

UNIT, BUSINESS AREA  
HM

OUR REFERENCE  
TR 13-02-06

DATE  
13/09/2016

CONSULTATIONS  
N, F, S, K, A, H

TECHNICAL GUIDELINE

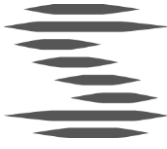
REVISION  
1

APPROVED  
TD

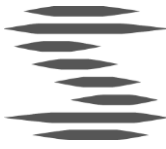
# Work Environment Requirements – Maintenance Contract

This technical guideline contains the work environmental requirements for maintenance agreement. The guideline applies when carrying out maintenance of substation, tunnel, power line and power line corridor, and storage operations on behalf of Svenska kraftnät.

This English text is to be regarded as a translation of the Swedish guideline. The Swedish text and the interpretation thereof shall govern the contract and the legal relations between parties.



Revision	Change note	Date
	First Edition	13/09/2016



## Contents

1	Definitions.....	4
2	Scope and responsibility.....	5
3	Organisation at permanent as well as temporary work sites .....	6
3.1	<i>Responsibility for coordination of a common work place.....</i>	<i>6</i>
3.2	<i>Appointment of the overall coordination responsible including tasks .....</i>	<i>7</i>
3.2.1	<i>Overall coordination responsible for permanent work site ...</i>	<i>7</i>
3.2.2	<i>Overall coordination responsible for temporary work site ...</i>	<i>8</i>
3.2.3	<i>Protection and order regulations .....</i>	<i>9</i>
4	Organisation of building and civil engineering projects in maintenance work.....	10
4.1	<i>Responsibility for the building work environment .....</i>	<i>10</i>
4.2	<i>Appointment of building work environment coordinator .....</i>	<i>10</i>
4.2.1	<i>Building work environment coordinator for planning and design, BAS P.....</i>	<i>11</i>
4.2.2	<i>Building work environment coordinator for planning and design, BAS U .....</i>	<i>11</i>
5	Common requirements.....	11
5.1	<i>Systematic fire protection work .....</i>	<i>11</i>
5.2	<i>Protective equipment .....</i>	<i>12</i>
5.2.1	<i>Personal protective equipment (PPE) .....</i>	<i>12</i>
5.2.2	<i>Common protective equipment, first aid .....</i>	<i>14</i>
5.3	<i>Alcohol, drugs and medicines .....</i>	<i>15</i>
5.4	<i>Working hours .....</i>	<i>15</i>
5.5	<i>Time reporting .....</i>	<i>15</i>
5.6	<i>Minor .....</i>	<i>15</i>
5.7	<i>Solitary work.....</i>	<i>15</i>
	<b>Annex 1 – Suitability requirements for coordination responsible .....</b>	<b>17</b>
	<b>Annex 2 – Suitability requirements for BAS P coordinator .....</b>	<b>19</b>
	<b>Annex 3 – Suitability requirements for BAS U coordinator .....</b>	<b>21</b>



# 1 Definitions

Work environment plan	Document which, among other things, specifies the work environment organisation, risks and measures in the present project to ensure the applicable health and safety requirements. The plan shall as a minimum include the requirements set out in the Work Environment legislation, and be structured according to Svenska kraftnät's template that can be found at svk.se.
Deviation	Work-related adverse incident or non-fulfilment of requirements: <ul style="list-style-type: none"><li>&gt; Event where accident or incident has occurred or could occur</li><li>&gt; Observation of an error, a risk or a deficiency that can lead to an accident or emergency (risk-sighting)</li><li>&gt; Departure from working methods, practices, routine, legal requirements, etc.</li><li>&gt; Deficiency in product, service and delivery</li></ul>
BAS	A Building work environment coordinator shall be appointed in accordance with the Work Environment Act for both planning and design (BAS P) and construction phase (BAS U). The BAS may be a legal entity, business or individual.
Customer	The party who orders a product or service
Client	The party who has construction work performed shall during every stage of the planning and design ensure that the working environment be taken into consideration both during the construction phase but also during use. Client shall appoint construction environmental coordinator (BAS)
Building and civil engineering work	Work or activities which the Supplier carries out in the field under contract with Svenska kraftnät, cf. AFS 1999:3.
Solitary work	Solitary work means work that involves physical or social isolation. For example, it may be that the worker cannot get in contact with other people at work without using radio or phone. Solitary work also includes situations where the worker is among other people but still can't expect help in a critical situation.
Contractor	Companies that deliver more or less complete construction services including material, for which AB and ABT apply.
Consultant	Consulting company that provides services and includes the role Project Planner.
Permanent work site	Permanent work sites are substation, tunnel, pylon and technical shed. The company that manages the permanent operations site has mandatory overall coordination responsibility.
HSEQ	Work environment, electrical safety, environment and quality (safety is excluded).



Supplier	Collective term for any company that has a contract with Svenska kraftnät and is supplying products/services. It includes Contractor and Consultant. Subcontractors can be different things but Svenska kraftnät is never party to the agreement.
Minor	Person aged under 18.
Overall Coordination responsible	<i>Overall Coordination responsibility</i> is a concept in the Work Environment Act that addresses how responsibility is handled when two or more employers simultaneously operate on a common site. The reason that this responsibility is regulated is that it is assumed that specific health and safety risks can arise when several companies are in the same workplace.
Coordination meeting	A physical meeting with a written agenda and minutes to be recorded.
Consultation	Verbal reconciliation between the BAS organisation and/or at the common working place
In writing	Information that can be read and stored. Means of transmission of such information are for example mail, fax and e-mail.
Regulations for protection and order	Document which, among other things, specifies the work environment organisation, risks and measures for permanent and temporary sites to ensure applicable work environment requirements.
Temporary work site	The Customer may define lines and line corridors as a temporary work site.
Subcontractor	Company that is a contractor or consultant, and party to agreement with a Svenska kraftnät's contracted Supplier.
Assignment	Task assigned to someone for execution during a certain period of time. Task performed by Suppliers mandated by the Customer. The term includes project as well as object.
Client's delegee	The Client can use the services of a Client's delegee who takes responsibility according to section 6 of the Work Environment Act if the following criteria are met: <ol style="list-style-type: none"><li>1. the delegee has been commissioned with independent responsibility for planning and design and/or performance and to</li><li>2. it has been agreed in writing that the information referred to in paragraph 6 and in regulations shall rest with the delegee in the relevant mission</li></ol>

## 2 Scope and responsibility

This technical guideline applies solely in Svenska kraftnät's storage operations and in carrying out maintenance works as well as building and civil engineering works within the maintenance contract.



Requirements on systematic control of the work environment, electrical safety, environmental and quality work that apply for maintenance work and building and civil engineering works under the maintenance agreement, commissioned by Svenska kraftnät, can be found in TR 13-01 and they apply in parallel with this technical guideline.

The requirements include the activities undertaken by Supplier under contract with Svenska kraftnät. The requirements also apply to all Subcontractors. The Supplier, with whom Svenska kraftnät has signed an agreement, is responsible for ensuring that the requirements in this document are followed.

Contractor and Designer/Consultant are referred to below as Supplier and Svenska kraftnät as Customer.

For rules for work environment as a whole, see Work Environment Act and associated regulations, and the work environment regulation:

<i>AML (Arbetsmiljölagen)</i>	Work Environment Act Cf. <a href="http://www.av.se">www.av.se</a>
<i>ABT (Allmänna bestämmelser för totalentreprenader avseende byggnads-, anläggnings- och installationsarbeten)</i>	General provisions for turnkey projects relating to building, construction and installation works
<i>AFS (Arbetsmiljöverkets författningssamling)</i>	Swedish Work Environment Authority Collection of provisions

## 3 Organisation at permanent as well as temporary work sites

### 3.1 Responsibility for coordination of a common work place

The Customer designates the Supplier as overall coordination responsible who is thereby mandated to be independently responsible for coordination of the entire common work place. Template for agreements between the parties is found on the Customer's website [www.svk.se](http://www.svk.se) under the Stakeholder's portal, templates to TR 13. They must be signed by both parties in connection with the contract signing.



## 3.2 Appointment of the overall coordination responsible including tasks

The supplier who is designated as overall coordination responsible shall ensure that the person doing the tasks of the work environment (coordination responsible) holds the qualifications referred to in sections 3.2.1 and 3.2.2.

### 3.2.1 Overall coordination responsible for permanent work site

#### **General**

On the sites where the Customer has principal responsibility, the overall coordination responsibility is transferred to the Supplier. All Customer's substations, tunnels, technical sheds and pylons are to be regarded as permanent site. These facilities are common workplace for several employers and therefore, a overall coordination responsible shall be appointed. This overall coordination responsible should be mentioned by name in the workplace. The overall coordination responsible shall ensure that posting takes place inside the plant, clearly visible on entry, but not to third parties.

#### **Skills**

The overall coordination responsible must have skills, qualifications and experience in accordance with the suitability requirements set out in annex 1

The appointed overall coordination responsible should be Swedish-speaking but also be able to communicate in a predetermined language to all who are in the workplace.

#### **Tasks**

The overall coordination responsible on a permanent site shall:

- > issue procedures for how and when the work at the site is to be conducted
- > if there is a tenant in the facility, consult with him and his maintenance supplier (coordination meetings should be ongoing depending on activity, but at least once annually for substations, tunnel and masts, for technical sheds as required)
- > consult with suppliers who have contracts signed for ongoing assignments in the facility (e.g. security inspections, ploughing, weed control, forest clearing, mowing, cleaning, snow removal)
- > if building or construction work is being conducted in the facility, initiate consultation with the BAS U



- > be responsible for security instructions being issued for the facility and kept current. Safety instructions shall follow those safety instructions for which the electrical owner is responsible in accordance with applicable SS-EN 51110-1
- > be responsible for common protective devices being set up and maintained; note the electric owner's responsibility to provide requirements for security instructions and access rules in accordance with applicable SS-EN 51110-1
- > be responsible for the systematic fire protection work carried out at the Customer's facilities
- > be responsible for safety inspections being regularly carried out under TR 13-01
- > inform others working in the facility about protection rules that apply to the facility (posted, displayed)
- > be responsible for updated risk list for the facility to be found and notified to all relevant
- > in case of burglary and damage to the facility or components belonging to the facility, ensure that the incident is reported to the police
- > carry out risk assessment for the common work place where more than one employer conducts business at the same time

#### **Consultation at permanent work site**

Before starting work other Suppliers who are active at the site, shall consult the Customer's designated coordination responsible for the substation. It is important that all Suppliers who perform work within the substation provide information about the risks that may arise due to their activity.

### **3.2.2 Overall coordination responsible for temporary work site**

#### **General**

The customer's power lines and line corridors are considered as temporary work sites. The Supplier assumes overall coordination responsibility for the Customer's lines and line corridors under special transfer document.

#### **Skills**

The overall coordination responsible must have the skills, qualifications and experience in accordance with the suitability requirements set out in annex 1

The appointed overall coordination responsible should be Swedish-speaking but also be able to communicate in a predetermined language to all who are in the workplace.



**Tasks**

The overall coordination responsible at a temporary site shall:

- > issue procedures for how and when the work at the site is to be conducted
- > if there is a tenant in the facility, consult with him and his maintenance supplier (coordination meetings should be ongoing depending on activity, but at least once annually) (for instance by joint property )
- > if other agreements have been entered for current assignments on line/line corridor, carry out consultations with these Suppliers (e.g., forest clearing)
- > if building and construction projects are carried out in line/line corridor, initiate consultation with the BAS U
- > be responsible for security instructions being issued for the facility and kept up to date. These must follow those safety instructions for which the electrical owner is responsible in accordance with applicable SS-EN 51110-1
- > be responsible for common protective devices being set up and maintained; note the electric owner's responsibility to provide requirements for security instructions and access rules in accordance with applicable SS-EN 51110-1
- > inform others working on the line/line corridor about protection rules that apply to the facility (posted, displayed)
- > be responsible for updated risk list for the line/line corridor existing and notified to all relevant
- > in case of burglary and damage to the facility or components belonging to the facility, ensure that the incident is reported to the police
- > carry out risk assessment for the common work place where more than one employer conducts business at the same time

**Consultation at temporary work site**

Before starting work other Suppliers who are active at the site, shall consult the Customer's designated coordination responsible for the lines/line corridors. It is important that all Suppliers who perform work on the lines/line corridors leave information about the risks that may arise due to their activity.

**3.2.3 Protection and order regulations**

For a permanent site, the supplier shall develop site-specific protection and order regulations based on the risks which Customer has identified and forwarded to the Supplier. The Supplier shall then adapt these to the activity and to identify any additional risks. The protection and order regulations should be reviewed by and agreed with the Customer, and adopted by the Supplier before work may



commence. The protection and order regulations should be posted and communicated and known by all concerned staff who will work within the site. Updates of the protection and order regulations and its annexes shall be documented on an ongoing basis.

Established protection and order regulations should be in the contract language and those languages required for the Supplier to ensure that everyone can understand the contents of protection and order regulations.

## 4 Organisation of building and civil engineering projects in maintenance work

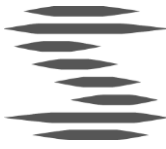
### 4.1 Responsibility for the building work environment

The Customer appoints the Supplier as independent client's delegee, thus being mandated to be independently responsible for planning and design, and the work performance regarding building and civil engineering works carried out within existing maintenance contracts, as well as in store operations. Template for agreement between parties can be found on the customer's website [www.svk.se](http://www.svk.se) under the Stakeholder's portal, templates to TR 13. It must be signed by both parties in connection with the contract signing. Regarding what is classified as building and civil engineering work, see the product list.

In cases where the Supplier is not acting as an independent client's delegee, the Customer appoints building work environment coordinator under AML Chapter 3. 6 § and separate agreements are signed.

### 4.2 Appointment of building work environment coordinator

It should appear who the client's delegee has appointed as building work environment coordinator under AML Chapter 3 section 6. Written agreement should be made if the client's delegee appoints someone other than himself. The designated building work environment coordinator shall ensure that the coordinator(s) appointed to be used in the work environment area (BAS P/BAS U) holds the qualifications referred to in sections 4.2.1 and 4.2.2.



#### 4.2.1 Building work environment coordinator for planning and design, BAS P

##### **BAS P Coordinator**

BAS P Coordinator must have skills, qualifications and experience in accordance with the suitability requirements set out in annex 3. Training papers must not be older than three years; certificates must be verified for the Customer.

##### **Work Environment plan BAS P**

The work environment plan is a statutory document that should be set up by building and civil engineering works.

The work environment plan shall be handed from BAS P to BAS U.

#### 4.2.2 Building work environment coordinator for execution, BAS U

##### **BAS U Coordinator**

BAS U Coordinator should have skills, qualifications, experience, according to the suitability requirements set out in annex 4. Educational results must not be older than three years; a certificate must be verified for the client.

The BAS U Coordinator should be available at the workplace. If the coordinator is not on-site, a contact person shall be appointed.

The BAS U Coordinator should be Swedish-speaking but also be able to communicate in a predetermined language to all who are in the workplace.

##### **BAS U Coordinator**

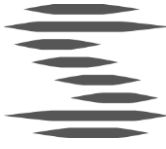
The BAS U should take over and further develop the working environment plan prepared by BAS P and in the context of this, consultation should take place. BAS P shall initiate the consultation. The associated risk list should be updated with risks that become apparent during the performance and the work environment plan be continually updated.

## 5 Common requirements

The requirements below apply at permanent as well as temporary sites where coordination is conducted, as well as by building and construction projects in maintenance contracts.

### 5.1 Systematic fire protection work

Supplier is obliged during the period of agreement to carry out systematic fire protection work of the Customer's substations according to the checklist for systematic fire protection work.



## 5.2 Protective equipment

### 5.2.1 Personal protective equipment (PPE)

Before personal protective equipment is chosen the employer shall analyse and assess the risks in the work and the characteristics that the equipment must have in order to protect against these. In doing so, account is also taken of the risks which the equipment itself can cause. The assessment should be reviewed when any changes have occurred that are relevant to the assessment.

To perform any kind of tasks behind door or operations barrier to deployed power plants (operations areas), full protective clothing must be worn. (Deviation in form of short trousers, even if regarded as fire-retardant, is not allowed)

Minimum requirements for personal protective equipment to be used in field environment are:

When working in deployed substation installations

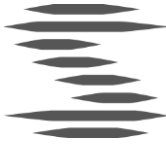
- > Safety helmet with chin strap Norm EN397
- > Protective clothing (high visibility clothing)  
Flame resistance Norm EN 11612 \*) \*\*)  
High Visibility Norm EN20471 class 1  
Moisture Norm EN 343
- > Safety goggles if necessary Norm EN166 grade S
- > Hearing protection if necessary Norm EN352
- > Protective gloves if necessary EN 388 2121
- > Protective footwear Norm EN ISO 20345 S3 class

\*) where risk assessment has shown a risk of electric arc, additional complementary flame protective clothing shall be worn (such as flame retardant hood, face shield, flame retardant gloves, flame-retardant underwear)

\*\*) EN 61482-1-2 if risk for short circuit and electric arc

For pole and pylon work

- > Safety helmet with chin strap intended for work at height Norm EN397, EN 12492



- > Protective clothing  
High Visibility Norm EN 20471 class 2  
Moisture EN343
- > Safety goggles, if necessary, Norm EN 166 class S
- > Fall protection equipment
- > Hearing protection when necessary, Norm EN 352
- > Protective gloves when necessary, Norm EN 388 2121
- > Protective footwear standard EN ISO 20345 S3 class

When working with motor chain saw

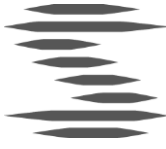
- > Safety helmet
- > Protective clothing for the upper body
- > Eye protection/face protection from injury by mechanical impact
- > Protective trousers or trouser legs with saw protection against injury from the motor-saw chain Norm EN 381
- > Hearing protection
- > Work gloves
- > Safety boots or safety boots with saw protection against injury from the motor-saw chain Norm EN ISO 17249:2013

When working with brush cutter

- > Eye protection/face protection from injury by mechanical impact
- > Protective trousers or trouser legs with saw protection against injury from the cutter Norm EN 381
- > Hearing protection
- > Work gloves
- > Safety boots or safety boots with protection against injury from the cutter Norm EN ISO 17249:2013

Visitors into Customer's electric plants and construction sites who do not perform work

- > Safety helmet with chin strap \*) Norm EN397
- > Protective clothing  
A class 3 high visibility vest 203471



- > Safety goggles, if necessary Norm EN 166 class S
- > Hearing protection if necessary Norm EN 352
- > Protective gloves when necessary Norm EN 388 2121
- > Safety shoes Norm EN ISO 20345 S3 class \*\*)

\*) For visitors at brief site visits, the chin strap requirement may be exempted if the person will be guided around by someone with good knowledge of the operation and the tour takes place in such a way that visitors are not exposed to risk of injury

\*\*) For visitors at brief site visits at the Customer's electrical installations, the requirement of safety footwear is exempted if the person will be guided around by someone with good knowledge of the operation and the tour takes place in such a manner that they are not exposed to risk of injury

Additional personal protective equipment should be used in accordance with the relevant risk assessment/safety instruction or directive from the Coordinator on the relevant workplace or BAS U at work places where there is construction work.

#### Identification

For identification purposes, all who carry out work on behalf of the Customer on substation construction or construction sites, shall wear visible tag with name and company. If the tag does not constitute valid proof of identification, the person must also have such ID available.

#### 5.2.2 Common protective equipment, first aid

The Supplier is responsible that the following common protective equipment is available at each workstation in the work area:

- > ABC hand fire extinguishers, 6 kg in adequate supply
- > Fire blanket
- > Eye wash or rinse bottles
- > First aid board or first aid bag

The Supplier is responsible for ensuring that protective equipment and first aid materials are maintained, are available in sufficient quantity and stored so that its protective power and hygiene standards are maintained.



### 5.3 Alcohol, drugs and medicines

It is not acceptable that an employee is under the influence of alcohol or other intoxicants at work.

The Customer shall be given the opportunity to carry out alcohol and drug testing during the assignment period.

In the event that any employee of the Supplier or of his hired subcontractor is found under the influence of alcohol or any other drug during working hours, the person shall immediately and safely leave the workplace. It is the responsibility of the Supplier to ensure this and replace him with another person with equivalent expertise.

### 5.4 Working hours

The Supplier shall have documented procedures to ensure that the organisation of working hours and length are such that the working environment and safety are not jeopardised. These procedures shall be presented to the Customer before starting work.

### 5.5 Time reporting

In addition to current reporting of work orders at completion, the Supplier shall quarterly report to the Customer the number of hours worked on the site, including officials, and annually and on completion of the contract period report number of total hours of work performed on the site.

### 5.6 Minor

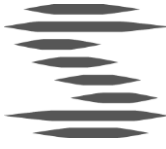
It is not permitted for minors to perform work on or near a live part of an electric power plant (work in operations areas or on power line).

The exception is if the job is

- > included in instructor-led practice as part of secondary education or equivalent education for work with electric power plant
- > performed by young people who have completed secondary education or equivalent education for work with electric power plant

### 5.7 Solitary work

Tasks that cannot be performed safely should not be performed as solitary work. This is particularly important outside normal working hours. Electrical maintenance operations can be performed as solitary work provided that they are carried out in a safe manner and with dedicated equipment.



Before commencing assigned work the Supplier shall have prepared guidelines for how the negative consequences of solitary work may be reduced in the most appropriate way.

The Supplier shall ensure that workers have the training and experience required to perform the work alone and that the worker has been given the instruction required for work alone to be carried out in the safest way possible.

Some of the Customer's plants are equipped with Hourly check, which is activated when the substation's mode of operation is "När" or "Fjärr med när- signal". Hourly check provides a reminder alarm locally in the control room (can be linked to alarm devices in other locations in the station). If the hourly check is not acknowledged within 5 min, general and remote alarm are activated in the operations centre.

For solitary work in the Customer's installations shall:

- > particular notification be given to the responsible Operation centre upon arrival at the installation
- > Hourly check should be activated in the installation if installed (*exception for security patrol, weed control and snow clearance*)
- > staff be familiar with the work tasks and the facility where the work is performed

Activities which may not be carried out as solitary work in the Customer's installations, lines and line corridors are:

- > works where there is a risk of threats or violence
- > the work is carried out by one of the ESA working methods Work in the vicinity of live parts, Dead working, or Live working
- > work performed by minors
- > mast and pole work
- > work in tunnel
- > turn-out in connection with burglar alarm or when risk assessment indicates that break-in may have taken place
- > felling and processing of forest in the line corridor or station areas





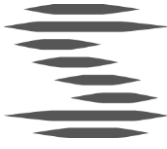
## **Annex 1 – Suitability requirements for overall coordination responsible**

### Basic skills requirements:

- > Good knowledge of the content of AML, the Work Environment Act
- > Good knowledge of the following AFSEs, laws and regulations:
  - Regulations on building and civil engineering work
  - Provisions on systematic work environment management
  - ESA education 14 – Principles and Work for skilled personnel
  - Relevant parts of the Electricity law SFS 1997:857, Power Regulation SFS 2009:22 and the Electrical Safety Authority's regulation ELSÄK-FS 2006:1 professional activity
  - Maintenance norm SS-EN 50110-1 version 3
  - Law on flammable and explosive goods
  - Civil Contingencies Agency's provisions on authorisation for handling of flammable gases and liquids
  - General advice on systematic fire protection work

### Competence requirements depending on type of risks in the relevant project (minimum requirements):

- > Provisions on load ergonomics
- > The workplace design
- > Provisions on ladders and trestles
- > Provisions on asbestos
- > Provisions on chemical hazards in the working environment
- > Provisions on signs and signals
- > Provisions on gas bottles
- > Provisions on pressure carrying equipment
- > Provisions on occasional lifting of persons with cranes or trucks
- > Provisions on use of trucks
- > Provisions on simple pressure containers
- > Provisions on the inspection of lifting devices and other technical devices



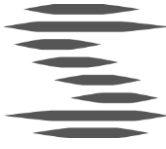
- > Provisions on the use of lifting devices and lifting accessories
- > Provisions on work in explosive environment
- > Provisions on mast and post work
- > Provisions on scaffolding
- > Provisions on work equipment
- > Provisions on protection against fall injury
- > Provisions on machinery and technical devices
- > Provisions about bolt-driving tools
- > Provisions about nail guns
- > Provisions on noise
- > Provisions relating to vibrations
- > Provisions on Quartz
- > Provisions on lead batteries

Experience requirements (supported by CV and reference checks upon request from the Customer):

- > Experience of work with coordination, management, or control of fixed operational sites
- > Knowledge of the organisation's rules and procedures for the work environment

Certificates presented to demonstrate the competency requirements:

- > Training in AML, work environment regulations, for example BAM-education or SAM training (may even be BAS U education)
- > Education in relevant regulations
- > ESA Education incl. a passed grade on written examination



## **Annex 2 – Suitability requirements for BAS P coordinator**

### Basic skills requirements:

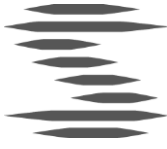
- > Good knowledge of the content of AML, the Work Environment Act
- > Good knowledge of the following AFSes:
  - Provisions on building and civil engineering work
  - Provisions on systematic work environment management

### Competence requirements depending on the type of risks in the current project (minimum requirements):

- > Provisions on ergonomics
- > The workplace design
- > Provisions on ladders and trestles
- > Provisions on asbestos
- > Provisions on chemical hazards in the work environment
- > Provisions on the inspection of lifting devices and other technical devices
- > Provisions on the use of lifting devices and lifting accessories
- > Provisions on machinery and technical devices
- > Provisions of work equipment
- > Provisions about bolt-driving tools
- > Provisions about nail guns
- > Provisions on noise
- > The provisions relating to vibrations
- > Provisions on mast and post work
- > Provisions on Quartz
- > Education ESA 14 – Basic and Work for proficient
- > Current parts of the Electricity law SFS 1997:857, Power Provision SFS 2009:22 and the Electrical Safety Authority's provision ELSÄK-FS 2006:1 Professional Activity
- > Maintenance standard SS-EN 50110-1 version 3

### Experience requirements (supported by CV and reference checks upon request from the Customer):

- > Experience of carrying out building and civil engineering work



- > Experience of work with coordination, management, or control of construction projects
- > Experience of project planning
- > Knowledge of the organisation's rules and procedures concerning the work environment

Certificates presented to demonstrate the competency requirements:

- > AML training, Work Environment Act, for example BAM-education
- > BAS education incl. an approved grade on written examination
- > Education relevant provisions
- > ESA Education incl. an approved grade on written examination



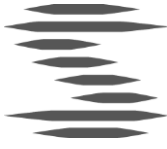
### **Annex 3 – Suitability requirements for BAS U coordinator**

Basic skills requirements:

- > Good knowledge of the content of AML, Work Environment Act
- > Good knowledge of the following AFSes:
  - Provisions on building and civil engineering work
  - Provisions on systematic work environment

Competence requirements depending on the type of risks in the current project (minimum requirements):

- > Provisions on ergonomics
- > Workplace design
- > Provisions on ladders and trestles
- > Provisions on asbestos
- > Provisions on chemical risks related to occupational safety and health
- > Provisions on the inspection of lifting devices and other technical devices
- > Provisions on the use of lifting appliances and lifting gear
- > Provisions on machinery and technical devices
- > Provisions of work equipment
- > Provisions about bolt-driving tools
- > Provisions about nail guns
- > Provisions on noise
- > The provisions relating to vibrations
- > Provisions on the mast-and-poster work
- > Provisions on Quartz
- > Education ESA 14 – Basic and Work for proficient
- > Current parts of the Electricity law SFS 1997:857, power provision SFS 2009:22 and the Electrical Safety Authority's provisions ELSÄK-FS 2006:1 professional activity
- > Management standard EN 50110-1 version 3
- > EBR



Experience requirements (supported by CV and reference checks upon request of the Subscriber):

- > Experience of carrying out construction work
- > Experience of work with the coordination, management, or control of construction projects
- > Familiarity with the Organisation's rules and procedures around the work environment

Certificates presented to demonstrate the competency requirements:

- > AML training, Work Environment Act, for example BAM-education
- > BASIC education incl. an approved grade on written examination
- > Education relevant provisions
- > ESA education incl. an approved grade on written examination