



# Global PS&S Guidance – Working @ Height

This document contains specific guidance on the implementation of the requirements contained in Section 3 of The Nokia Global PS&S Standard – Working @ Height.

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Organization	People Safety and Security
Document type	Internal
Document version	Version 3.0
Document ID	SP-44ISPA3ISPS4-1013285096-233
Document location	People Safety and Security SharePoint

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**Capitalized** terms used in this document have the meanings set forth in that Standard.

3.1	<b>FASTEN – PERSONAL Behaviors – Everyone</b> who Works @ Height as part of their business for Nokia must abide by the following rules at all times:	
	Must always be attached to the structure at all times	Fall prevention controls always take preference over fall arrest. When climbing a Tower or other type of structure, free climbing is NOT allowed. People MUST always be protected against a fall at all times.
	Must prevent objects from falling and hitting people	All tools and equipment should be secured against falling. Larger tools and equipment must be lifted and supported by a suitable lifting rig and tethered when being handled. Smaller equipment may be carried in a suitable sealed tool bag.
	Must have a clear, controlled zone around the structure when they are climbing	There must be a clear, controlled zone around the structure when climbing is underway to ensure that anyone working below will be safe in the event of objects falling from the structure. Where practical, the clear zone around the base should be 50% of the height climbed, but in no event less than a minimum 5 metres zone around the base should be observed whilst working at height is in progress. Preventing the incident in the first place is the goal and a clear / drop zone is not to be considered the primary control.
	Must ensure that they are medically fit to climb	If someone is not fit to climb, they are not only a hazard to themselves; they are a hazard to their colleagues. All persons undertaking work at height shall be fit to do so. In addition, all problems that affect the ability to work at height MUST be reported immediately to the Team Leader or Supervisor.

3.1	<b>FASTEN – PERSONAL Behaviors – Everyone</b> who Works @ Height as part of their business for Nokia must abide by the following rules at all times:	
	Ensure that their safety equipment has been inspected and is checked prior to use	All safety equipment must be inspected in accordance with the relevant statutory requirements and checked prior to use and climbing. The safety check should be done by a competent person who has the knowledge and the skills to ensure that the equipment being used is in a safe condition and is used correctly. This should not just be a Self-checks, it should also be done by a “buddy”, someone else in the team, think of what divers do.
	Must check the condition of the structure before climbing	A visual inspection must be made, to include the following before climbing:- <ul style="list-style-type: none"> <li>• Are there any missing structural members on the tower</li> <li>• Is the tower twisted or leaning over</li> <li>• Are the bolts and bolted connections loose or missing</li> <li>• Clean surrounding area as much as possible.</li> <li>• Check the pole/structure for ruined / corroded /rotten parts.</li> <li>• For poles a physical check must include:-</li> <li>• Pull the pole perpendicularly several times looking for unexpected movements.</li> <li>• Hit the pole at the base using a hard tool and listen. Musical noise means good condition. Dull sound means bad condition.</li> <li>• Spike the pole as low as possible to look for rottenness</li> </ul>
	Must <b>NOT</b> climb/stand on fragile surfaces	Where there is work on roofs, the surface must be assessed before work starts to ensure that it can support the weight of the person and equipment. Where it can not, work should not start until suitable controls have been put in place
	Must <b>NOT</b> climb any unsafe structure	Climbers shall only climb a structure after following an inspection of the stability and condition as above. Any structure that is considered to be in an unsafe condition must not be climbed and reported.



3.1	<b>FASTEN – PERSONAL Behaviors – Everyone</b> who Works @ Height as part of their business for Nokia must abide by the following rules at all times:	
	Must <b>NOT</b> climb whilst impaired due to drugs or alcohol	This includes LEGAL prescription drugs that can impair performance. The level of implementation of this requirement is determined by local culture; where abuse is common in society; formal testing should be considered.
	Must be accompanied by a appropriately trained and equipped second person, i.e. Work at height must not be carried out alone	Working at height using Personal Fall Protective Equipment requires a minimum of two appropriately trained, competent and equipped climbers. This includes the requirement for at least two team members to be rescue trained and equipped.

3.2	<b>FASTEN – Nokia must make sure that:</b>	
	These behaviors are clearly communicated to all Climbers and Riggers.	Despite being clear and obvious these expectations are often not met, some are routinely broken, for this reason the seriousness with which Nokia takes them needs to be communicated through multiple channels and reinforced at regular intervals.
	That all Climbers/Riggers/Rooftop Workers confirm that they have understood these	A signature stating that they have read and understood these is not sufficient. There needs to be an element of testing involved to ensure that the message is clearly understood.
	There is a process to monitor compliance with and enforce these, where necessary involving personal consequences	Failing to display these behaviours may result in formal disciplinary action; repeated non compliance can and will result in termination of contracts.
	That business process and pressure does not place a person in a situation where they are forced to break these rules	It is the responsibility of everyone in the business to ensure that no one is put in a position that in order to complete their job they need to put themselves at risk by breaking the requirements of this standard. Where a situation such as this occurs the reasons behind must be investigated and appropriate action taken to prevent recurrence. Everone has the right to refuse to do a task that they believe is dangerous.
	That Climbers are provided with all reasonable tools and equipment to allow them to meet these	Climbers/Riggers can only comply fully with the requirements if they are provided with the right tools and equipment, key examples of this are: <ul style="list-style-type: none"> <li>• All necessary information and documentation for the tasks undertaken</li> <li>• Personal Protective Equipment – including Fall Protection Equipment</li> <li>• Appropriate signage and where necessary, barriers</li> <li>• Lifting equipment</li> <li>• Rescue Kit</li> <li>• Appropriate and safe tools for the equipment being worked on</li> </ul>



<b>3.2</b>	<b>FASTEN – Nokia must make sure that:</b>	
	The consequences for not complying with the Nokia Standards, in particular individual behaviors in 3.1, are clearly communicated to all persons involved in the Work @ Height	Failing to display these behaviours may result in formal disciplinary action; repeated non compliance can and will result in termination of contracts / employment.

3.4	FASTEN – Type of Work	
	Rooftop work – Access	Where ever possible, roofs must be accessed by the designed method. e.g. internal access or fixed vertical ladder. If no suitable permanent means of access is available, appropriate temporary access must be established.
	Rooftop work – Fragile Surfaces –Fragile and sloping	<p>Before any Roof Work is done, there must be an assessment of the site; this will include any documentation that is available from the operator/landlord. The assessment will include the type of surface. If it is a fragile surface, no work should be done until appropriate controls are in place; these may be either temporary or permanent and shall be approved by the local H&amp;S Manager.</p> <p>The assessment must also include the incline of the roof (if any) and the condition of the surface (wet, slippery, vegetation) and any other controls that are required to minimise the risk.</p>
	Rooftop work – Unprotected Edges	On roofs with unprotected edges or adjacent fragile surfaces, a demarcation barrier must be established at a distance no less that 2 metres from the hazard. The demarcation barrier must be a physical continuous barrier. The demarcation barrier shall not be crossed without appropriate fall protection methods in place. These measures will typically be work restraint systems.
	Rooftop work – Protection of others	Where required, suitable barriers and signage must be erected to control access to the ground area below the work place.

3.4	FASTEN – Type of Work	
	Rooftop work – other hazards	<p>EMF – where required, adequate monitoring of EMF and RF must be in place. All antennas and feeder systems must be assumed to be ‘live’ unless proved other wise. Outage / shutdown procedures must be followed. Follow any RF warning signage.</p> <p>Other plant machinery – Care will need to be exercised when working in or accessing through plant and equipment rooms, e.g. lift motor rooms.</p> <p>Air Conditioning – Legionaries disease can be present in untreated open circuit air conditioning systems.</p> <p>Flues and chimney emissions – Any adjacent Flues and Chimneys may release toxic and or asphyxiating gases. These should be assessed and suitable controls put in place.</p> <p>Communications – Communications must be checked and if compromised, additional arrangements made to ensure that assistance can be requested if required.</p> <p>Birds, Bird faeces- Birds and their droppings can be hazardous. If there is a significant build up of droppings, controls must be put in place; as a minimum, PPE should be worn.</p>
	Climbing – General	<p>Climbers must:</p> <ul style="list-style-type: none"> <li>• Be continually attached (Work Restraint or Fall Arrest) when working at height.</li> <li>• Put in controls to avoid dropping objects from height.</li> <li>• Put in controls to avoid damage to existing telecom installations.</li> </ul>



3.4	FASTEN – Type of Work	
	Climbing – Pole Climbing	<p>All poles must be checked for hazards and stability before climbing            For join use poles or where adjacent to electrical apparartus exists. Minimum clearances must be established and maintained            If the pole is accessed via a portable ladder, the ladder must be of a suitable and approved type and secured against the pole at the bottom and the top. The climber must be protected against a fall by an approved method of attachment whenever on the pole.            All tools or equipment must be carried in a suitable harness pouch or raised to the work position in a suitable bag. Nothing to be carried in the hand when ascending / descending the pole / ladder.            Suitable controls shall be put in place to protect others</p>
	Rigger	<p>In addition to the measures outlined in the requirements for Climbers, the following measures are required for riggers:</p> <ul style="list-style-type: none"> <li>• An appropriate lifting plan</li> <li>• Lifting equipment must be suitable, sufficient and safe. All workplace activity must be controlled and managed</li> <li>• Any changes in working practice, equipment or environment will require a review of the appropriate risk assessment</li> <li>• On completion of the work, the site must be left safe and tidy.</li> </ul>

3.5	FASTEN – Fit to Work:	
	Medically Fit to Climb	<p>Nokia must make sure that everyone Working at Height is medically fit to work. Fitness to work and medical illnesses will have a significant effect on the ability to climb safely. In some countries the notification of medical conditions is part of the certification process. Where this is robust and trusted there is no need for action by Nokia, where this is not the case, Nokia needs to make arrangements for similar provisions.</p> <p>This will require, as a minimum that everyone under the age of 40 must have received a medical examination by a qualified medical practioner within the last 5 years and everyone over the age of 40 must have received this every 2 years. Examinations should at a minimum include: general fitness, flexibility and movement, cardio vascular health, medical history, hearing and eyesight. At the start of every day/shift, everyone must be asked “Are they fit to climb”; the response must be documented.</p>
	Inform their employer at any point where they are no longer considered fit to Work @ Height	<p>This needs to be clearly communicated as a condition of employment, should a person not declare a medical condition that has the potential to or has lead to an incident this will be considered as misconduct.</p> <p>In some countries personal data protection makes implementing these requirements difficult. Where this is the case, this decision must be supported by local legal team along with a local process.</p>

3.9	FASTEN – Arrangements	
	Working at Night	<p>Working at Height must not take place during the hours of darkness. In exceptional circumstances, work may be authorised by a Senior Manager in consultation with the H&amp;S team for work to be carried out during darkness in order to minimise customer affecting network downtime or due to a serious Health and Safety risk. Temporary lighting will be required; including head torches for climbers and floodlights on the ground or on the structure.</p> <p>If the work at height is prolonged and or complex, suitable lighting fixed to the structure around the work area will reduce risk. The glare from lights on the ground shining up at the work site will affect a climber’s vision and so should be avoided if at all possible.</p> <p>All Climbers should be given time to familiarise themselves with the structure during daylight hours. All those involved in the work activity should also be involved in its planning.</p> <p>A detailed briefing should take place immediately before the climb, during which relevant risk assessments should be referred to and all risk control measures discussed.</p>

3.9	FASTEN – Arrangements	
	Weather conditions	<p>Weather conditions that may significantly increase risk are:</p> <ul style="list-style-type: none"> <li>• Lightning – all work at height must cease</li> <li>• High winds – Careful consideration needs to be made to lifting operations</li> <li>• Heavy Rain</li> <li>• Ice / Snow</li> <li>• Extreme Cold</li> <li>• Extreme Heat.</li> </ul> <p>Weather changes can occur quickly and without warning. Weather conditions must be taken into consideration during the planning stage of any working at height operation. Unsuitable weather conditions may require the operation to be postponed. All climbing must be suspended if there is a significant risk of lightning. The Team Leader responsible for the climb must assess the weather conditions prior to and during the period on the tower. Where there are reasonable grounds for concern, a local weather forecast must be obtained.</p>
	Shut Down	<p>All work must be planned and all necessary arrangements made for any required outages or shut downs before work commences. All arrangements / procedures must comply with the relevant operator’s procedures. The system must be isolated and secure before any work on the systems commences. All systems must be returned to operation on the completion of work.</p>

3.9	FASTEN – Arrangements	
	Drop Zones	<p>When work is undertaken at height, people at ground level must be protected. During working at height activities there is a possibility of equipment, tools or other items falling into the area around the work site.</p> <p>An exclusion area or “Drop Zone” should be clearly marked out using suitable temporary barriers, cones or rope and accompanied by adequate signage in order to protect those on the ground.</p> <p>Only persons who have been made aware of the danger and who are wearing safety helmets may be allowed into the drop zone and only if they are required to be in there due to the task, e.g., accessing the structure, slinging loads, hauling or controlling loads.</p> <p>The items that could be dropped and the surface on which they would land should be considered when establishing the drop zone. Small hard items will bounce considerable distances if they land on a hard surface such as concrete or steel.</p> <p>The zone radius should be at least equal to half the working height of the operation. Where this size of zone is not feasible due to the proximity of surrounding structures or buildings, the drop zone should be as large as possible but no less than 5m from the base of the tower.</p> <p>Such dimensions shall be subject to the on-site risk assessment on the day of the work.</p> <p>Where neighbouring property falls within the area that would normally be a drop zone there must be liaison with the neighbours prior to climbing.</p> <p>Suitable signs should be placed at the entrance to the drop zone.</p> <p>Where danger areas have been identified, precautions or devices should be used to prevent unauthorised access to the area and clear indication must be made of the danger.</p> <p>Consider posting a guard to prevent unauthorised access.</p>

3.9	<b>FASTEN – Arrangements</b>	
	Hours of Work	Hours of work must be controlled and monitored and must comply with all applicable local legislation or regulation.
	EMF	<p>Antennae transmit/receive radio frequency (RF) over a designated area in particular directions – from 30 degrees to 360 degrees – depending on antenna type.</p> <p>Transmission dishes (microwave) transmit/receive radio frequency in a pencil beam to/from dishes within line of sight of each other.</p> <p>The radio signal transmissions that base stations emit are non-ionizing electromagnetic waves of radio frequency radiation.</p> <p>When radio waves – non-ionizing radiation – pass through the body some of their energy is absorbed. This has a heating effect on human tissue.</p> <p>Radio frequency is not hot in itself but when the energy is absorbed it causes molecules in the human body to vibrate which produces heat. As the internal organs of the human body are finely tuned to function and survive within a certain temperature range then any significant temperature change may have a detrimental effect.</p> <p>The power of the radio frequency signal produced from a base station will be strongest at the point of source, that is, as it leaves the antenna.</p> <p>It is at this point that radio frequency levels may exceed the levels set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). This standard recommends levels of occupational and public exposure that should not be exceeded. Current guidelines keep exposures well below damage thresholds. However, a cautionary approach must always be taken.</p>

3.9	FASTEN – Arrangements	
	Electrical	<p>This work must only be undertaken by trained and qualified personnel. When working on Poles, communication cables are often close to live electrical cables. Controls must be put in place.</p> <p>Any work on HV equipment will require a Permit to Work and MUST only be done by qualified/specialised personnel.</p> <p>All electrical work must comply with the Global Electrical Safety Standard.</p>
	Lone Working	<p>Only work that can be undertaken from a safe, guarded area or at more than 2 m from a fall hazard may be undertaken by a lone worker, that is, no one must go within 2 metres of an edge on their own.</p> <p>Any work that requires the use of Personal Fall Protection Equipment must not be undertaken alone.</p> <p>If lone working is deemed appropriate; adequate checks and controls must be maintained. These may include:</p> <ul style="list-style-type: none"> <li>• Informing manager / control of the commencement of work</li> <li>• Periodic checks by Management / Control</li> <li>• Informing Management / Control of completion of work.</li> </ul>

3.9	FASTEN – Arrangements	
	Proximity to Traffic / General walkways / other structures	<p>Traffic management systems must be deployed where a stated minimum separation distance between the structure and a dedicated traffic lane cannot be maintained.</p> <p>Where wires or cables are to be erected over a road, minimum clearances and appropriate additional controls must be implemented.</p> <p>Where accessing or working on the structure introduces an increased risk to members of the public, appropriate controls need to be put in place. Interference by others that may compromise the safety of the climber also need to be assessed. Controls can include additional people at ground level to manage this</p> <p>How close the structure to be climbed is to adjacent structures can influence the safety of the task E.g. Adjacent spiked railings.</p>



3.9	FASTEN – Arrangements	
	Pre Start Checks	<p>No structure may be accessed without the approval of the structure’s owner / operator. A prestart inspection must be completed before any work starts.</p> <p>The Climber must:</p> <ul style="list-style-type: none"> <li>• Comply with all the owners / operator’s access requirements. Where there is a conflict between the owner/operator’s requirements and the requirements set out in the standard and guidance, a solution must be found and implemented before accessing the site.</li> <li>• Establish a controlled zone as set forth in the Standard around the base of the structure and display appropriate signage.</li> <li>• Not start work if adequate controls to ensure the safety of all present cannot be established.</li> <li>• Ensure all Personal Fall Protection Equipment and other safety equipment must be available and appropriate.</li> <li>• Ensure all safety critical equipment must be checked before and after use.</li> </ul> <p>The minimum requirements are attached at the end of the guidance document.</p>

3.6	<b>FASTEN – Supervision: Supervision, to be effective must:</b>	
	Understand their responsibilities and be trained	Supervisors must understand what they are responsible for. They must receive training on the minimum expectations in the Standard. They must make sure : <ul style="list-style-type: none"> <li>• Only authorized people access site</li> <li>• Everyone is trained</li> <li>• Everyone has the right equipment</li> <li>• Everyone knows what that are doing and how they should be doing it</li> <li>• Any changes are assessed</li> <li>• Any changes to the method of work are agreed and documented</li> </ul>
	Be empowered to control the work, they <b>MUST</b> have authority to control the work and if needed, stop the work	Supervisors/Team Leaders must be empowered and operate Nokia’s Refusal to Work process, where required.
	Be monitored and held accountable	Supervisors/Team Leaders will be monitored and held accountable for what happens on the site
	Make sure only authorized people access the site	Access to the work area must be controlled, which can be done by barriers, tape, or physically stopping people from entering.
	Make sure that everyone on site is trained to the appropriate level for the task	Supervisors /Team Leaders must make sure that all climbers hold a valid certificate for the type or activity that they undertake; this will require physically checking the certificates on a regular basis during routing site inspections. Training records and valid certificates/qualifications is one of the first items checked in the event of an accident. All climbers must be able to demonstrate the status of their qualifications at all times. This must be checked by site inspections, audits and spot checks.
	Make sure everyone has the right equipment	Supervisors/Team Leaders must understand what equipment is required and ensure that all personnel are using the correct equipment, at <b>ALL</b> times.

<b>3.6</b>	<b>FASTEN – Supervision: Supervision, to be effective must:</b>	
	Make sure everyone knows what they are doing and how they should be doing it	Supervisors/Team Leaders MUST check that everyone are competent and trained to the correct level and have the correct certificate for the task that they are doing.
	Ensure that any changes to the method of work are agreed, assessed and documented	Where the task changes, for whatever reason, this must be re assessed to ensure that suitable and appropriate controls are in place and documented
	Be present on site at all times whilst high risk work occurs	Where high risk work is happening, this must be supervised. A supervisor can not be involved in the work whilst it is happening.

3.3	Type of Worker	Duration of Training / Testing Refresher Requirements & Max Student Trainer Ratio	Overview	Minimum Syllabus / Relevance
	Rooftop Worker	<p>Minimum 1 day</p> <p>50% must be practical – to include a Practical Skills Check</p> <p>Formal refresher – Every 2 Years</p> <p>6:1 – to ensure correct pupil / trainer contact</p>	<p>People who are required to plan, supervise or undertake work on flat roofs, including surveys, planning, installation, decommissioning and maintenance.</p>	<p>Rooftop Risks</p> <p>Restraint systems</p> <p>Portable Ladders</p> <p>Anchor points and Horizontal systems</p> <p>Relevant Personal Fall Protection Equipment including pre-use inspection</p>
	Tower Climber	<p>Minimum 2 day</p> <p>60% must be practical – to include a Practical Skills Check</p> <p>Formal refresher – every 3 years. If not climbing regularly (&gt;3 times /month) - needs to be refreshed annually</p> <p>6:1 – to ensure correct pupil / trainer contact</p>	<p>People who are required to undertake work at height on telecom structures including; lattice towers, masts, monopoles, roof top structures.</p>	<p>Towers – Access ladders – Control Measures and Hierarchy</p> <p>Relevant Personal Fall Protection Equipment</p> <p>Pre-use inspection of PFPE</p> <p>Pre-climb structure / workplace checks</p> <p>Site Safety – Drop zones, signage, security</p> <p>Anchor point identification and assessment</p> <p>Restraint systems</p> <p>Vertical Fall Arrest Systems</p> <p>Accessing vertical ladders and structures using twin lanyards</p> <p>Work Positioning</p> <p>Using temporary vertical fall arrest systems</p> <p>Self-Retracting Lifelines (SRLs)</p> <p>Direct lifting (10 kg)</p> <p>Rope / pulley lifting rigs 1;1 , 2:1 up to 35Kg</p>

3.3	Type of Worker	Duration of Training / Testing Refresher Requirements & Max Student Trainer Ratio	Overview	Minimum Syllabus / Relevance
				Safe handling of tools and equipment at height. Guarded platforms
	Pole Climber	<p>Minimum 1 day</p> <p>60% must be practical – to include a Practical Skills Check</p> <p>Formal refresher – every 3 years. If not climbing regularly (&gt;3 times /month) – needs to be refreshed annually</p> <p>6:1 – to ensure correct pupil / trainer contact</p>	<p>People who are required to work at height on overhead fixed network poles. The standard training will not cover the use of climbing spikes but this training can be included if needed</p>	<p>Relevant Personal Fall Protection Equipment</p> <p>Pre-use inspection of PFPE</p> <p>Pre-climb structure / workplace checks</p> <p>Site Safety – Drop zones, signage, security</p> <p>Correct use of portable ladders</p> <p>Ascending and Descending poles</p> <p>Work positioning</p> <p>Handling tools and equipment</p> <p>Emergency procedures</p>
	Rigger	<p>Minimum 3 days; in addition to Tower Climbing</p> <p>60% must be practical. Must be assessed and only fully certified following observed field work.</p> <p>Formal refresher – every 3 years. If not climbing regularly (&gt;3 times /month) – needs to be refreshed annually</p> <p>6:1 – to ensure correct pupil / trainer contact</p>	<p>For Tower Climbers and involved in the planning, supervision and undertaking of lifting operations on telecoms structures where the load lifted exceeds 35Kg</p>	<p>Rigging and use of lifting rigs including portable winches</p> <p>Lifting equipment – characteristics and limitations</p> <p>Pre-use inspection of lifting equipment</p> <p>Lift plans and rig design and records</p> <p>Use of mechanised lifting appliances</p> <p>Slings</p> <p>communication</p> <p>Lifting procedures and operations</p>

3.3	Type of Worker	Duration of Training / Testing Refresher Requirements & Max Student Trainer Ratio	Overview	Minimum Syllabus / Relevance
	Tower Rescue	1 day Annual test / refresher as appropriate - additional and separate to all other courses 6:1 – to ensure correct pupil / trainer contact		Casualty Care – Suspension Trauma Rescue Procedures Equipment for Rescue

3.7 FASTEN – Equipment Required – Including Access Equipment	
Ladders and Steps	<p>Ladders and steps must:-</p> <ul style="list-style-type: none"> <li>• Only be used for access or short duration work where safer means are not practical. Ladders and steps must:-               <ul style="list-style-type: none"> <li>○ Be of a design and standard applicable to the task</li> <li>○ Be Inspected and in a safe condition</li> <li>○ Be used in accordance with the manufactures instructions</li> <li>○ Be placed on firm level ground.</li> </ul> </li> </ul> <p>Portable ladders must be placed and secured at an angle of 75 degrees which equals to 1 metre out for 4 metres up.            If used for access the ladder shall extend at least 1 metre above the platform            Ladders must <b>NOT</b> be homemade or makeshift.            Ladder users must:-</p> <ul style="list-style-type: none"> <li>• Be Trained and competent in their use and inspection</li> <li>• Maintain 3 points of contact with the ladder</li> <li>• Not over reach and unbalance the ladder</li> <li>• Not undertake tasks requiring excessive applied force</li> <li>• Not use the top step of a step ladder as a standing platform</li> </ul>
Staging and podiums	<p>Temporary raised platforms will typically be used for low level access. These platforms must:-</p> <ul style="list-style-type: none"> <li>• Be of appropriate height and type to allow the task to be completed safely</li> <li>• Have adequate guarding to prevent a fall.</li> </ul>
Portable and Fixed Scaffolding	<p>Fixed and Portable Scaffolds</p> <ul style="list-style-type: none"> <li>• All scaffolds shall be erected and inspected by a trained and competent person.</li> <li>• All scaffolds will be erected, inspected and used in accordance with the manufactures instructions.</li> </ul>

3.7	<b>FASTEN – Equipment Required – Including Access Equipment</b>	
		<ul style="list-style-type: none"> <li>• Fall protection shall be used during the erection of scaffolds.</li> </ul>
	Mobile Working Elevated Platforms	<p>Mobile Elevating Work Platforms</p> <ul style="list-style-type: none"> <li>• Must be of an appropriate type and capacity for the intended task.</li> <li>• Must be inspected and certificated in accordance with relevant statutory requirements.</li> <li>• Must be operated by a trained and competent person.</li> <li>• Work Restraint shall be used by the occupants of the platform.</li> <li>• Must not be used where there is an overhead risk (Electrical/obstacles).</li> </ul>
	Anchor Points – Dedicated Anchor	<p>Eyebolts and single point anchors conforming to BS EN 795 (or equivalent) are designed to offer the individual individual a certified attachment point for fall protection and rope access techniques.</p> <p>It is a legislative requirement that eyebolts and single point anchors for the purpose of fall protection are inspected and certified a minimum of once every twelve months; abseil anchors must also undergo a visual inspection a minimum of once every six months. All inspections must be performed by a suitably qualified person.</p> <p>Freestanding weighted anchors provide a single point anchor conforming to BS EN 795 Class E for workers requiring temporary access to flat roofs or structures, of pitches up to and including 5 degrees and where it is impractical to install more traditional type fall protection systems.</p> <p>They have been tested and approved for use on concrete, single ply membrane, bitumen membrane, asphalt-sanded, asphalt-stone chipped and steel profile roofs.</p>
	Attachment Points	<p>Must use an “unquestionably reliable” anchor for the attachment of Fall Protection Equipment, e.g. a substantial tower member.</p> <p>When assessing an attachment point, the forces applied to the anchor and the direction of the force need to be considered. In addition to this, a factor of safety of 2:1 should be considered.</p>



3.7	FASTEN – Equipment Required – Including Access Equipment	
		<p>A fall arrested by EN standard Fall Arrest equipment will be limited to 6kN (approx 600 Kgf) applying a Factor of Safety of 2:1, this will require a selection of anchor capable of withstanding 12kN (1200 kgf) per person.</p> <p>Additional consideration needs to be given to the possibility of failure of anchor slings and ropes on sharp edges under a fall arrest situation. If there is a possibility of rope/sling damage, appropriate protection must be used. e.g., using a rope protecting sleeve.</p> <p>The slings must:</p> <ul style="list-style-type: none"> <li>• Be as high as possible</li> <li>• Be capable of withstanding a dynamic load when a person is falling.</li> </ul>
	Fixed Fall Arrest Systems	<p>Where installed Fall Arrest systems exist on a structure, these should be used as the preferred method of fall protection. They must be used with the appropriate, approved traveller / slider and attached to the front upper harness attachment.</p> <p>The following needs to be checked before a fall arrest systems are used:</p> <ul style="list-style-type: none"> <li>• Last date of inspection</li> <li>• Condition / tension – signs of falls</li> <li>• Number of persons allowed to be attached to the system</li> <li>• The correct traveler / slider is used and has been inspected and is safe.</li> </ul>

### 3.8 FASTEN – Equipment – Including Personal Protective Equipment.

The type of equipment required will be determined by the task, the following is the minimum that is required for each level:




M = Mandatory









O = Optional

Item	Equipment description	Roof Work	Tower Climbing	Pole Climbing	Rigger
1	Safety Boots	M	M	M	M
2	Safety Helmet	M	M	M	M
3	Gloves	M	M	M	M
4	Full body Harness – 4 point		M	O	M
5	Suspension Harness				
6	Twin tie back Lanyards		M		M
7	Restraint Lanyard	M			
8	Work Positioning Lanyard		M		M
9	Vertical Fall Arrest Traveller		M		M
10	Temporary vertical lifeline		M		M
11	Self reeling Lifeline		O		O
12	Rooftop restraint system	M			
13	Temporary Horizontal Lifeline	O			
14	Rope and Pulley Lifting Rig		O		M
15	Karabiner Connector	O	M x 2	M x 2	M x 4
16	Anchor Sling	M x 1	M x 1	M x 1	M x 2
17	Tower Rescue Kit		M 1 /team	O	M 1/team

## Types of Poles and access Equipment

The type of pole used vary greatly between regions and network operators but can be catergarised as below, with the following inspections required;

Climbable Poles		
Type of Pole	Picture	Pre Start Inspection Required – Before any Work at Height Done
Stepped Timber		Labels and Markings / Set Depth / Straightness / Ground Conditions / Loading / Low Cables
Timber		Labels and Markings / Set Depth / Straightness / Ground Conditions / Loading / Low Cables  Decay: visual check of condition , specifically at ground level, hammer test. Loose fittings / steps Physical Damage – vehicle strikes / hedge cutters / Insect Damage
Concrete		Labels and Markings / Set Depth / Straightness / Ground Conditions / Loading / Low Cables  'Spalling' concrete , exposed re-bar Physical Damage – Vehicle Strikes
Steel		Labels and Markings / Set Depth / Straightness / Ground Conditions / Loading / Low Cables  Corrosion / Rust Physical Damage
Type of access Equipment	Picture	General Information
Access Ladders		Non conductive material-wood of fiber. Anchor point must be connected at all times. Self supporting ladders with extendible legs preferable (poles and facades).

1. Safety Helmet	2. Safety Boots	3. Gloves	4. Hi-Viz
			
2 point Harness	6. 4 point Harness	7. Suspension Harness (Rope Access)	8. Twin tie back fall arrest lanyards
			
9. Restraint Lanyard	10. Work Positioning Lanyard	11. Vertical fall arrest system traveller / sleeve	12. Temporary vertical lifeline
			
13. Self Reeling Lifeline (SRL)	14. Rooftop restraint system	15. Temporary Horizontal Lifeline	16. Rope & Pulley lifting rig
			
17. Karabiner Connector	18. Anchor Sling	19. Tower Rescue Kit	20. Harness bag & lifting bag
			

**Pre Start Inspection Requirements – Supervisors**

Region/Area: \_\_\_\_\_

Site ID: \_\_\_\_\_

Site Supervisors' initial assessment checklist in identifying hazards on Site					
		Y	N	n/a	Comments
1.	All workers are feeling well and fit to work?				
2.	Enough team support? How many. i.e.Riggers, Installer, etc.				
3.	All workers has been trained on HSE training and recorded on PTID?				
4.	Riggers have been trained with valid certificates? i.e. Working in Height certificate				
5.	Toolbox briefing has been conducted and defined on HSE requirements?				
6.	Personal protective equipment (Safety Harness with double hook, helmet with validity, safety boots used, gloves available and good condition?				
7.	Tools, electrical equipments and devices, etc available and good condition?				
8.	Condition of routes – leading to site in good condition?				
9.	Worksite condition- compound / fence / gate/ tower/pole – all in good condition?				
10.	First Aid Kit available at site?				
11.	Crane has been inspected and in a good conditions and valid certificates?, If any				
12.	Hoisting gear and lifting by hand Eqpt in a good condition?				
13.	Miscellaneous				

Comments \_\_\_\_\_

Completed by (block capitals): \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

# Change History

Ver	Status	Date	Author	Owner	Reviewed by	Reviewed date	Approver	Approval date	Description of changes
0.1	Approved	2015.03.19	Gareth I Davies	Gareth I Davies	-	-	Gareth I Davies	2015.03.26	Global Head of Health & Safety
0.2	Approved	2017.01.31	Andrew Eadie	Andrew Eadie	-	-	Gareth I Davies	2017.01.31	Updated to reflect changes in Standard
3.0	Approved	2023.06.13	Sameh Eisa	Sameh Eisa	Rodney Van Wyk	2023.06.13	Paulo Conceicao	2023.06.13	Modifications include rebranding and organizational changes.