



Procedure for Working at Heights

AZSPU-HSSE-DOC-00065-2

Authority:	AzSPU Safety & Compliance Systems Manager	Custodian:	Safety Systems / CoW Specialist
Scope:	AzSPU	Document Administrator:	MS Document Coordinator
Issue Date:	05 October 2004	Issuing Dept:	Safety & Compliance Systems
Revision Date:	26 April 2010	Control Tier:	2
Next Review Date:	16 September 2011		

TABLE OF CONTENTS

1	PURPOSE / SCOPE.....	3
2	DEFINITIONS	3
3	GENERAL REQUIREMENTS	4
3.1	LEGISLATION & STANDARDS.....	4
3.2	REQUIREMENTS FOR WORK ACTIVITIES INVOLVING WORKING AT HEIGHTS.....	4
3.3	COMPANY REQUIREMENTS	5
3.4	STOPPING UNSAFE WORK	5
3.5	DEVIATIONS	5
4	RESPONSIBILITIES.....	5
4.1	SITE MANAGER (SM) / SITE CONTROLLER (SC) / OFFSHORE INSTALLATION MANAGER (OIM)	5
4.2	AREA AUTHORITY (AA)	5
4.3	PERFORMING AUTHORITY (PA)	6
4.4	EMPLOYEES.....	6
4.5	WORKING AT HEIGHT EQUIPMENT CONTROLLER	6
5	WORKING AT HEIGHTS	6
5.1	REQUIREMENTS TO WORK AT HEIGHT.....	6
5.1.1	Definition of work at Height	7
5.1.2	Principles of Working at Heights and Hierarchy of Risk.....	7
5.1.3	Risk Assessment and Planning.....	8
5.1.4	Fragile Surfaces	9
5.2	WORK EQUIPMENT.....	12
5.2.1	Means of Access or Egress at Height	12
5.2.2	Requirements for Working Platforms	12
5.2.3	Requirements for Collective Safeguards for Arresting Falls	12
5.2.4	Requirements for Mobile Elevated Work Platforms	13
5.2.5	Requirements for Scaffolds.....	14
5.2.6	Requirements for Ladders.....	14
5.2.7	Personal Fall Protection Systems	15
5.3	COMPONENTS OF FALL ARREST SYSTEMS.....	17
5.3.1	Lanyards and Energy Absorbers.....	17
5.3.2	Inertia Reels	18
5.3.3	Harnesses	18
5.3.4	Helmets	19
5.3.5	Anchor Points	20
5.3.6	Anchorage Slings / Strops.....	20
5.3.7	Ropes	20
5.3.8	Man Riding Winches	21
5.4	SIGNS AND BARRIERS.....	21
5.5	RESCUE	21
5.6	COMPETENCE AND TRAINING	22
5.7	INSPECTION AND MAINTENANCE OF EQUIPMENT	23
5.7.1	Maintenance.....	24
5.7.2	Mobile Elevated Work Platforms	24
5.7.3	Ladders	24
5.8	CONTROL AND ISSUE OF EQUIPMENT	24
5.9	TOOLBOX TALKS.....	25
5.10	HOUSEKEEPING.....	25
6	KEY DOCUMENTS / TOOLS / REFERENCES	26

7	APPENDICES.....	26
7.1	APPENDIX A: WORK AT HEIGHT AUDIT CHECKLIST	26
7.2	APPENDIX B: BARRICADE NOTIFICATION SIGN	28
7.3	APPENDIX C: REFERENCES	29
7.4	APPENDIX D: LINKS TO DROPPED CONSEQUENCE OBJECTS CALCULATOR FACILITY	29
7.5	APPENDIX E: FEEDBACK & IMPROVEMENT SUGGESTIONS.....	30

1 PURPOSE / SCOPE

The purpose of this document is to describe the procedures and precautions which shall be implemented, to ensure that hazards and risks associated with all work activities at height are either eliminated or mitigated, to ensure safe operations and safety of personnel, plant and equipment

The contents of this procedure are applicable to all BP owned and managed sites / installations in Azerbaijan and Georgia. Contractors working on BP owned or managed sites / installations are also responsible for alignment with this procedure.

This document does not replace the procedures prepared and adopted by specialist contractors. Neither does it supersede any national and local regulatory requirements.

All guidelines contained shall be regarded as the minimum requirements for BP owned or managed sites / installations in Azerbaijan and Georgia.

The scope covers defined activities of BP and Contractors at all BP AzSPU sites and installations.

2 DEFINITIONS

Refer to document [AzSPU-HSSE-DOC-00021-2](#) HSE Definitions for definitions common to this Procedure. Definitions specific to the Procedure are included below.

SM	Site Manager
SC	Site Controller
OIM	Offshore Installation Manager
AA	Area Authority
PA	Performing Authority
ALARP	As Low as Reasonably Practicable
CoW	Control of Work
L2RA	Level 2 Risk Assessment
PTW	Permit to Work
SSOW	Safe System of Work
TRA	Task Risk Assessment
TBT	Toolbox Talk
AzSPU	Azerbaijan Strategic Performance Unit
PSA	Production Sharing Agreement
MEWP	Mobile Elevated Work Platform

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 26 April 2010

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT
<http://docs.bpweb.bp.com/dkazspu/component/hssesms>

IRATA	Industrial Rope Access Trade Association
-------	--

3 GENERAL REQUIREMENTS

- Operating Management System OMS Essentials 3.2.1 and 4.5.1
- BP Group Defined Practice for Control of Work GDP 4.5-0001(Appendix 1)

3.1 LEGISLATION & STANDARDS

This procedure complies with applicable national law. Applicable national law is national law as amended by project specific agreements, e.g. the ACG Production Sharing Agreement (PSA), and relevant International Conventions, if any, in force in Azerbaijan or Georgia, as applicable.

In the absence of national legislation, or where national legislation is inconsistent with the requirements of project specific agreements, BP Group Standards or applicable requirements from UK or US legislation will be complied with.

Where requirements conflict, legal advice has been obtained and a defensible compliance position adopted.

The standards and practices contained in this procedure are consistent with those internationally recognized within the petroleum industry.

3.2 REQUIREMENTS FOR WORK ACTIVITIES INVOLVING WORKING AT HEIGHTS

The controls associated with Control of Work are listed below and shall be applied whenever the work activity is carried.

Working at heights of 2 metres (6 feet) or higher above the ground shall not proceed unless:

- a fixed platform is used with guard or hand rails, verified by a competent person, or...
- fall arrest equipment is used that has
 - a proper anchor, mounted preferably overhead
 - full body harness using double lanyard, double latch self locking snap hooks at each connection
 - synthetic fibre lanyards
 - shock absorber
 -
- fall arrest equipment will limit free fall to 2 metres (6 feet) or less
- a visual inspection of the fall arrest equipment and system is completed and
- any equipment that is damaged or has been activated is taken out of service

- person(s) are competent to perform the work

3.3 COMPANY REQUIREMENTS

It is a company requirement that all tasks are subjected to an assessment of risk to demonstrate that risks have been reduced to as low a level as reasonably practicable (ALARP). This can be achieved by complying with the Company's existing standards. Where compliance with Company standards cannot reasonably be achieved, a formal level 2 Risk Assessment will be undertaken to identify any additional controls and demonstrate that risks remain as low as reasonably practicable.

3.4 STOPPING UNSAFE WORK

To stop the continuation of potentially unsafe work at the earliest possible stage, the Control of Work (CoW) Policy and this procedure for Working at Heights make it very clear that all personnel are obliged and have the authority to **"STOP"** the work that they consider to be unsafe.

3.5 DEVIATIONS

This procedure is written in sufficient detail that it should be able to be applied consistently at all sites / installations. There may still be the requirement for some local rules covering site / installation specific logistical/administrative arrangements and local variations in responsibilities to reflect differences in organisational arrangements. These local rules should not deviate from the core processes within this document. Any form of deviation from this procedure, including but not limited to local rules, shall be requested and authorised in accordance with SSOW, Deviations from Regulations and Procedures (Doc. No: [AZSPU-HSSE-DOC-00011-2](#)).

4 RESPONSIBILITIES

4.1 SITE MANAGER (SM) / SITE CONTROLLER (SC) / OFFSHORE INSTALLATION MANAGER (OIM)

BP and its Site Management Teams have a duty to ensure that everyone engaged in any work at height activity, including any specialist contractor, is competent to do so (or, if being trained, are supervised by a Competent Person). They shall ensure that:

- The necessary systems and procedures are in place to manage and control work at height operations onsite including audit of the process
- Where third-party procedures and guidelines require to be used, that they have been deemed appropriate
- Roles and responsibilities for all personnel associated with these regimes are clear and understood

4.2 AREA AUTHORITY (AA)

Area Authorities shall familiarise themselves with the procedures and other arrangements in place to mitigate the risks involved in work at height. They are responsible for:

- Ensuring that the appropriate hazards and controls have been identified for planned tasks

- Ensuring that the appropriate level of risk assessment has been carried out, and they liaise closely with Performing Authorities to ensure all appropriate hazards and controls have been identified for the task
- Liaising with the person with working at height expertise (i.e. Scaffold Foreman, Services Team Leader and Equipment Controller) to ensure that all personnel involved with working at height activity have the necessary qualifications/training to implement the type of work being performed
- Ensuring that work activities are planned in such a way that they do not conflict with or have an adverse affect on other activities in the vicinity of the work area
- Ensuring worksite inspections are carried out before any activities are performed at height.

4.3 PERFORMING AUTHORITY (PA)

Performing Authorities are responsible for:

- Identifying the hazards and control measures for the planned task
- ☐ Participating in Level 1, and Level 2 Risk Assessments, if and when required
- ☐ Carrying out the Toolbox briefing just prior to the task being implemented
- ☐ Ensuring that people involved in the task fully understand the scope of the work and the hazards and controls for the job
- ☐ Ensuring adequate handovers take place at shift and at crew change periods with the oncoming Performing Authority

4.4 EMPLOYEES

All employees, whether working at height or exposed to other activities being performed at height, are responsible for ensuring they are sufficiently competent for the work they are performing, for adhering to safe working procedures, and for ensuring the safety of themselves and others. Employers must be notified of any medical conditions which may affect working at height safely.

4.5 WORKING AT HEIGHT EQUIPMENT CONTROLLER

Work restraint, work positioning and fall arrest equipment needs to be controlled by a competent person.

This person shall be named by the site controller and is normally also responsible for the issue and control of lifting equipment.

He / she will be responsible for:

- Inspecting and maintaining all work restraint, work positioning or fall arrest equipment
- Maintaining a register of and issuing all work restraint, work positioning or fall arrest equipment to competent personnel.

The Working at Height Equipment Controller is “**not**” normally responsible for the control issue and maintenance of rope access equipment unless they have been deemed competent by the specialist contractor.

5 WORKING AT HEIGHTS

5.1 REQUIREMENTS TO WORK AT HEIGHT

The guidelines in this document only reduce the risks involved with working at height to a point where they are as low as reasonably practicable. They do not remove the risks entirely. For this reason, wherever possible, every effort shall be made to minimise the need for personnel to work at elevated positions.

In addition, all personnel have an obligation to **“STOP”** any activity that they believe to be unsafe.

5.1.1 Definition of work at Height

Work at height should no longer be considered as an activity over 2m.

Personnel are advised that, work at height now means any place from which – if preventive measures were not taken – a person could fall and injure themselves, including a place at or below ground level or in the course of gaining access or egress from any place, except by a staircase in a permanent workplace.

This procedure requires personnel to take a risk-based approach to working at height.

When considering acceptability of exposure, a hierarchy of risk must be adopted whereby work at height should be avoided so far as is reasonably practicable; if work at height must proceed, precautions should be taken that so far as reasonably practicable, prevent anyone from falling a distance liable to cause personal injury.

The BP Golden Rule covering work at height currently still defines work at height as 2m or higher above the ground. This procedure is not intended to replace this golden rule.

5.1.2 Principles of Working at Heights and Hierarchy of Risk

Work at height is generally an activity with well-established procedures of good practice that can be followed to carry out work safely. If work must be carried out at height, then risk assessments are required to ensure suitable and sufficient measures can be taken to prevent any person falling, or otherwise causing personal injury:

- Avoid the risk, where it is reasonably practicable to carry out the work safely other than at a height
- Prevent falls, where there is no safe alternative to work at height.
- Mitigate the consequences of a fall where the risk of people or objects still remains. Risk assessments must define measures to minimise the distance and consequences of such falls (i.e. the selection and use of work equipment).
- Collective measures (guardrails, nets, mats and inflated devices) should be preferred over personal protective measures (e.g. fall arrest equipment).

Local arrangements and support for emergency response and rescue may also need to be evaluated.

The phrase ‘hierarchy of risk’ is often used when discussing fall protection. This can be considered as a scale of preference, based on risk and practicality, where certain measures to prevent workers falling are deemed less risky and therefore more desirable than others.

The top of the hierarchy of risk is the installation of permanent fixed access such as walkways and gantries. This is appropriate where a site must be accessed on a regular basis for routine maintenance. Once measures have been taken to avoid a fall (e.g. by providing a properly constructed scaffold with guardrails) there is no need to take further action, i.e. by providing nets. However, if a guardrail has been temporarily removed or if the area is being inspected for initial use (i.e. walkways onboard a normally unmanned platform), this would need to be addressed. Restraint devices or other suitable Personal Protective Equipment (PPE), and additional supervision, may also be required.

Second in the hierarchy is the installation of temporary working platforms, including scaffolding (which has its own risk implications in the construction phase), cradles or mobile platforms. Factors such as the duration and nature of the task must be considered when accessing the practicality and cost effectiveness of a major temporary structure. For some tasks, e.g. installation of steelwork, the access method may actually interfere with the smooth running of the job.

Where neither of the above options is practical, then the use of personal suspension equipment and work positioning techniques may be adopted. Where neither are practical use work restraints. The main consideration is the practicality of carrying out the required task from suspension equipment.

The least desirable in the hierarchy of risk is the use of fall arrest equipment to catch a falling worker. It is often difficult to accurately predict the level of risk to the worker during the operation, but it is important to remember that PPE always 'fails to danger'. The implications of a fall are very much dependent on the location of the fall, obstructions that may be hit during a fall, and the capabilities of other workers to rescue a fallen and injured worker.

5.1.3 Risk Assessment and Planning

The majority of falls from height result from failures of organisation or planning, e.g. selecting inappropriate and poorly maintained work equipment.

In order to be practical adopt a risk based approach to ensure that the measures taken are proportionate to the risk involved. Within this framework, the employer must:

- Assess the risks to identify and address hazards before the work commences.
- Follow the hierarchy for safe work at heights – avoid, prevent, mitigate – and give priority to collective measures over personal protection measures.
- Make use of appropriate work equipment, taking account of the following:
 - The working conditions and the risks to the safety of persons at the place where the work equipment is to be used
 - In the case of work equipment for access and egress, the distance to be negotiated
 - The distance and consequences of a potential fall.
 - The duration and frequency of use.
 - The need for easy and timely evacuation and rescue in an emergency.
 - Any additional risk posed by the use, installation or removal of that work equipment or by evacuation and rescue from it.

- Plan and organise work properly taking account of weather conditions and the possibility of emergencies.
- Make sure those working at height are competent.
- Manage the risks from working on or around fragile surfaces and from falling objects
- Inspect and maintain the work equipment to be used and inspect the place where the work will be carried out.

It must be ensured that any surface from which work at height is to be carried out is sufficiently strong and stable to support foreseeable loads. Risk assessments need to consider that, while the surface may support a person's weight, it may prove fragile once the weight of the load or any additional falling force is taken into account. If the work requires regular or occasional access where there is a fragile surface, then permanent fencing, guards or other measures to prevent falls should be in place.

All work at height will be risk assessed prior to any work commencing as per the flowchart, and equipment shall be selected as appropriate.

Necessary actions identified in the risk assessment to control risks should be proportionate to the risk of harm and reflect what is reasonably practicable.

All SIMOPs are to be carried out under appropriately coordinating control of Permit to Work. Persons involved in such SIMOPs shall be duly informed about the activities and strongly keep prioritization of actions according to the accepted Tasks Risk Assessment. Barriers and entry controls shall be clearly established and only relevant persons permitted.

5.1.4 Fragile Surfaces

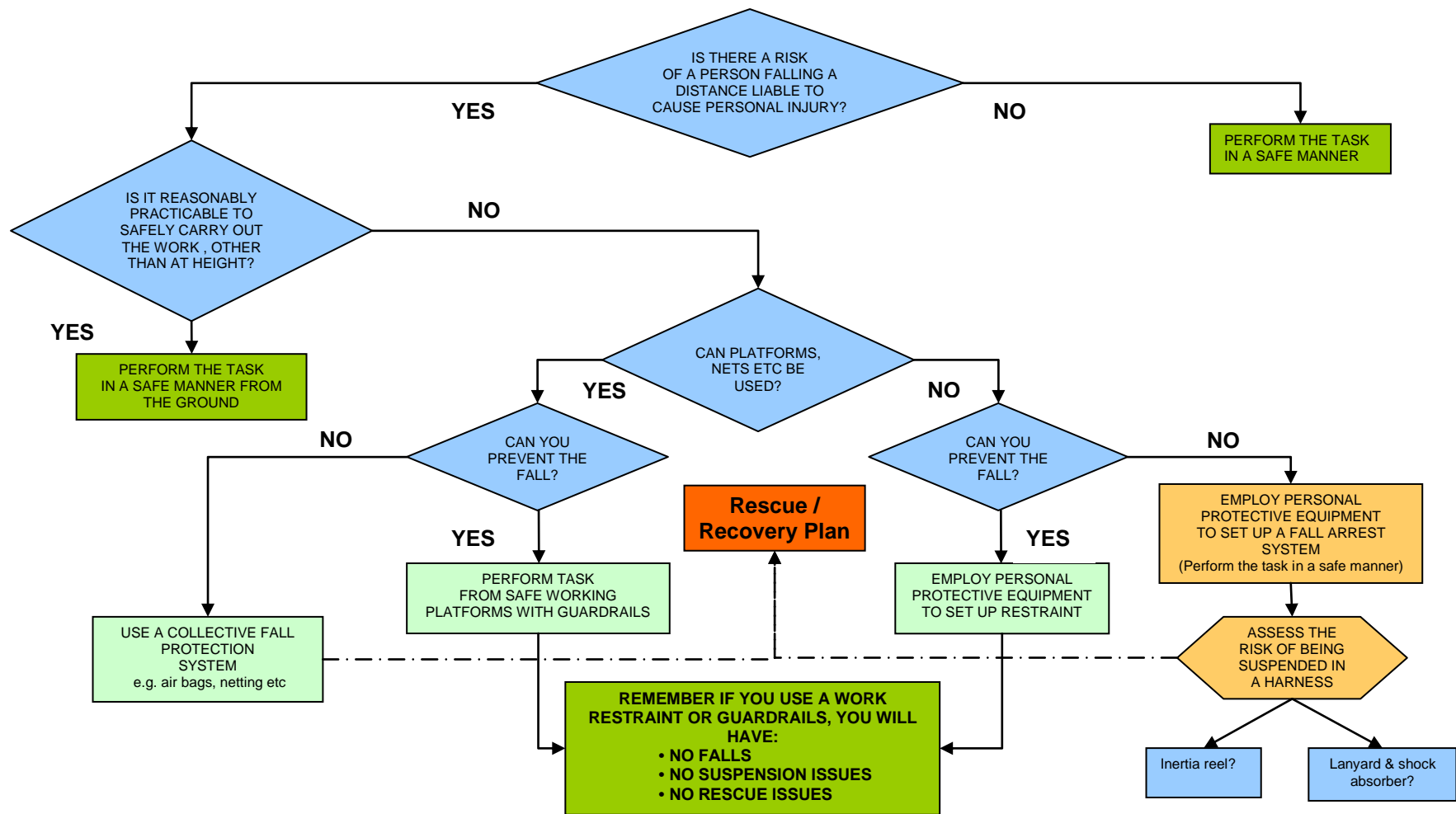
Fragile roofing materials include asbestos, glass, plastic, cement sheets and other similar brittle surfaces. Roof cladding which has the appearance of being substantial could be dangerously corroded. Surface coatings or dirt may conceal the fragile nature of the material, thereby giving a false appearance of solidity to glass, plastic, asbestos, etc.

No person at work should pass **across** or **near** a fragile surface. Nor should they work on, from or near a fragile surface where it is reasonably practicable to carry out work safely by another means. If it is not practicable, the following precautions must be taken:

- When working on, or passing across, fragile roofing materials, crawling boards must be used so that the person's weight is on the board, never on the fragile roof sheeting. At least two crawling boards should be used, one to support the person whilst the other is moved to a new position. Asbestos and various plastic materials are particularly brittle and will shatter without warning.
- The practice of trying to 'walk the line of the bolts' is very dangerous and compares with walking a tightrope. Where walkways are not provided, a safe system of work such as that described above must be employed.

- Work involving the handling of sheeting and cladding requires extra care in windy conditions, when a sheet may act like a 'sail' causing the person holding it to lose their balance.
- **Walkways** near fragile materials (in valleys, parapets, gutters or channels) must be provided with suitable guard-rails, or the fragile material should be suitably covered to prevent any possibility of anyone falling through.
- **Warning notices** must be fixed at all approaches to roofs constructed with fragile materials to comply with the Health and Safety (Signs and Signals) Regulations 1996.

IF YOU ARE WORKING ABOVE GROUND LEVEL, OR CLOSE TO AN EXPOSED EDGE OVER WHICH YOU COULD FALL, THEN YOU WILL NEED TO MAKE THE FOLLOWING ASSESSMENT:



5.2 WORK EQUIPMENT

5.2.1 Means of Access or Egress at Height

To determine if a place of work at height is safe, the criteria listed below must be checked. If it meets these criteria, work may be carried out from the platform without the need to use work equipment to make it safe:

- ☐ Stable and of sufficient strength and rigidity for the purpose for which it is intended to be or is being used
- Resting on a stable, sufficiently strong surface
- Of sufficient dimensions to permit the safe passage of persons and the safe use of any equipment or materials requiring to be used, and to provide a safe working area with regard to the work to be carried out there
- Provided with suitable and sufficient edge protection to prevent risk to others
- Devoid of openings through which any people, material or object could fall and injure a person or through which a person could fall
- Constructed, used and inspected, and maintained to prevent, so far as reasonably practicable, the risk of slipping or tripping, or any person being caught between it and any adjacent structure
- Prevented by appropriate devices, where it has moving parts, from moving inadvertently during work at height
- Fitted with suitable guardrail of sufficient height to prevent person falling, where 1m. height and maximum gap kept of 0.5m. between guardrails
- If these criteria's cannot be met, then further precautions will be required to protect personnel.

5.2.2 Requirements for Working Platforms

Working platforms are defined as 'any platform used in a place of work or as a means of access to or egress from a place of work'. It includes any scaffold, suspended scaffold, cradle, mobile platform, trestle, gangway, gantry and stairway.

All working platforms should:

- Rest on a stable surface of suitable composition and strength to support the structure and any loads intended to be placed upon it
- In the case of a wheeled structure, any supporting structure must be prevented by appropriate devices from inadvertently moving during work at a height
- In other cases, any supporting structure must be prevented from slipping by secure attachment to the bearing surface or to another structure
- When erecting, modifying, dismantling a 'working' platform and its supporting structure it should be done in such a way as to ensure it remains stable and avoids accidental displacement.
- A working platform and its supporting structure must never be loaded in a way to give rise to a risk of collapse and its SWL (safely working load) must never be exceeded.

5.2.3 Requirements for Collective Safeguards for Arresting Falls

Collective safeguards for arresting falls include nets, mats and inflated devices that are designed to catch a falling person. When using this equipment, follow the manufacturer's instructions. A safeguard shall only be used if:

- A risk assessment has demonstrated that the work activity can so far as reasonably practicable be performed safely while using it and without affecting its effectiveness
- The use of other, safer work equipment is not reasonably practicable
- Sufficient number of persons have received adequate training specific to the safeguard, including rescue procedures
- A safeguard shall be suitable and of sufficient strength to arrest safely the fall of any person who is liable to fall.

A safeguard shall:

- In the case of a safeguard which is designed to be attached, be securely attached to all the required anchors, and the anchors and the means of attachment thereto shall be suitable and of sufficient strength and stability for the purposes of safely supporting the foreseeable loading in arresting any fall and during the subsequent rescue
- ☐ In the case of an airbag, landing mat or similar safeguard, be stable.
- ☐ In the case of a safeguard that distorts (such as a net) in arresting a fall, afford sufficient clearance.

When applying any safeguard, steps should be taken to ensure, so far as reasonably practicable, that in the event of a fall, the safeguard itself does not cause injury.

When an external power source is required (such as a pump for an airbag) or restraints (such as brickwork enclosing bags) to make it effective, these power sources or restraints must be sufficient to maintain the effectiveness of the equipment in the event of a fall and rescue.

5.2.4 Requirements for Mobile Elevated Work Platforms

Mobile Elevated Work Platforms (MEWP's) can provide a safe place of working at height, but precautions need to be taken to minimise the risks of users falling from or being thrown from the basket or impact with other equipment.

The precautions for safe work from a MEWP include:

- A guard rail, with mid rail and toe-boards round the edge of the basket
- A slip resistant floor
- Dead-man controls
- Stability device, e.g. outriggers that are interlocked such that the MEWP will not operate unless they are fully extended
- Locking-out controls to prevent inadvertent operation
- Suitable anchor point to allow personnel to attach a backup system
- Personnel anchored to the base of the basket via a full body harness and short lanyard that creates an effective work restraint

Access to work at height can also be achieved by the use of working platforms fitted to counter-balanced forklift trucks etc. There are two types of these working platforms, including:

Occasional working platform: a platform and an enclosure fitted to the forks of a counter-balanced forklift truck

Integrated working platform: containing controls within the platform that are integrated into the controls of the truck

Forklift trucks are not specifically designed to carry people, so the use of a working platform on a forklift truck is restricted to exceptional use only.

Only trucks fitted with integrated working platforms, which have been designed to carry people, may be used for routine access to work at height.

5.2.5 Requirements for Scaffolds

Scaffolding is required to be designed, erected, altered and dismantled by competent people, under the supervision of a Competent Person.

BP employs specialist contractors to manage scaffolding operations. They have their own procedures and guidelines for controlling scaffolding operations.

5.2.6 Requirements for Ladders

Ladders should only be used as work equipment (either as a place from which to work or for access and egress) if a risk assessment confirms that their use is justified because of the low risk and short duration of the job or unalterable conditions at the worksite.

A ladder should only be used for access when putting in a permanent staircase is not reasonably practicable. It will be long enough to protrude sufficiently (*normal practice is either 1m or 3 rungs above the upper landing*) above the place of landing to which it provides access, unless other measures have been taken to ensure a firm handhold. The maximum recommended vertical distance of any ladder run is 6m (BS5395-3 code for fixed vertical ladders) to 9m (BS EN 12811-1:2003). If it requires going higher, where reasonably practicable, suitable rest platforms must be built.

Always consider that:

- No interlocking or extension ladder shall be used unless its sections are prevented from moving relative to each other.
- Any surface upon which a ladder rests must be stable and firm such that its steps or rungs remain horizontal.
- Any suspended ladders must be attached in a secure manner so as to prevent any displacement or swinging.
- Work offshore in hazardous area/zone, or work near electrical circuitry, should be using non-conductive access equipment, e.g. timber or glass fibre ladders.
- Any pole ladders should be tied in at least two places, preferably top and bottom for stability.
- Any wooden rung ladder must have a wire retainer underneath each rung to minimise the chance of injury should the rung fail.
- No paint can be used on wooden ladders

Portable ladders (not step-ladders) should always be placed at the correct angle, at 75 degrees, or roughly 1m out for every 4m up.

The feet of portable ladders should be prevented from slipping during use by:

- Tying them effectively to an existing structure (securing them at the top is the best method)

- Using an appropriate ladder stabiliser or anti-slip devices
- Having another worker 'foot' the ladder or stand against the bottom rung (this is only suitable when it is not practicable to secure the ladder any other way)

The ladder should be faced at all times, and contact should be maintained with both feet and at least one hand when climbing or dismounting (three-point contact).

Over-reaching is a major cause of falls even for experienced workers. If ladders require to be used for work, not just for access or egress, then you need to ensure the ladder is secured, that you can reach the work without stretching and that you are secure at all times.

Fixed vertical ladders are an extremely common access method at BP worksites. In addition to the guidance given on maximum vertical distance, BP-RP 4-3 (Guidance on 'Backscratchers') should be consulted.

5.2.7 Personal Fall Protection Systems

Personal fall protection systems are work restraint, work positioning (including rope access and positioning techniques), fall arrest or rescue systems.

A personal fall protection system can be used only if:

- A risk assessment has demonstrated that work can, so far as is reasonably practicable, be performed safely while using the system
- The use of other, safer work equipment is not justified
- The user and a sufficient number of available persons have received adequate training, including rescue provision
- The fall protection system is securely anchored
- The various components of the system are of sufficient strength to support all known loads and have been inspected by a competent person
- Suitable and sufficient steps have been taken to ensure, so far as is practicable, that in the event of a fall, injury from the fall protection system is minimised

The manufacturer's instructions should be checked to consider whether the item is compatible with other equipment being used. All equipment used in the personal fall protection system should be strong enough to withstand any forces placed upon it and should include an adequate margin for safety. The equipment's safe working loads (or minimum static strength), working load limits or maximum (and sometimes, minimum) rated loads should be checked.

Any equipment used for work at height is required to meet relevant European Standards (i.e. it is CE marked and tested to relevant European norms (EN) and all new PPE should be traceable to a certificate of conformity. The equipment should also be marked with a unique identification number so that it can be traced back to its point of origin and any test certificates and examination reports and register of all fall protection equipment at a particular facility shall be kept.

The need for rapid and effective rescue is particularly important when using personal protective systems where a delay may have severe consequences, i.e. when someone is left hanging motionless in a harness after a fall resulting in 'suspension trauma' as a result of restricted blood circulation. The time before loss of consciousness can vary from about 6 minutes to 2 hours, depending on physical capability and incident severity. Suitable rescue

equipment and competent personnel must be available on site at all times during the completion of tasks at height.

5.2.7.1 Shallow Sloped Roofs

Work restraint is a technique that makes use of PPE to prevent a person from entering an area where a risk of fall from height exists. The user is tethered by an anchor-point and line in such a way that he is prevented from reaching an exposed edge from which a fall can occur (Derrick-man racking stands from the Monkey-board). Work restraint techniques are often used to prevent users on open decks, roofs or platforms from falling and are an effective technique that will provide an extremely high level of safety.

5.2.7.2 Work Positioning

Work positioning is a technique for supporting a person while working by means of PPE 'in tension' to prevent a fall (e.g. BT Technician working up a pole). Correct use of work positioning techniques and equipment should mean that the individual is physically unable to fall. When PPE is providing the primary support, then there must be a secondary backup system in place. This back-up must be selected using the hierarchy, but it is quite common for fall arrest techniques to be chosen. The obvious advantage with work positioning is that the user is free to use his hands. This equipment is designed to cope with static loads on a regular basis, but not for dynamic loads such as those imposed by fall arrest equipment.

In addition to the requirements stated for a personal fall protection system, a work positioning system can be used only if:

- The system includes a suitable backup system for preventing or arresting a fall, as per the hierarchy
- Where the system includes a line as a backup system, the user is connected to it

5.2.7.3 Rope Access and Positioning Systems

Rope access techniques allow access to structures or equipment that are otherwise inaccessible, unsafe or impractical to access using conventional techniques.

Specialists using industrial rope access techniques are trained and assessed to professional industry standards, and their work at site requires to be supervised by Competent Persons.

An effective communication system must be in place for everyone involved and particularly for necessary third parties (e.g. a control room if working offshore).

Guidance on rope access and positioning is contained in BS 7985: 2009 'Code of Practice for the Use of Rope Access Methods for Industrial Purpose' and the Industrial Rope Access Trade Association (IRATA) Guidelines.

Rope access and positioning systems are recognised as a safe and efficient method of accessing and completing a wide range of industrial tasks.

5.2.7.4 Fall Arrest

Fall arrest is the most common form of personal fall protection as it is relatively simple to operate, requiring only minimal equipment and limited training. Fall arrest is a technique that makes use of PPE to stop a falling person under safe conditions. High attachment points are designed into a fall arrest harness, as the individual must be retained in an upright position in the harness after a fall, even if they are unconscious.

A fall arrest system must incorporate a suitable shock absorber to limit the force applied to the user's body. This could be either a shock absorber lanyard or inertia reel, but **NEVER** both.

Where reasonably practicable, anchor points must be picked at or above waist height. It is appreciated that this may not always be reasonably practicable.

All anchor points must be appropriately rated and tested.

In many situations, a combined fall arrest/work positioning approach may be required. For example, a user may require fall arrest to access the worksite and then convert to work positioning to carry out the task, or a user could be relying on a work positioning lanyard for primary support, but still have a fall arrest system attached for backup. When using work positioning equipment for support, the user can rely on the attachment to prevent him losing balance or falling.

5.3 COMPONENTS OF FALL ARREST SYSTEMS

5.3.1 Lanyards and Energy Absorbers

Lanyards come in a variety of types, lengths and materials depending on the application for which they are intended. In a fall arrest application, an energy absorber is required to limit the force generated by a 100kg adult falling 4m to below 6kN (approx 0.6 tonnes).

Note: If a shock absorber were not used, the force generated would be approximately 2.2 tonnes.

A lanyard assembly should not exceed 2m in length, considering all of the components, i.e. the lanyard, the connectors and an energy absorber. When using energy absorbers, the 'tear out' distance (maximum permitted length is 1.75m – but check manufacturer's instructions) must be accounted for (including any potential variation due to local users) when calculating clearance distance, e.g.:

- Lanyard length 2m
- Maximum energy absorber tear out distance (travel) 1.75m
- Average distance, harness attachment to feet and slack 2.5m
- Minimum stopping distance 1m

Clearance Required 7.25m

Note: Equipment suppliers such as Spanset can supply energy absorbing lanyards shorter than the 2m discussed here. For example, Spanset has supplied a steel

erecting company with shorter lanyards, where clearance heights were an issue.

The actual amount that an energy absorber pays out is dependent on a number of factors ranging from the quality of manufacture, how it is used and the weight and height from which an individual falls. At BP sites the worst case is assumed, i.e. 1.75m. For further information read HSE Report HSL/2003/09 – Survivable Impact Forces on Human Body Constrained by Full Body Harness.

When adjusted correctly a harness will have some 'slack' for body movement. This 'slack' will often add to the overall height of a fall when the harness straps tighten under load. This additional height from feet to harness attachment point is often missed in estimates of clearance beneath the user. In some applications, it may be advisable to consider floor mats.

5.3.2 Inertia Reels

An inertia reel offers one of the simplest forms of fall arrest protection; it limits the impact forces by ensuring the body is caught before it can accelerate and gain energy. It incorporates connection elements, energy absorption and lanyard in one unit. It should be used in accordance with manufacturer's instructions.

The most common type of inertia reel features a 6mm wire rope lanyard, supplied in a variety of lengths, with or without a retrieval handle.

Inertia reels should be placed directly above the user to prevent pendulum falls. Height above the ground and angle of deviation from the vertical must be considered as part of the risk assessment. Specific reference should be made to manufacturer's instructions.

When a person needs to be protected from a fall from the height of less than 6.25m inertia reels is the equipment of choice.

5.3.3 Harnesses

The safety harness forms an ergonomic link or interface between the human body and the attachment system. As such, the harness is probably the most important item of a worker's PPE.

Poor choice of harness can lead to the harness hampering, rather than assisting, the worker in his task and he may, as a result, be tempted not to use it. Harnesses should be selected to ensure they are suitable for intended use. A well selected harness should have the following features:

- Comfortable to wear when not 'in tension', e.g. walking about site
- Provide adequate levels of support for working in
- Be able to catch a fall without injuring the wearer
- Should not be overly complex to put on or adjust

5.3.3.1 Selection

There is a wide range of possibilities when selecting a harness. The principal consideration is whether the harness is required for work restraint, work positioning or fall arrest. Depending on the nature of the task, careful consideration should be given to the position of the attachment points; front or rear.

Types of harness:

- 1 – Single point fall arrest (EN 361)
- 2 – Twin point fall arrest (EN 361)
- 3 – Sit harness/chest harness combination (EN 358, EN 813)
- ☐ 4 – Multipurpose harness (EN 361, EN 358, EN 813)

5.3.3.2 Sit / Chest Harness Combination

The sit harness incorporating a work positioning belt can be used by itself for work restraint and work positioning. It can also be combined with an appropriate chest harness to make it suitable for fall arrest. This combination is particularly suitable for rope access. It is also the best combination for falling and hanging in.

People involved in rope access activity must be provided with, and use, a harness that conforms to an appropriate standard, e.g. BS EN 361 for full body harnesses and BS EN 813 for seat harnesses. The harness should be attached to both the working and safety lines.

5.3.3.3 Attachment of the Lanyard

People using harnesses should be trained to try to move their legs in their harness in the event of an emergency, and to try to push against any footholds. If someone is suspended upright, immediate emergency measures must be undertaken to minimise suspension trauma. This could include intermediate measures, for example use of foot loops. If someone is suspended long enough to lose consciousness, further medical advice is to be provided during the rescue to prevent further injury.

Items of equipment used to link parts of a system are referred to as 'connectors'. These include:

- Twist lock
- ☐ Karabiner
- Screw gate karabiner
- Double action scaffold hook

Karabiners are available in a variety of sizes, shapes and locking mechanisms to suit the work application. They provide the most convenient type of connector as they are easily attached and detached during operations. Industrial karabiners must be self-closing and self or manual locking. They need to be capable of being opened only by at least two consecutive, deliberate manual actions.

Although they come in steel or alloy, steel is preferred in the petroleum industry as it is strong, reliable, and less prone to unseen cracking and has a lower spark potential when struck against steel.

5.3.4 Helmets

A helmet is an important piece of safety equipment, and the type of helmet used while working at height must be considered as part of the risk assessment as a minimum. Due to an improved chinstrap and side impact loading (over a 'V-Guard' type helmet), an industrial climbing helmet complying with EN 397 and EN 12492 could be used while rope access equipment.

5.3.5 Anchor Points

Potential anchor points need to be identified and assessed to ensure that they are suitable and secure. Fall arrest anchorages should be rated or equivalent to BS EN 795, however in many cases a specifically designed anchorage will be unavailable and then the following guide may be useful. Anchorages can generally be classed as tested, structural or certified.

Items that are tested should ideally be to BS EN 795. These items require annual testing as a minimum. Items that are structural should be 'unquestionably sound' and capable of performing beyond the requirements of BS EN 795 i.e. capable of withstanding of 10kN or 2250pf of a shock load.

Other potential anchor points commonly encountered in industry require more careful consideration, particularly scaffolding, handrails or pipe work. When anchoring to scaffolding, advice should be sought from a Competent Person before use.

Anchoring to pipe work should be avoided where practicable. If it must be used as an anchor point, the Technical Authority can give permission but only after proper risk assessment. Under no circumstances should gas lines, instrument lines, H₂S lines or any pipe work less than 3in be used as an anchor point.

Handrails are designed to retain personnel within a walkway and ideally should not be used as an anchor point. Handrails can only be used as an anchor point if an assessment has been made and permission granted by the appropriate Technical Authority.

5.3.6 Anchorage Slings / Strops

Attachment to an anchor point can be made by utilising appropriate reinforced slings ('girder strops' but **NOT** flat webbing slings) or wire strops. The sling or strop requires to be fitted to the anchor point by being clipped in to the connector on the lanyard, passed around the anchor, then clipped back onto the connector. The sling should never be passed around the anchor point, then back through itself ('choke hitch' or 'larks foot'), unless it is specifically rated for this use.

Users need to inspect slings or strops for damage before use and avoid placing them around sharp edges or abrasive or hot anchor points (although the sling or strop could be protected by additional padding or a protective sleeve).

Where a tested and certified loop of galvanised steel cable (tested for purpose, e.g. BS EN 795) that is dedicated to use with fall arrest equipment is used to pass over a large member, protection against chafing must be provided.

5.3.7 Ropes

A wide range of rope construction is used in PPE. The most versatile and user-friendly construction is known as 'kernmantle'. The kern is the core that carries about 80% of the rope strength. The mantle is the sheath and protects the core. Ropes are usually manufactured from nylon as natural fibres such as hemp are unsuitable.

The main dangers to rope are sharp edges, heat and chemicals. Careful checking of the worksite and correct rigging is essential. Ropes should be stored hung up, dry

and clean, away from contaminants or direct sunlight.

5.3.8 Man Riding Winches

Man riding winches are used in industry for access to drilling and well control equipment positioned at height (e.g. in the derrick, beneath the drill floor). Current industry guidance recommends that – due to the potential for an accident – these operations must be considered as the last option, non-routine and subject to stringent planning and controls.

Man riding hand signals and radios should be used to ensure good communications and the Winch Operator should keep the man rider in view at all times.

5.4 SIGNS AND BARRIERS

For all elevated working operations, signs and barriers shall be erected. Barriers can be flexible or fixed.

Red and white barrier chain shall be used for demarcation of areas

Fixed barriers shall be constructed from scaffolding tubulars or rigid panel section, and shall be clearly identified by wrapping with red & white warning tape or hazard warning pennants, or by painting red & white.

Fixed barriers shall be used for instances such platform floor openings, penetrations, or platform and roof edges where there exists the potential for a fall hazard

All barriers shall be fitted with barrier signs which clearly identify the following items in both Azeri and English:

- The type of work ongoing
- The Responsible Person for the work area
- A contact telephone number / radio channel
- The estimated duration of the works

During erection and dismantling of scaffolds, suitable and sufficient physical barriers shall be erected to prevent access of personnel into “drop zones” where there exists a serious potential for dropped objects.

Adequate warning signs shall be posted to instruct personnel of the inherent dangers in the area.

5.5 RESCUE

It is difficult for one procedure to specify an appropriate rescue plan for an explicit site, however, each BP site where people are exposed to work at height must have a rescue plan and this must form an integral part of the emergency control procedures.

Most plans will deal with the rescue of a person left suspended in either fall arrest, work positioning or rope access equipment. For the latter, the specialist contractor will already have a plan, equipment and personnel as part of their standard procedures. In the case of fall arrest or work positioning equipment, a separate plan should be developed as follows:

- ☐ When considering Fall Protection Systems, suspension trauma must be considered
- Identify the equipment required. This may include:

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 26 April 2010

Print Date: 2/1/2011

- Fall arrestor with retrieval handle
- Specialist rescue equipment such as the GOTCHA System
- Crane and crane basket
- MEWP
- Man-riding winch and basket
- Forklift with personnel basket
- Scaffolds and ladders
- Identify personnel to carry out the rescue

Note: Most service providers will supply rescue equipment and competent personnel to perform this work. The worksite may deem this adequate however it is recommended that on sites such as platforms, personnel in the fire team/rescue team are provided with the appropriate equipment to perform this task.

Consider the level of medical treatment that may be required (refer to the following paragraph)

Suspension trauma is a medically recognised condition. Everybody who is suspended in a safety harness runs the risk of shock and unconsciousness due to blood flow insufficiency. Unconsciousness can become life threatening after only a few minutes.

Shock, caused by a lack of blood flow, is due to the blood accumulating in the lower parts of the body as a result of the muscles relaxing and the 'muscle pump' effect stopping. The need for rapid and effective rescue is particularly important when using personal protective systems where a delay may have severe consequences, i.e. when someone is left hanging motionless in a harness after a fall. The time before loss of consciousness can vary from about 6 minutes to 2 hours, depending on incident severity.

Further information can be found in the HSE Contract Research Report 451/2002; <http://www.hse.gov.uk> - Harness Suspension: Review and Evaluation of Existing Information. Contact Occupational Health for the latest advice regarding suspension trauma.

5.6 COMPETENCE AND TRAINING

All personnel required to perform elevated work shall be fully trained in appropriate, safe work practices, including the wearing and care of associated safety equipment and the safe use of all elevated work equipment.

All personnel involved in work at height shall be competent, trained and supervised by a competent person. This includes involvement in organisation, planning, supervision and the supply and maintenance of equipment.

Personnel working at height shall be trained in how to avoid falling from height and how to avoid or minimize injury to them selves should they fall.

Note: Those who may have to work at height as part of their job function (excluding contractors conducting abseiling or scaffolding activities at BP facilities who refer to industry specific training requirements) as minimum are encouraged to pass Working at Heights Computer Based training (CBT). The aim of the course is to provide a basic understanding of the hazards associated with working at heights and how to follow effective safety

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 26 April 2010

Print Date: 2/1/2011

controls.**5.7 INSPECTION AND MAINTENANCE OF EQUIPMENT**

Equipment provided for work at height requires regular recorded inspection to ensure that it continues to be safe to use and to comply with relevant standards.

Each item of equipment should also be marked with a unique identification number so that it can be traced back to its point of origin. Test certificates and examination reports must be available for audit at site or central control point (onshore database).

Work at height equipment and components should be inspected at least every 6 months, although manufacturers will recommend more frequent inspection (up to 3 months).

Manufacturers' recommendations will form the basis of any inspection routine.

While it is intended that the working at height Equipment Controllers will provide inspection and maintenance duties for the most frequently used type of equipment (fall arrest), competency requirements specify that specialist equipment (rope access) requires the services of the specialist company's competent person.

The inspection regime recommended for control of lanyards and harnesses falls into three categories:

- Pre-use checks
- Detailed inspection
- Interim inspections

Competent persons must complete these inspections and manufacturers' guidelines must be followed if they state inspection frequencies outside the below:

Pre-use Checks: Non-recordable

This should be tactile and visual. Records of usage (sign out/sign in) would provide a record of pre-use checks.

Detailed Inspection: Recordable

A 6-monthly formal in-depth inspection for harnesses and lanyards will be completed by the appointed competent person. Inertia reels will comply with manufacturer's recommended inspection requirements and will be returned to the manufacturer for re-calibration etc.

For frequent used lanyards the suggested frequency is at least 3-monthly inspection, particularly where equipment is used in arduous environments (e.g. demolition, steel erection, scaffolding, steel skeletal masts/towers with edges and protrusions).

Interim Inspection: Recordable

The need for and frequency of interim inspections will depend on use. The equipment used will be subject to a weekly inspection by the competent person. The inspection regime for inertia reels or other specialist WAH equipment will be defined by the manufacturer's guidance or specialist contractor's guidance.

To mitigate the risk of damage to lanyards and shock absorbers due to grit blasting operations, all lanyards and shock absorbers must be kept away from grit blasting work.

The lifetime of fall arrest system depends on the precise use. If it is abused, or used in poor conditions, its life could be no more than one use. Items of PPE must not be proof-loaded, and detailed inspection by a Competent Person may not reveal hidden damage (i.e. chemical contamination).

Any inspection process is, to some degree, subjective, but inspection by a Competent Person familiar with site conditions should determine product condition.

5.7.1 Maintenance

The information gained in the maintenance process, inspection and more technical examinations should be complementary. If a maintenance log exists, it should be kept up-to-date and accessible for persons inspecting the equipment or conducting a more thorough examination.

Where temporary equipment is used, it is important for the site to establish how safety-related inspection and maintenance will be undertaken with the hire company.

This is particularly important for equipment on long-term hire and any agreement should be documented and communicated to the site.

5.7.2 Mobile Elevated Work Platforms

MEWP's are defined as lifting equipment. This type of equipment requires a thorough examination (as defined in LOLER) by a Competent Person at least every 6 months or in accordance with an examination scheme developed by a Competent Person. Routine maintenance is to be performed in accordance with manufacturer's instructions and advice from a Competent Person. (Detailed information on MEWP operations is available from [AzSPU-HSSE-DOC-00059-2](#) Procedure for Man Riding Operations).

5.7.3 Ladders

All ladders need to be used in accordance with manufacturer's instructions and stated precautions need to be considered with current site conditions (including the weather).

Industry research has indicated that the feet of a ladder are particularly susceptible to damage that can significantly reduce the grip, make them more vulnerable to movement and, as a result, increase the risk for falls. Pre-use visual and other inspection and maintenance are important to ensure that the feet can still provide adequate grip.

5.8 CONTROL AND ISSUE OF EQUIPMENT

Scaffolding is controlled and issued by the Scaffolding Contractor at site, who is responsible for ensuring safe storage of and access to materials and associated equipment.

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 26 April 2010

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE
CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT
<http://docs.bpweb.bp.com/dkazspu/component/hssesms>

All sites / installations are required to ensure that all ladders are suitable for the local conditions and should maintain a register of ladders including type and known condition. A written record should be kept of all inspections, defects and repairs.

MEWP's and other mobile personnel lifting devices can only be issued to certified personnel, and inspection and maintenance requirements need to be validated before use against the temporary equipment register.

Work restraint, work positioning and fall arrest equipment need to be controlled by an equipment controller. At most sites, this person will be employed by the service provider.

Equipment found at any other location needs to be returned to the storage area to ensure necessary inspection and maintenance issues are verified.

Rope access equipment is to be controlled and issued by specialist contractors to meet industry requirements and adequate supervision must be confirmed before the equipment is released. Rope access equipment is not to be used by any unauthorised personnel.

Note: There may be more than one equipment controller at each site (e.g. Operations contractor and Drilling contractor reps).

5.9 TOOLBOX TALKS

The tool box talk for work at height operations shall consider and discuss the specific risk and hazard assessment prepared for the job and the provisions and conditions demanded by the work permit. The tool box talk shall be delivered by the work team leader supported by the Area Authority.

The work team shall register their awareness of the risk assessment and work permit instructions discussed in the tool box talk by signing the toolbox talk attendance sheet.

5.10 HOUSEKEEPING

For all work at elevation, housekeeping must be maintained to a high standard in order to limit or prevent occurrences such as dropped objects, slips, trips and falls.

Personnel shall maintain satisfactory control of tools and loose equipment to prevent them falling and creating a hazard to personnel and assets. This can be achieved by implementing preventive measures such as toe-boards, or binding and lashing of loose equipment.

Good housekeeping practices shall be implemented to limit the accumulation of debris, and to stop debris falling to grade.

6 KEY DOCUMENTS / TOOLS / REFERENCES

This procedure shall, where appropriate, be used in conjunction with this suite of AzSPU Procedures referenced below.

Document Number	Title of Procedure
AZSPU-HSSE-DOC-00011-2	Procedure for Deviations
AZSPU-HSSE-DOC-00060-2	Procedure for Permit To Work
AZSPU-HSSE-DOC-00063-2	Procedure for Task Risk Assessment
AZSPU-HSSE-DOC-00062-2	Procedure for Scaffolding
AZSPU-HSSE-DOC-00059-2	Procedure for Man Riding Baskets
AZSPU-HSSE-DOC-00061-2	Procedure for Personal Protective Equipment
AZSPU-HSSE-DOC-00002-2	Procedure for Control of Work

7 APPENDICES

Appendix A: Work at Height Audit Checklist

Appendix B: Barrier Notification Sign

Appendix C: References

Appendix D: Links to Dropped Object Calculator facility

7.1 APPENDIX A: WORK AT HEIGHT AUDIT CHECKLIST

Item No.	WORK AT HEIGHT AUDIT CHECKLIST	NO	YES	ACTION TAKEN AND CLOSED OUT BY:
1	Do all workers above 2m-wear harness with double lines and hooks latched on. 100% protection required.			
2	Are fall prevention devices fitted with shock absorber type lanyard, (only when higher than 6 metres)			
3	Are proper work platforms, landings and walkways provided min width 400mm			
4	Are safety nets provided where safe work floor is not feasible			
5	Are openings in work floors covered with planks / barricaded and signs posted			
6	Are signs 'danger men working overhead' posted in English and Azeri			
7	Is there satisfactory control of tools to prevent them falling and good housekeeping to stop debris falling			
8	Are correct precautions taken for working on sloping roofs?			

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 26 April 2010

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT
<http://docs.bpweb.bp.com/dkazspu/component/hssesms>

9	Is a valid PTW in place which adequately addresses all aspects of the work to be done			
10	Have personnel been advised on any Simultaneous operations which may be taking place			
11	Has a Toolbox Talk been held to advise all personnel on the works to be performed, and the risks involved with the task			
12	Are inertia reels tested every 6 months and certified.			
13	Are records available of all tests and inspections of TPI on Fall protection devices inertia reels etc.			
14	Is there a rescue team trained to rescue persons from height with correct medical aids			
Notes: 				

7.2 APPENDIX B: BARRICADE NOTIFICATION SIGN

Barriered Area

Ongoing work: _____

Responsible: _____

Phone no.: _____

Duration: From: _____

To: _____

7.3 APPENDIX C: REFERENCES

1. Work at Height Regulations 2005 SI 2005/735, as amended by the Work at Height (amendment) Regulations 2007 SI 2007/114
2. Health and Safety at Work etc. Act 1974
3. Management of Health Safety at Work regulations 1999 SI 1999/3242
4. Lifting Operations and Lifting Equipment Regulations 1998 SI 1998/2307
5. Construction (Health, Safety and Welfare) Regulations 1996 SI 1996/1592

7.4 APPENDIX D: LINKS TO DROPPED CONSEQUENCE OBJECTS CALCULATOR FACILITY

Link 1: Dropped Object Consequence Estimation BP Tool (guidance):

<http://docs.bpweb.bp.com/dkAzSPU:/content/hse/spu/records/AZSPU-HSSE-REC-01188-2>

Link 2: Dropped Object Consequence Calculator User Guide:

<http://docs.bpweb.bp.com/dkAzSPU:/content/hse/spu/records/AZSPU-HSSE-REC-01189-2>

7.5 APPENDIX E: FEEDBACK & IMPROVEMENT SUGGESTIONS

[illegible]

Revision/Review Log

Revision Date	Authority	Custodian	Revision Details
05 October 2004	CHSSE Manager	CHSSE Team Leader	Initial Issue as controlled document
07 September 2007	Alan McNulty (CHSSE Manager)	Esmira Akhundova (CHSSE Team Leader)	<p>General: Throughout the procedure the document numbering for referred procedures has been changed from UNIF to AzSPU.</p> <p>Section 1. Introduction: 1.1 <u>Purpose</u>; Wording changes. 1.2 <u>Scope</u>; Wording changes. Following inclusion to Section 1 are 1.3 <u>Legislation & Standards</u>, 1.4 <u>Working at Heights Golden Rules of Safety</u>, 1.5 <u>Company Requirements</u>, 1.6 <u>Stopping Unsafe Work</u>, 1.7 <u>Deviations</u>, 1.8 <u>Document Review</u>, 1.9 <u>SSOW Specific Cross References</u> (new doc control numbers). 1.10 <u>Language Facilitation</u>, 1.11 <u>Procedure Summary</u>.</p> <p>Section 2. Responsibilities: Is now "Definitions"</p> <p>Section 3. Working Platforms: Is now "<u>Roles and Responsibilities</u>". Changes made to the responsibilities of <u>SM</u>, <u>SC</u>, <u>OIM</u>, <u>Area Authority</u>, <u>Performing Authority</u> replaces the heading of Supervisors, Employees responsibilities added, Working at Height Equipment Controller responsibilities added.</p> <p>Section 4. Fall Arrest Equipment: Is now "<u>Requirement to Work at Height</u>".</p> <p>Section 5. Movement and Working at Height: Is now "<u>Work Equipment</u>".</p>

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 16 March 2010

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT
<http://docs.bpweb.bp.com/dkazspu/component/hssesms>

			<p>Section 6. Training: Is now "<u>Components of Fall Arrest Systems</u>".</p> <p><u>The following sections have been added</u></p> <p>Section 7: Signs and Barriers Section 8: Rescue Section 9: Competence and Training Section 10: Inspection and Maintenance of Equipment Section 11: Control and Issue of Equipment Section 12: Toolbox Talks Section 13: Housekeeping</p> <p>Appendices. 5 appendices included to the document as follows: Appendix A: Work at Height Audit Checklist Appendix B: Barrier Notification Sign Appendix C: References Appendix D: Procedure Summary Appendix E: Feedback & Improvement Suggestions</p>
05 December 2008	Yuliy Zaytsev, Safety & Compliance Systems Manager	Adalat Mamedov, Central Safety TL	Authority position/name has changed to reflect org changes in HSE&TD as of December 1st 2008
16 February 2009	Yuliy Zaytsev, Safety & Compliance Systems Manager	Adalat Mamedov, Central Safety TL	<p>Paragraph 4.4 Fragile Surfaces List of precautions for working at fragile surfaces is worked out and added.</p>

			<p>Paragraph 5.2 Requirements for Working Platforms. The last bullet is made more clear and detailed</p> <p>Paragraph 5.6 Requirements for Ladders The content is amended and made more detailed.</p> <p>Paragraph 5.7 Personal Fall Protection System. The content is slightly changed.</p> <p>Sub-paragraph 5.7.4 Fall Arrest Requirement for anchor points is added.</p> <p>Paragraph 6.2 Inertia Reels The content is made more detailed.</p> <p>Section 10 Inspection and Maintenance of Equipment Inspection period of WaH equipment is reduced now to 6 months. In arduous environments it is suggested to inspect lanyards at least every 3 months.</p>
--	--	--	---

16 December 2009	Yuliy Zaytsev, Safety & Compliance Systems Manager	Niyaz Mammadov, HSE Systems / CoW Advisor	The document has been re-formatted to be compliant with the requirements of Standardized HSE Document Control Template (AZSPU-HSSE-DOC-00026-2)
16 March 2010	Yuliy Zaytsev, Safety & Compliance Systems Manager	Kamran Aliyev, HSE Systems/CoW Advisor	<p>Section 3 General Requirements additional line added, which refers to relevant group standards</p> <p>Paragraph 3.2 added double lanyard into second bullet point</p> <p>Paragraph 5.2 Changed SHOULD to MUST</p> <p>Sub- Paragraph 5.2.1 Means of Access or Egress at height Added bullet point eight with technical data clarity</p> <p>Sub- Paragraph 5.2.4 Requirements for Mobile Elevated Work Platforms Two lines added: MEWP's can only be operated by competent operators No relocation / position change of a MEWP with personnel being in the man basket is allowed</p> <p>Sub- Paragraph 5.3.1 Lanyards and Energy Absorbers Adjusted mathematics calculation to 7.25 instead of 6.25</p>

Control Tier: <<2>>

Document Number: << AZSPU-HSSE-DOC-00065-2>>

Revision Date: 16 March 2010

Print Date: 2/1/2011

PAPER COPIES ARE UNCONTROLLED. THIS COPY VALID ONLY AT THE TIME OF PRINTING. THE CONTROLLED VERSION OF THIS DOCUMENT CAN BE FOUND AT

<http://docs.bpweb.bp.com/dkazspu/component/hssesms>

			<p>Paragraph 5.4 Bullet 5 statement has been removed</p> <p>Paragraph 4.3 Bullet 2nd comma has added: PA must participate in Level 1 Risk Assessment</p> <p>Sub - Paragraph 5.2.6 Requirement for Ladders Bullet 4 has been re-worded for offshore environment</p> <p>Appendix D Attached links to Dropped Objects Consequence Calculator facility</p>
26 April 2010	Yuliy Zaytsev, Safety & Compliance Systems Manager	Kamran Aliyev, Safety Systems/CoW Specialist	<p>Paragraph 5.6 Competence and Training bold section has been updated in line with current AzSPU Training policy. This ad hoc revision is result of incident outcome took place in ACG field.</p>