



HAZARD IDENTIFICATION AND RISK ASSESSMENT

1. Objective

The objective of this Work Instruction (WI) is to define how hazards are identified and the risks of potential accidents are assessed, as well as how the risks and opportunities of the Integrated Management System (IMS) are managed, in addition to risk management within the scope of the Corruption Prevention Framework (CPF).

2. Definitions

Hazard - Source, situation or activity with a potential for harm in terms of injury or impairment of health, or a combination thereof.

Risk (HST) - The combination of the probability of a hazardous event or exposure(s) occurring and the severity of injuries or health problems that could be caused by the event or exposure(s).

Hazard identification - The process of recognising the existence of a hazard and defining its characteristics.

Risk (IMS) - The combination of the probability of an event occurring and its impact, which could negatively affect the IMS, namely its ability to achieve the planned results.

Opportunity (IMS) - The combination of the probability of an event occurring and its impact, which could positively affect the IMS, namely its ability to achieve the planned results.

Risk (CPF) - Combination of the probability of an event occurring in the field of corruption and related offences and its impact, which could negatively affect Telhabel's image and/or ability to continue as a going concern.

When identifying hazards, you must take them into account:

- All routine and occasional activities;
- The performance of duties by members of the administrative and management bodies;
- The activities of all personnel who have access to the workplace (including contractors and visitors);
- Behaviour (e.g. history of accidents, use of PPE), skills and other human factors (e.g. ergonomic factor, manual handling of loads);
- The hazards created in the vicinity of the workplace with related activities under and without the control of the organisation (e.g. environmental aspect);
- The infrastructure, equipment, materials, substances and physical conditions of the workplace;
- Changes in organisation, activities and processes;
- Modifications to the Management System, including temporary changes and their impact on operations, processes and activities;

- How the work is organised and carried out;
- Design, research, development, testing, production, assembly, construction, provision of services/supply, maintenance and disposal of products and services;
- Relevant past incidents, internal or external to the organisation;
- Potential emergency situations;
- Design of workplaces, processes, installations, machinery/equipment, procedures, as well as work organisation, including their adaptation to the needs and abilities of the workers involved;
- Changes in knowledge about hazards and information about them.

Stakeholders - Individual or group interested in or affected by an organisation's OSH performance, whether internal or external to the organisation.

Risk Assessment - The process of evaluating risks arising from hazard(s), taking into account the adequacy of existing means of control, and deciding whether or not the risk is acceptable.

Acceptable Risk - A risk that has been reduced to a level that can be accepted by the organisation, taking into account its legal obligations and its own Occupational Health and Safety policy.

Occupational Safety and Health Management System (OSHMS) - Part of an overall system that makes it possible to manage occupational safety and health risks related to the organisation's activities. It includes the operational structure, planning activities, duties, practices, procedures, processes, as well as resources for developing, implementing, making effective and reviewing the organisation's Occupational Safety and Health Policy.

Occupational Safety and Health (OSH) - Conditions and factors that affect the health and safety of workers, including temporary workers, service providers, visitors, as well as any other person at the workplace.

Integrated Management System (IMS) - Part of an overall system that makes it possible to manage the areas of Quality, Environment and Occupational Health and Safety. It includes the operational structure, planning activities, duties, practices, procedures, processes and resources for developing, implementing, making effective and reviewing the Organisation's QHSE Management Policy .



3. Procedures

Procedures	Responsible	How to proceed
<pre> graph TD Start([Start]) --> A[Identify and duly analyse all the activities carried out] A --> B[Define a risk assessment method] B --> C[Identify hazards and evaluate risks inherent to activities] C --> D{Is the risk acceptable?} D -- No --> E[Propose and implement ne prevention measures] E --> C D -- Yes --> F[Informing employees] F --> G[Implementation] G --> H[Monitoring] H --> I{Are all activities duly evaluated?} I -- No --> A I -- Yes --> J[End] </pre>	RQSA, THS and D.O. and/or Sector Manager (RS)	They identify and analyse the activities carried out at Telhabel Construções S.A.
	RQSA	See point 4 of this Work Instruction.
	RQSA and THS HST delegates	The RQSA, THS and HST Delegates in collaboration with the D.O. and RS will identify the hazards and assess the risks for the activities carried out and record them in the Risk Assessment Table (Form 12/SG). They then analyse the risk assessment and check whether the risk is acceptable; if it is not acceptable, they propose and implement corrective action measures and identify the hazards and assess the risks again. As a means of monitoring or implementing changes, Telhabel takes into account the following hierarchy: Elimination, replacement, re-engineering (technical changes), training and/or administrative measures, personal protective equipment.
	RQSA and/or THS	The RQSA and/or THS informs employees of the results of the Risk Assessment Table (Form 12/SG).
	RQSA THS D.O. Foreman	Carries out the task in accordance with the prevention measures stipulated in the Risk Assessment Table, Equipment Safety Data Sheets and Monitoring and Measurement Plans.
	RQSA THS D.O. Officer HST delegates	They analyse whether all the activities have been assessed. If not, they re-analyse the process. This reassessment must be duly recorded in the Risk Assessment Table (Form 12/SG). After an accident, the risks are always reassessed.

4. Methodology for hazard identification and risk assessment

The methodology presented here makes it possible to quantify the magnitude of existing risks and, as a consequence, to prioritise their correction.

Given the aim of simplicity in this methodology, the risk level is obtained by combining 2 factors:

- o Probability level
- o Consequence level

The risk level (RL) will in turn be a function of the probability level (PL) and the consequence level (CL), and can be expressed as:

$$RL = PL \times NC$$

4.1 PROBABILITY LEVEL (PL)

For a specific risk, the probability level (PL) can be estimated according to the time spent in work areas, operating machinery, etc.

Table 1: Determining the probability level

PROBABILITY LEVEL	PL	MEANING
Very likely	4	Preventive measures don't exist and if they do, they're not effective.
Likely	3	Preventive measures exist, but they are not enough.
Occasional	2	Preventive measures are in place, but there are slight gaps.
Unlikely	1	Preventive measures are in place and effective.

4.2 CONSEQUENCE LEVEL (CL)

Four levels were also considered (table 2) for classifying the consequences (CL) in terms of physical damage.

Table 2: Determining the consequence level

CONSEQUENCE LEVEL	CL	PERSONAL INJURY
Deadly or Catastrophic (M)	100	Death
Very serious (MG)	60	Serious injuries that can be irreparable (ATI > 90 days and IPP)
Severe (G)	25	Disabling injuries (ATI from 3 to 90 days)
Low (L)	10	Minor injuries that do not require hospitalisation (ATI up to 3 days)

ATI - Absolute Total Incapacity

PPD - Permanent Partial Disability

4.3 RISK LEVEL (RL)

Table 3 establishes the grouping of risk level that give rise to intervention levels and their significance.

Table 3: Meaning of the Intervention level

INTERVENTION LEVEL	RL	MEANING
I	180 - 400	Not Acceptable - Correct and adopt control measures.
II	10 - 120	Acceptable - Improve if possible.

Note: Non-acceptable risks do not mean that they are legally non-compliant Associated. They just need more control over the expected consequences.

5. Methodology for assessing risks and opportunities

$$RL = PL \times IL$$

- Risk Level (RL)
- Probability Level (PL)
- Impact Level (IL)

Probability Level Classification Table (PL):

Probability Level	Level	Risk Description IMS + CPF	Opportunity Description IMS	Probability of occurrence
High	4	The situation is bound to happen and it's guaranteed to repeat itself	Reduced need for resources	50%
Average	3	The situation will happen and perhaps repeat itself	Moderate need for resources	20-50%
Low	2	The situation can happen from time to time	High need for resources	5-20%
Very low	1	The situation will probably never happen	Need for resources beyond the organisation's reach	5%

Impact Level Classification Table (IL):

Impact Level	Level	Description (O - Opportunity) IMS	Description (R - Risk) IMS	Description (R - Risk) CPF
Extreme	4	Very relevant opportunity with a very positive impact	Serious risk, which causes considerable deviations from the operating result	Serious risk, causing catastrophic impact on Telhabel's image and/or business continuity

High	3	Relevant opportunity with a positive impact	High risks, which can strongly influence the operating result	High risks, which could strongly influence Telhabel's image and/or business continuity
Medium	2	Opportunity of little relevance, with little positive impact	Medium risk, which can cause deviations from operating results	Medium risk, which could have consequences for Telhabel's image and/or business continuity
Low	1	Irrelevant opportunity; no positive impact	Risk not relevant; possible deviations from results will be negligible	Risk not relevant; possible impacts on Telhabel's image and/or business continuity are insignificant

Risk Level (RL) = Probability Level (PL) X Impact Level (IL)

		Impact			
		4	3	2	1
Probability	4	16	12	8	4
	3	12	9	6	3
	2	8	6	4	2
	1	4	3	2	1

RISKS:

Risk Level	Risk Acceptability	Intervention Prioritisation
10 a 16	Inadmissible	Immediate/short-term mitigation intervention
6 a 9	Admissible	Medium/long-term mitigation intervention
1 a 5	Acceptable	No intervention required

OPPORTUNITIES:

Risk Level	Opportunity	Intervention Prioritisation
10 a 16	Opportunity	Mandatory implementation of actions
6 a 9	Voluntary Opportunity	Analyse the relevance of implementing actions
1 a 5	Unsuitable	No need for action. Not a priority opportunity

PLANO DE PREVENÇÃO DE RISCOS (PPR)							
IDENTIFICAÇÃO						PLANEAMENTO	
ANÁLISE E CLASSIFICAÇÃO						PLANEAMENTO DA IMPLEMENTAÇÃO DAS MEDIDAS PREVENTIVAS E CORRETIVAS	
Fonte de Informação/ Origem do Risco	Área/processo	Identificação e Descrição do Risco	Nível de Probabilidade (NP)	Nível de Impacto (NI)	Nível de Risco (NR = NP X NI)	Medidas Preventivas e Corretivas	Tipologia da medida (P=preventiva; C=corretiva)
Reflexão Interna	Administração	A Administração entregar benefícios ilícitos a entidades públicas ou privadas para a angariação de obras	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Produção	A Produção entregar benefícios à fiscalização/representante do cliente para aceitar trabalhos não conformes	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Produção	A Produção receber benefícios para aceitar um serviço/produto não conforme por parte de um fornecedor/subempreiteiro	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Comercial	A Comercial diretamente ou por interposta entidade, atribuir benefícios em troca de favorecimento em procedimentos de aquisição	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	QSA	A QSA receber benefícios para aceitar um incumprimento ao PSS e PGA por parte de um fornecedor/subempreiteiro	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Logística, Aproveitamentos e Subempreitadas	O colaborador receber benefícios pela aquisição de bens ou serviços a determinado fornecedor/Subempreiteiro	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	RRH	Os RH receberem benefícios pela admissão de colaboradores familiares ou conhecidos	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Pós-Venda	O Pós - Venda receber benefícios do subempreiteiro para aceitar trabalhos não conformes	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Pós-Venda	O Pós - Venda entregar benefícios ao cliente para aceitar trabalhos não conformes	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Contabilidade	A Contabilidade receber benefícios dos subempreiteiros/fornecedores para alterar condições contratuais	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Orçamentos	Os Orçamentos receberem benefícios de potenciais clientes para reduzir o orçamento de um determinado concurso	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Informática	A Informática receber benefícios para ocultação ou divulgação de informação relevante	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Medições/Topografia	As Medições/Topografia receberem benefícios para adulterarem medições	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes; Confrontar as medições do cliente com os autos do fornecedor	P
Reflexão Interna	Secretaria Administração	A Secretária da Administração receber benefícios para divulgação de informação relevante	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Rececionista	A Rececionista receber benefícios para divulgação de informação relevante	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Jurídico	O Jurídico receber benefícios para alterar processos	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Armazém	O Armazém receber benefícios por aceitar material não conforme de fornecedores	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P
Reflexão Interna	Colaboradores	Os colaboradores utilizarem equipamentos/produtos em benefício próprio ou de terceiros sem autorização	1	3	3	Formação sobre o código de ética e conduta; Sistema QSA; Procedimentos internos já existentes.	P