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**Adventure tourism — Leaders —  
Personnel competence**

*Tourisme d'aventure — Leaders — Compétence du personnel*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 228, *Tourism and related services*.

This first edition cancels and replaces ISO/TR 21102:2013, which has been technically revised. The main changes are as follows:

- ISO 20611 has been added as a reference in the Introduction;
- Normative references have been included in [Clause 2](#);
- Requirements have been added (previously there were recommendations) in [Clauses 4 to 7](#);
- Information on qualifications for leaders (formal and otherwise) has been added in [7.1](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Introduction

## 0.1 Adventure tourism

Adventure tourism is a global industry that is growing in importance. Whether provided on a commercial, not for profit or charitable basis, adventure tourism activities involve an accepted, inherent element of risk and challenge. Taking risks brings rewards but also dangers. In order to maximize the rewards, adventure tourism activity providers should operate as safely as practicable.

## 0.2 Adventure tourism standards

The purpose of these documents is to set out the minimum requirements for safety management systems and for providing information to participants.

This document, along with ISO 20611, ISO 21101 and ISO 21103, provides a basis for adventure tourism activity providers to plan, deliver and provide information on adventure tourism activities as safely as practicable.

The following documents are independent entities since they apply to different aspects of adventure tourism:

- ISO 20611 provides requirements and recommendations on good practices for sustainability (environmental, social and economic aspects) for adventure tourism activities.
- ISO 21101 specifies how the adventure tourism organization manages its operations in terms of safety.

**NOTE** *ISO 21101, Adventure tourism — Safety management systems — A practical guide for SMEs* is a handbook that offers step-by-step guidance and examples to help small and medium-sized adventure tourism operators to develop, implement and continually improve a safety management system following the requirements of ISO 21101.

- This document specifies the minimum requirements and recommendations of competencies and the related expected results of competencies for adventure tourism activity leaders common to any adventure tourism activity.
- ISO 21103 specifies the minimum information to be communicated to participants and potential participants before, during and after the activity.

Effective implementation of these documents will help consumers and other participants make informed choices about activities and providers.

## 0.3 Purpose of this document

Adventure tourism activity leaders' competencies for leading participants and assuming responsibility for them is a critical factor in ensuring delivery of safe adventure tourism activities.

Competency is a concept that is based on knowledge, skills and attitudes or attributes.

Depending on the type of adventure tourism activity (e.g. rafting, hiking, cascading, climbing), different competencies are required. Nevertheless, there are some competencies that are common to every adventure tourism activity. These common competencies (and the respective expected results) are the focus of this document.

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# Adventure tourism — Leaders — Personnel competence

## 1 Scope

This document establishes the requirements and recommendations of competencies and the related expected results of competencies for adventure tourism activity leaders common to any adventure tourism activity, which can affect the quality and safety of the services provided. It can be used by all types and sizes of providers operating in different geographic, cultural and social environments.

This document does not apply to diving leaders, for whom References [1], [2] and [4] to [9] apply.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 20611, *Adventure tourism — Good practices for sustainability — Requirements and recommendations*

ISO 21103, *Adventure tourism — Information for participants*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **adventure tourism activity**

adventure activity for tourism purposes that involves a degree of instruction or leadership and a deliberate accepted element of risk

Note 1 to entry: An accepted element of risk means that the *participant* (3.9) has a reasonable understanding of potential risks.

[SOURCE: ISO 21101:2014, 3.35, modified.]

### 3.2

#### **competence**

ability to apply knowledge and skills to achieve *expected results* (3.6)

[SOURCE: ISO 21101:2014, 3.11, modified.]

### 3.3

#### **competent person**

someone who has the *competence* (3.2) to perform specific functions

### 3.4

#### **contingency measures**

preventive or corrective action to be adopted in response to an event and a need to depart from the agreed plan of action

### 3.5

#### **emergency**

serious situation requiring immediate action

[SOURCE: ISO 21101:2014, 3.43]

### 3.6

#### **expected results**

results of performed activities in provision of service

Note 1 to entry: Expected results can refer to an occupation, a *competence* (3.2) or a set of competencies.

### 3.7

#### **first aid**

*emergency* (3.5) procedures aimed at maintaining vital functions while ensuring that the condition of a person who is injured, unconscious or whose life is in danger is not aggravated, until he or she receives more qualified assistance

### 3.8

#### **leader**

*competent person* (3.3) who takes responsibility for people, and is able to lead, guide and supervise an assigned activity

Note 1 to entry: A leader might also be referred to as a 'guide', 'monitor' or similar.

### 3.9

#### **participant**

person taking part in the *adventure tourism activity* (3.1) but not a member of the leadership team

Note 1 to entry: A participant might also be referred to as a 'client', 'customer' or similar.

Note 2 to entry: A leadership team comprises several *leaders* (3.8).

[SOURCE: ISO 21101:2014, 3.37]

## 4 Role of the leader

Prior to leading specific activities, leaders shall have the appropriate competencies gained through training, experience, expertise or qualifications, and the role shall include:

- a) participant assistance;
- b) safety management and care of participants and the leadership team in accordance with the adventure tourism activity provider's safety management systems, including provision of appropriate information, instruction, supervision and training;

NOTE For more information, see ISO 21101 and Reference [10].

- c) implementation of emergency procedures, if necessary;
- d) sharing relevant information, in accordance with ISO 21103;
- e) implementation of relevant sustainable practices, in accordance with ISO 20611.

## 5 Expected results

### 5.1 Compliance

The leader shall establish, implement and maintain a procedure to:

- identify the legal requirements applicable to the adventure tourism activity; and

- determine how these requirements apply to the adventure tourism activity.

The leader shall ensure that these applicable legal requirements are taken into account when offering its services.

## 5.2 Leading groups

The role of the leader shall include:

- a) using technical skills before or during the adventure tourism activity to decide about changes in the programme, if necessary, including but not limited to:
  - undertaking analysis of the situation and cancelling or changing the activity due to hazards, risks and unforeseen situations;
  - adopting contingency measures;
  - analysing current natural phenomena that are helpful for weather forecasting;
  - deciding about alternative routes or activities in response to changes in the weather, local operating conditions or participants' capabilities and expectations.
- b) paying specific care and attention to safely leading groups during planned and unplanned routes, including but not limited to:
  - presenting activity programmes and giving formal safety briefings;
  - organizing, controlling and facilitating integration among group participants;
  - adapting programmes so that they meet the needs of different groups;
  - establishing limits related to group and participant behaviours;
  - mediating conflicts;
  - dealing with adverse or unusual situations and identifying potential high-risk hazards through continuous assessment;
  - ensuring participants have the necessary clothing or equipment, including first-aid equipment;
  - assessing participant competency levels and stress levels.

## 5.3 Technical abilities

The technical abilities of the leader shall include, but not be limited to:

- a) applying technical skills such as orientation and navigation, first aid and rescue techniques;
 

NOTE Orientation and navigation can include basic interpretation of topographic maps, maps, captions and symbols, scale, level curves, use of a compass and orientation through natural signs.
- b) checking that the use of equipment is in accordance with current good practice or manufacturer instructions, including but not limited to:
  - keeping equipment organized and in a serviceable condition;
  - monitoring for signs of wear or defects and remedying or replacing defective equipment;
  - advising participants on the suitability and appropriate use of their personal clothing and equipment for the activity and monitoring participants during the activity to ensure the equipment is used correctly;
  - knowledge of equipment and ability to do basic repairs.

- c) instructing the participants in the minimum practical techniques needed for, but not limited to:
- observing instructions related to the activities to be practiced;
  - developing individual competence;
  - creating good learning environments;
  - using language understood by participants and checking for understanding;
  - communicating relevant information;
  - demonstrating emergency procedures, including the use of sign language appropriate to the adventure tourism activity;
  - minimizing social and environmental impacts;
  - demonstrating equipment usage.

#### 5.4 Managing risks

The leader's role is to minimize and manage risks in order to enhance the well-being and safety of participants through continuous monitoring and assessment and, where necessary, taking appropriate action during the activity, including but not limited to:

- a) managing hazards and risks likely to impact upon the physical and psychological safety of participants;
- b) assessing factors that can contribute to accidents;
- c) encouraging positive relationships and teamwork among group members;
- d) encouraging and valuing respect for the physical and emotional safety of participants;
- e) watching for signs of physical and mental fatigue and emotional distress;
- f) recommending adequate equipment, food and clothing for the activity and ensuring sufficient supplies in the event of emergencies;
- g) ensuring that participants are informed and understand emergency measures and, if applicable, involving the members of the group in the management of the risks to which they are exposed. In certain situations, participants may have responsibilities for themselves and for other members of the group;
- h) communicating appropriate and inappropriate behaviour;
- i) intervening when inappropriate behaviour occurs;
- j) not exposing themselves or others to unnecessary risk, including situations arising from interaction with local communities;
- k) ensuring the activity follows the organization's operating procedures;
- l) maintaining ratios (leader-participant) according to the activity to be developed, in order to properly manage the risks.

#### 5.5 Responding to incidents and emergencies

The leader's role in responding to incidents and emergencies shall include:

- a) managing emergency situations, including but not limited to:
- assessing emergency situations and organizing evacuation or rescue, if necessary;

- controlling groups;
  - arranging the calling of and ongoing liaison with emergency services, resources or other support;
  - ensuring the well-being of participants in adverse situations in order to prevent or minimize harm;
  - referring to emergency checklists;
- b) applying first aid within the ability of the leader's experience and training.

## 5.6 Behaving professionally and ethically

The leader's role in acting with professional and ethical behaviour shall include:

- a) preventing or minimizing environmental and social impacts deriving from adventure tourism activities, including but not limited to:
- applying minimum negative impact practices;
  - sensitizing and orientating the group about the importance of environment conservation and respect for local communities;
  - intervening in group actions when these are deemed harmful to the environment or to local communities;
  - promoting conservation practices during the adventure tourism activity;
  - respecting local rules and customs in the geographic area of work or activity;
  - working to ensure participants' satisfaction, including but not limited to informing participants of the activity's generic characteristics before its commencement;
  - keeping the participant motivated and interested in the programme;
  - keeping the participant informed of specific aspects during the development of the activity;
  - being aware of individual needs and providing respective support;
  - receiving complaints and suggestions and responding appropriately;
  - solving problems and establishing consensus among divergent interests.
- b) looking after personal presentation and professional bearing, including but not limited to:
- taking care of appearance and physical bearing;
  - setting limits in order to develop an effective, professional relationship with the participants during the activity and avoiding any inappropriate behaviour;
  - avoiding or managing embarrassing situations;
  - using appropriate language;
  - maintaining high ethical and professional standards.

## 6 Competencies

### 6.1 General

The competencies for achieving expected results shall be evaluated through the knowledge, skills and attitudes or attributes indicated in 6.2 to 6.4.

NOTE Specific qualifications can be required for some adventure tourism activities as outlined by regulation or good practice.

### 6.2 Knowledge

Prior to leading a specific activity, leaders shall have the following knowledge:

- a) techniques of interpretation of relevant weather signs, landslides, atmospheric or environmental conditions, such as:
  - extreme weather conditions specific to the activity, including but not limited to snow avalanche risk, flash floods or tsunamis, sand and electrical storms, fires, hurricanes or cyclones and droughts;
  - special risks associated with underground environments (e.g. earthquakes);
  - erupting volcanos, geysers.
- b) techniques of orientation and navigation where appropriate (such as basic interpretation of topographic maps, map captions and symbols, scale, level curves, use of compass and orientation through natural signs), including, when available, technologies that allow the use of geolocation both in the planning and the execution of activities;
- c) techniques of group management, integration and conflict resolution;
- d) strategies of communication and instruction;
- e) safety requirements of the adventure tourism activity;
- f) factors that contribute to the occurrence of accidents;
- g) common environmental hazards and risks;
- h) emergency procedures;
- i) first-aid procedures;
- j) local environmental legislation and conservation;
- k) information on the environment and local communities specific to the location of the activity;
- l) techniques to minimize negative impact on the environment;
- m) basic rules of education and social skills;
- n) legal and statutory requirements.

### 6.3 Skills

Adventure tourism activity leaders shall have the following skills:

- a) competent communication to keep participants interested and motivated in the activity;
- b) ability to communicate in the participants' language or a language mutually agreed with the participants;