

# Guidelines for the working environment when work is performed by service providers

**Approval Date:** 01.05.2022 **Version:** 01 – May 2022

**Owner:** Corporate Work Environmental Committee (KAMU) **Responsible:** CAS Health, Safety and Emergency (CAS AB)



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# Background

In connection with the operation, inspection, and maintenance of DTU's buildings and facilities, there is a regular need for service providers to perform tasks at the university units, i.e. centres, departments, and support functions.

In some cases, service providers come in response to requests from building users. In other cases, service providers come in connection with planned operations, inspection, or maintenance.

These guidelines have been developed to clarify the joint responsibility and ensure a clear division of responsibility between university units and service providers in relation to identifying, managing, and preventing working environment risks before and during performance of the service providers' services.

The guidelines are intended to be supplemented by auxiliary tools in the form of guides and instructions. These are prepared by each university unit.

The guidelines have been prepared at the request of the Corporate Working Environment Committee (KAMU) by CAS Health, Safety & Emergency (CAS AB), in collaboration with an interdisciplinary working group consisting of representatives from various university units.

### 2. Purpose

The purpose of the guidelines is to promote a good working environment and high level of safety for all in connection with work done by internal and external service providers at DTU.

# 3. Responsibilities and roles

### 3.1 Employer/management

The formal responsibility for the working environment at DTU and for the service providers lies with the respective employers and managers. In practice, a good working environment is created through dialogue between management and employees as a normal part of the day-to-day work.

### 3.2 Collaboration and contact people

It is a joint responsibility to ensure a good working environment and high safety in connection with the work of service providers at DTU. This requires good dialogue between the requester, the recipient, and the supplier of services.

When services are ordered, the contact people from the university unit and the service provider must always be stated. In some cases, it will be necessary to assign several contact people, e.g. if there are multiple service providers involved in the work or several university units involved.

### 3.3 Risk assessment, information, and introduction

The unit that places the order is responsible for considering risks in relation to the local conditions for work and traffic in the given building/area, and providing information about and an introduction to these, so that the service provider can perform a risk assessment in relation to execution of the work.



### 3.4 Instructions and supervision

Based on information about and an introduction to local conditions for work and traffic in the building/area, the service provider's employer/management is responsible for ensuring that the service providers performing the work are sufficiently qualified for the task, and have received the necessary instructions to do the work in a safe and healthy manner.

The service provider's employer/management must also ensure that there is appropriate supervision during performance of the work. The service provider performing the work must always strive to take appropriate precautions against possible risks in the work. This includes using technical aids/equipment and suitable personal protective equipment.

Everyone is obligated to observe the current legislation, including health and safety legislation, building regulations, and DTU's sub-policies and guidelines.

### 4. Scope of use

The guidelines cover the work of service providers throughout DTU. Service providers are tradesmen, technicians, cleaners, window cleaners, gardeners, snow clearers, consultants, etc.

The guidelines cover services provided by internal service providers, e.g. employees from CAS (Campus Service) and IT Services (AIT), as well as external service providers requested by the university units (centres, departments, and support functions e.g. CAS, AIT, AHR, etc.). The guidelines also cover subcontractors to external service providers.

The guidelines apply to suppliers, requesters, and recipients of services.

The guidelines apply to planned services, as well as services required on an urgent basis. Where there is an urgent need for a service, a concrete and specific assessment of the given situation will serve as the basis for risk assessment and handling the service.

The guidelines cover all types of services, except those that are part of a construction project where a health and safety plan (PSS) has been prepared.



# 5. Before the work begins

### 5.1 Risk assessment

#### 5.1.1 University unit

Before a service provider is requested, the university unit must consider risks in relation to the local conditions for work and traffic in the building/area where the service provider is to perform the service. The university unit passes on information about risks to the service provider, so they can prepare a risk assessment for the given work.

#### 5.1.2 Service provider

Before beginning work, the service provider must prepare a specific risk assessment for their own work, based on the university unit's information about local risks.

#### 5.1.3 Working environment organization

If there are any major/complex risks, e.g. in laboratories or workshops, the local working environment organization from the university unit and the service provider must be involved.

#### 5.2 Information

#### 5.2.1 University unit

When ordering services from a service provider, the university unit must inform the service provider who the university unit's contact person is ('DTU's contact person').

The university unit must provide information about the local risks identified for work and traffic in the building/area, and about the precautions the university unit has taken in relation to the identified risks.

The university unit must provide information about any specific working environment requirements it has that the service provider must meet, such as the correct use of protective equipment and chemicals. The same applies if the university unit requires documentation for and control of compliance with the working environment requirements.

When the university unit requests services directly from an external service provider, e.g. in connection with technical research equipment, the university unit must inform the external service provider about local conditions and special risks.

When the university unit requests services via an internal service provider, the university unit must inform the internal service provider about local conditions and special risks. The internal service provider passes on the information if the service is to be provided by an external service provider.

When CAS/AIT orders a service provider for the operation, inspection, or maintenance of CAS/AIT installations, CAS/AIT obtains the above information from the university unit, e.g. via the <u>building manager</u> or another DTU contact person, and CAS/AIT passes on this information to the service provider.



#### 5.2.2 Service provider

When a service provider is ordered, the service provider must inform the university unit who the service provider's contact person for the university unit is. The service provider must inform the university unit in a timely manner of any risks or possible disruptions (e.g. noise, vibration, or dust) associated with the service provider's work, so the university unit can take the necessary measures to protect users and consider neighbours.

If the service provider lacks information in relation to minimizing risks and disruptions for the service provider performing the work and the users of the university unit, the service provider must obtain the lacking information from the university unit.

When CAS/AIT orders a service provider to perform a service for a university unit, the service provider must inform CAS/AIT about risks and disruptions. CAS/AIT must pass on this information to the university unit so that the necessary measures can be taken to ensure the safety and a good working environment of the users.

If it becomes necessary to interrupt the supply of water, electricity, heating, or ventilation, or the fire alarm system or anything else, the service provider performing the work must agree this with DTU's contact person well in advance, so that the management of the university unit can take steps to mitigate the inconvenience to users.

#### 5.3 Introduction

#### 5.3.1 General introduction

The person who orders a service from a service provider is responsible for ensuring that the service provider receives an introduction to safe movement and traffic in the building/area and is made aware of safety signs at DTU (see section 6.3.1).

The service provider must read and follow DTU's safety leaflet for tradesmen and contractors (*Tips and rules*). Only service providers who have received the right introduction may have access to the building/area.

When an external service provider is ordered directly by the university unit, the unit is responsible for providing an appropriate introduction to the service provider performing the work, so that the service provider can actively prevent accidents in connection with the work.

When a service provider is ordered via CAS/AIT, CAS/AIT is responsible for providing an appropriate introduction to the service provider performing the work, so that the service provider can actively prevent accidents in connection with the work. This applies regardless of whether the performing service provider is internal or external.

Based on information about risks and working environment requirements, the service provider's employer/management is responsible for ensuring that the service provider performing the work is sufficiently qualified for the task and has received the necessary instructions. The duty to provide instructions also applies when equipment owned by DTU is used, unless otherwise is agreed with DTU's contact person.

The service provider's employer/management must also ensure that there is appropriate supervision during performance of the work. The service provider performing the work must always strive to take appropriate



precautions against possible risks in the work. This includes using technical aids/equipment and suitable personal protective equipment.

#### 5.3.2 Specific introduction

Before starting work in high-risk areas, such as laboratories and workshops, DTU's contact person and the person at DTU responsible for the high-risk area must jointly ensure that the service provider performing the work receives specific introduction and is informed about respecting and following safety signs. Where there is an SOP (Standard Operating Procedure), this must be followed.

# 6. During execution of the work

### 6.1 Cooperation – agreements and requirements

The university unit and the service provider must work together to create a good working environment and a high level of safety for users and the service provider performing the work at the common workplaces in the university unit's building/area.

The university unit and the service provider must coordinate their health and safety measures and ensure that users and the service providers performing the work cooperate to create a good working environment and a high level of safety in their common workplaces.

The university unit and the service provider must ensure that any requirements set for the service provider in relation to the working environment, inspection, or documentation are followed up.

The service provider performing the work must follow DTU's safety leaflet for tradesmen and contractors (*Tips and rules*). This includes wearing the access card/visitor card issued by DTU visibly.

If the work is extensive and possibly involves several different activities, the university unit and service provider must assess whether there is a need for coordinating meetings and draw up joint written guidelines for the work and cooperation at the common workplaces where appropriate.

The service provider must notify DTU's contact person of any changes in the timing of activities in the schedule as early as possible. Before initiating new activities during the work, the service provider performing the work must discuss safety with DTU's contact person.

### 6.2 Consideration for users and neighbours

The service provider performing the work must show maximum consideration by organizing and carrying out the work so that it causes the least possible disruption to users and neighbours.

The service provider performing the work must:

- · comply with any agreements in relation to:
  - o restrictions on working hours.
  - reducing noise, vibration, or dust when choosing machines and working methods, and organizing the work site.
  - o other disruptions.
- supervise dangerous tools and processes and ensure that no one is injured during execution of the work.



Particularly noisy work which would disrupt teaching, exams or other activity taking place in the university unit's building/area, must be carried out at early or late hours when it will not disturb users. Consideration must also be given to neighbours as well.

Interruptions to the supply of water, electricity, heating, ventilation or other services may only be made by agreement with DTU's contact person well in advance, so that the university unit has the opportunity to take steps to mitigate any inconvenience to users.

The university unit must make sure that users are informed of the risks and precautions associated with the service provider's work, to ensure their safety and working environment. Neighbours must also be informed of any possible disruptions (noise, smoke, mess).

### 6.3 High-risk work and/or areas

There are many different types of high-risk work and areas at DTU. In the following sections, a number of these are mentioned, although the sections are not exhaustive.

In general, for high-risk work or areas, the service provider and DTU's contact person must first jointly perform thorough planning and risk assessment for the execution of the work. This must consider how the work can be organized and carried out in a safe and healthy manner, e.g. in laboratories and workshops requiring specific measures and behaviour (see sections 5.1.3 and 5.3.2).

The service provider performing the work must always use appropriate technical aids and personal protective equipment in order to carry out the work in a fully safely manner.

### **6.3.1 Signs**

The service provider performing the work must always respect and follow safety signs, e.g. in high-risk areas. The person at DTU responsible for the given high-risk area where a service provider is performing work must ensure that the service provider respects and follows the safety signs for the area.

#### 6.3.2 Work at height – including on roofs, scaffolding, lifts, and ladders

When working at height, the service provider must always assess and decide how the work can be carried out in a safe and healthy manner. Safety measures to protect against falls must always be in place, and the service provider must focus on:

- appropriate instructions and training for all service providers performing the work.
- technical aids and suitable personal protective equipment to carry out the work in a fully responsible manner, e.g. fall protection, scaffolding, lifts, or ladders.
- lifts or scaffolding should generally be used rather than ladders.
- supplier instructions for use/installation instructions/approvals/inspections are available at the work site.
- special risks when using technical equipment, and who is allowed to work with this (e.g. certificate requirements, age limits).
- proper safety barriers for the work site and the area below.
- shielding to prevent falling objects.
- removing tools, ladders, etc. at the end of working day, unless the work site is cordoned off and locked.



- establishing safe access and transport routes, so there is enough space to transport aids and equipment before, during, and after the work.
- blocking escape route doors is not allowed.
- fire roads must not be blocked without a permit from the authorities.

#### **6.3.3** Hot work

Before beginning hot work, the service provider must complete DTU's 'Agreement on safety measures for hot work'. The agreement is provided by and returned to DTU's contact person. The service provider performing the work must attach a copy of a valid hot work certificate to the completed agreement.

#### 6.3.4 Electrical work

The service provider must strive to only work on voltage-free (disconnected and possibly grounded and/or short-circuited) plant components. For high-voltage plant, the component must always be disconnected and grounded. High voltage means any voltage > 1000 volts AC (alternating current) or > 1500 volts DC (direct current).

On the rare occasions when the service provider must work on or near live plant components, particularly thorough planning and risk assessment for the execution of the work must be carried out in advance.

#### 6.3.5 Work in enclosed spaces

When working in containers, boilers, tanks, silos, wells, pipelines, crawl spaces, and other enclosed spaces with poor ventilation, the service provider must ensure through appropriate measurements that there are acceptable values for oxygen and other gases.

#### 6.3.6 Work on roads

Work performed on or near roads, bike paths and pavements must be planned and carried out according to the road regulations. When working on roads or in other areas with a risk of collision, measures must be taken that effectively protect the service provider, and special attention must be given to signs, traffic barriers, warning lights, and reflective workwear.

#### 6.3.7 Work in areas with hazardous substances and materials

When working in areas where hazardous substances or materials have been found, such as asbestos, epoxy, PCB, lead, or nano particles, or where there is suspicion of these in a material or building, special rules and guidelines for these must be followed. Where there is any doubt, the presence of hazardous substances or materials must be investigated and mapped before executing the work.

Before the work is executed, the service provider and DTU's contact person must jointly complete thorough planning and a chemical risk assessment for the execution of the work, which describe how the work can be planned, organized, and carried out in a safe and healthy manner. In general, effort must be made to eliminate, prevent or reduce the risk of exposure to hazardous substances and materials.

The service provider's employer/management must ensure and supervise that the service providers performing the work:

- follow any special rules and guidelines and safety measures for the work.
- have received instructions and adequate training, and have completed special training where this is required, for example, when working with asbestos, epoxy, etc.
- correctly use appropriate technical aids in the work.



- use special workwear and personal protective equipment where required.
- have access to the chemical risk assessment, containing a list of all hazardous substances and materials present at the work site, and the relevant safety data sheets from suppliers.

#### 6.3.8 Work in ATEX areas

The service provider's employer/management must ensure special instruction and training for service providers performing repair and maintenance work in ATEX areas, and the safe use of suitable ATEX equipment.

In the case of hot work (welding, cutting, grinding, soldering, etc.) using tools that generate heat, extra precautions must be taken to ensure that the risk of fire, explosion, or other accident is minimized before, during, and after the work (see also section 6.3.3 on hot work).

#### 6.3.9 Solitary work (work alone)

If a service provider must perform solitary work, this must be organized so that it does not pose a particular danger. This means that it is important to assess each task before solitary work is done, e.g. when working in tunnels. The assessment is carried out in collaboration with the immediate supervisor, and possibly involving DTU's contact person and/or the working environment organization.

#### 6.4 Welfare facilities

The service provider's employer/management must ensure that the service provider performing the work has access to welfare facilities, including a toilet, sink and eating area. The service provider arranges with the university unit to what extent and under what conditions the service provider performing the work may use the university unit's welfare facilities.

### 6.5 Materials and waste

The service provider must agree on storage of materials with DTU's contact person.

Materials must be located in such a way as to cause the least possible disruption to building users. Escape corridors and stairways must be kept clear. If it becomes necessary to store materials or perform work in escape corridors (never on escape stairways), the service provider performing the work must always be present and ensure that materials can be easily moved, so that escape route conditions are not compromised in an evacuation situation.

If it is necessary to store the service provider's waste at the building, this must be done by agreement with Campus Service, in containers placed at a suitable distance (at least 5 m) from the building for the sake of fire hazard. Materials and equipment must never be placed on top of well covers etc.

The service provider must dispose of their waste in line with applicable legislation.

The service provider must remove their waste and materials for recycling on a daily basis, unless agreed otherwise with DTU's contact person. The service provider must follow CAS' instructions for waste disposal if an agreement has been reached with CAS to dispose of waste via DTU's waste schemes in connection with specific tasks.



# 7. After the work is complete

Commissioning after interruption of the main supply of water, electricity, heating, ventilation or other may only be carried out in agreement with DTU's contact person from Campus Service.

After the work has been completed, the service provider must remove their waste from DTU's buildings and areas. Cleaning and tidying up after the work is completed is part of the service provider's service. The service provider must report that the work is completed to DTU's contact person.



### Glossary

#### ATEX

Areas with a risk of explosive atmospheres.

#### Users

All DTU employees and students who enter DTU's sites or use DTU's facilities, including buildings and equipment.

#### Building manager

Each building at DTU has a <u>building manager</u> associated, who can be contacted in connection with operations, maintenance, and other building matters (indoors and outdoors), such as renovation, rebuilding, notifications about window cleaning, snow clearing, etc.

#### Introduction

DTU's contact person must inform the service provider about general and working environment conditions, including the scope of the work, location, special risks, emergency and evacuation.

#### Instructions

Employers must ensure that employees receive adequate and appropriate instruction, so that they can perform the work in a hazard-free manner. The Danish Working Environment Authority does not impose any minimum requirements regarding the form or scope of instructions, but they must clearly inform the employee how to handle situations and use the equipment that is necessary for the work to be done in a safe and healthy manner.

#### Contact person

When services are ordered, the contact persons for the university unit and the service provider must be stated. In some cases, it will be necessary to assign several contact persons, e.g. if there are multiple service providers or university units involved in the work.

The role of the contact persons is to have insight into and understand the given process and service. It is particularly important that the contact persons can contribute knowledge and understanding in relation to risks and the working environment, so there can be good and safe coordination in planning and executing the service.

Contact persons at DTU could be: Building manager, working environment coordinator, laboratory manager, facility manager, workshop manager, member from working environment organization, project manager, CAS/AIT service technician, etc.

#### Laboratories and workshops

There are many different types of workshops and laboratories at DTU, so pay special attention to signs and hazard symbols for these areas, as access is restricted.

#### Neighbours

Residential areas and businesses in the local area, as well as local authorities, e.g. the municipality, police, emergency services.



#### Risk assessment

A risk assessment is a method used to assess and plan a work task, including what safety measures should be in place at the work site. The risk assessment must ensure that the probability of an accident occurring is so low that the work can be carried out safely.

Risk assessment must always be done in both acute and non-acute situations.

#### · Service providers

Refers to tradesmen, technicians, cleaners, window cleaners, gardeners, snow clearers, consultants, etc.

The guidelines cover services provided by internal service providers (e.g. employees from CAS and AIT), as well as external service providers ordered by the university units (centres, departments and support functions, e.g. CAS, AIT, AHR, etc.). The guidelines also cover subcontractors to the service providers.

#### • University units:

Centres, departments and support functions, e.g. CAS, AIT, AHR etc., see DTU's organization chart



# Flow charts

# Flow chart no. 1

### University unit orders service from internal service provider (CAS/AIT)

Before a service provider is requested, the university unit must consider risks in relation to the local conditions for work and traffic in the building/area where the service provider is to perform the service.

Need	•A need for service at a university unit arises
Ordering	•University unit orders an internal service provider, and information about contact persons is exchanged
Information	•Initial information and dialogue between the university unit and internal service provider about conditions and potential risks in connection with the service
Planning	•Internal service provider carry out a risk assessment and plan precautions in relation to the service
Introduction	•Further dialogue and the university unit introduces internal service provider to safe work and traffic in the building/area in connection with the performance of the service
Performance	•Internal service provider performs service in a safe manner
Notification of completion	•Service performed and internal service provider reports service completion to the university unit



# Flow chart no. 2

### University unit orders service directly from an external service provider

Before a service provider is requested, the university unit must consider risks in relation to the local conditions for work and traffic in the building/area where the service provider is to perform the service.

Need	•A need for service at a university unit arises
Ordering	•University unit orders an external service provider, and information about contact persons is exchanged
Information	•Initial information and dialogue between the university unit and external service provider about conditions and potential risks in connection with the service
Planning	•External service provider carry out a risk assessment and plan precautions in relation to the service
Introduction	•Further dialogue and the university unit introduces external service provider to safe work and traffic in the building/area in connection with the performance of the service
Performance	•External service provider performs service in a safe manner
Notification of completion	•Service performed and external service provider reports service completion to the university unit
completion	



# Flow chart no. 3

# University unit orders service from internal service provider (CAS/AIT), which requests external service provider to carry out the service

Before a service provider is requested, the university unit must consider risks in relation to the local conditions for work and traffic in the building/area where the service provider is to perform the service.

Need	•A need for service at a university unit arises
Ordering	•University unit orders an internal service provider, and information about contact persons is exchanged
Information	•Initial information and dialogue between the university unit and internal service provider about conditions and potential risks in connection with the service
Forward information	•Internal service provider requests external service provider to perform the service - contact information is exchanged and internal service provider forwards information between the university unit and external service provider
Planning	•External service provider carry out a risk assessment and plan precautions in relation to the service
Introduction	•Further dialogue and internal service provider introduces external service provider to safe work and traffic in the building/area in connection with the performance of the service
Performance	•External service provider performs service in a safe manner
Notification of	•Service performed and external service provider reports service completion to internal service provider who forwards the information to the university unit
completion	
completion	



completion

### Flow chart no. 4

# CAS/AIT orders service in connection with operation, inspection and maintenance of installations/equipment/building

CAS/AIT must, in cooperation with the university unit, consider risks in relation to the local conditions for work and traffic in the building/area where the service provider is to perform the service.

# • A need for service in connection with operation, inspection and maintenance of installations/equipment/building arises Need CAS/AIT assesses whether the service should be performed by an internal/external service An internal/external service provider is ordered and information about contact persons is Ordering exchanged Initial information and dialogue between the university unit (via the building manager or other DTU contact person), CAS/AIT and internal/external service provider about conditions and potential risks in connection with the service Information •Internal/external service provider carry out a risk assessment and plan precautions in relation to the service **Planning** • Further dialogue and CAS/AIT introduces internal/external service provider to safe work and traffic in the building/area in connection with the performance of the service Introduction •Internal/external service provider performs service in a safe manner Performance Service performed and internal/external service provider reports service completion to CAS/AIT, which forwards information to the university unit Notification of