

AVINOR AS

Appendix D5

Requirements for HSE and fire safety

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1 GENERAL

The purpose of this requirement document is to ensure that HSE requirements and requirements for fire safety are taken care of in building/construction projects at Avinor's airports.

In the event of a breach of applicable requirements and regulations regarding HSE and fire safety, the contractor is responsible for implementing the necessary measures without additional remuneration.

2 TRAINING

The contractor must participate in Avinor's training when working at the airport.

The contractor must carry out HSE training of personnel under his contract and sub-contractors on the specific project risks. A start-up meeting/introductory course for personnel in the project, including hired and sole proprietorships shall be held. Here, the project's goals, requirements and risk factors must be reviewed. The contractor must complete SfS BA's courses "Project Danger Blind" and "Dangerous Patterns" before the start of contract work. [SfS BA kursoversikt - EcoOnline LMS](#). These are course made in agreement between client and constructor organisations. The contractor's HSE manager/safety management in the project must have documented training.

3 SYSTEMATIC HSE WORK

3.1 General

Avinor has a zero vision for injuries and accidents. The contractor must carry out systematic, risk-based HSE work.

Before the start of the contract work, the contractor must conduct a review of the contract's activities to identify activities that are critical for safeguarding HSE. Learning and experience after incidents will be used as part of the continuous improvement process. HSE and safety work must be the first agenda item at all construction meetings.

Monthly HSE reporting must be done by filling in attachment at the end of this document. Relevant data is: Personal injuries w/absence, personal injuries without absence, number of RUH, number of safety inspections, number of SJA, number of HSE risk analyses, hours worked

3.2 HSE plan

The contractor, including subcontractors, must have a documented assignment-specific internal control. In accordance with the requirements of the Internal Control Regulations the contractor must prepare a specific HSE plan for this project while including the relevant points from the Client SHA plan. The HSE plan must be prepared and presented no later than two weeks before start-up. The client may postpone the start of the work until the HSE plan has been accepted. The client shall be indemnified for any delayed start-up.

3.3 Risk assessments and risk management

3.3.1 General

Risk assessments must be carried out and documented for risky work. Planned risk assessments must be viewed in the context of specific measures stated in the client's SHA plan, as well as applicable work procedures and the contractor's internal control system. The contractor must continuously and as soon as possible inform the client of uncovered risk factors that are not described in the client's SHA plan.

The client must be informed of the contractor's planned work with risk assessments. The client has the right to participate in meetings concerning risk and relevant risk assessments must be submitted.

Identified risks and measures must be implemented in the contractor's HSE plan, which must include an assessment of risk with associated measures related to:

- Building and construction activities
- Safety and security
- Fire safety
- HSE

The contractor shall systematically carry out and update risk assessments and preventive measures.

Risk-reducing measures that reduce probability rather than consequence should primarily be chosen.

3.3.2 Safe Job Analysis (SJA)

The client must be informed about the SJA in advance and has the right to participate in the implementation of the SJA. The SJA must be made available to the Client. The contractor must ensure that the SJA is made by those who will carry out the work in question and that the SJA is translated into relevant languages.

3.3.3 Pre-job conversations (Toolbox)

The supervisor must hold a pre-work interview with each shift just before work is due to start and ensure that all personnel involved understand what they are going to do, communicate the risks associated with what they are going to do and verify that all control measures are in place and maintained, and that notification routines are known.

3.3.4 Safety information on the construction site

The contractor must ensure that relevant safety information is made available on the construction site.

3.4 Requirements for protective equipment

The contractor must ensure that personal protective equipment used in the workplace provides fully adequate protection. The contractor must assess whether the work may entail a risk to the life and health of employees. Everyone who travels on a construction site is responsible for familiarizing themselves with the requirements for the use of protective equipment.

In addition, the following specific airside requirements apply:

- The use of safety goggles is required on the airside if there is a risk of blast (strong winds from the aircraft engine).
- Upper visibility clothing is mandatory on the airside

3.5 Use of machinery and equipment

3.5.1 General

Only machines and equipment that satisfy regulatory requirements and have approved CE marking with the necessary certificates/certification marks must be used.

The contractor must prepare an overview of certificates and approvals for the technical equipment and ensure that these are kept up to date. The equipment must be inspected before it is put into use (checklist for self-monitoring).

3.5.2 Indoor work equipment

Care must be taken when equipment such as lifts, forklifts, snails and pallet trucks are used indoors. The equipment must never be left so that unauthorized persons can use it. The equipment must be parked in designated spaces. There is a requirement for a gel battery in all forms of work equipment that are to be used indoors, and charging indoors must only take place if the equipment has a gel battery.

3.6 Work at height

Work at height, on scaffolding, on roofs or other structures must be planned and carried out in a safe manner. When working at height with a work platform over 2 metres, fixed or rolling scaffolding, personal lifts/lifts or other equipment approved for personal lifting must be used. Particular emphasis shall be placed on the following points:

- Only ladders and trestles are permitted that meet safety requirements and are marked with 'Good Working Environment Choice'
See image below for accepted solutions and [bra-arbeidsmiljøvalg-kriterier.pdf](#).
- Curtain stairs beyond EBA's Good Working Environment Choice are not permitted.



Se etter dette merket

Generelle krav til produktene

- Produktene skal oppfylle tekniske krav i relevante NS-EN standarder og / eller Produsentforskriften.
- Frittstående produkter skal kunne låses i utfelt posisjon.
- Trinn skal være sklisikre
- Produkter over 15 kg skal være utformet med hjul eller lignende for å unngå tunge løft.

OBS! Produkter av aluminium/glassfiber er typegodkjent for enklere el-arbeider. Ved arbeid med høyspenning i tavler, kreves særskilte rutiner og annet utstyr.

Bra arbeidsmiljøvalg - spesifikke krav per nivå



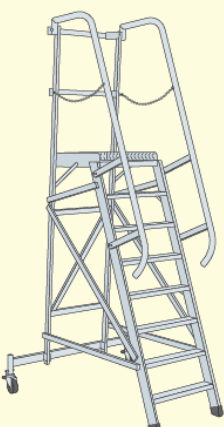
Nivå 1. < 0,5 m plattformshøyde. Arbeidsbukk

- Maksimumshøyde 2 trinn inkl ståplanet.
- Minimumsmålet på ståplanet skal være (b x d) 600x300 mm.
- Arbeidsbukken skal ha like mange trinn på begge sider om den ikke har en stopp-/ støttebøyle.
- Høyden mellom trappetrinnet skal maksimum være 30 cm.
- Dybden på stigtrinet skal minimum være 5 cm.



Nivå 2. 0,5 m - 1,25 m plattformshøyde. Gardintrapp/ trappestige

- "Stoppanvisning" på minst 3 sider.
- Minimumsmålet på ståplanet skal være (b x d) 300x250 mm.
- Høyden mellom trappetrinnet skal maksimum være 30 cm.
- Dybden på stigtrinet skal minimum være 5 cm.



Nivå 3. 1,25 m - 2 m plattformshøyde. Arbeidsplattform.

- Rekkverk på minst 3 sider.
- Minimumsmålet på ståplanet skal være (b x d) 400x400 mm.
- Høyden mellom trappetrinnet skal maksimum være 30 cm.
- Dybden på stigtrinet skal minimum være 5 cm.



Nivå 4. > 2 m plattformshøyde. Arbeidsplattform.

- Rekkverk på 3 sider pluss ryggskring.
- Minimumsmålet på ståplanet skal være (b x d) 400x400 mm.

If the requirements cannot be met, the contractor must apply for exception from the Client.

3.7 Inspections and safety rounds

The contractor's project/construction manager shall, together with its own safety representatives/HSE personnel, carry out safety inspections at least every two weeks for its own and any subcontractors' / subcontractors' work.

The client must be notified of the time and has the right to participate in the safety inspections. A report from the safety inspections must be sent to the Client.

3.7.1 Safety inspections shall also include environmental topics/aspects, Reporting of undesirable incidents(RUH)

The contractor must ensure that all undesirable incidents are reported and dealt with internally. The client has the right to access all reporting of undesirable incidents (RUH).

Serious incidents must be notified to the client immediately in line with the notification plan. The client has the right to request an extended report and an explanation of the measures that are being implemented to prevent a recurrence of the situation.

The contractor must immediately notify the client if the Labour Inspection Authority or other supervisory authorities have carried out an inspection or issued an order to stop the work, rectify system faults or similar that may have an impact on the implementation of the building or construction work.

3.7.2 Investigation of undesirable incidents

Where the contractor carries out an investigation of an undesirable incident (including fatal accident), the client must have submitted a completed investigation report (name-censored version in the case of sensitive personal information). The contractor must submit the report no later than one week after it has been completed.

In the event of incidents with serious consequences (risk of death or permanent injury) or incidents that could have led to serious consequences, the client may demand to participate in the contractor's investigation.

The client may require the contractor to contribute to the client's investigation and investigation work free of charge.

4 PREVENTIVE MEASURES

4.1 Securing the construction site

In the case of work in close proximity to where the public/passengers travel, the contractor must ensure that the work area is secured throughout the construction period, including ensuring that no unauthorised persons have access to the building/construction site. The contractor must take the necessary measures to prevent passers-by and neighbours from being exposed to splashes, drops of objects and collisions.

The workplace must appear neat and orderly. The public/passengers must be informed about what is going on at the workplace. The information must be placed clearly visible to the public. It shall not be possible for the public/passengers to acquire dangerous objects or tools from work sites within the CP (Critical Parts) area.

4.2 Safe and clear construction area

The construction area must be clear and safe, so that the contractor's employees have a fully satisfactory and safe workplace at all times. The contractor must pay particular attention to the risk of blast (wind from a jet engine) and FOD (damage as a result of unwanted objects on or near the runway) during outdoor work.

Every contractor must clean up their own work on an ongoing basis, but the contractor is jointly and severally liable together with other contractors if the obligation is not complied with.

4.3 Consideration for other businesses

The contractor must take into account other businesses (interfaces) on or near the building/construction site. To avoid unforeseen operational consequences, the contractor must participate in risk assessments with the airport and the client organisation.

4.4 Use of alcohol or other drugs

Personnel under the influence of alcohol or other drugs are not allowed to stay on the client's construction site.

4.5 Safe access and safe routes

The parking of vehicles, machinery and equipment shall not be an obstacle to other traffic and construction operations. Roads must be kept open, cleared and free of materials and waste. The contractor must follow the airport's rules for traffic.

4.6 Maintenance and control of plant and equipment

The contractor must have routines for maintenance and control, including control before start-up, of all machines and equipment that are to be used in the construction area. The work equipment must be approved for use in Norway.

All construction machinery and associated equipment that can be connected to or towed by the machines (trailers, agitators, etc.) and that are to be used on the construction site must be registered in the Machine Register [Maskinregisteret - Sentralregisteret](#). The machines and equipment must be registered on arrival at the building and construction site.

The client shall be given access to the register in order to be able to exercise real-time control and obtain an overview of the contractor's and subcontractor's registered machinery and equipment.

4.7 Marking and preparation of areas for the storage and storage of hazardous materials or substances

The contractor must ensure that areas for storage and safekeeping of materials are marked and arranged. Containers and packaging for hazardous chemicals must be clearly marked with a hazard symbol (hazard pictogram), in addition to hazard and safety information in Norwegian. The contractor must ensure that all personnel receive the necessary training in a language the recipient understands.

The substance register for chemicals must be available electronically, both at the storage site and at the place of use. The substance register shall enable automatic control of any content of substances harmful to health and the environment in products. The client must have access to the electronic substance register system.

4.8 Storage, handling and disposal of waste and hazardous materials

The contractor must ensure that all storage sites in its area are properly secured, fenced off and signposted with hazard markings.

The contractor must ensure that safety data sheets/forms for the declaration of hazardous waste are always included when shipping chemicals from the construction site. Removal of chemicals/explosives must be traceable and documented.

5 NOTIFICATION AND EMERGENCY PREPAREDNESS

If an accident occurs, the contractor must call for help in line with current notification routines for the airport, secure the scene of the accident, take care of the injured person and meet the fire and rescue service at the agreed meeting point for unloading to the scene of the accident.

All first-line notification in the event of accidents and incidents must be made to the emergency services and the Operations Centre/Hotline.

The contractor shall prepare its own Construction Site Emergency Response Plan as agreed and no later than before start-up on site.

The Construction Site Emergency Response Plan must specify the contractor's first-line action to limit, notify (including notify the client) and deal with accidents and incidents. Relevant parts of the airport's Emergency Response Plan must be taken into account and incorporated. The plan shall include incidents involving personal injuries, environmental incidents and major material damage. The Construction Site Emergency Response Plan must also have procedures for notification if pollution is encountered during excavation work.

The Construction Site Emergency Response Plan must be available at the construction site at all times. The contractor must ensure that the plan is reviewed and well known to personnel working on the construction site.

6 MAIN COMPANY

If the contractor is the main undertaking, the contractor shall, in addition to the requirements of the Working Environment Act and associated regulations, establish a system for access control for registration in/out of building/construction areas. The system must be compatible with HMSREG.

The contractor must establish and update a plan, such as a progress plan, for the main company's activities, stating the scope and frequency of activities. The main company's activities must support the client's vision of zero damage and accidents. The main company's plan must be available to the client at all times.

7 HSE-CARD AND HMSREG

The contractor must use HMSREG as an electronic tool for crew registration and seriousness work. Among other things, the contractor is responsible for pre-registration of crew, follow-up of its own non-conformities, and for ensuring that electronic overview lists are kept in HMSREG. The contractor must ensure that employees and subcontractors use the tool and register the HSE-card via current access control. The contractor and subcontractors must use Avinor's platform in HMSREG.

Note: To work on an construction site, the contractors personnel must obtain personal HSE-cards. In order to obtain such a card the following must be in order:

- Organization has a norwegian organization number
- The worked has a D-nummer or norwegian hirth number
- The working relation is registrerd in the Aa-registeret

8 VIOLATION OF HSE REGULATIONS - EXPULSION

The client can expel personnel who violate HSE and safety rules. This includes the use or influence of drugs at the facility.

The client determines the duration of the expulsion.

The dismissal shall not entail financial liability for the client.

9 FIRE SAFETY DURING THE CONSTRUCTION PERIOD

9.1 General

For all construction work for Avinor, organisational and technical security and control measures must be in place. During the construction period, there will be operations in the buildings, but parts of the technical installations such as fire alarm and sprinkler systems may be out of operation. It is therefore very important that safety is ensured through control and assessment of risks that exist. During this period, it is important to consider extraordinary measures such as round-the-clock security to prevent undesirable incidents from occurring.

Goals for fire safety during construction periods:

1. The construction work must not lead to an unacceptable risk to people on the construction site.
2. Measures shall be taken to prevent incidents at the construction site that represent an increase in the risk of the buildings used in the operation of the airport.
3. Changes to existing buildings must be carried out while maintaining the security level in the building.
4. Rescue and extinguishing crews must at all times have satisfactory opportunities to make an effective effort.

The contractor must supervise its own employees, subcontractors and suppliers to ensure that routines/instructions are followed. This includes:

- Knowledge of the area/building (interlocking systems and escape routes)
- Placement and use of extinguishing agents and manual detectors in connection with the workplace
- Conduct in accordance with fire instructions that apply to the building
- Fire Alarm Signal Identification
- Knowledge of the building's evacuation meeting point/place
- Knowledge of routines for; hot work, switching on and off sprinklers and fire alarms, requirements for tidiness in escape routes
- Reporting of deviations

9.2 Fire protection measures

9.2.1 Fire sectioning and fire cell limiting structures

Holes in existing fire separators must be temporarily fireproofed before leaving the workplace.

9.2.2 Escape routes

Escape routes must be operational during the construction period unless otherwise specifically agreed.

If there is a need for closure of, or obstructions in, escape routes, the client must be contacted.

9.2.3 Fire alarm system

In the event of work that may affect the fire alarm system (smoke, hot work or similar), the contractor must notify the airport's operations centre/client before the work can be initiated. Separate fire logs must be used when working at an airport in operation.

Triggering the fire alarm system leads to a direct alarm to APOC which could result in major practical and financial consequences for the operation of the airport. Necessary consideration must therefore be taken when notifying a fire at the construction site.

9.2.4 Escape route lighting

The Escape route lighting system in existing buildings must be operational at all times, and reflect the escape conditions that are considered acceptable.

9.2.5 Fire sprinkler system

Disconnection of the fire sprinkler systems requires an approved registration.

9.2.6 Smoke ventilation

In areas where smoke ventilation deteriorates during the construction period, alternative fire safety measures must be established.

9.2.7 Fire extinguishing equipment

There must be access to sufficient fire extinguishing equipment adapted to the risk and use in question at all times.

9.2.8 Accessibility for rescue and extinguishing crews

The construction sites and adjacent facades must be available for rescue and extinguishing efforts.

9.2.9 Hot work

When working indoors, there must be ventilation extraction to prevent odours and smoke from spreading. The person performing the work must be certified for hot work.

9.2.10 Flammable goods, gas

Flammable goods or gas must not be stored inside buildings. In cases where this is carried in connection with work, it must be removed from the area at the end of working hours for storage at the agreed place. The contractor is responsible for reporting this to the central authorities and performing the required risk analyses.

9.3 HSE report template

Project number:

Contract: [Contract number and name]

Contractor: [Name]

Report no.: [#]

Period: [Month and year] Period start: [Date] Period end: [Date]

1 Injuries

Personal injury with absence	Absence injuries this period	Absence injuries accumulated	Absence frequency rate (H1) accumulated
Own employees			
Employees of subcontractors			
Total			

[Briefly describe the injuries during the period – incident, consequence and measures]

Personal injury with and without absence	Personal injuries this period	Personal injuries accumulated	Personal injury frequency rate (H2) accumulated
Own employees			
Employees of subcontractors			
Total			

[Injuries during the period are briefly described – incident, consequence and measures]

2 Undesirable HSE incidents (including Airport safety and Airside security)

Registration of undesirable incidents (RUH)	RUH this period	RUH accumulated	Near-accident frequency rate (N)
Registered by own employees			
Registered by employees of subcontractors			
Total			

[Incidents during the period are briefly described and categorised by severity]

3 HSE risk management (including Airport safety and Airside security)

Activity	Amount this period	Amount accumulated
HSE risk analysis, Airport safety and Airside security		
Safe Job Analyses		
Safety inspections		

[Activities during the period are briefly described]

4 Personnel matters

Personnel at the construction site	Persons during the period	Working hours during the period	Working hours accumulated
Own administrative employees			
Own production employees			
Administrative employees at subcontractors			
Production workers at subcontractors			
Total			