

Coaching involves listening to a person and spending one-on-one time with them to help them progress. The manager needs to understand the person's mindset to help them learn independently from their own experiences.

At least once a year, senior and middle managers must attend a meeting with all front-line managers to assess their performance and provide them with feedback and coaching.

No. 16

Advice on developing the role of front-line managers in HSE management

1. Purpose

The standard of leadership of HSE managers is a key factor in the creation of an integrated safety culture. This "Advice" places special emphasis on front-line management (including supervisors, team leaders, works foremen, worksite managers, works managers, project managers, etc.). They set out the general HSE leadership model, with special reference to front-line management.

However, the success of HSE-related activities at this level of management depends on a number of factors, which concern the entire management line (see paragraph 6.).

2. Definition

Integrated safety culture: this is described in the **"Advice on a holistic vision of an integrated HSE culture"**. Many other terms are defined in the various "Advice" relating to this topic.
Leadership: the ability to motivate employees and to organise and facilitate their work in order to develop and promote safety.
Behaviour: behaviour is the visible part of an activity (movements, words, etc.). To understand behaviour, the invisible part of the activity must be accessible (mindset, skills, available information, emotions, etc.).

Safety relies on two types of behaviour:
- **compliance** (with rules and procedures, PPE requirements, etc.),
- and **initiative** (safeguarding colleagues, reporting hazardous situations, questioning oneself and others, making suggestions, stopping if unsure about something, etc.).

3. Expected results

Front-line management plays a vital role in aligning the company's HSE policy with reality at the sharp end. By following this "Advice", companies will strengthen their HSE culture: the more actions are dictated by conviction rather than just regulations or contractual obligations, the stronger the company's HSE culture will be. Front-line managers have a crucial role in encouraging belief-driven action.

However, it should be noted that the allocation of resources depends on middle and senior management (see § 6).

4. Links with the MASE-France-Chimie common system

This "Advice" relates to chapter 2.3 of the MASE-France-Chimie common system on "Attitude" (HSE culture/behaviour) and to Area 5 of the HSE management system. It aims to promote the development and acceptance of the company's HSE culture.

5. The three aspects of HSE leadership by front-line managers

The leadership of front-line managers is based on three aspects: their own behaviour, their interactions with their team, and their actions in terms of organisation and facilitation.

5.1 Their own behaviour

The behaviour of front-line managers is constantly observed by their teams and sets the tone:
- they are exemplary in their application of HSE rules, consistent in their words and actions, and do not tolerate any transgression of these rules so as not to lower standards,
- if the HSE rules are not adapted to the reality of sharp-end operations, they stop ongoing operations where there is a risk of accident and then inform their own line manager of the problem,
- they clearly consider HSE issues in any decision they take and do not order any operations to be carried out that would be contrary to HSE policy, even to safeguard production,
- they stop all work if the situation becomes dangerous or if unforeseen changes occur, and take the time to update the risk analysis,
- they report risk situations beyond their decision-making scope to their line manager (and, where appropriate, to support staff and to the user company or supplier company), and make suggestions as to how they should be handled.

5.2 Their interactions with the team

Explaining HSE policy:
- Front-line managers present the company's HSE policy to their team and explain how it relates to their specific activity; they know and underline the most serious risks, and the company's commitment to protecting people, facilities and the environment.
- They are firmly committed to ensuring compliance with basic rules, particularly "lifesaving rules", and make sure that rules and procedures are fully applicable in real situations.

Positive management:
- They respect people and acknowledge their contribution to safety, for example by praising good initiatives.
- Through their action, they seek to prevent the occurrence or recurrence of risk situations or sources of difficulty.

Understanding the realities of the job and looking at the bigger picture:
- They are familiar with industry standards. They may require training, mentoring (by a mentor/tutor) and a transitional period when they first take up their position.
- They are responsible for the "commencement of works", both on a daily basis and after important changes have been made. This involves prompting discussion of specific risks and the state of preparedness (What might happen? What are the dangers? Are we properly prepared? Are the conditions right to begin work? Do we have the necessary machines, equipment, documents, skills and accreditations? Have we clearly understood the operating procedure and the information in the work authorisation? Do we know who to call if there's a problem?).
- They are often at the sharp end of operations, observing the actual conditions of implementation and talking to their team.
- They are present during the most critical operations.
- If necessary, they organise breaks to update objectives and resynchronise the team.
- They anticipate the specific risks involved in future operations and the precautions to be put in place.
- They help to analyse the root causes of undesirable events.

Monitoring the health of team members and the work group as a whole:
- They watch over the health of team members and of the work group as a whole.
- They ensure that HSE issues are included in the on-the-job training of new recruits, for example by setting up mentoring programmes as required.
- They support the professional development of employees, notably by informing the continuous training action plan.
- They allocate employees to different tasks, considering their skills and their state of health. They may be required to protect a member of their team by removing him from the worksite.

Listening to others and encouraging dialogue and participation:
- They create a climate of trust.
- They involve the team in the risk assessment process, prior to the commencement of work.
- They encourage shared vigilance within the team.
- They expect and encourage the escalation of risk situations and of any problems encountered;
- They regularly encourage team discussions on risk situations, and adopt a participatory approach to corrective action.
- They inform the team of the measures taken.
- They involve the team in drafting and validating standards and rules.
- They keep the team informed of upcoming technical and organisational developments.

Responding appropriately to non-conformities

To foster a climate of trust, front-line managers apply the principles of a just culture (see **"Advice on developing a just HSE culture"**). They promote the positive recognition of contributions to safety. Should an undesirable event occur, they stress that the most important thing is not to find a culprit but to stop the accident or risk situation happening again. They help to analyse the causes of the situation or event. They may apply or suggest sanctions only after a thorough investigation has been carried out, as per company policy.

Promoting cross-functional cooperation

It is part of the front-line manager's role to promote cooperation between team members and with other teams or departments, in order to maintain and improve HSE performance. Should an undesirable event occur, he or she helps to analyse the causes and establish common prevention measures.

5.3 The front-line manager's role as an organiser and facilitator

Front-line managers are observed constantly by their team to determine their ability to influence work situations and organisational processes, and hence ensure good, safe work:
- Organise the worksite in advance to avoid rushing and improvisation.
- Provide the equipment and resources needed to ensure that work is done correctly and safely.
- Work with the user company or supplier companies if necessary, to resolve coordination issues.
- Handle problematic situations, take part in validating solutions, and provide feedback to the team.
- Insist on getting their own line managers to deal with recurring issues beyond their control.

6. A key success factor: the commitment of the entire management line

Front-line managers' contribution to HSE performance does not depend exclusively on their own personal talents.There are several other factors involved.

6.1 Commitment to HSE throughout the management line

The commitment of the Management Committee:
- The Management Committee is clearly committed to developing an integrated safety culture, and a just culture in particular. It acknowledges everyone's contribution to safety.
- It makes sure that it knows exactly what is going on at the sharp end.
- The Management Committee members set an exemplary standard where safety is concerned, and their decisions reflect the importance attached to safety.
- Their internal and external communications are consistent with their actions.

The commitment of the management line:
- All line managers are expected to listen actively to their staff, for example by encouraging them to report hazardous situations, conducting end-of-work reviews and seeking out solutions.
- Risk situations that cannot be handled at one level of management are passed on to the next highest level, and so on until they are resolved.
- The entire management line is frequently present at the sharp end.
- Commitment to HSE performance is an important factor in performance reviews. Managers who are actively committed to HSE performance are highly valued.
- Particular attention is paid to the HSE leadership potential of future managers (during the recruitment and appointment process).

6.2 The resources and policies in place

The resources and policies put in place encourage all managers to engage in HSE activity:
- Early information and involvement of managers in new strategies, new forms of organisation, and new courses of action.
- Support for front-line managers from departments such as HSE, HR and purchasing.
- HSE induction for new managers, regular assessment of the HSE leadership level, training and coaching programmes to develop HSE leadership in managers.
- Regular meetings between front-line managers and their own line managers; development of a speak-up culture and handling of questions raised by front-line managers.
- Leeway for front-line managers in terms of equipment, adapting procedures to specific operations and handling problems at the sharp end.
- Front-line managers are kept informed of interactions between senior management and employee representative bodies.
- Time and resources are allocated to front-line managers for planning and organising future operations, team-building exercises, etc.

No. 17

Advice on developing shared vigilance

1. Purpose

The purpose of this "Advice" is to provide the employer with a description of best practices relating to "shared vigilance", and to suggest methods and tools for implementing them within the company.

2. Definition

Shared vigilance is an act of solidarity which, for all employees, means:
- being attentive to their own safety – and that of others – at all times,
- feeling entitled and empowered to report and/or put an end to a risk situation, irrespective of the position, seniority or rank of any of the parties involved.

Shared vigilance implies that this type of initiative in potentially hazardous situations is accepted company wide. It is one aspect of an integrated HSE culture (see **"Advice on a holistic vision of an integrated HSE culture"**).

3. Expected results

The main result expected is a decrease in HSE events (i.e. accidents and high-potential incidents).

Shared vigilance changes the relationship between the different members of the company, and thus helps to make HSE performance everybody's business. It contributes to greater mutual trust and the proper flow of information.

4. Links with the MASE-France-Chimie common system

- **Chapter 1.1: commitments of company management.**
  Shared vigilance can only develop if employers themselves behave in an exemplary manner and agree to be challenged if they contribute to or find themselves in a risk situation;
- **Chapters 2.2 and 2.3: skills and attitude.**
  Shared vigilance is an aspect of professionalism and is treated as such in professional training programmes;
- **Chapter 3.3: completion.**
  Shared vigilance is one of the fundamental aspects of worksite management.

5. Why is shared vigilance necessary?

5.1 One of the last lines of defence

As explained in the **"Advice on a holistic vision of an integrated HSE culture"**, the overall safety of a system is based on two essential components:

RULE-BASED SAFETY

Rule-based safety includes all the measures taken in advance to deal with HSE issues. The purpose of rule-based safety is to prevent all foreseeable failures through formal practices, rules, automated procedures, protective measures and equipment, and clearly defined "safe behaviours".

MANAGED SAFETY

Despite the measures taken and the resources allocated to design studies, assessments and risk analyses, employees have to deal with unforeseen, undescribed or inadequately considered situations on a day-to-day basis, which undermine the relevance and efficiency of the barriers put in place. Thanks to their individual and collective expertise, knowledge and professionalism, they are able to adjust efficiently to such situations. This is known as managed safety.

Generally speaking, formal prevention systems (= rule-based safety) are becoming more precise, comprehensive and effective (these include regulations, management systems, procedures, instructions, technical resources, etc.). Likewise, professional standards and training/accreditation requirements are increasing (= necessary for managed safety).

Accidents still occur despite these permanent improvements, thus revealing failures in prevention systems. In general, these failures are a combination of:
- **an individual failure** (inadequate risk perception, lack of attention, human error, etc.),
- **a collective failure** (a weak or unshared culture, individualism, a collective lack of attention, absence of communication, etc.),
- **dorganisational failures** (e.g. poor management presence at the sharp end, time pressures, lack of coordination between departments, etc.).

Shared vigilance (paying attention to one's own safety and that of others) is one of the last lines of defence against these failures.

5.2 A tried and tested approach

Shared vigilance has been systematised in many high-risk professions (mountaineering, surgery, aeronautics, etc.). **This experience has shown that developing shared vigilance requires:**
- the elimination of hierarchical barriers when HSE issues are at stake;
- the widespread development of a dual ability to challenge and be challenged.

5.3 A new approach for the corporate sector

Shared vigilance is:
- a fully-fledged component of a company's integrated HSE culture
- a moral duty (so that we don't find ourselves thinking "if only I had done something, the accident would never have happened")
- a legal obligation(1).

It must become an automatic habit and an inherent part of professionalism for all those involved.

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(1) Labour Code (Légifrance 01 05 08): "..., it is the responsibility of each employee, insofar as their training and possibilities allow, to exercise care in respect of their own health and safety, as well as that of other persons affected by their actions or omissions at work." Penal Code (Légifrance 01 01 02): "Anyone who, being able to prevent by immediate action either a crime or an offence against the bodily integrity of a person, without risk to himself or to third parties, wilfully refrains from doing so, shall be punished by five years' imprisonment and a fine of €75,000. The same penalties shall apply to anyone who wilfully refrains from offering assistance to a person in danger, which he could provide personally without risk to himself or to third parties, or by initiating a rescue operation."

6. The approach

In many situations, it is not easy for an employee to intervene when a colleague, a manager, or someone from the user company or another company puts themselves at risk: how will they react? Is it my responsibility? In any event, the employee must act with the necessary courtesy, tact and firmness. All those involved must have clearly understood the balance between "daring" to challenge someone and "agreeing" to be challenged.

The company-wide development of shared vigilance therefore requires a change management process incorporating the steps described in **"Advice on driving the transition towards an integrated HSE culture"**.

6.1 Share the responsibility

Employers must share the responsibilities of shared vigilance (i.e. taking care of oneself and others) with all employees, including managers, staff representatives and work groups. The employer agrees personally to be challenged if he/she contributes to a hazardous situation. He/she provides examples where this has already happened, and gives proper recognition to those who dared to intervene. He/she acknowledges the time and effort needed to effect fundamental change.

Shared vigilance can only develop in organisations where workers already have confidence in their managers' response (see **"Advice on developing a just HSE culture"**).

The shared vigilance approach should ultimately apply to all risks, regardless of how serious they are. It is one aspect of a questioning culture (see **"Advice on a holistic vision of an integrated HSE culture"**). During the deployment phase, employees may be reminded of their duty to intervene in the most high-risk situations. Indeed, everyone considers it normal to step in and prevent a serious accident to protect the physical integrity of others. However, this means working on a common and consensual definition of the most potentially serious situations (see **"Advice on preventing serious and major accidents"**).

The responsibility for shared vigilance does not stop with the company's own employees. It extends to all those working on the same site or taking part in joint works. This is how supplier companies are involved in the first instance.

Shared vigilance must be reciprocal, meaning that an employee from a supplier company should not be afraid to challenge an employee from the user company in the common interest. This principle must be firmly established from the outset; the managers of both companies should be clear in their commitment to it, and should give proper recognition to those who act on it.

6.2 Provide the necessary tools and methods

To overcome the usual difficulty of challenging a colleague or manager who have got themselves into a hazardous situation, a few simple tools and methods (such as videos and role plays) should be provided. This will ensure that:
- the colleague or manager responds positively to being challenged;
- the person doing the challenging responds positively when the tables are turned.

Examples are given, from simple actions (closing an open hatch on a scaffolding structure and informing the employees present; telling a visitor that they are parking the wrong way around or that they should use the handrail) to more complex situations (ordering a risky operation to be stopped;

forbidding entry to a specific area; stopping a manager who is not wearing PPE).

These types of action are valued as a mark of professionalism. Such tools can be used in team meetings, HSE meetings (talks, safety toolbox meetings, etc.), professional training sessions (particularly joint UC/SC sessions), and various other collective events.

6.3 Support exemplary behaviour in managers and employee representatives

Reviews are conducted with managers (especially front-line managers) and staff representatives to identify any difficulties they may have encountered when implementing the shared vigilance policy at the sharp end. If necessary, key players such as these are given additional training.

They are also encouraged to positively recognise any acts of shared vigilance on the part of employees, even if work is delayed as a result. Conversely, they must be careful never to reward the completion of a job if the workers knew the conditions were unsafe and failed to exercise their duty of shared vigilance. A culture of heroics, which allows safety rules to be broken, is the complete opposite of a culture of shared vigilance.

6.4 Establish the development of shared vigilance

The development of an HSE culture conducive to shared vigilance requires the implementation of training, information and communication campaigns within the company.

Positive examples are spotlighted (through articles in internal newsletters, and even awards). This is a particularly important aspect of the relationship between the SC and the UC, which must work together to reward reciprocal acts of shared vigilance.

Personal and collective shared vigilance objectives are defined and discussed during annual performance reviews.

Team discussions about the issues and situations that have led employees to challenge each other's actions can be used to inform and improve feedback.

Shared vigilance is further developed by the arrival of new employees who bring fresh ideas to the table, and who are accompanied by a patient tutor or mentor who encourages them to ask questions.

No. 18

Advice on escalating and processing information

1. Purpose

The purpose of this "Advice" is to provide the employer with a set of best practices for escalating and processing information, and providing feedback to sharp-end workers.

2. Definition

When information on hazardous situations or near misses is available at the sharp end but is not escalated (a situation referred to as employee silence), HSE risks accumulate.

What is escalation?
Escalation is a company-wide best practice whereby employees identify near misses, analyse them, record them (or have them recorded) on a suitable medium, and report them to management or to the user company to prevent further exposure to the identified hazard and the resulting risk. The recipients of the information must deal with the risk – if necessary with the UC or the SC – and provide feedback to the persons or teams who reported it. Information must be escalated and processed quickly to prevent an accident.
Employees and their managers should regard the escalation and processing of information on near misses and hazardous situations, and the subsequent feedback as:
- a duty, a moral responsibility;
- self-evident, automatic;
- a mindset;
- a mark of professionalism and a source of pride.

It is one of the principal components of an integrated safety culture (see **"Advice on a holistic vision of an integrated HSE culture"**).

3. Expected results

Escalation enables near misses to be dealt with as quickly as possible. The rapid provision of feedback to individuals and teams who report a hazardous situation demonstrates the importance of HSE matters to everyone in the company. The efficient management of such reports contributes to the development of an integrated HSE culture.

The escalation and processing of information encourage different management echelons to work together on HSE issues, and promote continuous improvement in risk prevention and standards of work. The sharing of feedback helps increase the professionalism of all those involved.

4. Links to the common system

Area 1 = Commitments of company management
- Chapter 1.4.13 - Escalation system
- Chapter 1.7 - HSE information and activity

Area 2 = Professional skills and qualifications
• Chapter 2.2.2.9 Skills - HSE induction: the conduct required in the event of a hazardous situation

Area 3 = Organisation of work
• Chapter 3.1 - HSE risk analysis.
• Chapter 3.4.2 - Feedback – hazardous situations

Area 4 = Effectiveness of the management system
• Chapitre 4.1.14 - remontées d'information

Axe 5 = Amélioration continue
• Chapter 5.1. - 5 escalation

5. Implementation

5.1 Prerequisites

The efficiency of the escalation process depends on the extent to which employees trust their managers to respond appropriately when a hazardous situation is reported to them (see **"Advice on developing a just HSE culture"**). Trust and dialogue are essential to the smooth flow of information. Therefore, the employer must accept the need for full transparency regarding the failures of the company, individuals and work groups.

The efficiency with which front-line managers process information depends on how much leeway they have, the support they get from their own line managers and the company's support departments, and the quality of communication between the UC and SCs.

To ensure the smooth escalation of information, the employer must meet these prerequisites and take all necessary steps to set up an internal escalation procedure (see **"Advice on driving the transition towards an integrated HSE culture"**). Most importantly, the time required to escalate and process information must be factored into the work timeline.

5.2 The type of information to report

The following information should be escalated:
- Information relating to any situation that poses, or is likely to pose, a risk to people, facilities or the environment – including those resulting from an error or glitch in the progress of an operation (e.g. a tool falling from a height, or onto equipment that plays an important part in the industrial process);
- Suggestions for improving working conditions and standards.

Sharp-end workers and front-line managers should play a central role in the escalation system; they must be fully aware of the

5.3 The formal procedure to put in place

The formal escalation procedure must be as simple as possible so as not to hinder its use. It must be integrated as far as possible into existing work tools (e.g. tablet).

After verbally notifying their front-line manager (in the event of an emergency), the employee should provide the following information via an appropriate medium:
- his/her name (more than one person possible);
- the date and time;
- the exact location and, if necessary, details of damage to equipment;

- the hazardous situation, near miss or hazard observed, or the area requiring improvement;
- the estimated severity;
- negatives and positives (such as best practices);
- any immediate action that has been taken (compensatory measures, shutdown, etc.);
- the causes of the incident if they have been identified;
- if a similar incident has happened before (recurring problem);
- suggestions for managing or improving the situation.

Caution: forcing the employee to give too many details or to suggest a solution may discourage escalation. The front-line manager's support is required. Team discussion can also encourage escalation.

The document or file is sent as quickly as possible to the front-line manager, accompanied by photos when the situation and resources allow.

5.4 Processing

In the event of danger, the employee or the front-line manager immediately takes the appropriate emergency measures (shutdown or compensatory measures), if necessary with his/her line manager and the UC or SC.

To make sure that reported near misses and hazardous situations are analysed in depth and fully addressed, the front-line manager verifies their potential severity and establishes the necessary dialogue with the reporting party(ies), his/her own team and line manager, the support departments, and the UC or SC.

Near misses and dangerous situations, especially those reported to the UC by the SC, are discussed with the teams concerned. This helps to identify recurring situations (when the same problem has been encountered by another employee), improves analysis and solution finding, enhances the professionalism of all the employees, and builds confidence in the company's commitment to resolving HSE issues. The subjects of discussion are set out in an appropriate form.

5.5 Feedback

Feedback must systematically be provided to the reporting party(ies) and the team to maintain the upward flow of information. Failure to provide feedback slows the flow of information, even if solutions have been implemented without the teams' knowledge. When a substantive solution has been found, it is communicated to the reporting party(ies) and the team, or indeed more broadly to the rest of the company, the UC and any SCs affected. The implementation deadline is specified.

Feedback can be delivered by several means:
- verbally;
- by text message;
- at a team meeting, talk or safety toolbox meeting;
- via a "flash" safety update or any other internal communication channel;
- as part of a service assessment meeting or report;
- during a training course or an induction for new employees, etc.

5.6 Employer and management involvement

The employer and management must:

- monitor the smooth escalation and processing of information (using straightforward indicators so as not to complicate the process);
- deal with any barriers to the flow of information and the involvement of all personnel. For example, do not rely exclusively on the reporting party to find a solution, as this may discourage him/her from escalating any issues in the future;
- get involved personally in seeking solutions to near misses or hazardous situations that go beyond the decision-making scope of other managers and support staff – especially when the UC or SCs need to be consulted;
- be exemplary in escalating and dealing with any near misses and hazardous situations that they themselves observe during worksite visits;
- inform and remind managers of the objectives relating to the escalation and handling of near misses and hazardous situations, at their individual performance reviews;
- regularly remind people of the importance of escalating and processing information, particularly during inductions and training sessions;
- periodically present the escalation procedure to staff representative bodies;
- inform personnel of important escalations through internal communication channels; explain the solutions implemented (and say who proposed them). Everyone should be encouraged to get involved in identifying hazardous situations and escalating information, for example through wide-reaching, impactful "before" and "after" communications that focus attention on the solutions implemented;
- relate escalation to other aspects of the experience feedback policy (root cause analysis of accidents and high potential incidents).
- explain why some escalations are not pursued further or do not give rise to corrective action, to avoid the implication that escalation is pointless and to stop employees from thinking: "anyway, I report problems and nothing ever changes".

No. 19

Advice on developing and implementing industry standards

1. Purpose

The purpose of this "Advice" is to help employers establish industry standards and make sure they are accepted and implemented by all sharp-end workers.

2. Definition

What is meant by industry standards:
- A detailed description of how to carry out tasks and the industry-specific activities relating to them, safely and in compliance with good practice.
- Industry standards are established primarily on the basis of industry feedback*, best practices, and accident data.
- They are updated in line with new techniques and technologies used in the industry.

They are an everyday tool:
- They are taught to new employees, who undergo both theoretical and practical on-the-job training before being qualified to do their job.
- Front-line managers go over them again with their teams when work begins. They should be considered as part of the job, and second nature to everyone.

A maximum of 10 standards only are selected per industry. The 10 standards selected are those that would have the greatest impact on HSE performance if they were not met. It is crucial to have no more than 10 standards, as beyond that it is very difficult to remind workers of them every time work commences or resumes.

For supplier companies, they consist exclusively of best practices relating to their specific line of work.

They do not reiterate the user company's standards or HSE requirements.

In the specific case of high-potential incidents, a "lifesaving rule" – see **"Advice on preventing serious and major accidents"** – may also be an industry standard. This is not, however, the case for all industry standards, which are also designed to prevent the most frequent and less serious accidents.

Pour exemple, pour le métier d'échafaudeur, une entreprise a défini qu'un standard métier, sur ses dix standards identifiés, était aussi une règle qui sauve. Il s'agit de la règle qui sauve d'être attaché en permanence, en dehors des protections collectives, lorsqu'il existe un risque de chute de hauteur.

3. Expected results

One of the objectives of this "Advice" is to increase employee involvement in ensuring the safety of sharp-end operations relating to their specific industry. It is important to show in practical terms, through industry standards, that professionalism and safety cannot be dissociated. They also aim to improve the leadership skills of managers, particularly front-line managers.

This "Advice" therefore reconciles the components of an industrial culture (through the expertise of the stakeholders) with those of a managerial culture (through the definition, communication and monitoring of working methods). In this respect, it contributes to developing an integrated safety culture that is viewed as being more effective and sustainable (see **"Advice on driving the transition towards an integrated HSE culture"**).

4. Links with the MASE-France-Chimie common system

This "Advice" is linked to the majority of the MASE-France-Chimie common system, particularly:

- **commitments of company management (Area 1):** this is essential to emphasise the importance of industry standards and promote their implementation;
- **professional skills and qualifications (Area 2):** this is fully in line with the transmission of skills through industry standards;
- **organisation of work (Area 3):** this includes, for instance, managerial actions consistent with industry standards: preparation, implementation, feedback;
- **continual improvement (Area 5):** this also underpins the very principle of industry standards, which must be reviewed and adapted according to lessons learned from real life experience and inevitable changes in the work environment.

5. The advantages and the selection of industry standards as regards safety culture

Anticipate the most common work situations and establish a "rule-based safety" system accordingly.
Industry standards help to clarify what needs to be done during the design and planning phases. It is important to ensure that different teams adopt the same approach to day-to-day tasks. Front-line managers and operational staff must be involved in establishing industry standards. This enables "rule-based safety" arrangements to be clarified and shared (see **"Advice on a holistic vision of an integrated HSE culture"**).

Clarify standards, above all for front-line managers.
Essential industry standards are often included in operating procedures. They are therefore buried among numerous other documents. Furthermore, they complicate operating procedures unnecessarily, thereby becoming too generic and failing to address the specific aspects of the work to be carried out. Consequently, sharp-end workers are actually less likely to adhere to them.

This "Advice" therefore suggests a different approach, which, instead of including all essential standards in operating procedures, focuses on strengthening the leadership skills of front-line managers to ensure that the standards are implemented at the sharp end (see **"Advice on developing the role of front-line managers in HSE management"**).

6. The implementation of industry standards

The role of the front-line manager.
Front-line managers exercise leadership in their teams (see **"Advice on developing the role of front-line managers in HSE management"**). They make sure that their teams comply with industry standards on a daily basis. They set out the conditions for their implementation, and learn from subsequent feedback. The HSE department must support them in this role, and not do the work for them. Front-line managers must be involved in developing industry standards to ensure that they reflect the realities of day-to-day work.

The commencement of work, an ideal opportunity to initiate an integrated HSE culture.

Front-line managers give the go-ahead for work to begin. They do not delegate their responsibilities to their line manager or to the HSE coordinator.

In addition to sharing legal and/or HSE documents with their teams (such as prevention plans, work permits or authorisations, operating procedures, risk analyses, etc.), the commencement of work is an opportunity for front-line managers to talk directly with sharp-end workers about the proper implementation of industry standards.

If there are any questions, the front-line manager and his/her team can discuss how to enforce these best practices going forward.

This technical discussion is based on industry expertise. It encourages all the team members to act safely in line with the rules, and makes the front-line manager's job easier because it relates specifically to the area he/she knows best.

Once the work has commenced, the front-line manager can observe his/her team as they work, and make sure that they have fully understood the industry standards and comply with them at all times.

The initiation of work by a front-line manager.

Who:

The front-line manager.

When:

When work commences or resumes, at the sharp end.

The steps:

- Introduction and chat with each individual team member (primarily to make sure that everyone is in good health).
- Review of the requirements of the prevention plan/work permit (1).
- Review of the various steps in the operating procedure that will be carried out over the next few hours, based on an occupational hazard analysis.
- Then, if required for a short length of time, a detailed review of the task hazard analysis for tasks posing a specific risk, for example:
  - new or accident-proning tasks, new working methods, new tools, etc.). All workers must understand how to carry out the tasks and adopt the behaviours defined in the task hazard analysis.
- Discussion on worst-case scenarios.
- Systematic review of applicable industry standards. This last step is an opportunity to improve workers' assimilation of the standards, so that they comply with them automatically.

The commencement of work for middle and senior management

The middle or senior manager's role is to observe the initiation of work by the front-line manager, and then to observe the behaviour, movements and postures of his/her team as they work. Following this, the middle or senior manager should provide feedback to the worker(s) observed and then, separately, to the front-line manager.

This feedback consists of both dialogue and coaching, using the **Industry Standards as a reference.**

Except in the rare case where a "lifesaving rule" is broken, coaching should highlight both positive points and areas for improvement, the goal being to achieve a 3 to 1 ratio: three positive points for every area for improvement, the aim being to create and then reinforce the conditions for a positive approach to safety.

(1) The work permit is always the applicable official document. It should be updated as necessary after the reviews and analyses, and before any work actually begins.

The manager talks to the worker observed, prompting him/her to identify the area for improvement and to suggest one or more solutions. As regards both positive points and areas for improvement, the manager will encourage the worker to explain how they have prevented (or could prevent) the worst possible safety outcome for themselves or their colleagues. This approach reinforces and embeds good safety behaviour. These attitudes towards safety facilitate the company's transition to an integrated HSE culture.

7. What attitude should be adopted in the event of non-compliance with industry standards?

It has been stated that the industry standards, particularly those relating to HSE, must be adhered to by all employees when carrying out the most important works.

In the event that a breach of the industry standards is observed or reported – leading to a hazardous situation – the management must react in a predictable manner based on a shared policy towards undesirable events (involving information analysis and processing, and rewards or disciplinary action).

The use of industry standards therefore implies the implementation of a just culture within the organisation (see **"Advice on developing a just HSE culture"**).

8. How to ensure that industry standards are sustainably embedded in the company

Ensure that they keep pace with changes and are relevant to the real-life context.
Due to technological and organisational developments, industry standards will inevitably have to change over time.
To make sure they are relevant to the real-life context, feedback from the sharp end should be closely monitored and regular reviews should be carried out with the operational staff and experts concerned.

Ensure that they are firmly and sustainably embedded.
The credibility of industry standards with operational staff hinges primarily on the recognition of their relevance, and on the importance given to them company wide.

Managers therefore have an important day-to-day and long-term role to play through their managerial activities: initiation of works, safety inspections, team reviews, and recognition of best practices and feedback in the event of a non-conformity.

Mentoring is also essential to ensure that new employees comply with industry standards, and therefore that the standards are firmly and sustainably embedded. Tutor training must encompass the promotion of industry standards and the aspect of HSE culture associated with operational activities.

No. 20

Advice on driving the transition towards an integrated HSE culture

1. Purpose

The purpose of this "Advice" is to provide the employer with an overall view of the measures required to evolve the company's HSE culture towards an integrated HSE culture.

2. Definition

Integrated HSE culture: this is explained in the **"Advice on a holistic vision of an integrated HSE culture".**

Numerous other terms are defined in the various "Advice" relating to this topic.

3. Expected results

An integrated HSE culture is aimed primarily at preventing serious and major accidents, which may pose a threat to personal integrity or jeopardise the very survival of the company. However, since it involves substantive work and input from all stakeholders regarding the organisation's fundamentals, it also helps to improve HSE outcomes in general and, ultimately, the company's overall performance.

The process of change should lead to:
- A shared vision of the strengths and weaknesses of the company's initial HSE culture,
- The development of a participatory approach, and hence a shared vision of the company's three-to five-year goals for an integrated HSE culture, and of how to achieve them,
- The creation of a framework for success in order to avoid several well-known pitfalls and make good use of the company's resources,
- The long-term establishment of an integrated HSE culture.

4. Links to the common system

This "Advice" is linked to the entire MASE-France-Chimie common system.
It addresses all areas of that system:
- **Area 1:** Commitments of company management.
- **Area 2:** Professional skills and qualifications.
- **Area 3:** Organisation of work.
- **Area 4:** Effectiveness of the management system.
- **Area 5:** Continual improvement.

It is part of a coherent set of several "Advice" documents aimed at developing an integrated HSE culture.

5. Conditions for success

Every company has an HSE culture, i.e. widely shared **ways of doing and thinking** with regard to managing the HSE risks related to its activities. These ways of doing and thinking reflect the importance that HSE issues have in relation to the company's activities as a whole, particularly its development in specific markets. This culture develops gradually over the course of the company's history, and is constantly evolving.

If the company wishes to move towards an integrated HSE culture, it must consider three essential issues:

1) The HSE culture does not exist in a bubble, cut off from other aspects of the company's culture: the safest company would be one that is no longer in business. The HSE culture reflects **the importance that the company attaches to HSE issues when carrying out its activities,** including decision-making, investment, training, organisation, management and social dialogue processes.

2) An HSE culture cannot be changed overnight. The HSE culture cannot be changed unless the underlying factors change. For example, if escalation is undermined by a fear of sanctions, the HSE culture will not change unless substantive action is taken regarding the recognition and sanctions policy (see **"Advice on developing a just HSE culture"**).

3) Top-down changes in the HSE culture, imposed by the company's management, are not an option. While management's commitment to changing company-wide ways of doing and thinking is vital, all employees must be involved in every stage of the process..

6. Steps

The process of changing an HSE culture comprises three main steps:
- The first step is to assess the current HSE culture and share the conclusions regarding its strengths and weaknesses.
- The second step is to jointly establish a three- to five-year goal in terms of HSE.
- The third step is to jointly develop a change management programme.

The following conditions must be met:
- The employer and, if necessary, HSE specialists are trained in developing an integrated HSE culture and in change processes.
- The company's management agrees on the need to change the HSE culture, and on the most appropriate approach.
- The assessment and change process is presented to management, employee representative bodies and workers, and any comments made are taken into consideration.
- A steering committee is set up, reflecting the diversity of the stakeholders. This committee may be the same as that which manages the entire MASE-France-Chimie deployment process.

The steps involved in changing the HSE culture
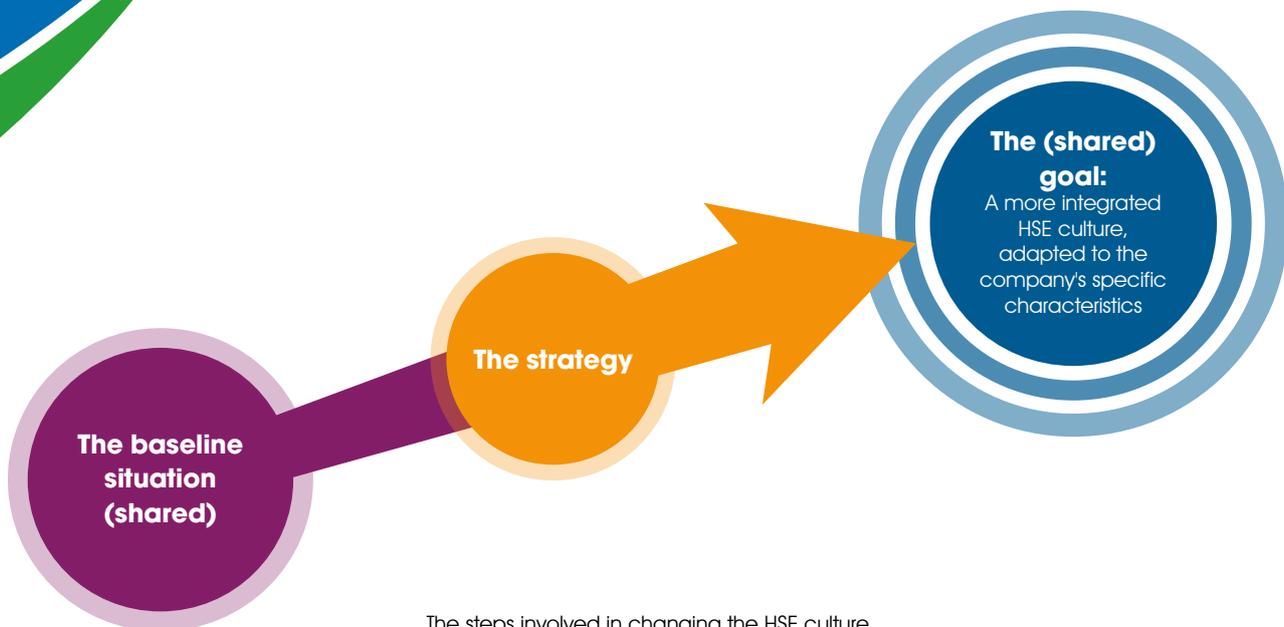
6.1 t is our current HSE culture?

An HSE culture is a complex combination of shared ways of thinking and doing, so there is no simple approach to assess it. However, the key characteristics of a company's HSE culture can be described and discussed by means of an **HSE culture assessment.**

An HSE culture assessment usually combines several methods:
- An understanding of factors other than HSE, which the company must take into consideration (the sector, the market, regulatory requirements, etc.).
- Opinion surveys to determine what the various stakeholders (senior, middle and front-line managers, employees and staff representatives) perceive the main risks to be, the way they are managed, the resources allocated to them, the consistency of words and actions, the quality of information flows, the handling of escalations, etc.
- Joint discussions on the findings of the questionnaires.
- Observations of work situations to understand the difficulties encountered at the sharp end of operations, the reasons for the differences between recommendations and actual practices, the daily interactions between departments or between the UC and SCs, and the forms of managed safety implemented by sharp-end workers, etc.

The assessment explores at least the following seven aspects of the HSE culture:
- Shared awareness of the biggest risks.
- The extent to which the three pillars of HSE performance (technical resources, management system, organisational and human factors) are taken into consideration.
- The efficiency of the balance between rule-based and managed safety, bearing in mind the company's activities.
- The questioning culture (constant awareness of risks, attention to the detail of operations, shared vigilance, the standard of analysis of hazardous situations, near misses, accidents and occupational illnesses, the lessons learned from them, etc.).
- The culture of transparency (flow of information, just culture, consistency of words and actions).
- The involvement of all the stakeholders (employer, managers, employees, support departments, employee representative bodies, UC and SCs).
- The leadership skills of managers, and employee involvement.

The assessment is organised by the steering committee, which is assisted by one or more specially trained experts from inside or outside the company. The experts make sure that the assessment is carried out in an ethical manner (anonymity, effective discussion of the results even if they contain bad news, etc.). The assessment may, for example, find that the company's HSE investment is viewed differently by the employer and other hierarchical levels. This is a frequent finding, which it should be possible to discuss freely within the company.

The assessment not only reveals the weaknesses of the current HSE culture, but also its strengths, which will serve as cornerstones of the transition process.

The assessment should not be viewed as an accurate snapshot of the current situation; it should be presented to everyone in the company and used as a basis for discussion, with the aim of coming to a common conclusion regarding the current situation and the necessity of certain changes.

6.2 What kind of HSE culture are we aiming for?

Based on the assessment and the ensuing discussions, the company's management defines its three- or five-year goal by asking itself the following question: "looking ahead three or five years, what visible changes in our HSE practices and mindset would we like to see"?

It extends this goal to those of the seven above-listed aspects with the most significant weaknesses, building on the strong points revealed by the assessment.

The company's management discusses this formalisation of the goal with line managers, staff representatives and workers, in order to clarify, improve and share it. It demonstrates its own commitment by acknowledging the changes it needs to make itself, and providing the resources needed to develop an integrated HSE culture.

6.3 How do we achieve this goal?

Based on the shared conclusion and goal, the steering committee sets out the various stages of the transformation programme, identifying a coherent set of operational objectives and the means for achieving them (levers of action). **The idea is not to put together a huge programme of ill-assorted measures, but to focus on some of the most critical aspects of the current HSE culture, for example :**
- The organisational structure (organisation chart, development of rules and procedures),
- Decision-making processes (lack of communication between departments, etc.),
- Technical resources and equipment,
- Purchasing and procurement procedures,
- Recruitment, training and induction processes, and annual performance reviews,
- Difficulties encountered by front-line management,
- Insufficient consideration of users by engineers when designing new equipment,
- Weaknesses in social dialogue, etc.

(1) The time required to significantly change the HSE culture depends on the size of the company, its structure (local, national or international scope), its history (mergers, takeovers), etc.

The actions envisaged may have different timescales:
- Fast resolution of issues that can be dealt with relatively easily, providing a rapid benefit to various stakeholders (for example, replacement of faulty equipment, or rapid improvement in some hazardous situations). Such actions demonstrate that a process of positive change has begun, and encourage ongoing employee mobilisation,
- Emblematic actions which are more difficult to implement, but which address significant issues that have been reported for some time (for example, the recognition and sanctions policy). These are the ones with the greatest impact,
- Perception correction actions designed to dispel any misunderstandings or rumours,

- Actions to reinforce the company's strengths and to preserve or develop existing skills,
- In-depth actions, particularly those that address organisational and human factors. These may begin immediately but consist of several stages, and will produce results gradually over time.

The steering committee "project manages" the transformation programme, as it would a technical investment. The implementation process is carefully planned, explained in detail at the operational level, fully supported, closely monitored, and assessed. Information on the programme is adapted for the recipients.

The tangible impacts are described in feedback from the field. "Victories" are celebrated.

Difficulties are identified, analysed and addressed.

Progress reports are drawn up periodically and discussed with management and employee representative bodies.

The steering committee will be able to draw on the various "Advice" on an integrated HSE culture, and on the tools provided.

If an accident occurs despite the actions taken, it may undermine the momentum achieved. The analysis of and response to the accident must be consistent with the ongoing efforts to develop the HSE culture.

7. Embedding the integrated HSE culture over time

A company's trajectory is subject to changes that are often brought about by external factors, such as market changes, new technologies, and accidents and events that have an impact on the company. It is also subject to internal changes, such as leadership, management and organisational changes. These events can occur at any time, and they disrupt the process of changing the HSE culture.

Although the HSE culture must be dynamic and evolving, the progress towards an integrated HSE culture must continue irrespective of any changes. To maintain this continuity, all visible actions must be firmly embedded in the company's practices, particularly those of its managers: for example, appropriate responses in line with the just culture, the presence of managers at the sharp end, and the importance attached to safety in decision-making, escalation processes, discussions and problem handling. Embedding the integrated HSE culture into sound company practices should therefore be an integral part of the change process.

On expiry of the three- to five-year deadline, significant changes have been made, not exactly in the form initially envisaged but definitely in the right direction. The effects of the changes are being felt in other areas, such as quality, efficiency, social dialogue and therefore overall performance. The internal and external environment has also changed; some key actors have left and others have arrived. A fresh assessment of the HSE culture may be useful to measure the progress made, identify new issues, and pursue new priorities.

However, the progress already made, the climate of trust established, and the interactions developed should make it easier to mobilise the stakeholders for this new phase.

No. 21

Advice on security management

1. Purpose

Support Supplier Companies and User Companies in implementing their security policy.

2. Definition

The term 'security' refers to all the technical, human and organisational resources put in place to prevent, deter and reduce malicious acts against a company. It involves dealing with intentional risks, arising from a deliberate desire to do harm. In comparison, 'safety' refers to the prevention and reduction of accidental risks.

A security-related failure may be caused by several things: voluntary human action (e.g. vandalism, theft) or involuntary human action (e.g. negligence, inattention).

Therefore, to conclude, the security policy is designed to prevent malicious acts (e.g. intrusion, theft, vandalism and terrorism), including cyberattacks.

3. Expected results

To achieve a level of security that prevents any damage to the environment, neighbouring communities, UC and SC personnel, and industrial facilities, all the stakeholders must work together to implement the rules and best practices set out in this "Advice", which aims to prevent and deter malicious acts.

4. Links to the common system

- **Chapiter 2.1:** SKnowledge
- **Chapiter 3.1:** HSE risk analysis
- **Chapiter 4.3:** Analysis of hazardous situations, near misses, accidents and occupational illnesses

5. References

5.1 Useful Links

http://www.gouvernement.fr/risques/comprendre-le-terrorisme
http://www.stop-djihadisme.gouv.fr/radicalisation/identifier-radicalisation/quels-sont-signes-radicalisation
http://www.ssi.gouv.fr/administration/bonnes-pratiques/ https://www.referentsurete.fr/ http://www.sgdsn.gouv.fr/

Interministerial Directive on the Protection of Sensitive Information Systems No. 901/SGDSN/ANSSI NOR: PRMD1503279J

5.2 Extract from the agreement on health, working conditions, safety and security in the chemical industry, 18 July 2016

"Monitor and control the access of people, vehicles and goods (including packages) by adapting the relevant technical and human resources in consultation with Employee Representative Bodies (ERBs). Access control may involve the use of barriers, fences, security guards, a badge system and an anti-intrusion detection system. Draw up a formal map of sensitive areas, showing who can access them and how. Keep the inventory of hazardous materials up to date, in order to spot thefts quickly and report them to the authorities".

"Security file

Security management involves preventing malicious acts, including intrusion, theft, vandalism, terrorism and cyberattacks. To maintain and improve security in Seveso establishments, external companies must also have provided the user company with a security file, including:

- a definition of their security policy;
- a description of the recruitment process (job description, candidate assessment procedures, etc.);
- security regulations and procedures;
- the security training and awareness courses available to their employees;
- an analysis of any security-related incidents, and the feedback carried out.

The list of personnel involved shall be provided to the user company in advance, so that it can authorise access to its sites. The subcontracting company shall notify the user company of any replacements in advance".

5.3 Applicable regulations

Supporting documents that may be required during the recruitment process

In general, any information requested from candidates should be used for the sole purpose of assessing their ability to do the job or their professional skills. It must therefore have a direct and essential link to the job itself, or to the assessment of professional skills (Article L. 1221-6 of the French Labour Code). A valid driving licence may be one of the documents required for the job.

Residence permit

It is up to the employer to check with the French authorities that foreign nationals (from outside the European Economic Area) are in possession of a permit entitling them to work in France, unless they are a registered jobseeker (Article L. 5221-8 of the French Labour Code). Permits that entitle foreign nationals to work in France include: resident card, long-term residence permit bearing the words "passeport talent", long-term residence permit bearing the words "passeport talent (famille)", general long-term residence permit bearing the word "salarié", etc. (Article R. 5221-3 of the French Labour Code).

The request for verification of the work permit must be sent to the Préfet at least two working days before the effective date of employment, along with a photocopy of the document produced by the foreign national.

Foreign nationals must therefore provide their residence permit to the employer prior to their engagement.

Furthermore, a decree dated 28 December 2016 lists the documents that foreign nationals must provide if they wish to undertake paid employment in France. The list includes documents proving the civil status and nationality of the foreign national, as well as the residence permit; documents proving that the candidate's qualifications and experience match the job description (copies of diplomas and degrees, curriculum vitae, employment certificates).

6. Implementation

The table below lists the areas covered by the chemical sector agreement in France, in chronological and systematic order.

Security file	Advice for Supplier Companies
Establishment of their security policy	The security policy may be established in the same way as the HSE policy: risk identification, risk prevention, employee awareness training, requirements in terms of informing subcontractors and temporary workers about regulations.
Description of the employee recruitment process (job description, candidate assessment procedures, etc.)	 **Pre-employment:** Depending on the criticality of the tasks performed and/or the supplier company's areas of activity, it may be necessary to: • conduct pre-employment or pre-engagement checks including the examination and cross-referencing of administrative documents (ID card, driver's license, residence permit/card, work permit, professional identity card etc., and compulsory declarations), • consult the police or the gendarmerie about the candidate's suitability for the job/assignment, • conduct personality tests, depending on the job or assignment on offer, • include a confidentiality clause in the employment contract (if necessary, consult with the company lawyer or a specialised lawyer if such clauses are not already in force). **Selection of temporary workers:** Complete the statement of requirement (criteria for the selection of staff by temporary-work agencies); include the assessment of temporary workers based on security criteria. **Leaving the company:** Establish a procedure for managing employees who are leaving the company: return of equipment, keys, mobile telephones. Terminate IT access rights (e-mail, badge, removal from access system databases, etc.). Remind the employee of his/her contractual confidentiality obligations when the "final settlement" is made.

Security file	Advice for Supplier Companies
Security instructions and procedures	**CONFIDENTIEL** **Selection of tier-2 subcontractors:** The staff turnover rate and the proportion of temporary workers may be included in the selection criteria. **Information security:** Check references to the various charters (ethics, conduct, IT) and the code of professional conduct in the employment contract or the rules of procedure. Ban the taking of photos and/or videos on industrial sites (unless authorised by the user company). **IT security:** Data security: use filters on screens (e.g. on laptops when travelling), restrict or even forbid the use of USB drives, change passwords regularly and remind employees that they must be kept confidential, use only secure Wi-Fi connections, make sure that firewalls and anti-virus software are installed and up to date, block access to certain websites. Extend these recommendations to all connected devices, including mobile telephones and tablets. Separate industrial IT systems from office equipment connected to the Internet and other networks. UC/SC contractual relationship: Check that security regulations are included in contracts and adhered to by employees, particularly by monitoring social networks. **Personal data and video surveillance:** The management of personal data and/or the implementation of geolocation or video surveillance system requires special measures: the company must either notify or request permission from the French data protection authority (CNIL); it must inform the employee representative body (Economic and Social Committee depending on the size of the company) and the employees themselves (display regulations in the company, and circulate internal communications about the systems in place and the right of appeal).

Security file	Advice for Supplier Companies
Security management instructions and procedures	**Conduct:** Do not leave badges in cars, especially not in plain view. Report the loss of badges as soon as possible. Preferably use badges with photos. Set up a badge management system (supplier company employees may have several badges). Package delivery: check unidentified or improperly stored packages immediately. **Vehicle management:** Do not leave original vehicle registration documents in vehicles, make black and white photocopies to avoid duplication, preferably use non-electronic keys. Be vigilant as to the content of the vehicle: know exactly what is stored there and how it is stored to facilitate monitoring and inspections. Keep the interior of vehicles tidy to facilitate visual inspection. **Being vigilant:** Look out for suspicious comings and goings. Respect traffic, operations and parking areas. **Living accommodation/equipment storage/worksites:** Develop a procedure for managing living accommodation, equipment and storage areas, in order to control content and allow for inspections.
Training/ awareness sessions on the security measures put in place for employees	Training for front-line managers and their immediate superiors Include a security awareness module in the induction process. Organise or take part in security incident simulation exercises to train personnel. For employees not fluent in the company's official language, provide an interpreter and/or suitable materials.
Analysis of any security-related incidents, and the feedback carried out	**Incident:** Adopt the same approach as you would to a workplace accident: record the event (accident, near miss or hazardous situation), analyse the event, identify the root causes according to a severity threshold established by the company, define and implement corrective actions. **Risk analysis:** Worksite risk analysis: include security factors. See Annex 2 in the "Masecotte Advice" booklet.

Security file	Advice for User Companies
General organisation	Appoint a security manager.
Draw up a formal map of sensitive areas and the conditions of access applicable to all persons. Keep the inventory of hazardous goods up to date so that thefts can be spotted quickly and reported to the authorities.	**Map:** Map of areas by criticality and description of the corresponding access conditions: classification of buildings/areas and access rules (for different types of employee, visitors, SC personnel, temporary workers). The criticality of inventory items can be assessed according to: the quantities stocked (maximum capacity defined by an operating permit), the need for customs checks for tankers, environmental risks, market values.
Monitor and check incoming people, vehicles and objects (including packages); update the technical and human resources needed to do this, after consulting with ERPs.	**Access:** GManagement of access rights and the associated rest definition of days, hours, areas authorised for badge holders. Keep an entrance log. Preferably use badges with photos. Badges must bevisible. Do not leave badges in cars or on desks, especially in plain sight. Report the loss of badges as soon as possible. Different colour badges depending on type of access (duration and/or location). Badges must be shown on request. The professional identity card for the construction industry may be used to cross-check the identity of construction company workers. Define a procedure for managing lock-and-key or badge access rights to buildings and premises (who, where, how), as well as authorisations and the use of duplicates. Feedback: Employees of supplier companies (both temporary and organic) must be announced beforehand to the user company, which must verify their identity before granting them access rights (e.g. a badge). Visitors: Visits must be planned and organised in advance (identification of the visitor, creation of a badge). Visitors must wear their badges visibly,and be accompanied at all times. Define restrictions according to the rules of procedure (e.g. restrict access for salespersons visiting the living accommodation/worksites of SCs). Supplier companies: during the worksite preparation phase, anticipate requirements regarding worker identification and mark off areas prohibited during induction (include them in the formal risk analysis, i.e. the Prevention Plan).

Security file	Advice for User Companies
	The living accommodation of Supplier Companies: SCs may be allowed to store equipment on the UC's premises provided the containers are properly managed (e.g.: develop a procedure for managing the authorisation and installation of containers, check that the container is closed following the inventory and inspection by a representative of the UC). Provide for security and safety inspections of the living accommodation by a representative of the UC. UC prevention remit: protect/slow down/warn: this includes access control (with vehicle checks, opening of boots, etc.), the protection of critical areas, and access restrictions. Protection may be ensured through the use of video surveillance, and the management of visitors, workers, carriers and deliveries. **Vehicle access:** Implement a security protocol or a prevention plan including, for example: • Identification of vehicles and LV (light vehicle) drivers • Restriction of traffic and parking areas. For carriers: • Pre-identification of drivers and vehicles • Verification of compliance with Hazardous Materials Transportation procedures and regulations. For package delivery: • The delivery area should preferably be far from sensitive facilities (site entrance, guard post, external building). **Inspection:** Security-oriented field visit: verification of buildings, gates, docks, fences, badges, offices, and access to computers and sensitive documents. Include security-related checkpoints in the worksite audit. Carry out exercises to assess security-related procedures on the basis of events such as: a break-in attempt, presence of a person with a camera, a ladder against a fence, a suspicious package. **IT security:** Data security: use filters on screens (e.g. laptops when travelling), restrict or even forbid the use of USB drives, change passwords regularly and remind employees that they must be kept confidential, use only secure Wi-Fi connections, make sure that firewalls and anti-virus software are installed and up to date, block access to certain websites. Extend these recommendations to all connected devices, including mobile telephones and tablets.

Security file	Advice for User Companies
	  Data security: Management of the documents in on-call briefcases: define rules for storing the briefcase, which contains important documents. Define the level of confidentiality of internal documents, draw up rules for their transmission.
Access control may involve barriers, fences, security guards, a badge system, anti-intrusion detection.	**Anti intrusion :** Implement a permanent or temporary, selective or non-selective anti-intrusion system, and develop a policy for managing it. Clearly identify site entrance points, reduce incentives to approach the industrial site (no objects close to fences and gates, lighting in sensitive areas). Vary the lighting level according to the need: it should be stronger to identify people and vehicles at the site entrance and in areas where wagons and trucks are loaded/unloaded. Determine whether video surveillance would be beneficial. Include the maintenance of this equipment in the company's maintenance plan, with the necessary authorisations. Include the security of sensitive buildings (containing valuable equipment, goods or information), outside of working hours. **Warning system:** Draw up a contingency plan to deal with security-related events, develop a warning system and specific instructions (e.g. display anti-terrorist advice). **Physical security measures:** Identify or create security containment areas: secure doors and windows with, for example, bars, anti-intrusion locking and safety hinges.
Resource coordination	**Relations with the authorities** Establish a strong relationship with the local police and/or gendarmerie during quiet periods, in order to be more effective during emergencies.

Glossary

ACCIDENT

Any event occurring in the workplace or as a result of work carried out which results in damage (to people, and/or property, and/or to the environment, etc.).

ACCREDITATION

Issued by an employer on the basis of certain criteria (training, occupational skills, etc.) allowing the employee to perform a given task.

ACTION PLAN

Tool used to monitor actions (corrective, preventive, regulatory, etc.), containing the following headings as a minimum requirement: description, origin, nominated person responsible, deadline, monitoring or progress status, effectiveness measurement.

ASSESSMENT

Estimate of the efficiency and conformity of the actual system put in place.

AUDIT

The audit is a systematic, objective examination conducted on the basis of a reference guide. It is used to establish observations from the points audited (inventory) in order to identify nonconformities, offer guidance on improvement and highlight good practices / positive points.

AUTHORISATION TO OPERATE

Issued by the employer, in particular for operating handling equipment and machinery.
Appropriate training of personnel is necessary. It must be enhanced and updated whenever the need arises.
As a minimum requirement, authorisation to operate must be issued by the employer for the following types of machinery:

- Rider-operated material handling trucks,
- Tower cranes,
- Mobile cranes,
- Remotely controlled or rider-operated site machinery,
- Mobile elevating working platforms,
- Truck-mounted auxiliary cranes.

Authorisation is granted if:
- the company doctor has issued the driver with a medical fitness certificate
- the driver has acquired the knowledge and skills necessary through:
  - testing of the knowledge and know-how required to safely operate the machine
  - knowledge of the workplaces and instructions to be complied with on the site(s) of use

This principle can be extended to different tools and machines in the company as required by the employer. Not to be confused with accreditation (electrical for example).

AUTHORISATION TO WORK

Document dated and signed by the accredited people setting out HSE risks, prevention measures and authorising execution of work in a specific location (= permit to work).

BUDDY SYSTEM

See "TUTOR".

CERTIFICATION PERIMETER

Office or agency affected by certification.

CO-CONTRACTING

Several companies which draw up a legal arrangement to jointly fulfil the same order.

COMPANY

Public or private structure through which an economic activity is exercised using human resources (employees, temporary staff or subcontractors), premises and appropriate equipment.

COMPANY HEALTH SAFETY ENVIRONMENT (HSE) CULTURE

The HSE culture is all of the HSE values, practices and methods common to all members of a company or organisation.

COMPANY MANUAL

Set of documents listing the provisions implemented to comply with the requirements of a reference guide.

COMPANY SAFETY IMPROVEMENT MANUAL

Complete document containing the "Reference guide".

COMPANY SAFETY IMPROVEMENT PLAN (PASE)

Set of documents listing the provisions implemented by the employer to comply with the requirements of the MASE reference guide; see also HSE manual.

COMPETENCE

Use of validated know-how in a complex professional situation, with a view to attaining a result or requirement.

CONTINUAL IMPROVEMENT

Regular process used to improve the overall performance of the management system in line with the company's policy.

CORRECTIVE ACTION

Action undertaken to eliminate the causes of an existing nonconformity in order to prevent recurrence.

CPE

Collective protective equipment.

DELEGATION OF POWER

Delegation of power is a legal act through which an authority (the delegant) relinquishes all or part of the powers assigned to them and transfers them to a subordinate authority (the delegatee).

DOCUMENT REVIEW

Detailed analysis of all the documents defining the management system in place.

EFFECTIVENESS

An action (or system) producing the effect required or the result expected.
The management system is considered effective if risks are controlled, results improve consistently and the management system continues to develop within the company.
Effectiveness leads to efficiency.

EFFICIENCY

Efficiency is the implementation of attainable and appropriate actions that take account of economic realities while remaining effective.

EMPLOYEES (permanent and temporary personnel)

The employee is a person who undertakes to perform a job, either full-time or part-time, on behalf of an employer and in return for a salary or wage.

EMPLOYER

Person who employs salaried personnel.

ENVIRONMENT

The surroundings (air, water, soil) in which an organism (flora and fauna) develops. The interaction of humans with this environment can have positive or negative consequences.

EXPOSURE

Act of subjecting an individual to an identified risk.

FREQUENCY RATE

FREQUENCY RATE 1 (or FR1):

Number of lost-time accidents per million hours worked.

E.g.: 5 lost-time accidents for 120,000 hours worked.

$$TF1 = \frac{5 \times 1,000,000}{120,000} = 41.6$$

FREQUENCY RATE 2 (or FR2):

Number of declared lost-time and non-lost-time accidents per million hours worked.

FREQUENCY RATE 3 (or FR3):

Number of declared lost-time and non-lost-time accidents and those requiring first aid per million hours worked.

SEVERITY RATE:

Number of lost-time days per thousand hours worked.

E.g.: 132 lost-time days for 120,000 hours worked.

$$SR = \frac{132 \times 1000}{120,000} = 1.1$$

These four indicators are used to report the frequency and severity of accidents. They must appear each year in the company's social responsibility audit and the CHSCT report.

GUIDANCE ON PROGRESS

Suggestions that may be made to help the employer improve their system.

HAZARD

The intrinsic property of an element capable of compromising the physical integrity or health of people, or of threatening the safety of facilities or the environment.

HAZARDOUS SITUATION

Situation in which damage is possible as a result of one or more hazardous phenomena.

HEALTH

Preservation of physical and psychological well-being in the short term (safety), medium and long-term (hygiene).

HEALTH, SAFETY AND WORKING CONDITIONS COMMITTEE

The CHSCT is a staff representation body in companies with more than 50 employees.

SEG

A similar exposure group (SEG) is a set of people, jobs or work functions which are estimated to experience exposure of the same type and of similar intensity. Each employee must be included in one or more HEGs.

HIRED MACHINERY OPERATOR

A service provider who offers hire of "machinery with operator".
The machinery operator must be covered by a PPSPS or PDP.

HOURS WORKED

Total hours worked is the sum of the hours actually worked by employees.

HYGIENE

Industrial hygiene is the discipline of anticipating, recognising, assessing and controlling dangers to health in the work environment with the objective of protecting employee health in the medium and long term.

INDICATORS

An indicator is a chosen and objective item of information used to periodically observe developments in relation to the targets set (see Annex 3 "Advice on choosing indicators").

INDIVIDUAL REVIEW

Used to both determine whether the targets set (work, HSE, etc.) have been achieved, and to set new ones for the coming year.
It can be used to identify additional training needs (at the request of the employee or employer).
It is used to determine any job-related modifications.
Regardless of its content, it is essential not to leave things unspoken. It is an opportunity for open discussion.

INDUCTION

Training session for personnel on risk and associated rules and instructions.
Training is delivered when personnel are hired and whenever necessary (change of job, changes in techniques, manufacturing processes, work instructions, regulations and corporate organisation).

INFORMATION

Items passed up or down the company chain of command necessary for understanding (poster, talk, email, safety toolbox talks, etc.).

INSTRUCTION

Internal memo that helps define good practices and/or ways of operating.

LESSONS LEARNED

The lessons learned process is a systematic and rigorous analysis of an incident in order to draw lessons from it for the future.

LIST OF JOBS EXPOSED TO SPECIFIC RISKS

The list of jobs exposed to specific risks is drawn up by the employer and specifies the jobs presenting specific risks for employee health and safety.
Casual staff (on fixed term contracts and temporary personnel) working in a job involving specific risks are given enhanced training.

MAJOR NONCONFORMITY

A major nonconformity is a nonconformity in relation to the reference guide that could endanger the system in place, its organisation, application and effectiveness.

MANAGEMENT COMMITTEE

Group of people responsible for implementing and coordinating the company's management system.

MANAGEMENT SYSTEM

The totality of the global organisational structure (responsibilities, procedures and resources) used to manage the health, safety and environmental risks associated with the organisation's activities.

MASE

"Company Safety Improvement Manual". A reference guide that can be used by the company to set up its management system. Name of associations whose remit is to promote and improve health, safety and protection of the environment in companies.

MASE/FRANCE-CHIMIE COMMON SYSTEM CERTIFICATION

Recognition of the HSE management system by one of the MASE associations.

MECHANISM

Set of measures to attain a target.

MINOR NONCONFORMITY

A minor nonconformity is a deviation that does not prevent the system from functioning but could impinge on its effectiveness.

NEAR MISS

Any event occurring in the workplace or as a result of work carried out which could have resulted in damage (to people, and/or property, and/or to the environment, etc.).

NONCONFORMITY

See major nonconformity.

OBSERVATION

Comment that may be similar to guidance on progress.

OCCUPATIONAL DISEASE

A disease is "occupational" if it is the direct consequence of a worker's exposure to a physical, chemical or biological risk, or results from the conditions in which they exercise their occupational activity.
To be recognised, the disease must appear in one of the tables annexed to the French Social Security Code (created and modified by decree).

PERMANENT EMPLOYEE

Employees on fixed-term contracts are known as permanent employees.

PERMIT TO WORK

See "AUTHORISATION TO WORK".

PLANNING

Programming of actions or tasks to be performed in order to attain a target or result.

POLICY

Formalised declaration by the employer describing the fundamental commitments of the company's management system.

PPE

Personal protective equipment.

PREVENTION

Set of measures taken to anticipate / prevent potential risks.

PREVENTION PLAN

The PDP is a process for analysing multi-source and coactive risks which must be implemented by the head of the user company (the entity commissioning the work) together with the management of external companies (those doing the work) carrying out one or more operations. It must be drawn up in writing for all hazardous works (list defined by French decree of 19 March 1993) or if the duration of the operation is greater than 400 hours over a 12-month period.

PREVENTIVE ACTION

Action undertaken to eliminate the causes of a potential nonconformity in order to prevent occurrence.

PROCEDURE

For a given activity, a document setting out the means to be used, the measures to be implemented and the checks to be made in order to attain the expected result.

RECORD

Document reporting a result obtained or providing proof of a completed action.

RE-EXAMINATION

Process identifying nonconformity between regulatory changes applicable to the company and what it actually applies.

REFERENCE GUIDE

One of the components of the Company Safety Improvement Manual: it contains requirements and associated questions.

RELEVANCE OF THE MANAGEMENT SYSTEM

The management system put in place by the employer is considered to be relevant if it is coherent and appropriate to the needs of the company.

RESIDUAL RISK

Risk that is still present when prevention measures have been implemented.

RISK

Risk is the probability of a hazard causing an impact when there is exposure to that hazard (Risk = Hazard x Exposure).

RISK ASSESSMENT AND ACTION PLAN

The occupational risk assessment and action plan (DUER) is a document containing a written transcription of the company's risk assessment results.

SAFETY

Safety is the discipline of anticipating, recognising, assessing and controlling hazards to health in the work environment with the objective of protecting employee health in the short term and the well-being and protection of the community as a whole.

SAFETY AND HEALTH PROTECTION COORDINATION

This is an obligation of the client for construction and public works activities. The purpose of safety and health protection coordination, for all construction or civil engineering sites where several contractors or self-employed trades are working, is to prevent risks resulting from their joint activity and to plan the use of common resources. To this end, the client appoints a safety and health protection coordinator, whose roles, duties and responsibilities are defined in the French Labour Code.

SAFETY PROTOCOL

Used for loading or unloading activities.
The safety protocol is a written document drawn up between the host company and the haulier.
It includes all information resulting from the prior analysis of risks inherent to the operation.

SCOPE

All the company's activities covered by MASE/France-Chimie common system certification.

SPECIFIC SAFETY AND HEALTH PROTECTION PLAN

Specific safety and health protection plan (PPSPS): drawn up by a company working on a closed and independent construction or civil engineering worksite on the basis of the general coordination plan (PGC).

SPONSOR

See "TUTOR".

STEERING COMMITTEE

The steering committee (COPIL) is a body within the association.
It performs a variety of tasks (certification, meetings, representation, etc.).
Its members meet specified eligibility conditions and are appointed by the board of directors.

SUBCONTRACTING

Subcontracting is the performance of a service awarded by contract to another company (known as the subcontractor). Various types of subcontracting exist.

CONTRACTOR

A company that provides services (supplier), a company considered to be external to the client, the user company.

TALK

A talk is a planned and regularly organised meeting examining specific themes.

TARGET

General goal that the company sets in line with its policy.

TEMPORARY EMPLOYEE

Temporary work is the result of a temporary employment contract drawn up solely for the performance of a specific and temporary task, known as the assignment, and only in the scenarios allowed by law.

Employees on temporary employment contracts or fixed-term contracts are known as temporary employees.

Regardless of the reason for which it is drawn up, such a contract cannot have either the purpose or effect of permanently filling a post linked to the regular and permanent activity of the user company.

TRAINING

Training is the learning process which allows an individual to acquire the knowledge and know-how (skills and expertise) necessary to exercise a trade or professional activity.

TUTOR (sponsor)

The tutor is an experienced employee (job and HSE knowledge) who facilitates the integration of a person (permanent contract, fixed-term contract, temporary employee, intern, employee in new post) into the company.

CLIENT

Contracting party / outsourcer (client).

WORK DOCUMENTS

Set of documents required to perform an action (sequence of operations, procedures, orders, drawings, diagrams, work instructions, etc.).

WORK INSTRUCTIONS

Work instructions are a list of all the operations that must be carried out to complete a specific task.

WORKSHOP

A place or building where workers operate with rules specific to their profession.

WORKSITE

Operation outside the company's premises - construction, operation or demolition site, or a place where various materials are stored.

NOTE

ABBREVIATION GUIDE

ATEX   Explosive atmosphere

BEI   Biological exposure index

IRP   Health, safety and working conditions committee (Comité d'Hygiène, de Sécurité et des Conditions de Travail)

CMR   Carcinogenic, mutagenic or toxic for reproduction

CPE   Collective protective equipment

CSN   National Strategy Committee (Comité Stratégique National)

DTA   Asbestos survey (Dossier Technique Amiante)

DUER   Risk assessment and action plan (Document Unique d'Evaluation des Risques)

FIPE   Individual exposure prevention record (Fiche Individuelle de Prévention des Expositions).

HCA   Hazardous chemical agent

SEG   Similar exposure group

HR   Human resources

HSE   Health safety environment

IPRP   Occupational risk prevention specialists (Intervenants Prévention des Risques Professionnels)

IRP   Personnel's representative bodies (Instances Représentatives du Personnel)

LL   Lessons learned

MASE   Company Safety Improvement Manual

MSD   Musculoskeletal disorders

OD   Occupational disease

OPPBTP   Organisme Professionnel de Prévention du Bâtiment et des Travaux Publics (French organisation for accident prevention in the construction industry)

PDP   Prevention plan (Plan de Prévention)

PGC   General coordination plan (Plan Général de Coordination)

PPE   Personal protective equipment

PPSPS   Specific safety and health protection plan (Plan Particulier de Sécurité et de Protection de la Santé)

SC   Supplier company = contractor

SDS   Safety data sheet

SMR   Closer medical supervision (Surveillance Médicale Renforcée)

SR   Staff representative

TLV   Threshold limit value

UC   User company = client

WA   Work accident

WC   Works council

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