# national**grid**

**Telehandler Guidance Booklet** 



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The following documents were consulted in the creation of this booklet

HS(6)144 The Safe Use of Vehicles on a Construction Site

HS6 Lift Trucks

L117 RIDER Lift Trucks, Operator Training. Approved Code of Practice & Guidance

SFPSG Safe Use of Telehandlers in Construction

HSE Telehandler Bulletin, Telendler Visibility

Safety Bulletin No. 24 Guidance relating to use of Stabilizer Pad Size Calculato

Safety Bulletin No. 309 Telehandler Operatives with CPS Accreditation

## Foreword

This guidance booklet has been produced by the UK Construction Telehandler Working Group, a group made up of representatives from UK Construction, Asset Management and Construction Industry Partners. The booklet provides information gathered as part of a review, to improve safety in the planning and operation of Telehandlers on Construction sites.

This booklet is intended to be guidance to support existing procedures; it is not a replacement for your existing procedures. Where the term 'must' is used in this booklet it should be considered to be best practice, current procedures may not include such requirements. If you have any queries or concerns, please discuss them with your line manager, supervisor or safety representative.

This booklet has been developed in conjunction with and is supported by our partners, including:



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# Design, planning & selection

Use of Telehandlers must be considered in the design, planning & selection phase.

## What does it mean for us?

- Designers, Project Leads or Site Supervisors must consider if the Telehandler is the appropriate tool for use
- Designers, Project Leads or Site Supervisors involved with the selection of Telehandlers on site must consider the areas detailed in Appendix A
- Suitability of Telehandlers on construction sites must be considered as part of the Temporary Works Design at the design stage
- Proximity to crush risks must be assessed at the planning stage and controls identified
- Sub-contractors must agree the Telehandlers selection with the site coordinator prior to arrival on site

# **Procurement standard**

Hired-in machines must comply with British Standard BS EN 1459:1998. The British Standard must be included in the procurement request when ordering Telehandlers.

## What does it mean for us?

- Ideally Telehandler should be no more than five-years old
- Meets the BS EN 1459;1998 standard (Telehandler)



Hired-in machines must comply with the British Standard. The British Standard must be included in the procurement request when ordering Telehandlers.



# **Appointment of a Telehandler Co-ordinator**

A Telehandler co-ordinator must be appointed where Telehandlers are used on sites.

# What does it mean for us?

- The Telehandler coordinator needs to be a formally appointed role and is responsible for enacting all the responsibilities outlined in Appendix B
- This does not need to be a separate full-time role



# Training, competence & behaviour

All involved in the management and use of Telehandlers must be trained and competent. Roles and responsibilities are clearly defined and should be adhered to at all times. There are 3 clear roles, Vehicle Marshall, Plant Banksman and Slinger Signaller, responsibilities are defined below.

## Vehicle marshal:

An Individual with the competency to aid the vehicle driver to safely move the vehicle (driven) e.g aiding a delivery driver to reverse park, segregate vehicles and pedestrians.

## Plant banksman:

An individual with the competency to act as a vehicle marshal and additionally aid the plant operator to safely operate

the plant. E.g. loading and un-loading operations (NOT including lifting operations)

## Slinger signaller:

An individual with the competency to act as a vehicle marshal, plant banksman and additionally to sling loads and guide lifting operations (in accordance to BS 7121:2010) e.g. attaching lifting accessories and controlling suspended loads.

	REVERSING AND MANOEUVRING (NON-PLANT)		REVERSING AND MANOEUVRING (PLANT)	REVERSING AND MANOEUVRING (PLANT) INCLUDING SLUNG LOADS	OBSERVING AND GUIDING PLANT OPERATIONS	LOADING AND UNLOADING (NOT INCLUDING SLINGING OPERATIONS)	IDENTIFY AND MAINTAIN A SAFE WORKING AREA	IDENTIFY AND MAINTAIN A SAFE WORKING AREA	CRANE OPERATIONS	(BS 7121) OPERATIONS
VEHICLE MARSHALL	1	1	x	x	x	x	x	x	x	x
PLANT BANKSMAN	1	1	1	1	1	1	1	x	x	x
SLINGER SIGNALLER	1	1	1	1	1	1	1	1	1	1

#### What does it mean for us?

#### A Telehandler Coordinator

- It is Best Practice to deploy log books demonstrating the operatives experience of using the particular type of telehandler. Log Books are to be checked by the Telehandler Coordinator prior to allowing the operative to commence work.
- If a Telehandler operator's experience on the particular type of Telehandler (i.e. via the log book) cannot be demonstrated, the Telehandler coordinator must observe the operative in the machine operating the controls fully, before work commences

## Telehandler operatives

- Must have satisfactorily completed a recognised training course accredited to NPORS or IPAF
- Refreshed within a period of one and three years, depending on usage - refer to log book
- Operatives with limited usage/ experience should receive refresher training every year
- Experience logbook to be held by operatives and must be kept up to date to demonstrate their competence on different machines
- Log book entries must be signed off by the Telehandler coordinator or Supervisor following use of the Telehandler



# **General Work Related Competence for Telehandler Operations**

# The Management of Lifting Operations

A safe system of work should be established and followed for every Lifting Operation whether it is an individual or repetitive lift. The safe system of work should eliminate or reduce, to an acceptable level, all foreseeable health and safety risks and include:-

- Risk assessment and method statements:
- Planning of the operation;
- Selection of a Telehandler and suitable lifting equipment;
- Maintenance and examination of the lifting medium and associated equipment;
- Provision of competent personnel;
- Adequate supervision;
- Inspection of test certificates
- Prevention of unauthorised use or movement;
- Safety of all persons.

A calculation of the Telehandler gross lifting moment\* (Ma) and subsequently the forces being placed through the stabilizers may be required.

Employers have a duty to both ensure the health of their employees and to ensure that any employee is fit to undertake the tasks they are required to carry out by ongoing assessment.

#### ATTRIBUTES AND SELECTION

It is essential that all planning, supervisory and operating personnel involved with the selection and use of telehandlers have the necessary attributes to ensure that they will be able to carry out their duties both effectively and safely. The necessary attributes for planning, supervisory and operating personnel are set out below.

#### BEHAVIOUR

KEY: All staff involved have the ability to challenge any part of the operation that is not planned, that they do not understand, or that they feel is unsafe.

Lack of time or correct equipment is not an excuse for the job not being done correctly.

An effective and safe telehandler is one which is well matched to the type and size of load to be carried and lifted, together with the environment in which it is to be used.

\* When a crane picks up a load, it generates a load movement that has been resisted by an equal and opposite force if there is to be a state of equilibrium. This 'reaction' moment has to come from the ground resisting the force the stabilisers place upon it.

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Attachments for use with telehandlers should be chosen with care to ensure that the combination of attachment is both safe and fit for purpose. It is essential that all attachments are compatible with the telehandler with which they are to be used. Where necessary and appropriate, the manufacturer should be consulted when third party attachments are to be used. The selection of any attachments should be part of the planning process.

Employers must ensure that their personnel are competent to work safely with Telehandler operations. Employers must therefore assess the competence of their staff and, where necessary, provide training to achieve the level of competence required. The training needs to reflect the ability and level of responsibility of the individual, degree of complexity of the task and the risks involved.

Any gaps in the knowledge, skills and understanding of competent persons (planning), supervisors and operators must be remedied by suitable training. This may be carried out in-house or by an external training provider. At the end of the training period the trainee must be assessed to ensure that the learning objectives have been met.

Basic telehandler operator training does not include the lifting of suspended loads, the lifting of persons or the use of other attachments. If such tasks are to be carried out the employer must ensure that the operator is suitably trained and assessed as competent. In addition basic operator training for non-rotating machines does not cover rotating machines. This can normally be carried out by a local training provider.

You cannot assume that all delivery drivers have the same competence or risk perception, so therefore you must take ownership and responsibilities for these deliveries

Delivery driver briefings are to include local hazards, traffic management plans & laydown areas.

Time pressures, managed and planned in advance.

## Maintenance:

The effective maintenance of a telehandler is an essential part of safe operation. As with all machines a telehandler wears, deteriorates and can suffer damage over time. The maintenance process, including checks and inspections, prevents and rectifies this deterioration. It is important that the personnel asked to carry out these tasks have the necessary machine-specific training, experience and competence in both periodic and breakdown maintenance.

## **OPERATOR ATTRIBUTES**

Operators should know and understand the principles of telehandler operation and what the telehandler can and cannot be used for. This will include the hazards associated with telehandler operations, including:

- Overturning
- Electrocution contacting overhead power lines – safety distances
- Colliding with pedestrians
- Crushes and trapping
- Falling loads
- Loss of controlInsecure attachments
- What can happen if the telehandler is poorly maintained

## **Additional Responsibilities**

They must physically leave the cab and check any attachment or quick-hitch before work commences or recommences following fitment

That they must organise their work in accordance with the Method Statement (generic or task specific), including coordination with others who may be affected, and follow the Method Statement unless it is unsafe to do so, in which case work must stop.

They must report all unsafe working practices and faults with their machine to their supervisor Understand that poor planning, operation, training, maintenance, supervision or working environment, (or a combination thereof), are major contributory factors to accidents/incidents.

## Operators should be able to:

- Communicate effectively with other workers and line managers
- Interpret relevant information and follow given instructions
- Organise the work activity or part of the work activity with others
- Select and/or request resources and additional equipment required
- Carry out the checks and pre-use inspections that are required on a daily and/or weekly basis as required
- Attach and detach an attachment in the prescribed manner
- Carry out checks to ensure the attachment has been correctly engaged
- Operate the telehandler according to manufacturer's requirements and safe working practices.
- Raise and address issues confidently and not be afraid of conflict or of stopping work when necessary to ensure safety

#### Supervision

Supervisors should know and understand the principles of telehandler operation and what the telehandler can and cannot be used for. This will include the hazards associated with telehandler operations, including:

- Overturning
- Electrocution contacting overhead power lines – safety distances
- Colliding with pedestrians
- Crushes and trapping
- Falling loads
- .
- Loss of control
- Insecure attachments
- What can happen if the telehandler is poorly maintained

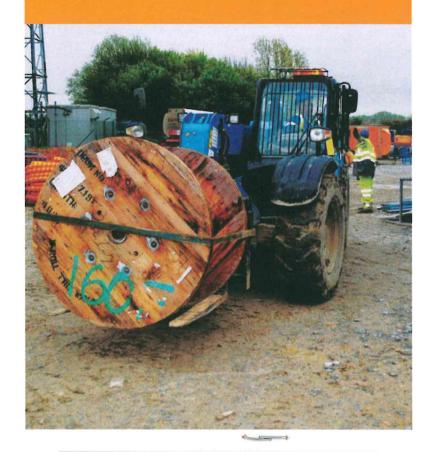
#### Supervisors should be able to:

- Carry out an effective observation and know what to look for
- Communicate effectively with operators and line managers
- Recognise bad practice and unsafe behaviour
- Develop good working relationships
- Raise health and safety standards
- Display consistency and be persistent
- Raise and address issues confidently and not be afraid of conflict
- Ensure feedback to supply chain regarding, poor selection, maintenance and information through procurement.

## Site supervision

All lorry loading operations undertaken by third party visitors to site MUST be controlled by competent site personnel. Lone working is to be avoided wherever possible, were this is not possible, it is essential that suitable measures are put in place to minimise risk to other workers. This is what we expect; this is what we want you to do!

Supervisors should know and understand the principles of telehandler operation and what the telehandler can and cannot be used for.



# Arrival at site

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Any Telehandler arriving at site must have the relevant valid certification, have its functionality demonstrated and familiarisation training delivered prior to handover to any competent operative

# What does it mean for us?

- A valid Pre-Delivery Inspection (PDI) and six-month insurance certificate (or Certificate of Conformity) must be delivered with the Telehandler
- A full demonstration of the operation of the controls should be given by the Telehandler hire company / owner
- A full functionality check to the full extent of the Telehandler including the emergency power mode should be carried out
- The Telehandler hire company / owner should undertake familiarisation training of the Telehandler with the Telehandler coordinator or operator
- The size and controls of Telehandler machines vary, familiarisation training is required to identify the varied controls

- A competent person must take delivery of the Telehandler i.e. the Telehandler coordinator or operator
- It is not acceptable to have a noncompetent person i.e. the Storekeeper take delivery and then allow another operative use the machine.
- The handover of the Telehandler to the Telehandler operative must be documented and included in the Telehandler Safety Documentation Pack. This must include emergency rescue method testing
- A handover must be carried out by the Telehandler coordinator
- Appropriate (LOLER) Lifting Operations and Lifting Equipment Regulations certification required of lifting equipment and associated accessories

# **Telehandler Safety Documentation Pack**

A Telehandler Safety Documentation Pack, must be established and maintained on site prior to any Telehandler being set to work

## What does it mean for us?

 Telehandler Safety Documentation Pack to be prepared by and handed over to the assigned operative by the Telehandler Co-ordinator

The following information is required to form the Telehandler Safety Documentation Pack. The pack must be present on site, ideally with the Telehandler itself

- A Certificate of Conformity or sixmonth Insurance inspection
- Pre-Delivery Inspection (PDI)
- The checklist forming the handover of Telehandler to the Telehandler operator

- Daily / weekly inspection sheet
- Any defect report related to the Telehandler
- The Telehandler operator's training record
- The risk assessment and method statements (RAMS) associated with the work
- A record that the emergency operation procedure has been carried out and repeated as required



A Telehandler Safety Documentation Pack, must be established and maintained on site prior to any Telehandler being set to work.

All Telehandler movements must be assessed, planned and controlled. The assessment must consider if a banks person/vehicle marshal is required.



# Movement to and from work areas

Movement to and from work areas must be undertaken in a controlled manner

## What does it mean for us?

- All Telehandler movements must be assessed, planned and controlled. The assessment must consider if a banks person/vehicle marshal is required
- Telehandler must not be moved with the platform in the elevated position
- On Electricity Transmission sites movement must be under (NSI8) National Safety Instruction 8 control of Senior Authorised Person (SAP) / designated route etc

# Appendix A - Site Induction

- What work needs to be done?
- Who is going to operation the Telehandler?
- At what stage in the job will the Telehandler be needed and what will the ground conditions be like at that stage?
- What access is there to the site?
- Are the any overhead power lines on site?
- Are there any manual handling issues?
- What fuel type is allowed on site and where will refuelling take place?



#### The coordinator

Establishes the machine specific Safety Documentation Pack

Appendix B - Responsible Person Duties

- Has control of the keys of all Telehandler on site and issues keys and the Telehandler Safety Documentation Pack to Telehandler
- Ensures the Telehandler meets the age and earthing requirements
- Ensures operatives have completed the required training
- Ensures the Telehandler operator demonstrates competence through upto date log books and signs off where
- Ensures familiarisation training and the correct handover process is carried out
- Ensures that a competent person takes delivery of the Telehandler
- Has responsibility for authorising Telehandler activities on site

- Has responsibility for ensuring that method statements, risk assessments and other relevant permits and documentation are completed in relation to all Telehandlers under their control
- Ensures that records of familiarisation training, operator qualifications and licenses are maintained
- Ensures that daily checks are carried out
- Has responsibility for making sure that defects with equipment are remedied
- Ensures that the process for communicating contents of method statements and risk assessments to all relevant parties is taking place
- Should be part of the process for appraising sub-contractor risk assessments
- Has responsibility for making sure that a safe loading/unloading area has been provided where possible
- Has responsibility for undertaking sensible monitoring, inspections or audits on Telehandler activities



**DETAILS OF LIFT** 

Is there sufficient supervision? (e.g. Does the supervisor have the right level of competence?) Are weather conditions suitable for loading / offloading? (e.g. lightning risk, wind etc) Have all persons who may be affected by the loading/off-loading operation (including anyone working nearby) been made aware of the lift? Confirm that the delivery driver understands he/she is responsible for adhering to their own company work instructions when off-loading / loading equipment, materials or plant? Are the ground conditions level & stable? Is the loading/off-loading area free of overhead and underground services / hazards?

While loading / off-loading have all other vehicle

Is the lorry loader / telehandler fitted with a functioning safe load indicator?

Will the load remain stable after securing straps

If the vehicle is fitted with outriggers, have they been deployed? Use spreader pads where

When off-loaded is the load greater than 2 meters

movements been controlled? Are the materials to be loaded / off-loaded. within the SWL of the machine / lifting equipment (Including Tail Lifts) and is the equipment suitable

for the offloading activity?

have been loosened?

from the NG security fence?

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# Appendix C - Delivery (Loading/Off Loading) Checklist

This form shall be completed for deliveries of plant, equipment, power tools, materials, welfare facilities. This form is not required for small deliveries, for example: stationery, drinking water, etc.

Site:		
Delivery Company	Driver Name	
Delivery Vehicle		
Registration Number	Serial No.	
Item No.	Date:	
Project No:	Date.	

	CHECK	ANSWER
1.	Is a lift plan required for the loading / off- loadingoperation? NOTE: The requirement for a lift planshall be determined through risk assessment.	
2.	Is there evidence of delivery operator competency (CPCS/ALLMI) or risk assessment for the safe loading or off-loading of this plant/equipment/materials?	
3.	Is there valid Certification of Test & Examination for both the delivery vehicle and plant/equipment being delivered? (Including lifting equipment)	
4.	Does certification correspond to the serial number or plant identification number for plant/equipment being delivered? (Record Serial No.)	Serial No
5.	Is there operating instructions with the plant / equipment?	
6.	Does the delivery have any obvious visual defects or damage? e.g. welds, dents, broken mirrors / windows etc.	
7.	Is the delivered quantity and type correct?	

Completed by: (Signature)	Print name	
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Description	Yes	No
Operator already familiar with plant and equipment?		
Familiarisation of plant and equipment required?		

Demonstrator		
Name	Signature	Date
Operator		
	Signature	Date

Note: Do not use plant or equipment if you are unfamiliar with its operation

Other Operators requiring familiarisation with this plant / Equipment / Machinery

Name	Job Position	Signature	Parent Company