



# **IRATA International code of practice for industrial rope access**

## **Part 1: Foreword, Introduction, Scope, Structure, Terms and definitions, Principles and controls**

**July 2014**

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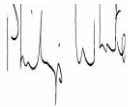
## Commendations

### IRATA International code of practice for industrial rope access

*Although there is a steady decline in the number of injuries caused by falls; falls from height remain the most common kind of workplace fatality. They are the biggest single cause of serious and fatal injuries arising from construction and maintenance activities. Safety when working at height is essential, and making sure that people use access equipment properly is a key part of this.*

*HSE recognises that, within the variety of work at height methods available, rope access is an accepted technique to use in appropriate circumstances.*

*I am pleased to continue HSE's support of IRATA's guidance in this area. This voluntary code of practice sets out good practice for individuals and organisations using rope access equipment and will help to ensure that health and safety risks in this area are minimised or avoided.*

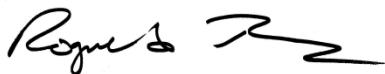


**Philip White**

**Chief Inspector of Construction, HSE**

01 January 2010

*The Offshore Safety Division of HSE concurs with the continued general support by HSE of IRATA's voluntary code of practice. Use of this code of practice is also commended for offshore working when rope access methods are required.*



**Rog Thomson**

**HM Principal Inspector of Health and Safety,**

**Offshore Safety Division**

01 January 2010

**NOTE**      *The word 'voluntary' used in the commendations is intended to signify that compliance with the IRATA International code of practice is not a legal requirement under UK law. However, it is mandatory for members of IRATA International to comply with the principles of the code of practice and this is a condition of their membership.*

## Part 1: Foreword, Introduction, Scope, Structure, Terms and definitions, Principles and controls

### Foreword

IRATA International is recognized as the world's leading authority on industrial rope access. Established in the UK in 1988 as the Industrial Rope Access Trade Association, an increase in membership worldwide led to the name IRATA International to reflect this. The association's aim is the promotion and development of the safe system that it has pioneered since its inception and to support its member companies and trained technicians to enable them to work in a safe and effective manner.

There are several types of IRATA International membership. *Full member* companies are either *trainer members* or *operator members* (or both). These types of members have full voting rights. There are probationary levels of these memberships, which also have full voting rights. There are two more types of membership, neither with voting rights: *associate*, open to organizations such as manufacturers, architects and authoritative bodies, and *individual*, open, for example, to consultants and rope access technicians.

Trainer and operator members of the association have to meet specific entrance qualifications and are subject to regular audits to ensure they meet IRATA International's requirements for quality assurance, safety, training and work practices.

The benefits of the IRATA International system are demonstrated by the low level of accidents and incidents reported by members, which after independent collation and study are published annually as the *IRATA International Work and Safety Analysis*. The latest version of the work and safety analysis can be viewed by visiting [www.irata.org](http://www.irata.org).

Monitoring shows that the IRATA International system of effective training, diligent supervision and a proven method protects lives and guards against injury. It also demonstrates that IRATA International operates more safely than the work-at-height industry as a whole. In addition, the several references in this code of practice to the *unlikely* event of failure and the steps then taken to minimize the risk, even though statistically unlikely, highlights the cautious, preventative approach taken by IRATA International to safety.

The code of practice has been compiled using the experience of established rope access companies and is the result of many years of experience working with various national, international, regional and trade-based health and safety organizations, to which IRATA International is indebted for their advice and assistance.

Members of IRATA International are required, as a condition of membership, to comply with the principles of the code of practice.

A free download of the latest version of this code of practice, including the informative annexes in Part 3, is available from [www.irata.org](http://www.irata.org).

It should be noted that the code of practice is not intended as a full interpretation of the law and does not relieve employers of their duties under the various legal requirements that may relate to their specific location, situation and applications. It should also be noted that the code of practice applies to industrial rope access work only, where the prime activity is the work itself. It is not intended to cover, for example, leisure activities or emergency evacuation systems and their procedures, although trainees in such other activities would probably benefit from a level of protection similar to that advised within these pages.

Although care has been taken to ensure, to the best of IRATA International's knowledge, that the content of this code of practice is accurate to the extent that it relates to either matters of fact or accepted practice or matters of opinion at the time of publication, IRATA International assumes no

responsibility for any errors or misinterpretations of such content or any loss or damage arising from or related to its use.

## **Acknowledgements**

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*Writer/compiler:* Paul Seddon OBE

*Review panel members:* Justin Atkinson, Graham Burnett, Jonathan Capper, Russ Manton, Steve Murphy, Paul Ramsden, David Thomas, Mark Wright

*Drawings:* Angela Wright

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## Introduction

IRATA International's rope access system is a safe method of working at height, where ropes and associated equipment are used to gain access to and egress from the workplace, and to be supported at it.

The advantage of using rope access methods lies mainly in the safety and speed with which workers can get to or from difficult locations and then carry out their work, often with minimal impact on other operations. Another major benefit is that the combination of the total man-hours and the level of risk for a particular task (man-at-risk hours) is often reduced when compared with other means of access and their associated risks and cost.

The primary objective when using rope access methods is to plan, manage and carry out the work with a goal of no accidents, incidents or dangerous occurrences, i.e. to ensure a safe system of work is maintained at all times, and with no damage to property or harm to the environment. IRATA International has in place a continuously evolving regime with procedures that members are required to follow, which are monitored for compliance to ensure that a safe system of work is established and maintained. This sets IRATA International member companies apart from rope access companies that are not subject to such a rigorous scheme.

Like any other method of working at height, the application of rope access should be regarded as a complete system, in which planning, management, competence and suitable equipment should be treated with equal importance, as each is dependent on the others to ensure a safe system of work. This code of practice gives recommendations and guidance on the use of rope access methods to provide such a safe system of work. Part 1 sets out fundamental principles and controls. Part 2 expands on Part 1, providing more detailed guidance. Part 3 consists of informative annexes, which give advice on the rope access aspect of associated work practices and information on other relevant topics. Several of these annexes are still under development. Part 4 gives links to relevant national legislation and Part 5 provides a bibliography. The parts should be read in conjunction with each other, particularly Part 1 with Part 2 and Part 2 with relevant informative annexes in Part 3.

## 1.1 Scope

This code of practice gives recommendations and guidance on the use of IRATA International rope access methods, including training, to provide a safe system of work. It is intended for use by IRATA International members, IRATA International rope access technicians, national or regional enforcement agencies, safety officers and those who commission rope access work, e.g. building contractors; multi-national oil and gas companies; the renewable energy sector. This code of practice is applicable to the use of IRATA International rope access methods for industrial purposes, i.e. for access to buildings, other structures (on or offshore) or natural features, such as cliff faces, where ropes are used as the primary means of access, egress or support and as the primary means of protection against a fall.

This code of practice is not intended to apply to the use of rope-based access methods for leisure activities, arboriculture, general steeplejack methods or emergency personal evacuation systems, or to the use of rope-based access (line rescue) techniques by fire brigades and other emergency services for rescue work or for rescue training.

*NOTE* Throughout this code of practice, the term rope access is intended to mean rope access for industrial purposes, unless otherwise stated.

## 1.2 Structure

**1.2.1** This code of practice consists of several parts. Generally, clauses and figures in each part are numbered to match the number of the part, e.g. in Part 2: 2.2, *Planning and management*, Figure 2.3 — *Example of a scaffold knot*. The exception is Part 3, which is a series of informative annexes. Here, the clauses and figures are given a letter to match the title of the particular annex, e.g. in Annex A: A.1, A.2.

**1.2.2** The following list details the part titles and clause titles in each part up to the fourth level of numbering, e.g. 2.5.3.2. Clause titles at lower levels of numbering, e.g. 2.7.1.5.1 *Work restraint (travel restriction) equipment*, are omitted. Under Part 3, only the main title of each informative annex is listed. This is to allow flexibility in the development of each topic to be covered.

*NOTE This code of practice is intended to be a live, website-based document and is, therefore, subject to change, so clause numbers and possibly part numbers could change over time.*

### Part 1: Foreword, Introduction, Scope, Structure, Terms and definitions, Principles and controls

Foreword

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### **Part 4: Legislation**

Local legislation

### **Part 5: Bibliography, further reading and useful addresses**

## 1.3 Terms and definitions

For the purposes of all parts of this code of practice, including the informative annexes, the following terms and definitions apply:

### **anchor**

general term used as a noun to describe a fitted or unfitted anchor device, or a structural anchor containing an anchor point, or as a verb to describe the act of connecting to a fitted anchor device or a structural anchor

### **anchorage**

structure or natural feature that provides an anchorage point (see **Figure 1.1**)

*NOTE Two examples of a natural feature are a rock face and a tree.*

### **anchorage point**

particular place on an anchorage used for the attachment of an anchor device (see **Figure 1.1**)

### **anchor device**

personal fall protection equipment comprising an assembly of elements with one or more anchor points or mobile anchor points and which is removable from the structure or natural feature (see **Figure 1.1**)

### **anchor lanyard**

lanyard connected to the main attachment point of the harness, which normally incorporates a connector and which is used for connection to an anchor point

*NOTE Some anchor lanyards are also known as cow's tails.*

### **anchor line**

flexible line connected to a reliable anchor to provide a means of support, restraint or other safeguard for a person wearing an appropriate harness in combination with other devices

*NOTE An anchor line may be a working line or a safety line.*

### **anchor line device**

collective term for ascending device, descending device and back-up device

*NOTE Anchor line devices are also known as rope adjustment devices.*

### **anchor point**

point on an anchor device or structural anchor used for the connection of personal fall protection equipment (see **Figure 1.1**)

### **anchor sling**

sling or strop made from textiles, wire rope or chain, which is used to attach to a structure or natural feature to provide an anchor point for an anchor line or for the direct connection of the rope access technician

### **ascending device**

anchor line device used primarily to assist progression along an anchor line and for positioning the rope access technician on it, which, when attached to an anchor line of appropriate diameter, locks under load in one direction and slips freely in the opposite direction

### **back-up device**

anchor line device for a safety line, which accompanies the user during changes of position or allows adjustment of the length of the safety line and which locks automatically to the safety line, or only allows gradual movement along it, when a sudden load occurs

**certificate of conformity**

document certifying that the supplied goods meet the claimed compliance and/or specifications

**competent person**

designated person suitably trained or qualified by knowledge and practical experience to enable the required task or tasks to be carried out properly

**connector**

openable device used to connect components, which enables the user to link himself or herself directly or indirectly to an anchor point

**descending device**

manually-operated, friction-inducing anchor line device which, when attached to an anchor line of appropriate type and diameter, allows the user to achieve a controlled descent and a stop with hands off anywhere on the anchor line

**deviation**

redirection of the path of the anchor lines from the anchor points to avoid abrasion and other potential causes of damage to the anchor lines or to provide more accurate access for the rope access technician

**deviation anchor**

anchor placed primarily to alter the direction of an anchor line and installed at a distance (unspecified) from the anchor point(s) used for the first attachment of an anchor line

**device lanyard**

lanyard used to provide a link between the user's harness and the anchor line device

*NOTE Some device lanyards are also known as cow's tails.*

**dynamic rope**

rope specifically designed to absorb energy in a fall by extending in length, thereby minimising the impact load

**energy absorber**

component or components in a fall arrest system designed to minimize the impact load generated in a fall

**fail to safe**

revert to a safe condition in the event of a breakdown, failure, or mismanagement of a critical nature

**failure load**

minimum breaking load of an item of equipment when it is new

**fall factor**

length of a potential fall divided by the length of rope or lanyard available to arrest it

**kernmantel rope**

textile rope consisting of a core enclosed by a sheath

*NOTE The core is usually the main load bearing element and typically consists of parallel elements which have been drawn and turned together in single or several layers, or of braided elements. The sheath is generally braided and protects the core, for example from external abrasion and ultra-violet degradation.*

**lifting equipment**

work equipment for lifting or lowering loads, including its attachments used for anchoring, fixing or supporting it, e.g. chain or rope sling or similar; ring; link; hook; plate-clamp; shackle; swivel; eyebolt; webbing

**low-stretch rope**

textile rope with lower elongation and, therefore, less energy absorbing characteristics than dynamic rope

*NOTE Low stretch rope is sometimes known as semi-static rope.*

**maximum rated load (RL<sub>MAX</sub>)**

maximum mass of one or more persons, including tools and equipment carried, with which a component of a rope access system can be used, as specified by the manufacturer

*NOTE 1 Maximum rated load is expressed in kilograms.*

*NOTE 2 See also safe working load (SWL) and working load limit (WLL).*

**minimum rated load (RL<sub>MIN</sub>)**

minimum mass of one or more persons, including tools and equipment carried, with which a component of a rope access system can be used, as specified by the manufacturer

*NOTE Minimum rated load is expressed in kilograms.*

**proof load**

test load applied to verify that an item of equipment does not exhibit permanent deformation under that load, at that particular time

*NOTE The result can then be theoretically related to the performance of the test piece under its expected conditions in service.*

**re-anchor**

anchor installed at a distance (unspecified) from the anchor point(s) used for the first attachment of an anchor line, to which the anchor line is additionally attached, and which is not a deviation anchor or an anchor placed simply to maintain the position of an anchor line

*NOTE Re-anchors are also known as re-belays and intermediate anchors.*

**rigging for rescue**

establishing a rescue system which enables workmate retrieval to take place without the need for a rescuer to descend or ascend to the position of the injured person

**rope access**

method of using ropes, in combination with other devices, by which a user descends or ascends a working line to get to or from the workplace, and for work positioning, while further protected by a safety line, such that both lines are connected to the user's harness and separately secured to a reliable anchorage in such a way that a fall is prevented or arrested

*NOTE 1 Ropes used for descending, ascending, work positioning or as a safety line are known as anchor lines.*

*NOTE 2 In this context, the term 'ropes' includes appropriate textile ropes, wire ropes and webbing.*

**safety line controller (in Annex L)**

person paying out or taking in safety lines while protecting another person against a fall from a height

**safe working load (SWL)**

designated maximum working load of an item of equipment under particular, specified conditions

*NOTE See also working load limit (WLL) and maximum rated load ( $RL_{MAX}$ ).*

**safety line**

anchor line provided as a safeguard to protect against falls if the rope access technician slips or if the primary support (e.g. the working line), anchor or positioning mechanism fails

**safety method statement**

document prepared by the employer describing how a particular job (or types of job where these will be essentially identical) should be undertaken to ensure that any risks to the health and safety of the workers, or others who may be affected, are minimised

**screwlink**

type of connector formed as an open loop, which is closed by a threaded sleeve

*NOTE Screwlinks are also known as maillon rapides and quicklinks.*

**structural anchor**

element or elements of an anchor incorporated into a structure or natural feature and not intended to be removed (see **Figure 1.1**)

*NOTE 1 A structural anchor may contain an anchor point.*

*NOTE 2 A structural anchor is not an anchor device.*

*NOTE 3 An example of a structural anchor is where an element such as an eyebolt is welded or resin bonded to the structure.*

**suspended scaffold**

scaffold suspended by means of ropes or chains and capable of being raised or lowered by such means but does not include a boatswain's chair or similar apparatus

**working line**

anchor line used primarily for access, egress, work positioning and work restraint

**working load limit (WLL)**

maximum load that can be lifted by an item under conditions specified by the manufacturer

*NOTE See also safe working load (SWL) and maximum rated load ( $RL_{MAX}$ ).*

**workmate retrieval**

removal by one or more operatives of an incapacitated member of their rope access work team from a place of danger to a place of safety

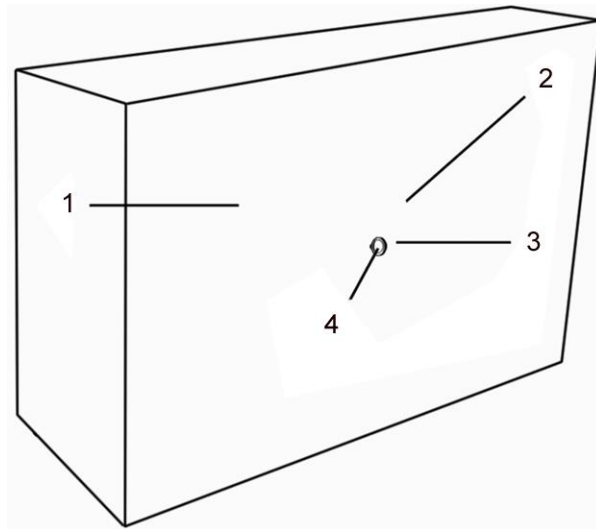
*NOTE Workmate retrieval is also known as workmate rescue.*

**work positioning**

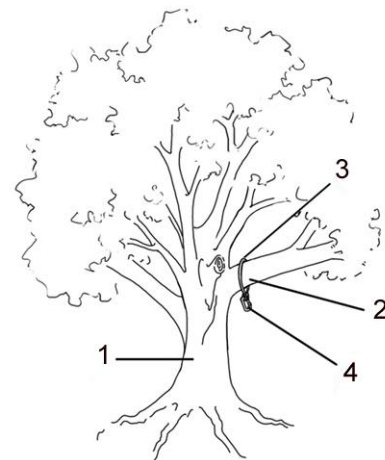
technique that enables a person to work supported in tension or suspension by personal fall protection equipment in such a way that a fall from a height is prevented or restricted

**work restraint**

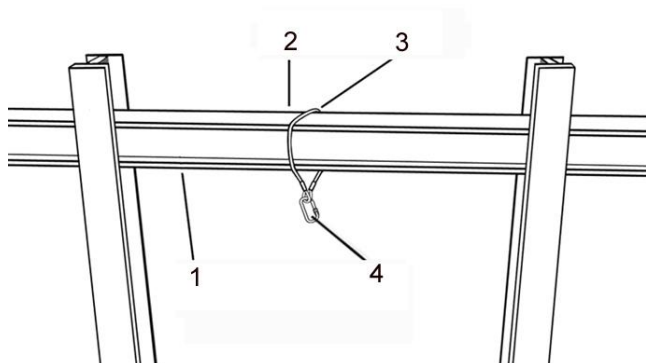
technique whereby a person is prevented, by means of personal fall protection equipment, including an appropriate belt or harness, from reaching zones where the risk of a fall from a height exists



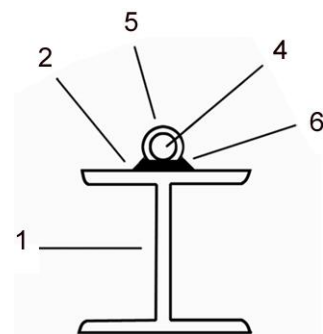
a) Concrete wall



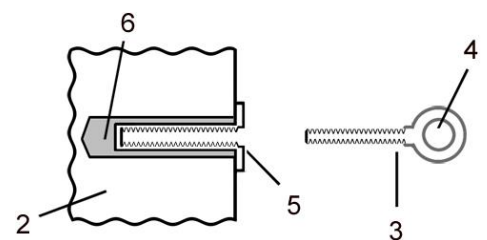
b) Natural feature



c) Steel structure



d) Structural anchor with an anchor point



e) Structural anchor without an anchor point (anchor device unfitted)

#### Key

- 1 Anchorage
- 2 Anchorage point
- 3 Anchor device
- 4 Anchor point
- 5 Structural anchor
- 6 Permanent fixing element (e.g. welding; riveting; resin bonding)

**Figure 1.1 — Examples of anchorages, anchorage points, anchor devices, anchor points and structural anchors**



## **1.4 Principles and controls**

### **1.4.1 General**

**1.4.1.1** The essential elements of a safe system of work include:

- a) proper planning and management;
- b) the use of trained, competent persons;
- c) good supervision;
- d) the careful selection of appropriate equipment;
- e) proper care, maintenance and inspection of equipment;
- f) proper control of working methods, including:
  - (i) provision for emergencies;
  - (ii) the protection of third parties;
  - (iii) the use of work equipment;
  - (iv) exclusion zones.

**1.4.1.2** The principles and controls of the IRATA International rope access system are given in **1.4.2** and **1.4.3**. These should not be taken to be exhaustive, as other elements may need to be taken into account, depending on the specific work task and work situation.

### **1.4.2 Principles**

#### **1.4.2.1 Planning**

**1.4.2.1.1** Rope access work should be planned (and managed) by a person who is designated as being responsible for maintaining a safe system of work.

**1.4.2.1.2** Before rope access work commences there should be a documented:

- a) pre-work analysis, to establish whether rope access methods are appropriate;
- b) risk assessment, to identify any hazards, to assess the likelihood of an incident occurring and to establish control measures to minimize the risk;
- c) safety method statement, which clearly defines work procedures.

#### **1.4.2.2 Training and competence**

Rope access technicians should be:

- a) trained and competent to carry out any access tasks that they are to undertake, including workmate rescue/retrieval and should only be allocated tasks appropriate to their level of training;
- b) sufficiently physically fit and free from any disability that might prevent them from working safely at height;

- c) competent in the pre-use inspection of their equipment, including an understanding of when equipment should be withdrawn from service.

#### **1.4.2.3 Management and supervision**

**1.4.2.3.1** There should be proper management and supervision of the rope access worksite.

**1.4.2.3.2** Managers responsible for the rope access site should be:

- a) competent in management skills;
- b) have adequate knowledge of rope access technical procedures to enable them to manage the rope access work site competently.

**1.4.2.3.3** Worksites using rope access require the supervision of rope access safety and of the work project itself. These two types of supervision may be the responsibility of different people or the same person. This code of practice covers only the supervision of rope access safety.

**1.4.2.3.4** Under the IRATA International training, assessment and certification scheme, only Level 3 rope access technicians are permitted to be rope access safety supervisors. Rope access safety supervisors should be:

- a) competent in supervisory skills;
- b) competent in rope access techniques appropriate to the particular worksite and should understand the limitation of those techniques;
- c) responsible for hazard identification and risk assessment for rope access related tasks;
- d) competent in workmate rescue/retrieval techniques appropriate to each worksite and be able to organize and put into effect a workmate rescue/retrieval appropriate to that worksite.

#### **1.4.2.4 Selection, care, maintenance and inspection of equipment**

**1.4.2.4.1** The selection and purchase of equipment should be approved by a person with knowledge of the technical specification required.

**1.4.2.4.2** Equipment used in any rope access system should be compatible and should be appropriate to its application.

**1.4.2.4.3** Equipment should be capable of withstanding any foreseeable loads without catastrophic damage to any component of the system.

**1.4.2.4.4** Equipment should be selected which, wherever possible, fails to safe.

**1.4.2.4.5** Equipment should be inspected before each use (pre-use check) and more thoroughly at regular intervals (detailed inspection). Results of all detailed inspections should be recorded and records should also be kept of use and maintenance.

**1.4.2.4.6** Equipment should be correctly stored and maintained, and should be traceable back to the manufacturer or his authorized representative.

**1.4.2.4.7** Rope access technicians should have clothing and similar equipment appropriate to the work situation and conditions.

#### **1.4.2.5 Work methods**

**1.4.2.5.1** Of primary importance in the IRATA International rope access system is the principle of double protection. It is essential to include the provision of at least one additional means of protection to prevent a rope access technician falling, for example, a safety line in conjunction with the working line. This means that, should any one item fail within the suspension system, there is an adequate safety back-up to protect the user. Therefore, when a rope access technician is to be in tension or suspension, there should be at least two independently anchored lines, one primarily as a means of access, egress and support (the working line) and the other as additional back-up security (the safety line).

*NOTE Where appropriate, the safety line may be substituted by other forms of back-up security, which should equal or better the performance of the one it replaces.*

**1.4.2.5.2** The connection of a rope access technician to the rope access system or other personal fall protection system and disconnection from it should be made in an area where there is no risk of a fall from a height.

**1.4.2.5.3** The rope access technician should be connected to both the working line and the safety line via a harness, which may be an appropriate sit harness or an appropriate full-body harness. The same point on the harness may be used to connect the working line and the safety line to it.

**1.4.2.5.4** The primary connection to the rope access technician of both the working line and the safety line should always be via the harness, even if a work seat is being used.

**1.4.2.5.5** Steps should be taken to ensure a rope access technician is unable to descend inadvertently off the end of the working line or safety line and that, if the intention is to exit from them at the bottom, the anchor lines are long enough to do so.

**1.4.2.5.6** An efficient communication system should be established between all rope access technicians in the team and, where necessary, third parties, e.g. the control room, if offshore.

**1.4.2.5.7** Rope access systems should be planned to avoid falls. In the unlikely event of a fall, the impact load on a rope access technician should never be greater than 6 kN.

*NOTE Potential impact loads can be reduced by keeping fall distances to a minimum, e.g. by positioning the back-up device high.*

**1.4.2.5.8** The distance and consequences of any potential fall should always be minimized. No potential fall should allow the rope access technician to impact with the ground. All practicable steps should be taken to avoid the possibility of impacting with the structure, natural feature or obstructions in a way likely to cause injury.

**1.4.2.5.9** Rope access technicians should work in teams of no fewer than two, one of whom should be a Level 3 rope access safety supervisor.

*NOTE There are many situations that require more than a two-person rope access team, depending, for example, on the nature of the work; site conditions; competency of the work team; potential rescue scenarios.*

#### **1.4.2.6 Exclusion zones**

Exclusion zones should be established, as appropriate, to protect against falls where rope access technicians need to attach to the rope access system, e.g. an unprotected edge; to protect against falling objects from above; to protect people below the area of rope access operations and to protect against unauthorized persons entering the work area(s). Exclusion zones may also be required for reasons other than fall protection, e.g. to protect against exposure to: radiation; radio waves, such as those emitted by mobile phone antennae; areas of high temperature; chemical pollution. Exclusion zones may be necessary at several levels, e.g. above anchor level; at anchor level; at intermediate areas; at ground level.

#### **1.4.2.7 Emergency procedures**

**1.4.2.7.1** There should be suitable arrangements in place at every worksite to provide rapid workmate rescue/retrieval. These should include an appropriate site-specific plan, together with equipment, rigging and anchors of adequate strength for workmate retrieval.

**1.4.2.7.2** A rope access technician should endeavour always to be in a position such that, in the event of an incident, he/she would be able to rescue him/herself, or to be rescued quickly and efficiently by the work team or by a dedicated on-site rescue team.

#### **1.4.2.8 Expanded techniques**

Rope access techniques and equipment can be expanded to encompass traversing, aid climbing, lead climbing and other forms of harness-based access. Some of these techniques could put rope access technicians at risk of a fall. Techniques that could result in a fall should be used only after specific hazard identification and risk assessment and the appropriate choice of personal fall protection equipment. Only specifically trained and competent rope access technicians should engage in these types of rope-based access work. See **Part 3, Annex L**.

#### **1.4.3 Quality and safety controls**

**1.4.3.1** IRATA International full and probationary member companies, i.e. operator and trainer companies, are required to have competent rope access management and to provide a company-nominated person to be the main contact point between the company and IRATA International for matters relating to IRATA International safety training, this code of practice and other relevant IRATA International documentation. This system provides the best method for communication between the member company and the IRATA International office, executive committee, technical sub-committees, technical officer and executive staff.

**1.4.3.2** IRATA International operator member companies, which provide operational services, are subject to an initial probationary audit to check both technical and quality assurance aspects of procedures and equipment before being accepted as probationary members. After a minimum of one year, they are eligible for another audit before acceptance as full operator members. This audit concentrates on evidence of work completed to verify compliance with IRATA International requirements. Subsequently, member companies are re-audited every three years to ensure they maintain standards. The audits of each member company are undertaken by IRATA approved independent auditors. Member companies are also required to conduct internal audits at planned intervals to determine whether their arrangements conform to this code of practice (all relevant Parts) and any other IRATA International requirements, and that they are effectively implemented and managed.

**1.4.3.3** Audit programmes are planned, taking into account the size and complexity of the company, the status and importance of its processes, the hazards and risks associated with its operations and the results of previous audits. The audit objective, scope and criteria of each audit are determined. Records of the audits and their results are maintained and are subject to inspection by IRATA International. Member companies are responsible for ensuring that any necessary corrections, corrective and preventive actions are taken without undue delay to eliminate detected and potential non-conformities and their causes.

**1.4.3.4** IRATA International trainer member companies are subject to the same audit regime as operator member companies. Only IRATA International trainer member companies are authorised to deliver training to the IRATA International syllabus and to register candidates for IRATA International qualifications.

**1.4.3.5** All IRATA International training is controlled by IRATA International Level 3 trainers at training venues that have to meet specified requirements. All candidates are assessed by IRATA International independent assessors.

**1.4.3.6** All rope access work carried out by IRATA International operator member companies is undertaken by IRATA International trained and qualified rope access technicians working to the member company's operational procedures, which are based on this code of practice.

**1.4.3.7** There are three levels (grades) of rope access technician: Level 1, Level 2 and Level 3, the third level being the highest. All worksites operated by IRATA International member companies have at least one IRATA Level 3 rope access safety supervisor on site as the person responsible for the safety of the rope access systems and the Level 1 and Level 2 rope access technicians who work under their supervision. An IRATA International rope access team consists of at least two rope access technicians, one of whom has to be an IRATA International Level 3 rope access safety supervisor. Lone working is not allowed.

**1.4.3.8** IRATA International rope access safety supervisors are trained in first aid and are required to hold an in-date qualification.

**1.4.3.9** IRATA International full and probationary member companies are required to record all hours worked on ropes, incidents and dangerous occurrences and to provide quarterly work and safety statistics to the IRATA International office. The information is used by a nominated independent expert to compile a yearly report, the IRATA International *Work and Safety Analysis*, which highlights trends and provides recommendations for changes to working practices. This provides statistics upon which IRATA International can justify its claim that using an IRATA International member company allows a client to have the assurance that they are using the safest providers of rope access services.

**1.4.3.10** To provide a quick response to an incident that could have implications for other member companies and their clients, IRATA International has established a system to notify all members of such incidents and appropriate action that should be taken.

**1.4.3.11** IRATA International requires all safety method statements to include a rescue plan.

**1.4.3.12** IRATA International member companies are required to operate a management system for equipment certification, traceability and inspection in accordance with this code of practice and relevant national regulations.

**1.4.3.13** IRATA International makes a significant contribution to the development of safe techniques for work at height through a number of committees that provide the member companies with expert advice. These include committees for health, safety and equipment, training and auditing.

**1.4.3.14** IRATA International member companies are required to have an appropriate representative attend at least one general meeting or other formally convened meeting of the association, e.g. Training Committee; Health and Safety Committee; Equipment and Standards Committee; Regional Advisory Committee, within each 12 calendar-month period. Member companies are encouraged to participate in the many activities of the association, e.g. the above committees, thereby providing an unparalleled international consensus on the future direction of the rope access industry.