Guidance on the Safe Management of Contracts: A Contract Lifecycle Approach







INTERNATIONAL SOCIAL SECURITY ASSOCIATION

International Section for Electricity

The ISSA Electricity Section would like to thank all members of the international working group for their active support in establishing this Guidance.

Peter McCormick, EA Technology, United Kingdom – Chair Bernhard Ascherl, Siemens, Germany Peter Coyle, New Zealand Antonio De Cos Blanco, Fraternidad Muprespa, Spain Dieter Häring, ABB, Germany Jens Jühling, ISSA Electricity, Germany Mike Leppard, ENA, United Kingdom Bernd Merz, ISSA Construction Industry, Germany Jennifer Papantuono, ISSA Electricity, Germany Frank Pirman, ISSA Mining Industry, Germany Klaus Renz, ISSA Electricity, Germany Ansgar Roelofs, RWE, Germany

Contributing organisations: CIER, Uruguay

IVSS 032E

Editor: International Social Security Association Section for Electricity, Gas and Water c/o Berufsgenossenschaft Energie Textil Elektro Medienerzeugnisse Gustav-Heinemann-Ufer, 50968 Köln, Germany

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List of contents

	Preliminary remarks	7
	Purpose	7
	Audience	8
	Guidance – introduction	10
	Scope	11
	Types of contracts and range of contracted work	12
	Types of relationships	13
	Competency	13
	Contract Lifecycle	14
1	Project preparation	16
	1.1 Project definition	17
	1.2 Planning	18
	1.3 Tender	19
	1.4 Procurement	20
2	Choice of contractor/Check of tender	22
	2.1 Pre-qualification process/Tender process	23
	2.2 Selection criteria/Tender submission	24
	2.3 Final selection	26
3	Contractual arrangements	27
	3.1 Project definition	28
	3.2 Guideline for contractors	30
	3.3 Coordinating persons	30
	3.4 Subcontractors	31
	3.5 Risk assessment	31
	3.6 Operational plan	32
4	Collective preparation	34
	4.1 Guideline for contractors	35
	4.2 Coordinating persons	35
	4.2.1 Responsible Contact Person (RCP) of the client/	
	Responsible Supervisor (RS) of the contractor	35
	4.2.2 Coordinator	36
	4.2.3 Special Supervisor	38
	4.3 Risk assessment	38

4.4 Information and communication management	40
4.5 Appointment of contractor's workforce	41
Management of contract	44
5.1 Protective measures	45
5.2 Safety information	45
5.3 Operational plan	48
5.4 Identification of workforce	48
Control and sign-off/Completion	51
6.1 Implementation of protective measures / Implementation	
of operational plan	52
6.2 Supervision of measures	52
6.3 Incident/accident management	54
6.4 Contract infractions	55
6.5 Testing and acceptance/Plant handover	56
Paviaw	50
Keview	50
Process improvement	62
·	
	 4.4 Information and communication management 4.5 Appointment of contractor's workforce Management of contract 5.1 Protective measures 5.2 Safety information 5.3 Operational plan 5.4 Identification of workforce Control and sign-off/Completion 6.1 Implementation of protective measures / Implementation of operational plan 6.2 Supervision of measures 6.3 Incident/accident management 6.4 Contract infractions 6.5 Testing and acceptance/Plant handover Review Process improvement

ANNEX

Good practice examples	65
List of references	79

Preliminary remarks

The starting point for this Guidance is the growing tendency among companies to concentrate on their core business and, as a result, to outsource more and more operational functions. This leads to the increased utilization of external companies under contract.

Contract work naturally influences the normal workflow and can give rise to an additional and mutual increase in risk.

The probability of accidents, other health risks and material damage may rise considerably.

Consequently, safety considerations and related precautions will play an important role in the interaction between a client and contractor. This relationship should ideally be a partnership based on collaborative working to ensure an efficient and timely delivery of the contract. This Guidance therefore comprises all relevant aspects that form the basis for the safe and successful performance of contract work.

Purpose

This document is intended to provide practical guidance to clients and contractors (including subcontractors) in the implementation of contractual arrangements between the various parties. The Guidance is designed to:

- Provide advice to both client and contractor as they strive to meet their legal obligations with respect to European legislation (please note that this does not replace your legal obligation to observe national laws);
- Place equal emphasis on the roles and expectations of both client and contractor;
- Outline the means for achieving a successful contractual outcome in the most efficient, cost effective and safe manner;
- Illustrate how this can be achieved through a Contract Lifecycle model that sets out the required stages comprising the awarding, management and implementation of contracts.

Audience

The following general definitions are used to address the various parties considered in this document:

- The client (or host company) outsources a task or function;
- The contractor (and personnel) contracts with the client to provide a service (e.g. maintenance works);
- The subcontractor (and personnel) is engaged by the contractor to carry out, for example, specialised or minor ancillary works.

The employer (client) fulfils general duties with respect to his employees in line with established health and safety obligations as follows:

Employer			
	Organise OSH activities	 designate worker(s) or internal/external services establish agreements for workers' representation 	\wedge
Ш	Evaluate OSH risks	 document risk assessment prioritize risks for normal and emergency situations 	
U	Set and implement protective and preventive measures	 document work and production methods choose work and protection equipment (collective and personal) document emergency response plans train workers 	
Ш	Inform and involve workers	 disseminate info on risks and measures – in-house personnel, subcontractors/collaborators establish agreements for workers' representation 	
	Monitor and control	 measure/estimate exposure maintain health surveillance investigate and learn from incidents/accidents enforce OSH rules 	
		Workers representatives	

Guidance on how to successfully manage these duties and develop an effective working relationship between managers and employees is set out in the ISSA Electricity Section document 'Guidance for the Management of Health and Safe-ty Performance'.

The client also has duties to non-employees, including contractors, subcontractors, visitors and members of the general public. The general safety of all parties should be assured through effective risk assessment, as well as health and safety management. The client also assumes a common law duty of care to all parties and is liable for any negligent acts or omissions that may arise from employee work activities.

The contractor assumes general duties with respect to his employees, subcontractors, visitors and members of the general public, and has an obligation to cooperate with and coordinate activities with the client and subcontractors. The contractor is responsible for his personal on-site actions, owes a duty of care to all parties and is similarly liable for any negligent acts by his employees.

The subcontractor assumes general duties with respect to his employees, as well as to the client, contractor, visitors and members of the general public, and has an obligation to cooperate with and coordinate activities with the client and contractor. The same legal obligations apply as referenced above.

The relationship between all of these various parties is illustrated below:



Fig. 1: Client-contractor relationship

Guidance – introduction

It is assumed as a requisite that, in order to effectively use and apply this guidance material, companies must first have appropriate systems in place for managing their legal obligations with respect to:

- Corporate governance;
- Competition;
- Financial management;
- Procurement;
- Health, Safety & Environmental requirements;
- Quality standards;
- Workforce welfare arrangements.

The degree of governance expected of an organisation will be dependent on the size and function of the business. Larger companies will have resources more readily available and will be expected to introduce and implement more detailed procedures than a small or medium-sized enterprise (SME) would. Similarly, the number and size of the companies contracted will determine the initial level of scrutiny and control required. Nevertheless, all organisations have a clear obligation to manage their business affairs in a legally compliant and transparent manner. This includes working with third parties (including subcontractors) engaged by the business for a specific purpose or to fulfil a discrete project or task, and involves both temporary and permanent contracts.

From the outset, it must be determined whether contracting or outsourcing is the correct business approach, as carrying out the work in-house does offer greater control over the processes and operations. Yet, if it is determined that a contractual arrangement with an external company or service provider is more appropriate, then the procedures and guidance outlined in this document will ensure that a suitable approach is adopted by the client, allowing him to manage and work with contractors in a manner that is both aligned to, and supports a wider integrated business management model.

This document includes not only the necessary formal arrangements as outlined above, but also the good practices that, when implemented together, provide a robust and consistent approach to managing these issues. The adoption of an integrated approach to business management and performance based on agreed standards addressing contractual, financial, quality, health, safety and environmental issues ensures that no activity or function is carried out in isolation from other business needs. This approach should be supported by company-specific standards, as well as with good practices recognised throughout the industry accompanied by suitable auditing and reporting procedures to ensure overall compliance with business needs.

Scope

The intent of this Guidance is to provide advice on how to best manage the processes and relationships between the various parties to ensure a successful outcome for the benefit of all parties. Contracts should be based on an equal relationship between the client and contractor while promoting a fair and transparent approach to the task at hand from initial contract award through project completion. The level of detail required to ensure this will depend on the type and complexity of the contract.

A Contract Lifecycle model accompanied by test questions will be used to highlight the minimum considerations required at each stage of the process. These will be illustrated through the use of good practice examples (see annex) from, and case studies of successful contracts.

The model underscores the legal obligation a client and contractor have to ensure the health, safety and welfare of their employees, contractors and others affected by their activities, including members of the general public. These obligations are fulfilled by ensuring that all parties manage and mitigate the risks associated with their work activities by implementing suitable and sufficient risk assessment procedures, as well as by introducing appropriate control measures.

Many of the health and safety problems associated with contract work result from:

- Unsuitable or insufficient methods for selecting contractors;
- Poor planning and lack of agreement on how to carry out the work/task;
- Poor communication about work-related or mutually-induced risks;
- Lack of consideration given to necessary precautions;
- Poor monitoring or supervision of the work process or of the individual parties.

Even after a contractor has been appointed and the work defined, a number of issues or challenges, all of which can impact safety, still must be considered, including:

- A new working environment with unknown hazards for contracting personnel;
- Complexity in the organisation of work, roles and responsibilities;
- The presence of different on-site actors client and contractor, production and maintenance personnel, multiple or chains of contractors and subcontractors;
- The introduction of risks to personnel already working regularly at the establishment;
- Differences in safety cultures between the client and contractor;
- A lack of understanding of on-site safety rules and instructions;
- The use of non-competent workers in temporary employment or subcontracting or the use of subcontractor personnel being less qualified than the contractor;
- Competition among contractors to reduce costs in order to secure a contract, leading to potential cuts in training, safety precautions, skill levels and equipment.

Managers therefore need to be familiar with the procedures for working with and managing contractors within their area of responsibility, especially if a contractor is employed to assume high-risk activities. Managers must also be aware of any impact a contractor's work may have on the health, safety and welfare of their own personnel.

Types of contracts and range of contracted work

The arrangements documented between a client and contractor will ultimately depend on the type of contract being awarded and the level of risk associated with the activity or process. Turnkey projects, plant construction, equipment installation, replacement or refurbishment work, regular maintenance or routine cleaning, etc., all represent contracts demanding differing levels of commitment and varying resources to manage the associated risks from the initial design through project completion. Irrespective of the level of risk, the client should ensure that all risks are effectively managed at all times.

Other contractual arrangements will be required for those situations where subcontractors are employed by a principal contractor as part of an overall contract.

Types of relationships

The contract, itself, should stipulate the category and competence of the personnel to be employed. This requirement may be met by permanently based skilled workers, temporary fixed-term contractors, the use of external service providers, agency personnel employed for a specific function or short-term contractors, temporarily employed to cover for a client's personnel shortage. The various categories will all influence the type of relationship and level of interface between the client and contractor, as well as the competence, supervision and control required of the personnel. In turn, this also influences the amount of resources the client will ultimately have to commit to manage the contract.

Competency

The competencies required of a contractor will be influenced by whether the client is contracting out for a service not related to his main business function or if he is employing a third party to undertake work associated with his principal activity. This will also determine the type and degree of authorisation required by the client, as well as the safety rules and operational procedures applied by the contractor; which will either be its own or those of the client.

Authorisation and approval of a contractor will ultimately be determined by the level of confidence in the training and qualifications he offers. At the same time, his status and equivalence of competencies across differing industries, within multinational corporations and even throughout Member States must be established.

Once the work has commenced, a client needs to collaborate with the contractor at every stage to ensure their procedures remain aligned with the client's requirements. This requires effective on-site support, ongoing evaluation of contractual compliance, the use of assurance and audit programmes and regular performance assessments. This not only demonstrates mature and effective leadership on the part of the client, but gives evidence of proactive monitoring, as well, while providing guidance and advice.

Contract Lifecycle

An overriding concern should be to ensure that contracted work is managed in the same manner and to the same standards as in-house activities and is aligned to the overall aims and objectives of the company.

The Contract Lifecycle, including the process it follows and the interaction between the client and contractor, is best illustrated in the diagram below. It depicts the key stages to follow, from initial contract planning through contract completion and review:



The Contract Lifecycle model provides a basis for this Guidance, with its various stages being expanded upon throughout the document. The sections herein offer advice, while good practice and case study examples are provided at the end of the document (see annex) to assist in successful contract management. Effective controls will therefore be needed at each stage of the contract lifecycle in order to achieve this success in a safe, efficient and timely manner.

Policies and procedures must be in place, where applicable, for all control functions to be managed and implemented by both client and contractor personnel. This will ensure that a cooperative and collaborative support framework is established and that information is shared between the parties throughout all stages of the contract.

The model reflects the roles and responsibilities of both the client and the contractor, while this colour coding is used throughout the document to help illustrate their individual duties at each stage of the lifecycle.

Continuing this colour scheme, the main text is also divided into two columns (see below):



Contractor

1. Project preparation



Client

1.1 Project definition

Prior to initiating the process of selecting and engaging a contractor, the host company must first determine whether there is a need to outsource the work, or if the work can actually be carried out in-house. Irrespective of this decision, the work activity must be thoroughly planned; this requires that the job be clearly defined, and any potential hazards identified.

In due course, the risks associated with these hazards will have to be met with control measures to eliminate or reduce the level of risk. The measures may involve the use of specialised personnel and equipment, and may include special procedures where necessary.

Work conducted by the host company or the contractor must:

- Meet the standards set by legal requirements;
- Comply with recognised industry or branch standards;
- Represent good industry practices;
- Reduce risk insofar as is reasonably practicable.

In line with the overarching Contract Lifecycle, the project preparation

18

1. Project preparation

Planning.

process.

ment.

Client

process is based on a series of

Market assessment and tender

Evaluation of tenders and procure-

This will then shape and inform the

Planning is needed to manage the procurement of products and ser-

and evaluation stages.

1.2 Planning

subsequent contract award, contract management, contract completion

discrete stages addressing:

1. Project preparation

Contractor

Client specific job. This will help address any increased risks from contract work by ensuring that appropriate procedures are first in place. These procedures should cover clear responsibilities of the client for: Working with contractors, Planning, Communication, Coordination. Supervision.

Contractor

- Management of change,
- Contractual and financial considerations.

1.3 Tender

The client must make suitable arrangements for conducting a two-stage tender process; the development of tender specifications and subsequent evaluation of submitted tenders.

For capital projects, as opposed to routine maintenance or regular service provision projects, the client must ensure that project objectives are realistic and that tenders clearly set out the scope of work, enabling efficient contractors to deliver on time and within budget without compromising health and safety standards. Health and safety requirements must

- Risk assessment,
- Competence,

- vices while helping to ensure the best possible outcome for the contract. This stage determines both the requirements and effectiveness of the subsequent Contract Lifecycle stages by considering the risks from the product or service with relation to the people affected. This applies
 - throughout the lifetime of the contract and the lifecycle of the products employed.

Procedures concerning the use of contractors should therefore be included within an organisation's health and safety management system, even before any consideration is given to engaging a contractor for a

Contractor

Client

be integrated into the initial design phase to ensure they are reflected in the construction, testing and operational stages. This requires a transparent commitment for the tender criteria to reflect a 'value for money over cheapest quote' approach.

1.4 Procurement

The procurement process should seek to provide value for money, exercise due diligence in meeting health and safety objectives, and ensure continuous performance improvements can be achieved throughout the contract.

The client should incorporate health and safety design principles into their procurement policies and practices to help eliminate potential hazards during the initial design stage. Designers, manufacturers and suppliers all have an obligation of responsibility for ensuring that their tender applications, including the equipment and services they provide and deliver to the client, are safe for all users. Safe design, therefore, requires that both the hazards associated with a product or service throughout its lifetime, as well as its past performance and related incidents are considered as part of the decision-making process.

Contractor

Client

Once a contract has been awarded, it is then a good practice to evaluate the procurement procedure to identify any weaknesses and strengths in the overall process, as well as to formulate any lessons that can be applied to other procurement activities.

Questions

Is there a need to contract out the work?

- Have suitable plans for the safe and successful execution of the contract (from start to finish) been developed?
- Has the planning process identified all potential hazards?
- Does the health and safety management system include procedures concerning the use of contractors?
- Is a two-stage tender process in place?
- Do submitted tenders represent both value for money and address all the identified health and safety issues?

2. Choice of contractor/ Check of tender



Client

2.1 Pre-qualification process

The pre-qualification process is expected to be rigorous; it should provide an analysis of the contractor's health and safety statistics as a standard, but also consider an organisation's use of leading indicators, the quality of their safety programmes and the existence of continuous improvement plans. Many clients share common practices during the initial stages of the contract life cycle, related to procurement and pre-qualification, pre-job task and risk assessment, as well as contractor training and orientation.

Pre-qualification questionnaires can be used to seek information on a contractor's health, safety and environmental performance, as well as the extent of their safety management system. Some of this information will be available through a national contractor database system, which companies can use to facilitate the procurement process while demonstrating transparency and accountability.

Companies may also use the services of a third-party pre-qualifying agency to help bridge any gaps in the contractor's portfolio of evidence as to their safety management

Contractor

2.1 Tender process

A contractor participating in the tender process must thoroughly check and review the tender with a special focus on technical requirements, safety and health requirements, economic conditions and regulatory requirements. The contractor should also check that the tender data is complete and that all information required for submission of the offer is available.

Additional items to be considered by the contractor include:

- Capacity,
- Personnel knowledge and skill levels,
- Technical equipment,
- Experience with similar tasks.

Contractors may also use the services of a third-party pre-qualifying agency to help bridge any gaps in their portfolio of evidence as to their safety management system, thereby

system, thereby enhancing their eligibility to bid on a project. This approach helps handle a large part of the initial vetting process as contractors must receive a 'passing grade' to be approved for work. This also enables a rating system to be developed based on a contractor's health and safety history along with a record of their documented policies and practices.

Following analysis of the pre-qualification questionnaires, pre-selection can be made and a tender list drawn up based on this information.

There may be legal requirements that put restrictions on this process.

2.2 Selection criteria

The client should document and use clear criteria for contract selection. This will include, but is not limited to:

- The contractor's approach to health and safety both in planning and execution;
- Third-party certification of the health & safety management system (ISO 45001 compliant);
- Records of health and safety policies, risk assessments, method statements and safe work systems;

Contractor

enhancing their eligibility to bid on a project.

2.2 Tender submission

The tender submitted by a contractor must demonstrate the capacity of his business to comply with the health and safety requirements and design criteria identified. A contractor may be asked to complete a pre-qualification questionnaire used to seek information on his health, safety and environmental performance, as well as the extent of his safety management system. The contractor and his company must be capable of fulfilling the tender criteria, including project/ work specifications, while duly com-

Client

- Records of safety performance, incidents and regulatory, as well as enforcement notices;
- Qualifications, training and authorisations of the contractor's workforce, stipulating levels of competency, skills, knowledge and experience;
- Employee induction and training processes;
- Arrangements for managing the standard and quality of work, including the use of subcontractors;
- Insurance coverage;
- Membership in trade and professional organisations;
- Assessment of the contractor's previous work;
- Safety culture surveys;
- Environmental performance.

The criteria employed can be suitably weighted based on relative importance. This provides an overall score to facilitate comparison and selection of tenders from the potential contractors. A preferred contractor list from previous work that has been safely delivered may also assist with this process.

Those evaluating tenders should have the necessary skills and knowledge to do so. Otherwise, a suitably qualified person may need to be engaged to assist with this process. Contractor

pleting them in a timely manner and under fair conditions.

2. Choice of contractor/Check of tender

Client Contractor 2.3 Final selection The client should document and use clear criteria for contract selection. Questions • Where should particular atten-What kind of information on potential contractors is tion be paid when checking a essential for the work? tender? • Have the most important • Would it be helpful to use the services of a pre-qualifying criteria for contract selection been identified? agency? Are pre-qualification question-Is it possible to fulfil all the naires available? requirements of the tender? Are there any areas that • Are the persons who evaluate require further work? tenders suitably qualified? Does your organisation have a list of previously approved contractors suitable for the work?

A good-practice example can be found on page 65 of the annex.

3. Contractual arrangements



Contractor

Client

3.1 Project definition

The project definition (Sec. 1.1) adapted to the specific contract requirements and to the contractor selected is an essential part of the contract.

It considers time and resources, potential hazards and risks, communication, competence and training, as well as the impact on others in the workplace. It is vitally important that the job and the client's needs are clearly stipulated; this includes the job specification, all aspects and complexity of the work to be undertaken, the level of risk to the workforce and the means by which legal obligations will be fulfilled.

From a H&S perspective, the contract between the client and the contractor should include:

- Clear expectations conveyed to contractor and subcontractor personnel related to managing the work safely;
- Health and safety requirements (company policies, procedures, equipment maintenance and the on-site use of hazardous substances);
- Health and safety roles and responsibilities of the client and contractor (including their management teams);

Contractor

3.1 Project definition

The contractor has to check and review the project definition thoroughly. He and his company must be able to fulfil these specifications of the project/works and to complete them duly, on time and under fair conditions.

	Duty to cooperate (this is a legal	
	requirement in Germany accord-	
	ing to ArbSchG);	
	Processes for eliminating or reduc-	
	ing risk to the health and safety	
	of client, contractor and subcon-	
	tractor personnel, as well as to	
	members of the general public;	
	Procedures for handling policy and	
	ing contractual termination provi	
	sions and removal of the contractor	
	from the preferred contractor list:	
	Procedure for handling changes to	
	processes, procedures or controls;	
	Reporting expectations (health	
	and safety performance, site in-	
	ductions and training, and consul-	
	tation arrangements);	
	Scheduling of and procedures for	
_	Inspections and audits;	
1	communication between the client	
	Training and competence to carry	
7	out work (including any authorisa-	
	tions);	
	Procedures for ensuring SHE	
	quality standards are maintained;	
	Safety culture and human factors	
	approach;	
	Personal protective equipment	
_	(PPE) requirements;	
	Expectations related to site	
	special requirements:	
	Requirements for leaving the site	
	at the end of a work period or	
	upon work completion.	
	· ·	l i

Client

3.2 Guideline for contractors

The client must provide the contractor with all necessary information related to the site, required personal protective equipment (PPE), tools, emergency plans, etc. This information will be summarized in the Guideline for Contractors (Sec. 4.1).

The overall health and safety management system, including measures to be implemented, should be developed in collaboration with the contractor and suppliers, wherever possible, in order to both promote good practice and help instil a sense of ownership into those organisations.

The Guideline for Contractors should also set out the incident/accident management process.

Contractor

3.2 Guideline for contractors

If the client has its own Guidelines for Contractors and these form part of the contract, the contractor should review these Guidelines before signing the contract. He must verify that he is capable of complying with the Guidelines.

If the client's Guidelines for Contractors contain stipulations regarding the incident/accident management process, the contractor should familiarize himself with his reporting duties and possible consequences.

Client

The contractor nominates the Responsible Supervisor (RS) for his personnel. Depending on the individual circumstances, it might also be necessary to nominate a Coordinator or Special Supervisor.

Contractor

planning and proper performance of the work. The contractor has the duty to nominate the Responsible Supervisor (RS). Responsibilities and personal details should be included in the contractual arrangements, if practicable.

3.4 Subcontractors

The use of subcontractors should be discussed and agreed upon during the procurement process and ideally included in the contract. Subcontractors are usually managed by the principal contractor, but the client's responsibilities related to health and safety remain the same.

3.4 Subcontractors

Depending on his own capacities, the contractor should examine the use of subcontractors and, if deemed necessary, discuss it with the client. Ideally, the use of subcontractors will be regulated in the contract. The principal contractor is responsible for hiring subcontractors and managing their safety. Subcontractors have the duty to comply with the contractor's requirements.

3.3 Coordinating persons

An essential part of the contract is the clear definition and documentation of the responsibilities assigned to the coordinating persons (Sec. 4.2) involved. The client nominates the Responsible Contact Person (RCP) who knows the premises, the plant facilities and the processes.

3.3 Coordinating persons

An essential part of the contract is the clear definition and documentation of the responsibilities assigned to the coordinating persons (Sec. 4.2) involved. The contractor's Responsible Supervisor (RS) is the authorized person to issue instructions to his personnel. He is responsible for the

3.5 Risk assessment

The contract contains the requirement for a thorough risk assessment (Sec. 4.3). With respect to companyspecific risks, the client should support the contractor in drawing up a risk assessment make available their specific plant-related risk assessment.

3.5 Risk assessment

The contractor accepts the requirement for a thorough risk assessment (Sec. 4.3) and cooperates with the client in drawing up risk assessments tailored to the project.

3.6 Operational plan

Based on the client's expectations and the contractor's specialist experience, the contractor will need to develop a contract-specific health and safety plan; the so called operational plan (Sec. 5.3). This plan stipulates how the contractor will manage his occupational health and safety requirements throughout the term of the contract, including the systems and methods that will be employed to effectively manage risks. These should once again be commensurate with the level of risk and the complexity of the work. The plan should be based on the contractor's existing health and safety management system and set out how the following issues will be managed:

- Safe work procedures and practices for the contract;
- Health and safety inspections;
- Health and safety performance monitoring;
- Incident recording and investigation processes;
- Avenues for consulting employees;
- Safety training programmes and supervision;
- Emergency procedures.

The operational plan must be based on a thorough risk assessment (Sec. 3.6 and 4.3).

Contractor

3.6 Operational plan

The contractor may be contractually required to draw up an operational plan (Sec. 5.3) stipulating how he will manage his occupational health and safety requirements throughout the term of the contract, including the systems and methods that will be employed to effectively manage risks. Preparation of this plan must be based on a thorough risk assessment (Sec. 3.6 and 4.3).

Client

Questions

- Has the project been sufficiently defined and agreed?
- Is there a duty to cooperate between client and contractor? Why?
- Has the job been clearly set out (job specification, complexity, level of risk, etc.)?
- Is a common safety culture approach between both partners possible?
- Has a Guideline for Contractors been prepared and is its purpose clear?
- Have the role of coordinating persons been defined and suitable persons nominated?
- Is any subcontracting work planned?
- Has a risk assessment and operational plan been prepared for the contract?

Has the project definition been thoroughly checked and reviewed? Can all the specifications be fulfilled?

Contractor

- Is the benefit of good cooperation with the client clearly understood?
- Is a common safety culture approach between both partners possible?
- Does the client have a Guideline for Contractors?
- Has the role of the Responsible Supervisor been defined and a suitable person nominated?
- Are there any plans to use subcontractors? Has this been discussed and agreed with the client?
- Has a risk assessment and operational plan been prepared for the contract?

Good-practice examples can be found on page 66 of the annex.

4. Collective preparation



Client

4.1 Guideline for contractors

The client provides the contractor with the Guideline for Contractors. This Guideline describes all relevant information and stipulates requirements concerning the safe performance of the contract.

Contractor

4.1 Guideline for contractors

The contractor will receive the client's Guideline for Contractors prior to commencing work.

The contractor confirms in writing that he will fulfil the requirements of the Guideline.

4.2 Coordinating persons

4.2 Coordinating persons

Successful project communication and management requires that qualified and responsible contact persons be appointed and mutually documented by the respective client and contractor.

Both the client and the contractor must ensure that the responsible persons appointed can fulfil their duties, perform their tasks and possess the necessary authorizations.

The responsible persons should have sufficient knowledge of the local language (spoken and written) to be able to understand and implement all safety instructions. An interpreter may be necessary.

4.2.1 Responsible Contact Person (RCP) of the client

The client's **RCP** is responsible for the orderly processing of the project on behalf of the client.

The **RCP** must have a good understanding of the contract and, depending on the complexity of the contract, may require advice from a specialist. His responsibilities include the planning, procurement and exe-

4.2.1 Responsible Supervisor (RS) of the contractor

The contractor's **RS** is the authorized person to issue instructions to his personnel. He is responsible for the planning and proper performance of the work and will be the contact person for the client.

In addition to the authority to issue instructions to his own personnel, the **RS** should also have the author-

4. Collective preparation

Client

cution of the contract in any aspect that has a defined scope, starting point and completion point, regardless of industry. The **RCP** is the first point of contact for any issues concerning the contract.

The **RCP** must coordinate and supervise project performance and accepts the final results. He must also instruct the contractor's Responsible Supervisor about the risks, associated safety measures, company-specific rules and specific working conditions at the host company.

This instruction shall be documented.

The client's **RCP** is permitted to intervene in matters related to the contractor only in the event of imminent danger.

4.2.2 Coordinator

In an effort to prevent mutually endangering one another, a **Coordinator** must be appointed where employees from different companies, company sites or operating units perform work at the same location. The client's **RCP** may also assume the role of **Coordinator**. If a different person is appointed as **Coordinator**, this person may support the **RCP** in the fulfilment of his duties, if necessary.

Contractor

ity to issue instructions to subcontractor personnel, as well. The **RS** should be present, or at least accessible, at all times while work is being performed.

4.2.2 Coordinator

In an effort to prevent mutually endangering one another, a **Coordinator** must be appointed by the client where employees from different companies, company sites or operating units perform work at the same location.

The role of the **Coordinator** described in this section must not be confused with the specific responsibilities of the *person responsible for an electrical installation or the nominated person in control of an*

Client

The role of the **Coordinator** described in this section must not be confused with the specific responsibilities of the *person responsible for an electrical installation or the nominated person in control of an electrical installation during work activities* as defined by, for example, EN 50110 [Operation of Electrical Installations] when carrying out work on electrical installations and equipment.

The **Coordinator** has the right to issue instructions to all employees involved in a task in an effort to promote occupational health and safety. The **Coordinator** must intervene when necessary or where defined safety measures are not implemented/observed, where occupational

Contractor

electrical installation during work activities as defined by, for example, EN 50110 [Operation of Electrical Installations] when carrying out work on electrical installations and equipment.

The client and the contractor should jointly review in advance the tasks and responsibilities that were assigned to the **Coordinator**. The duty to support the **Coordinator** should be imposed on all other executives.



Coordinating persons

health and safety regulations are disregarded or where persons are endangered.

The **Coordinator**, himself, should be released from other tasks. He needs the authority to shut down the workplace and (in the worst case) remove personnel from the worksite. This duty should be assigned in writing in advance and reviewed by all contract partners. The duty to support the **Coordinator** should be imposed on all other executives.

4.2.3 Special Supervisor

A **Special Supervisor** must be appointed if hazardous work (e.g. working with dangerous substances) is being performed.

4.2.3 Special Supervisor

A **Special Supervisor** must be appointed if hazardous work (e.g. working with dangerous substances) is being performed.

Contractor

4.3 Risk assessment

4.3 Risk assessment

With respect to company-specific risks, the client should support the contractor in drawing up a risk assessment and, specifically, make available their plant-related risk assessment.

Contractors should adjust their own specific risk assessment to the conditions anticipated at the client's on-site location.

Both the client and contractor have a duty to cooperate in order to ensure the safety and health of the workforce. They must inform each other about possible risks associated with their activities. The client's RCP and the contractor's RS will jointly initiate a thorough risk assessment, preferably after an initial field visit. Involvement of the responsible persons from the individual operating units is also recommended.

Client

Contractor

There are many different project-related aspects in a client-contractor relationship that are relevant to the safety and health of both partners' workforces.

There is a need to consider risks from:

- Non-routine activities;
- Unknown environments;
- Time pressures;
- Lack of communication between production and maintenance personnel.

A list of typical operational safety issues may help facilitate the risk assessment:

General aspects

- Access/egress routes and traffic management;
- Site rules and work area authorisations;
- Safe systems for the work to be performed;
- Safety messaging and warning signs;
- Personal Protective Equipment (PPE) and safety equipment.

Emergency arrangements

- Site emergency plans and procedures;
- Fire equipment and evacuation procedures;
- Emergency first aid personnel.

Site-specific hazards

- Hazardous and dangerous substances;
- Working on electrical assets;
- Mechanical equipment;
- Working at height procedures and equipment;
- Health risks (noise, dust, vibration);
- Special hazards (asbestos, confined spaces, biochemical, radiation);
- Environmental considerations (waste management, emissions/leakage into the air, ground or water).

4. Collective preparation

Client

This list is merely exemplary, whereby the site-specific risk assessment may emphasize other specific hazards.

The results of the risk assessment are compiled in writing prior to commencing work and are to be available during execution of the work.

If a risk assessment reveals that organizational or personal measures must be taken as a result of the deployment of a contracting firm, then corresponding instructions must be issued.

It is recommended that the need for supervisory personnel, possibly for each individual sub-project, be defined in the risk assessment.

4.4 Information and communication management

4.4 Information and communication management

Contractor

Communication is the cornerstone of the trouble-free and safe execution of a planned project. Clear rules are necessary to establish an effective line of communication between the client's and the contractor's personnel. A lack of mutual understanding can ultimately lead to disorder, material damage and accidents.

The German Social Accident Insurance (DGUV) 1 imposes a duty on the client and the contractor to already cooperate when a contract is awarded, meaning a duty already exists to draw up a joint risk assessment. Germany's Civil Code (BGB) also calls for the execution of the work by the contractor to be as independent as possible. However, constraints are imposed here in practice. For instance, energy and water, as well as the provision of social amenities, will usually be supplied by the client. If a contract firm also has to access operational facilities and work equipment (company roads, scaffolding, cranes, aerial work platforms, etc.), this will require points of contact ("interfaces") between the client and contractor, calling for increased attention and care from the executives of both sides. It must be made clear by the client, who from its side is authorized to grant the contractor access to the client's facilities and to what degree. Especially in the case of long-term deployments (e.g. a maintenance agreement), uncontrolled access to the client's facilities and work equipment by a contractor may be involved.

The rules required here must be made known to the core workforce (both employee and executive personnel) and monitored for adherence.

In principle, significantly higher amounts should be invested in communications (planning, review, coordination), since this will avert many problems (stress, disputes, loss of time, drop in quality, etc.) during the actual execution phase. Conversely, the lack of, or an inadequate review and coordination process could have the worst consequences, ultimately resulting in a total loss or even a severe accident.

Client

Contractor

In Spain, there is a recent trend in the construction industry to use software solutions (including 3-D modelling software) that help structure the flow of project information and facilitate project coordination between various parties. The software usually features special Health and Safety modules to assist both client and contractor in coordination tasks and in the management and application of documents that are necessary to carry out a project/work in a safe manner.

The **RCP** sets up the information and communication management. He establishes an adequate flow of information between both parties using a variety of suitable communication tools.

His awareness of changes in the plant structure, the processes and the workforce will enable his timely response (intervention and sanctioning) in close coordination with the contractor's **RS**.

In the event of an incident, the **RCP** initiates the investigation process (including the control/stoppage of work activities).

The **RCP** also organizes the management of interfaces (client – contractor, contractor – contractor, contractor – subcontractor), as well as changes in the plant, processes or personnel. The **RS** must support the **RCP** in setting up the information and communication management. The **RS** has the duty to inform the **RCP** about any occurrence that might influence the proper performance of the work or the health and safety of the workforce.

Therefore, reporting of incidents by the **RS** to the **RCP** is an essential part of the information and communication management.

If a contractor employs a subcontractor, he must observe the rules and regulations related to subcontractor management of the contract.

4.5 Appointment of contractor's workforce

The client reviews the workforce provisioned by the contractor. This review may cover:

4.5 Appointment of contractor's workforce

One of the duties of the contractor is to provide suitable employees. Selection criteria include profession-

- Qualifications,
- Training and authorisations,
- Levels of competency,
- Skills,
- Knowledge and experience,
- Employee induction and training processes and
- Occupational health certificates, if required.

Where contractually agreed upon, the client confirms the subcontractor(s) chosen by the contractor for the work to be performed. The client may reserve the right to reject a subcontractor based on any work-related incident that endangers personnel or property. If a subcontractor is deployed who has not been confirmed in writing by the client, the latter may disallow his continuation of the work.

Contractor

al competence and, if necessary, health certificates for special work locations. Special work (e.g. work associated with noise or hazardous substances) may be subject to occupational health examinations.

Special permits and training for specific types of work may be required, including but not limited to accessing confined spaces, electrical work, hot work, energy control, the use of fork lifts, working at heights, etc.

Depending on the contractual arrangements, the contractor may have a duty to name subcontractors in writing prior to commencing work, and to obtain written confirmation from the client. If a subcontractor is deployed who has not been confirmed in writing by the client, the latter may disallow his continuation of the work.

Special groups (e.g. young people or expectant mothers) may be subject to restrictions related to working times, work processes, physical burdens or even working bans.

Questions

Is there a Guideline for Contractors? If so, has it been handed over to the contractor? Does the client have a Guideline for Contractors and has it been handed over? Is it possible to fulfil all the specifications?

Client

- What are the roles and responsibilities of the coordinating persons? Is their role in delivering the contract clear?
- Have the safety and health risks of the project been identified and discussed with the contractor?
- Have the results of the common risk assessment been recorded?
- Has the potential use of subcontractors been considered?
- What is the most important issue that needs to be managed within the contract?
- How is information managed and communicated between the client and the contractor? Who is responsible for this?
- Have the training and skills qualifications of the contractor personnel been checked?
- Has the use of subcontractors been contractually agreed? If so, has the contractor provided a list of those subcontractors he/ she is planning to use?

Which coordinating persons are key for the contractor and its workforce?

Contractor

- Have the results of the common risk assessment been recorded?
- Which risks require special attention?
- What is the most important issue that needs to be managed within the contract?
- How is information managed and communicated between the client and the contractor? Who is responsible for this?
- Is incident reporting included as part of the communication arrangements?
- What are the key issues to be considered in the selection and deployment of the contractor's workforce?
- What needs to be considered when subcontracting?



Good-practice examples can be found on page 66 ff. of the annex.

5. Management of contract



Client	Contractor
5.1 Protective measures	5.1 Protective measures
Protective measures must be imple- mented in accordance with the re- sults of a risk assessment (Sec. 4.3). The RCP and the RS work together.	Protective measures must be imple- mented in accordance with the results of the risk assessment (Sec. 4.3). The RCP and the RS work together.
All measures are to be set forth in writing.	All measures are to be set forth in written form. The contractor maintains these records at the deployment site and must submit them to the client on demand. The contractor remains responsible for the accuracy and adequacy of the risk assessment and for the measures derived from it for the protection of his workers.
It is essential to establish efficient first aid and emergency manage- ment measures and communicate these to all personnel.	It is essential to establish efficient first aid and emergency manage- ment measures and communicate these to all personnel. An emergency plan must be estab- lished that addresses both general conditions as well as specific activi- ties that may present greater risks (e.g. hazardous materials, heavy lifting, working at height, contaminat- ed atmospheres, etc.).
5.2 Safety information	5.2 Safety information
The client's RCP must inform his personnel about the commencement of contractor work.	Prior to commencing work, the RS must instruct his personnel about the task at hand and inform them about

5. Management of contract

Client

The client's own personnel must receive special instruction if the contractor's work imposes additional risks, if new safety measures must be taken or if a work process changes. Such instruction must be given by the direct supervisor and may involve the person in charge of the order/contract and/or the Coordinator. The instruction must be documented.

It has proved advantageous to summarize the content of the inductions in writing and distribute it to the contractor's personnel in the form of a safety booklet. Limiting initial inductions to the contractor's executives, alone, with an obligation to pass on the required information to the employees, has not proved successful in the past. On the one hand, much of the information is lost (refer to the Chinese whispers principle) and, on the other, it cannot be assured that an executive will actually provide his personnel with effective instruction during the hectic start-up phase of a contract. This omission can lead to mistakes, misunderstandings and, in the worst case, accidents.

Contractor

the equipment used for the job. He must also instruct them on the contents in the client's Guideline for Contractors, possible hazards and the protective measures foreseen. This instruction must be documented in writing.

If a contractor employs a **subcontractor**, the subcontractor's personnel must be instructed in the same manner as contractor's personnel. The worker's signature on the special instruction documentation is recommended.

The instruction documentation must be submitted to the client in writing.

General inductions should cover the following subjects:

- General remarks
 - General induction related to the on-site location;
 - The client's operating rules and regulations (e.g. site/inspection rules);
 - Responsibilities for induction/ instruction;
 - Access rules;
 - Duty to maintain safety;
 - Coordination (potential risks posed by or imposed on neighbouring companies or sites);
 - Personal Protective Equipment;
 - Security pass & identification;
 - Data privacy;

Client

Contractor

- Risk assessment;
- Fire protection/permit to work with hot tools/materials;
- On-site emergency and first aid measures (must be communicated to both client and contractor personnel, while everyone must be familiar with and regularly reminded of the emergency controls and procedures), including fire and emergency rescue equipment;
- Handling of hazardous substances;
- Clearance and approval procedures (e.g. work clearances/work permits/disposal permits/permit procedures for high-risk activities);
- Hazard prevention/reporting rules;
- First Aid;
- Assembly point and acoustic alarms.

The instruction given must be designed to ensure that all participants will readily recognize the stipulations to be observed. In this context, any company-specific documentation should be made available.

Inductions and instruction should be given by the employee's direct supervisor, or at least in his presence (e.g. when a safety specialist instructs contractor personnel).

Induction at the workplace, in particular, is often handled by the client ("Because he is more familiar with the local situation"), but even then, by people who may not be authorized to issue specific instructions (safety specialists, gatekeepers) or who might use computers that tolerate (and document) even inaccurate solutions to a certain degree.

As a compromise, it is suggested here that, during induction, at least one contractor representative, authorized to issue instructions and familiar with the project, is present to monitor the instruction given by the client to his personnel (and also to intervene if the information conveyed has not been agreed upon).

5.3 Operational plan

An operational plan that considers the results of the risk assessment and stipulates protective measures is crucial for the success of the project.

Contractor

It is the duty of the contractor's **RS** to draft this plan in cooperation with the client's **RCP**.

5.4 Identification of workforce

The client provides identity cards/ safety logbooks (if applicable) for and maintains a register of the contractor's approved personnel.

The issuance of (possibly photo) ID cards to contracting personnel has proved successful in larger companies and at special facilities, especially if the contract covers a lengthy period of time.

5.4 Identification of workforce

The contractor's personnel wear the identity cards provided by the client in a visible place during their work on the host's premises.

Where security passes are used, the contractor must ensure that his employees and all subcontractors deployed by him carry their security passes on their person prior to entering the plant grounds and at all times while performing their work.

Client

The ID cards, for example, authorize contracting personnel to enter the plant grounds while serving as a form of identification.

The introduction of security pass schemes (sometimes also referred to as Health, Safety and Environment Passport) can also contribute to increasing occupational health and safety performance. Appropriate criteria can be established to ensure the necessary health and safety standards are achieved. A security pass is a personal document that - in addition to providing personal data – confirms the relation to an employer, as well as participation in any screening programme or induction and training courses. A security pass helps increase transparency and fulfil organizational and personnel prerequisites related to occupational safety; specifically serving as personal evidence of all occupational-health screening and occupational-safety-relevant training, instruction and induction. They are especially useful as a means of controlling work-site access for contractors who work for more than one company or industry.

Contractor

A security pass will contain personal data and provide information about any occupational-health screenings, qualifications, instruction and training in industrial safety, as well as any authorizations.

Upon issuance of the pass, the contracting firm is responsible for ensuring the continued accuracy of the information, its updating as required and the proper transfer to, and safe-keeping by the employee according to the corresponding agreement. Any amendments may be made and confirmed only by the client or the respective training institution.

When the contractor's personnel enter the client's plant grounds and/ or the work area, they must check in. This also applies to employees of small companies.

The check-in process applies even if a plant ID card has already been issued. Contracting personnel check in by reporting to a defined reporting point (e.g. a security gate) or to an assigned work area.

The use of differently coloured work clothing is useful in quickly distinguishing between client and contractor personnel while on-site together.

Contractor

Questions

- Have the protective measures identified in the risk assessment been planned and implemented?
- Who is responsible for ensuring the protective measures have been implemented?
- Have the protective measures been recorded and are they reviewed as the work progresses?
- Does the deployment of the contractor give rise to additional risks for the client's workforce? If so, have the employees of the client been sufficiently informed of these risks?
- What arrangements are in place to ensure the client's employees can be distinguished from the contractor workforce?

- Have the protective measures identified in the risk assessment been planned and implemented?
- Who is responsible for ensuring the protective measures have been implemented?
- Has a first aid and emergency action plan been established?
- Is the operational plan fit for purpose for the contract?
- Who is responsible for instructing the contractor workforce about the risks and protective measures before starting work?
- What are the key risks to be managed throughout the work?
- Does the client prescribe the use of identity cards/security passes? Do the contractor employees, and subcontractors if employed, use these cards/ passes as intended?
- Has a check-in procedure been established for both contractor and subcontractor employees?

6. Control and sign-off/Completion





6.1 Implementation of protective measures

The client's **RCP** checks the implementation of protective measures before work is commenced.

Contractor

6.1 Implementation of operational plan

The contractor's **RS** leads the implementation of the operational plan. He manages, supervises and motivates his team to achieve the aim of the contract in a safe manner. He cooperates and communicates with the client's **RCP** during the entire process.

The **RS** must ensure that defined safety measures are being observed and that work is being performed in accordance with safety rules. All employees have a duty to cooperate. They have a duty to report to their direct supervisor, to the responsible person or to the occupational health and safety expert if agreed safety measures are not being observed and/or cannot be observed. The RS in cooperation with the **RCP** and/or the **Coordinator** must then define whether new or adapted safety measures are immediately practicable without interrupting the work process.

Client

performance with the possible support of a **Coordinator**.

He follows a plan of intermittent checks and assessments based on the anticipated work progress. Auditing and active monitoring is necessary to ensure compliance with safety and health standards while facilitating regular performance assessment. This could include daily checks and weekly site inspections, as well as monthly assessments for long-term contracts.

Meetings with the contractor should be set up at reasonable intervals to both ensure that measures agreed upon are working and provide for enhancements to be made as the client-contractor relationship develops. Any changes in the task, environment or working practices can be reviewed and discussed with additional precautions being identified.

This demonstrates mature and effective leadership on behalf of the client, provides a clear channel of communication and facilitates the ongoing provision of guidance and advice. The local identification and elimination of deviations in nearreal-time requires a high degree of accessibility to company supervisors. Under no circumstances should instructions be issued by a client's representative to a contract-

Contractor

checklists and safety talks to a weekly walk-through, to monthly or even yearly assessments for longterm or maintenance contracts.

Meetings should be set up at reasonable intervals, both to ensure the measures put in place are working and to provide for their possible enhancement as the client-contractor relationship develops.

Sufficient supervision, as well as the provision of adequate time and resources must be assured. Mistakes and, in particular, infringements of rules must be identified and eliminated before unacceptable damage/loss occurs. All subcontractors employed should be adequately supervised with their work monitored to ensure that the agreed upon standards are maintained.

6.2 Supervision of measures

The **RCP** supervises the orderly processing of the project. He must coordinate and supervise project

6.2 Supervision of measures

The supervision of the safety measures is an important task of the **RS**. These measures will vary from daily

ing partner's employee; exception: instruction to discontinue work or to leave the work site without delay. The question as to who should have the authority to issue instructions must be clarified in advance. This must also be reviewed and coordinated among the contract partners.

Sufficient time and resources should be allocated to work monitoring. Good performance (good practice) should also be identified and recognized, and should be taken into account when plans are updated.

6.3 Incident/accident management

An incident is a symptom of something gone wrong. Incidents must be reported to the **RCP**.

Both responsible persons must investigate the causes and the circumstances. They cooperate in finding suitable preventive measures, especially if an accident has already occurred.

6.3 Incident/accident management

An incident is a symptom of something gone wrong. The **RS** is obliged to give a report to the **RCP**.

Contractor

Any accident in conjunction with the order/contract must be reported in principle and immediately to the client. This duty to report applies to all subcontractors, as well.

Both responsible persons must investigate the causes and the circumstances. They cooperate in finding suitable preventive measures, especially if an accident has already occurred.

Contractor

of contract occurs, the client must take all necessary steps to avoid consequences that could threaten the project.

Disciplinary measures and, in extreme cases, suspension of work or termination of the contract are possible options.

6.5 Testing and acceptance

The client tests and inspects plant facilities and equipment according to the requirements of the contract.

6.5 Plant handover

The contract work is ideally completed on time, within budget and in compliance with all safety and health regulations. Upon completion of the work, the contractor hands over the plant/equipment, etc. to the client.

Contractor

Questions

- Has the implementation of the protective measures been checked? Who is responsible for this?
- What are the most important controlling duties of the RCP?
- What protective control measures must be performed regularly or in case of emergency?
- Is the role of the Responsible Supervisor clear when it comes to implementing the operational plan?
- Who is responsible for ensuring the protective measures are implemented and maintained?
- Have appropriate supervision arrangements been established?

- Have regular meetings with the contractor been arranged to review the work?
- Who has the authority to issue instructions to the contractor? Is the extent of this authority clear?
- Are arrangements in place to handle infringements by the contractor and how are these handled?

- Have regular meetings with the client been arranged to review the work?
- What actions should be taken in the event of incidents/ accidents?
- Are the consequences of contractor infringements clear and are procedures in place to manage this?
- Have sufficient time and resources been allocated to manage the work?



Good-practice examples can be found on page 72 ff. of the annex.

7. Review



Client

Contractor

A post-job evaluation is necessary and will prove fruitful for both the client and contractor. Lessons can be learned at every stage of the Contract Lifecycle as to how to further improve the effectiveness of the process. Upon completion of the job and the plant handover, a diligent review of the experience gained during the project – negative as well as positive – is essential. The results should be documented in writing.

Stages 1 - 6 of the Contract Lifecycle and their subheadings may serve as a guideline for the review.

The client and contractor should individually review the process from their respective points of view. In the end, however, they should come together to discuss their findings.

The client's aim is the targeted fulfilment of the contract within the time limits allotted and costs budgeted. It is not possible to achieve this goal, however, without maintaining effective health and safety standards.

Workflow interruptions, material damage, sporadic incidents or, in the worst case, an accident are all indicative of something gone wrong. Analysis of these unanticipated occurrences and identification of their causes will help to find more effective solutions for future projects.

Essential review topics can be:

- Contract planning;
- Choice of contractor;
- Training and education;
- Cooperation and communication;
- Risk assessment;
- Protective measures;
- Supervision and monitoring.

The contractor's aim is the targeted fulfilment of the contract based on the effective cooperation with the client. It is not possible to achieve this goal, however, without maintaining effective health and safety standards. Unsafe and unhealthy working conditions at the client's site may jeopardize the health of the contractor's workforce, thus putting fulfilment of the contract at risk.

Workflow interruptions, material damage, sporadic incidents or, in the worst case, an accident are all indicative of something gone wrong. Analysis of these unanticipated occurrences and identification of their causes together with the client will help reveal mistakes and shortfalls in the contractor's fulfilment of the contract.

Essential review topics can be:

The client should assess the overall performance of the contractor. A general review of the overall project will provide the contractor an opportunity to offer concrete proposals towards improving performance and avoiding shortfalls in the future.

The contractors are subjected to an assessment. Included here should be the subcontractors commissioned by the contractor. This underscores the contractor's responsibility in selecting subcontractors.

The result of the assessment should be discussed with and made available to the contractor. One major aim of the assessment is the further development of partnershipbased cooperation.

If the work order was executed in line with the specifications while safeguarding the safety and health of all employees and keeping material assets intact, this qualifies the third-party firm for possible follow-up orders.

Contractor

- Check of tender;
- Competence of workforce;
- Training and education;
- Cooperation and communication;
- Risk assessment;
- Protective measures;
- Supervision.

A review of the project provides the contractor an opportunity to identify potential for improvement in his management and organisation of future projects.

The contractor should also inform the client about any potential for improvement he identified while working for the client.

Joint consultation at the conclusion of a project provides invaluable information to each of the contract partners and establishes a basis for the success of further project collaborations.

In addition to evaluating its performance upon conclusion of a contract, the contracted enterprise should also determine whether or not the order was executed in a trouble-free manner. Particularly in view of future orders, it is important to know to what extent planning, organization and execution may follow a similar course, or whether modifications are necessary. Using this knowledge, it should be determined whether or not it was possible to guarantee the safety and health of all personnel at all times.

Client	Contractor
At the end, the client decides whether he will cooperate with he contractor in future contracts or not. He updates his preferred contractor list accordingly.	

Questions

- Have arrangements for a review of the work been established with the contractor?
- What are the essential issues to consider in the contract review?
- Have the results of the contractor assessment been discussed with the contractor?
- Have arrangements for a review of the work been established with the client?
- What are the essential issues to consider in the contract review?
- Have any incidents or unplanned events that occurred during the contract been analysed?
- Have potential improvements for further contracts been discussed with the client?



A good-practice example can be found on page 75 ff. of the annex.

7. Review

8. Process improvement



Client

The client uses the results of the review (Sec. 7) to revise the **Contract Lifecycle** and to adapt/improve the overall process.

Deviations will occur inevitably during a project, even with the most meticulous planning. But they also provide valuable insights for the future. They can impact all phases of a project but are particularly important when they reveal weaknesses in one's own bidding process or in the selection of a contractor.

Contractor

The contractor uses the results of the review (Sec. 7) to revise his part of the **Contract Lifecycle** and to adapt/ improve his strategy, resources, structure and contract management.

Deviations will occur inevitably during a project, even with the most meticulous planning. But they also provide valuable insights for the future. They can impact all phases of a project but become particularly important when they reveal weaknesses in vetting an offer.

Questions

Has the experience and learning gained from the performance of the contract been recorded for use in future projects?

- Are there any steps of the Contract Lifecycle that could be improved based on the results of the review?
- Has the experience and learning gained from the performance of the contract been recorded for use in future projects?
- Are there any steps of the Contract Lifecycle that could be improved based on the results of the review?



Good-practice examples can be found on page 76 ff. of the annex.

Annex

Good practice examples

2. Choice of contractor

List of references (8, 9)

Part of the learning legacy from an Olympics construction project included published guidance on the approach to assessing and securing contractors to work on the project. A prequalification process explored the ability of the organisation to provide relevant services whilst meeting the required standards during design and construction. In turn the main contractor also had to ensure that the standard was met by supporting and assisting sub-suppliers and subcontractors within their supply chain.

Prequalification ensured that the required competencies, systems and resources were in place if appointed. Documentation was submitted by potential contractors setting out their:

- Health & safety policy;
- Environmental policy;
- Organisational arrangements setting out the management commitment, planning, control measures, monitoring and routes to continual improvement;
- Evidence of membership of contractor management schemes, and compliance with industry codes of practice;
- Details of H, S and E performance over the last five years;
- Evidence of near miss reporting, worker engagement, safety culture, occupational health services and employee competence and training schemes;
- Procurement arrangements;
- Arrangements for benchmarking and verification of H, S and E performance.

The above aspects were set at a level appropriate to the nature, scale and impact of the activities, products and services that were required. They also had to be supported by senior level commitment and sign off within the organisation. Contractors were expected to be committed to continual improvement and comply with all legal requirements. Policies and procedures were requested to be documented, implemented, and communicated to all persons working on behalf of the organisation, and be regularly updated and approved at senior level.

Annex

Good practice examples

Good practice examples

3. Contractual arrangements

List of references (21)

All work contracts with the respective company contain an obligation for the contractor to comply with statutory occupational health and safety regulations. However, company accident statistics show that the referencing of legal requirements for occupational safety, alone, is neither sufficient nor does it inspire the desired attention.

For this reason, the company has introduced so-called "Additional conditions for occupational safety" with every order, in which all obligations are defined and made contractually binding. The focus here, for instance, is on the analysis of results from work-related accidents. A compilation of fall-related accidents led to the introduction of a general obligation to wear PPE against falls from a height, if such a risk exists (e.g. working on aerial platforms). In this manner, attention is drawn to important points in advance, with these being uniformly described and presented to the contractor as contractually binding.

On this basis, the fulfilment of any additional occupational safety obligations becomes mandatory once the contract is executed. These obligations apply both to contractors and subcontractors.

List of references (17)

Because, from the client's perspective, a clear separation of client and contractor energy resources (e.g. electricity, compressed air, etc.) and operational facilities has proven impracticable in practice, the client made the decision to contractually prohibit the use of equipment introduced by the contractor. As an alternative, the client provides the equipment (e.g. PPE). This, then, is stipulated in the contract.

4. Collective preparation

A UK energy company developed a more advanced approach to contractor selection through the adoption of opportunities to partner with one or more contractors and suppliers in the form of an 'Alliance Working programme', rather than using traditional supply chain relationships. The benefits proved to be more effective longer term relationships, and value to all partners through the expectation of a closer and more efficient way of working that increased the level of confidence and commitment in the projects. It supported contractor investment in equipment and personnel from an assurance that forward planning in training, equipment and personnel resource would provide a greater return due to the availability of longer term contracts. These arrangements also led to a more stable workforce with a lower turnover rate, enabling a greater focus on health and safety, quality and reliability issues.

The commitment from both sides was made at senior level and based on shared goals and strategies. A well-managed approach at working level then ensured that effective management controls were in place to ensure any issues could be effectively resolved, and that the process continued to the full term of the contract, which is the risk of entering into such long-term partnerships that do not meet expectations. This was supported by a regular contract review process. This required cooperation at all levels between the parties and the ongoing provision of information, training and consultation to ensure any breach of the agreement and working arrangements were prevented.

List of references (19)

Contractors have been employed for many years in the German oil and gas industry to carry out major repairs and provide special services. Over time, it became clear that the risk of a work-related accident was particularly pronounced for contracted personnel whenever they worked at a company for less than six months and did not yet have adequate experience in the oil and gas industry. The respective company undertook an initiative to raise awareness of this issue among the contracting managers and personnel, as well as throughout the client's company itself. Various measures were taken to this end: "New" personnel must be accompanied by an experienced colleague while performing their work tasks. The contractor must also inform the client as to the number of personnel, their qualifications and instructions given, as well as any specific, activity-related training provided. This information must be submitted in writing and in a timely manner prior to commencing work. The status of "new employee" is retained for 6 months, being annotated in a safety passport carried by each employee and indicated by an appropriate sticker on their helmet. At the same time, informative sessions were conducted for managers and personnel to discuss safety problems associated with the deployment of inexperienced employees and present related measures introduced by the company. The initiative developed and implemented here has a twofold effect. On the one hand, it obligates the contracting company's management to focus intently on this topic while, on the other, it sensitizes the client's personnel to pay particular attention to their "new" contractor colleagues.

Good practice examples

Good practice examples

List of references (4)

Within the electrical industry, a number of contracting companies have developed close working relationships with their respective clients. This has proven mutually beneficial for both contractors and clients, and has led to a greater level of preparedness for future contracts. By developing long-term relationships between the client and contractor for specific work activities, a conducive environment for introducing best practice initiatives and innovations will already exist when synergistic opportunities arise. This promotes a more consistent approach to site set-up and working methodology, as well as to occupational health and safety management. Contractor commitment is demonstrated through an allocation of sufficient resources across a range of skills and disciplines, thereby generating confidence on the part of the client.

A health and safety forum is held quarterly with the participation of all seniorlevel managers from both organisations. The goal of the forum is to ensure a commitment to health and safety values while maintaining a shared vision for managing health and safety performance, and for improving on that performance year after year. The forum therefore encompasses a review of lessons learned as well as forthcoming areas of focus, thereby ensuring that issues are addressed at the decision-making levels of both companies. Each organisation briefs the other on their respective risk assessments, and shares information on the hazards and risks identified. This collaborative approach ensures an enhanced level of risk assessment as well as a safer worksite for all personnel. It also leads to improved quality performance with a commitment to achieve the highest standards from the start.

In addition, the client hosts a cross-contractor safety forum to facilitate the communicating of innovations, best practices and lessons learned along their supply chain, as well as to ensure that a drive for continual improvement is mutually shared throughout the industry. Case studies are used to review incidents in more detail, to convey learning points to help prevent future accidents and to provide links to tools for improving human performance. These are accompanied by discussion topics, such as developments in accident, near miss and hazard reporting systems, or measures to improve contractor access to host-company data systems, policies and procedures.

Another industry example is the opportunity afforded a contractor to develop its own training program within the client's training facilities, and to provide tradespecific technical training to all participating teams. This combined program helps contracting personnel gain a deeper understanding of client work practices and emphasizes the importance of collaboration in their mutual efforts to improve project safety. A Safety Charter has been introduced at company sites where both client and contractor sign-on to pursue the safety standards agreed upon by and expected of all personnel. The Charter is prominently posted at all site locations and has ultimately led to much greater sense of joint ownership by all parties. This, in turn, has helped promote the sharing of innovation and best practice initiatives. It is also accompanied by a 'Clear Bright Line', which plainly defines the principles each person must strive toward and helps to ensure that all personnel are made aware of their related obligations. The intention is also to preclude the client from 'overstepping' its boundaries by assuming contractor obligations. This is likely to cause confusion over time and will ultimately prove detrimental to safety. At the same time, the client must be fully aware of its legal obligations and responsibilities related to working with the contractor, while being careful to not 'under-manage' the contract.

5. Management of contract

List of references (11)

A significant sewerage infrastructure improvement project identified the need to promote the benefits of induction to a workforce comprised of equal numbers of directly employed and contractor personnel; this was intended to help remove any distinction or barriers between the two sets of workers. An investment in personnel irrespective of the company provided the necessary health and safety management required, whilst demonstrating a commitment and value to all employees.

The induction process required the construction and use of a dedicated facility that provided a range of introductions to the project including classroom teaching, acted out safety scenarios, general and site specific tours and awareness visits, available occupational health services, and the provision of branded PPE and equipment. A sense of ownership was instilled though adapting the protective equipment to the specific needs of both roles and individuals. Employees were provided with dedicated changing areas and personal storage lockers, welfare and catering facilities and rest areas. The initiative benefited from support from all of the contract partners and led to a collective ownership, and in turn helped integrate the workers both between different contractors and between the contractors and the client.

Good practice examples

Whilst induction is only one aspect of the effective treatment and management of personnel, the investment at the beginning of the process set the tone for the expectations of workers and the professionalism required for the project. It also demonstrated the client's commitment to the health, safety and welfare of all employees. In this way the client was able to create a construction environment that had not been experienced by workers before, and in doing so set a new benchmark for the industry.

List of references (27)

In conjunction with a major conversion project using internal employees as well as an additional 800 employees from 100 contractors, all contractors were issued initial instructions by means of a multilingual film.

The film communicated the safety regulations in a short, concise and easily understandable manner. A multilingual control sheet was then used to ensure that the film content had been comprehended. Moreover, additional clientpersonnel were deployed at the conversion site during the project to monitor compliance with safety regulations.

At the same time, the overall provision of medical care was enhanced, with the ambulance station being manned around the clock. Signs were posted in the local language, as well as in English.

List of references (17)

To improve its own organisation with respect to the use of contractors, a chemical company established a so-called safety room to serve as a central point of contact for its contractors. Required instruction is disseminated and induction is provided at this location.

An adjoining training room has facilities for films to be shown and presentations to be given, among other uses. The safety room also serves as the meeting place for client personnel to conduct their briefings and meetings.

Ultimately, there has been a tremendous improvement in contractor coordination since the safety room was opened. The number of "abnormalities/defects" attributed to contracting companies has also been significantly reduced and the frequency of gross, work-related safety violations is in steady decline.

List of references (20)

The LPS (Loss Prevention System) initiated by a company operating internationally provides for, among other options, select personnel to be trained as safety coaches. These safety coaches are tasked with addressing and discussing

Good practice examples

topics related to occupational safety at regular intervals within their assigned groups.

The LPS-spectrum can range from the examination of safety issue and the consideration of a key work process to the critical analysis of risk. Safety coaches provide an air of authenticity in this task because they, themselves, are working colleagues. Regularity ensures that occupational safety is and remains a daily topic. A safety coach is supported and supervised by a mentor, who is, in turn, commonly the coach's line manager. Coaching is planned together with the mentor and carried out on a weekly basis. The results of the coaching session are recorded on a recently introduced team card. Team cards are anonymously evaluated by the OSH department and subsequently made available to all personnel.

List of references (28)

During the production process, employees of a sugar manufacturing company must move around the overall plant facility. This presented a problem during an evacuation, however, in determining whether all employees were accounted for at the respective assembly points. Furthermore, the absence of one employee revealed that his last work-location could not be determined beyond a reasonable doubt. As a solution to this problem: All employees are now issued personally coded cards with which to register themselves via a card reader at a respective assembly point.

Upon registration, the employee's name is deleted from the evacuation list. The card also serves an access-control function, in that an employee's access onto and subsequent departure from the company's premises are recorded. The system has also been expanded so that employees must now log in when entering, and out when exiting the various plant zones. This means that information as to the whereabouts of an employee is immediately available in the event of an evacuation.

List of references (29)

Company-internal emergency telephone numbers must be readily available in the event of a work-related accident. An in-house survey revealed, however, that many employees and contractors had no knowledge of these important numbers. For this reason, the respective emergency numbers are now labelled directly on the safety helmets, guaranteeing their immediate availability if needed. Helmets must always be worn when in the company's production facilities. Therefore, a yellow sticker listing the most important emergency numbers is glued into every

Annex

Good practice examples

safety helmet worn by all employees, contractors and visitors. In addition, both the internal and mobile phone numbers for the first aid facility are listed, as well as the extensions to call in the event of fire. This facilitates both fast and effective coordination and communication when it's needed the most.

List of references (31)

An information centre was developed to serve as a central point of contact and information dissemination for both contractors and employees, as well as for all others accessing or not familiar with the construction site.

Location, responsibility and priority plans are readily visible and facilitate the smooth flow of information. In addition, the information centre also serves as an assembly point in the event of imminent danger, a first aid station and the location for accessing emergency fire-fighting equipment. Upon arrival at the construction site, contractors are informed about the procedures and points of contact for initial registration at the information centre. After registering by telephone, specific instructions are issued by a responsible person. The information centre is thus capable of providing a real-time overview of the personnel deployed. This centralized orientation results in significant time and cost savings. Mandatory contact information, signs and notices are also available at all times.

6. Control and sign-off/Completion

List of references (25)

Repair work on large-scale equipment such as excavators and spreaders requires a high degree of work-process planning and coordination. The most diverse activities are often carried out simultaneously on large-scale equipment at multiple locations. A lack of awareness about these parallel work initiatives, however, can invoke considerable risks.

In an effort to reduce these risks, an idea was conceived to visually support the coordination of working groups on construction sites and during the basic repair of large equipment. According to the new visualization concept, supervisors from each participating company and working group meet daily, prior to starting work, to mark their individual work areas on a magnetic board. The respective large-scale equipment is depicted on the board from all significant perspectives. Supervisors use coloured magnets assigned to each working group to identify their working location for that particular day.

In this manner, a big picture of the overall workplace takes shapes during the meeting and in the presence of all participants. Possible influences and potential hazards are immediately recognizable, so that the necessary precautions can be taken with measures being initiated directly.

Good practice examples

List of references (22)

During the plant shutdown each winter, personnel from several contracting companies work together with the client's own personnel to process special orders. Up to 250 additional persons can be on the plant site at any one time – posing a great challenge to occupational safety.

In order to coordinate the contractors and their personnel, and to ensure a safe, accident-free working environment, a safety centre was established to serve as a point of contact for all related enquiries and permits. The director of occupational health and safety, as well as the entire plant management team are involved in the initiative. Its aim, in the context of coordinating client and contractor personnel during major repair work in very confined areas, is to guarantee that this work can be carried out safely. At the same time, it provides for management of the overall administrative process (e.g. permits and work approvals) from a centralized location. The safety centre is open Monday to Friday from 7 a.m. to 6 p.m. and manned by a member of the management team (department or plant manager). In addition, the safety centre facilitates the coordination of instructions issued to all companies and the review of risk assessments, as well as the distribution of helmet stickers.

Experience over time has proven that this concept works. Improvements in the information shared among all parties involved, accompanied by a growing awareness of and, consequently, acceptance of the client's safety rules, the prevention of uncoordinated work activities and the availability of competent contact personnel are particularly appreciated by the contractors.

List of references (2)

As a managing contractor one company's reputation was partly determined by its approach to managing large numbers of subcontractors. Contractor inductions were carried out on site by a client manager although the short term and transient nature of the tasks and the sector meant that, whilst many subcontractor staff were inducted, only a limited number were present on operational sites at any one time. This meant the inductions needed to be short and focused, but well-structured and supplemented by noticeboard information and weekly tool box talks.

Good practice examples

The company's attainment of external verification demonstrated their commitment to ensuring the necessary safety and quality processes were in place, and helped emphasise the safety culture and level of awareness of the client in the minds of the contractors. The company also expected contractors looking for continuity of work to show a commitment and willingness to comply with this proactive approach to health and safety irrespective of the economic climate and the availability of work.

Subcontractors were encouraged to promote suggestions for improved working; on one project this included a supervisor or manager from each subcontractor taking turns to conduct a daily safety inspection on the entire site. This led to all subcontractors working together more closely and giving more consideration to the operations of other trades. Subcontractors are now much more open and prepared to speak to other companies' personnel if they see them working unsafely, or to communicate with each other when they notice potential problems in their own or others' work areas.

A morning safety meeting of all the contractors was also combined with the daily inspection system, again integrating the work of different contractors working on the same project. In turn this has improved the companies' relationship with the client, increasing the potential for being accepted onto the client approved tender list and for attracting new business opportunities.

List of references (3)

A major UK construction project introduced several strategic initiatives to ensure collaborative and progressive working relationships with its contractors. The 'Front-line Leadership Program' was designed to help supervisors develop their leadership skills by introducing new ways of thinking to assist them in their day-to-day roles while, at the same time, encouraging future progress. The Safety, Health and Leadership Team (SHELT) was comprised of directors from both the client and tier 1 contractors (primary contractors with overall project responsibilities). It met regularly to discuss health and safety performance, to consider emerging trends and incentives, as well as to find a consensus for an overall health and safety improvement program strategy. Regular forums and workshops were held with contractor health and safety managers to review audit and survey results, and to share best practice concepts and ideas compiled from the various contracts.

Client programs included a 'Behaviour Influences Behaviour' initiative designed to raise health and safety standards, achieve established targets and goals, and help the client's own personnel to better understand how their behaviour can influence that of contracting personnel. Working groups were tasked with implementing the 'Target Zero Golden Rules', with these being reviewed and the focus adapted to emphasise task-specific initiatives, as required, depending on priorities set and issues encountered.

The reward and recognition scheme, 'Gateway', provides contractors with an opportunity to showcase their innovative and inspirational programs. Delivery contracts were assessed against the client's Target Zero pillars of Leadership, Health & Safety Design, Communication, Occupational Health, Safety and Performance Management. This led to the award of Foundation, Commendation or Inspiration status. All good practices identified during these assessments were then shared project-wide via Inspiration Bulletins, while performance-based awards were used as a mechanism to incentivise, measure, recognise and celebrate health and safety excellence achieved.

Tier 1 contractors were empowered to develop their own processes and systems with which to meet client objectives. The client focussed on engaging contractors, thus enabling them to develop their own good practices and drive their own performance while allowing them to use their own company processes, where practical.

7. Review

List of references (9)

Organisations can make use of the previous experience of other companies who are willing to share good practice, knowledge and innovation on health and safety management through working with contractors. Following completion of a major successful UK construction project, a 'Learning Legacy' web site and initiative was developed to help share lessons on health and safety management, environmental management, sustainability, procurement, project management and engineering issues associated with the use of a contracted workforce. Access was provided to case studies and procedures highlighting the benefit of using leading health and safety indicators that measure the steps taken by contractors to create safe and healthy working environments. This was shown to be an improvement on simply analysing traditional lagging indicators such as accident frequency rates. This was particularly useful when employing a number of contractors working across multiple disciplines on one project. A 'Performance Assurance Framework' enabled contractor performance to be compared which encouraged contractors to achieve the highest possible

Annex

Good practice examples

Good practice examples

standards. Best practice guides were published on specific activities and the skills required, whilst contractor human and organisational initiatives and work-force engagement practices were reviewed to establish how they aligned with the client's overarching health and safety strategy. Mature contractors also provided evidence of diversity policies and how workplaces could be designed to be inclusive of all persons.

By providing access to this information help was made available to companies looking to improve their contractor selection process; this is important as ultimately the client discovered that 'the lowest health and safety standards accepted and displayed will be the highest standards that can be expected to be achieved'.

8. Process improvement

List of references (4)

The process of improving engagement and working with contractors is not limited to reviews of individual contracts, but can also draw on a sector level policy approach. The UK electricity industry devoted an annual theme within its overarching health and safety strategy, Powering Improvement, to the review of company experiences with working with contractors, as well as learning from the contractor businesses themselves. This was considered both important and necessary in a sector where contractors form the greater part of the overall workforce. This was also intended to build on the existing relationships between all of the strategy partners, which is seen as a beacon of excellence in raising awareness and improving standards on health and safety in the sector. The contractor focus year sought to emphasise the partnership working between the electricity companies and their contractors, promoting collaboration and ensuring procedures were designed to secure the safety of all people who access, operate and work on company assets. A Delivery Plan set out a number of Outcomes and Outputs which all stakeholders signed onto, and which centred on sharing best practice approaches to managing the common risks within the industry. This required the promotion of improved communications and the development of safety alliances and frameworks where appropriate. A number of events were held including national workshops, contractor presentations at cross cutting industry forums, and individual company workshops, which were held jointly with contractors. These highlighted both functions that are

carried out by the contractor on behalf of the host company and joint initiatives. The work focussed on:

- Contractor Forums & Expert Groups to oversee projects;
- Shared training and competence assessment;
- Apprenticeship training requirements;
- Shared risk assessments;
- Site audits;
- Incident learning and corporate memory aspects;
- Promotion of case studies on common industry risks, including the use of new technology;
- Company behaviour and safety culture programmes;
- Managing specific higher risk activities (driving, overhead line work, tree cutting).

The learning and case studies were collated into an Annual Progress Report and SHE Review, which is available on the Powering Improvement web site. This process of reviewing the approach to working with contractors, and learning from their expertise and the projects they have undertaken, provided value to the companies as clients and enhanced existing relationships with their contractors. In turn this experience will help shape the management of new projects and contracts using the Contract Lifecycle approach.

List of references (24)

The respective company was able to significantly reduce the number of accidents its own and its contractors' employees were involved in, relying on the continuous and sustained improvement of its occupational safety management system together with innovative occupational safety programs.

In an effort to find the most effective measures, the entire collaborative process was broken down into individual steps, with each step examined as to its influence on occupational safety. 24 points were identified, with each being analysed to determine the measures through which potential success could most likely be achieved.

From the outset, a tiered, multi-year approach was favoured. The aim was, and still is, to treat contractor employees as if they were the client's own employees, while focusing on the development of an occupational safety culture towards the long-term prevention of accidents. This comprehensive management approach

Annex

List of references

Good practice examples

targeted a systematic, sustainable improvement in occupational safety. It is particularly important to note that, while the company demands an emphasis on occupational safety from its contractors, it also provides intensive support through concrete measures to promote the achievement of its safety goals. The contractor's management of occupational safety proves tremendously successful when the various measures taken along the individual steps are interlinked and consistently implemented. Especially the transition from "contractor" to "partner" is an essential cultural step, but this, in turn, requires a long-term commitment. The results are ultimately reflected in declining accident-rate statistics. The LTIF rate for contractors, for example, has fallen by up to 30% and is a single digit at many construction sites.

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ISSA's VISION ZERO Strategy

Accidents at work and occupational diseases are neither determined by fate nor unavoidable – they always have causes. By introducing the VISION ZERO strategy at workplaces, these causes can be eliminated and work related accidents, harm and occupational diseases can be prevented. Seven Golden Rules have been developed to establish this strategy successfully at workplaces.

7 Golden Rules for VISION ZERO

- 1. Take Leadership Demonstrate Commitment!
- 2. Identify Hazards Control Risks!
- 3. Define Targets Develop Programs!
- 4. Ensure a Safe and Healthy System Be Well Organized!
- 5. Use Safe and Healthy Machines and Equipment!
- 6. Improve Qualification Develop Competence!
- 7. Invest in People Motivate by Participation!

Join the campaign

You are invited to consult the Vision Zero website (www.visionzero.global) for further information and good practice examples and to sign up online to join the global community of Vision Zero Companies.

This publication contributes to the international ISSA campaign



Safety.Health.Wellbeing.



International Section for Electricity



ISSA – International Section for Electricity

The Section was founded in 1970 and is located in Cologne, Germany. The Section's work is based on the collaboration of more than forty members from twenty countries. Its objective is to promote occupational health and safety in the electricity area as regards the commercial production and distribution of electricity and gas worldwide. The Section encourages international exchange of information and experience



among experts through symposia, workshops, international working groups and trainings on safety and health with regard to crucial issues of occupational safety and health protection in this sector.

A further key activity of the Section's work is the organization of the International Media Festival for Prevention, which takes place every three years in the framework of the World Congress on Safety and Health at Work. The Festival provides a comprehensive over-

view of films and multimedia productions from all over the world regarding occupational safety and health.



International Section of the ISSA for Electricity c/o BG Energie Textil Elektro Medienerzeugnisse Gustav-Heinemann-Ufer 130 | 50968 Cologne | Germany Tel.: +49 221 3778 6007 | Fax: +49 221 3778 196007 Email: electricity@bgetem.de

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