

BASIC MINIMUM STANDARDS FOR ADVENTURE TOURISM RELATED ACTIVITIES

Introduction

There are a vast number of Adventure Tourism Activities being conducted in the country. In order to ensure safety of participants in such activities, there is a need to lay down the minimum acceptable standards in terms of equipment and human resources. As a first step, the Basic Minimum Standards are recommended for those activities which have the greatest volumes in terms of participation. These activities are:-

LAND BASED

- 👉 Mountaineering
- 👉 Trekking

WATER BASED

- 👉 River running

AIR BASED

- 👉 Parasailing
- 👉 Paragliding
- 👉 Bungee Jumping

BASIC MINIMUM STANDARDS FOR LAND BASED ACTIVITIES

MOUNTAINEERING

1. **Application:** These Basic Minimum Standards (BMS) will apply specifically to commercial operators attempting 6000m or other comparable peaks, which offer to guide or accompany climbers above Base Camp and also to operators who offer more limited facilities. However, it will also concern operators who supply transport etc to Base Camp, and also supply Base Camp services and High Altitude porters.

2. **Information to Clients:** A variety of organisations offer to take clients on 6000m or other comparable peaks. They vary from those which provide a full service to the summit or nearly to the summit, to those where there is minimal support for clients above Base Camp. However at the present moment it is difficult for clients to deduce from brochures exactly what is offered in terms of guiding and support, and whether it corresponds to their needs. These Basic Minimum Standards will supply clients with pointers to assist them to make an informed choice.

3. **Danger awareness:** Mountaineers climbing at very high altitude, especially above 6000m are at considerable stress to their mental and physical powers and may not be capable of assisting others as has always been traditional in mountaineering. This fact is of particular importance to mountaineers of limited experience, who rely on professional guides to bring them safely up and down 6000m+ peaks. They should be made aware that the risks involved in climbing at altitudes are such that a degree of self-reliance is necessary.

4. **General Guidelines for Mountaineering**
 - (a) All such operators will have to be registered with Adventure Tour Operators Association of India and Ministry of Tourism.

 - (b) The leader or chief guide and as many as possible of the

guides should have high altitude experience appropriate to the altitude of the peak to be climbed. He must have been a member of three climbing expeditions above 6000 m and must have completed the Basic Mountaineering Course with an 'A' grade or an equivalent from abroad. He/She must be qualified on first aid and cardiopulmonary resuscitation (CPR) certification.

- (c) The guiding and porter staff on the mountain and the material supplied must be adequate for the aims of the party and stated level of service offered.
- (d) An experienced doctor in the party is desirable but at the very least advance arrangements must be known for medical help. Advance arrangements must also be made for evacuation assistance in case of emergency.
- (e) The minimum safety equipment available is recommended walkie-talkie radios and recommended medical supplies.
- (f) Advertising must give a true picture of all the difficulties and dangers involved, and avoid promising the impossible. If an expedition is commercially launched by an operator, then the Biographical information about the guiding team should be included.
- (g) The client must truthfully reveal his experience, supported by documentation/photograph, medical history etc to the organiser so that the organiser can make an informed choice about the potential client.
- (h) Information supplied in advance will include a clear statement of the guiding, portage and equipment which will be supplied by the organiser, together with details of the clothing and equipment to be supplied by the client. This is not in context of the operators assisting expeditions with logistics alone.
- (i) All equipment on which life is dependent must be Union International de Alpine Association (UIAA) or European Union (EU) certified.

- (j) Knowledge of low impact environmental expeditioning must be undertaken, pledging to environmental guidelines of Union International de Alpine Association (UIAA)/Himalayan Environment Trust (HET) etc.

TREKKING

1. The leader or chief guide and as many as possible of the guides should have experience appropriate to the difficulty of the route being attempted. The trip leader must have completed at least two trekking trips in general and must have completed the Basic Mountaineering Course or equivalent with an 'A' grade. He/She must be qualified on first aid and cardiopulmonary resuscitation (CPR) certification.
2. The guiding and porter staff for the trek and the material supplied must be adequate for the aims of the party and stated level of services offered.
3. Adequate arrangements must be made known in advance for medical help available in the area. Advance information must also be made for evacuation assistance in case of emergency. Minimum first aid medical supplies must be carried on the trip. In case of a helicopter requirement for rescue operation, it is recommended that the Accreditation Committee be empowered to authorize the rescue.
4. Information provided to clients must give a true picture of all the difficulties and dangers involved, and avoid promising the impossible. Biographical information about the guiding team should be included.
5. The client must truthfully reveal his experience, medical history etc to the organiser so that the organiser can make an informed choice about the potential client.
6. Information supplied in advance will include a clear statement of the guiding, portering and equipment which will be supplied by the organiser, together with details of the clothing and equipment to be supplied by the client.

BASIC MINIMUM STANDARDS FOR **WATER BASED ACTIVITIES**

RIVER RUNNING

1. Any company operating river running trips or commercial white water rafting trips must be registered with Indian Association of Professional Rafting Outfitters/Adventure Tour Operators Association of India and Ministry of Tourism.
2. All trips on white water for tourists will be conducted with at least one qualified guide on each craft. A senior guide or trip leader must be present and supervise the activity at all times.
3. **The Guide accompanying the trips should:**
 - (a) be at least 18 years of age;
 - (b) be able to swim;
 - (c) hold a valid first aid and cardiopulmonary resuscitation (CPR) certificate or equivalent.
4. **Training:** Guide trainees should complete a course (or equivalent training) that equips them with the necessary skills and knowledge to safely and competently guide a raft. A guide training course should include the following topics:
 - (a) skills -rafting techniques, crew training and management, emergency and rescue techniques.
 - (b) knowledge - equipment, safety and emergency procedures, rapid theory, leadership, signals, environment protection
5. **Recognition Experience:** Guides should:
 - (a) have guided a raft under the supervision of and to the satisfaction of a Trip Leader on at least ten white water runs within the past two years in rapids of the same class or higher than the run they intend to guide on;

- (b) complete a familiarization run on any new stretch of white water they intend to guide on;
- (c) maintain a log book recording each run and signed by the Trip leader as proof of experience;
- (d) should have good communication skills in Hindi and English

6. Special Requirements for Trip Leaders: Trip Leaders should:

- (a) have been qualified guides for at least two years;
- (b) have a high level of guide skills and knowledge;
- (c) have a thorough knowledge of trip planning, white water rescue techniques, emergency procedures and advanced first aid;
- (d) have guided a raft as a qualified guide on at least twenty white water runs within the past two years in rapids of the same class or higher than the run they intend to lead on;
- (e) complete a familiarization run and know the evacuation routes on any new stretch of white water they intend to lead on;
- (f) should have excellent communication skills in Hindi and English.

7. Single Raft Trips: Some of the worst accidents in river running internationally have occurred where there has been only one raft. There should always be at least two crafts on the water i.e, two rafts or kayaks or a raft and a safety kayak. This may be relaxed for float trips (maximum grade II) in the case of rafts. For kayaks a minimum of two or preferably three is always recommended. Safety Kayaks must be mandatory on technical rapids grade IV and beyond. In case on continuous white water sections, one should look at a minimum of one kayak per raft, if not more.

8. Kit: All trips must carry a well- equipped first Aid kit (it must have triangular bandages, sterile pads, gauze roller bandages,

pressure bandages, first aid adhesive tape, splints, scissors as bare minimum), a repair kit (it must contain approx. half meter of repair material, a sufficient amount of glue and accelerator, sand paper or roughing tool and waterproof repair tape/ duck tape). Oar rafts must carry at least one spare oar. All rafts must have a safety line going all around the raft, a bow- line and preferably a stern line as well. All rafts must have a throw bag and a bailing bucket (in case of non self bailer bucket boats). A flip line is recommended for all big drops.

- 9. Personal River Equipment:** All rafters/ kayakers must have a life jacket on all times while on water. This includes the guides also. The life jackets must have adequate buoyancy (minimum of 6.14 kgs, and preferably 9 – 10 kgs.), must be the proper type (U.S. coast Guard Type III or V) with a provision of ensuring a snug fit by straps etc. and the life jacket must be worn correctly. Inflatable life jackets and the 'keyhole' type jackets should not be allowed. Guides must ensure that the life jackets are on in a secure manner before the trip starts and above all major drops. Helmets are mandatory on all rapids and it is recommended that helmets be kept on throughout the trip. The helmet should be properly strapped. Rafts must be of good condition with no leakage or compartment damage. A baffle / compartment inflation check must be carried out at regular intervals to ensure that each compartment is air tight with no leaks. A minimum of 14 – 16 feet boats are recommended for commercial rafting. Self bailing rafts are recommended.
- 10. Age Limit:** Fourteen years on all stretches except float trips (grade II and below), where it may be relaxed to ten years.
- 11. Non Swimmers:** Non swimmers should not be allowed on any serious rapid (grade III +/IV)/ or hard section.
- 12. Safety Briefing:** Guides/ trip leader must ensure that a thorough safety briefing covering all pertinent details for that particular trip is given before each trip. The trip leader must ensure that clients are in suitable attire (bulky clothes, sarees, neck ties, long

skirts and three piece suits should not be permitted). People suffering from any serious ailments, weak heart conditions, epilepsy and expecting mothers should not be allowed. Non-swimmers should be allowed to body surf only with rope back up. Shoes/appropriate sandals/ booties are a must for rafting. Appropriate clothing must be worn during winter/ on glacial melt rivers with cold air temperatures. For such rivers, dry suits/ wet suits are recommended. If not, light woolens/synthetic clothes are a must. Trips must be timed carefully to finish at least an hour before sunset.

- 13. Alcohol and Drugs:** Consuming alcohol in any form or quantity or illicit drugs at least six hours prior to the river trip must not be allowed.
- 14. Familiarization Runs:** One or two familiarization runs before operating commercially each season or on new rivers is recommended. Rivers should not be run commercially at flood levels.
- 15. Foreign Guides:** Foreign Guides must be aware of the Indian Safety Regulations before being allowed to operate. They must fulfill the required criteria and should do a few familiarisation runs on the river and equipment before being allowed to operate commercially. A valid first aid certificate is a must.
- 16. Senior Guide:** A senior guide must have spent at least three consecutive seasons on any of the above three rivers with a minimum of sixty days on the river per season. He must have all requisite first aid and cardiopulmonary resuscitation (CPR) qualifications and must have a clean safety record. A senior guide must have river- running experience on at least three different rivers.
- 17. Safety Kayaker:** A safety and rescue kayaker must be thoroughly trained and experienced in all safety norms, river rescue and first aid/cardiopulmonary resuscitation (CPR) certification. A minimum of thirty days on the river is mandatory before kayaking with commercial trips.

BASIC MINIMUM STANDARDS FOR AIR BASED ACTIVITIES

Aerospports need the highest skill requirements. They also have the highest risk element and anything that goes wrong hardly gives an opportunity for corrective action. Accordingly adherence to safety guidelines must be followed meticulously.

Generally the following principles need to be adopted:-

- (a) The equipment used in each aero-sport must be defined in terms of its specifications, certifying agency and its life (shelf life and usage life), as defined by the manufacturer, who for the purpose must hold a valid authorization for manufacturing the particular aero-sport equipment.
- (b) Instructor/operator qualification is very important. It is not enough to have an initial certificate or qualification. Currency and continued evaluation in terms of safety and skill needs to be carried out.

PARAGLIDING

Infrastructure:-

1. Operator must have access to safe and open take off points in case of hill launches. The take off point should be free from obstructions in the take off path and should not have rock or crops which could injure the participant. Cliff take off points must strictly not to be used.
2. The operator must have free and clear access to a designated landing ground free of obstructions such as tall trees, buildings, electric wires etc.
3. First aid must be available at site with Qualified First aid

Instructors (having additional knowledge of related accidents), with arrangements with a nearby hospital for quick emergency services.

4. Wind conditions should be strictly monitored and the activity must be done within the weather conditions stipulated by the equipment manufacturer.

Equipment And Accessories

5. Paragliding wings must have APCUL DHV or CEN certification. Such certification should be stitched on the wing and visible for inspection. Harness should be with back protection and harness must be fitted with round type certified rescue parachute.
6. Helmets and Ankle shoes must be compulsory.
7. Proper log books must be maintained for all equipment.
8. Annual inspection and certification of equipment for air worthiness must be carried out.

Operator Qualification

9. In case of solo flights the pilot should have undergone two full days ground training consisting theoretical and practical training and instructor should satisfy himself of the first launch both in hill and winch launched paragliding. For first 15 launches height should be restricted to Max 500 feet and student should be radio guided. After demonstrated capability for 180 degree stable turns, five spot (20 Mtrs) landings and after the theory paper is cleared, the student may be allowed to carry out free fly. The student pilot must have a valid registration with a club recognised by the Aero Club of India.

10. Tandem pilots must have a tandem pilots licence issued by the competent authority, which will be issued after the following:
 - (i) 150 logged flights.
 - (ii) 35 h + logged.
 - (iii) Pass theory paper

11. All instructors must be current pilots having sufficient knowledge and experience in the sport.

PARASAILING

1. **Operator Classifications:** All operators shall be certified by the appropriate agency in terms of their capability to conduct the activity on land or water, specifically endorsed to allow multi-passenger flight operations.
2. **In Flight Floatation Devices and helmets:** At all times passengers participating in parasailing activities over water, while in flight shall wear a properly fitted approved life jacket. Over land, the passengers must wear an ISI approved helmet.
3. **Assumption of Risk And Release of Liability Waiver:** Without exception, all operators shall require ALL PARTICIPANTS of legal age or if a minor; a parent or legal guardian to read and sign an assumption of Risk and Release of Liability waiver prior to starting the activity.
4. **Passenger Safety Briefing:** All parasail participants shall be required to view a Parasail Safety Briefing video and/ or be given a written Parasail Safety Briefing handout. In addition, the crew shall give a pre-flight verbal summary of the briefing before any parasail flight activities commence, which should include the following:
 - A. A description of the activity itself.
 - B. Safety precautions while underway and in-flight.

- C. Safety and life saving equipment locations.
- D. Warnings and Procedures for unexpected events, such as water landings, equipment malfunctions, and towline separation.
- E. Procedure in the event of an emergency onboard the vessel.
- F. The proper use of signals.
- G. Question and answer period.
- H. Exclusion of any participant that may be afraid or intimidated prior to participation.

1. **Proximity to Obstructions. Wind restrictions:** Operator should have a wind measurement device and should not operate in winds exceeding 18 Kph. Operator shall at all times maintain a minimum operating distance from any surf-zone, shoreline, or fixed object, of not less than 500 feet. In addition, at no time shall a parasail vessel's operator allow a canopy to pass within the following distance from the shore while an onshore wind is present. (Onshore wind shall be defined as any wind direction that could potentially place a parasail vessel, canopy, or participant in contact with land in the event of the loss of vessel or systems power and/or line separation.).
2. **Responsibility of Vessel Sea worthiness and tow vehicle road worthiness:** It shall be the responsibility of the first mate in charge to make certain that the vessel is maintained and is properly equipped in a sea worthy condition. A current written log shall be kept of all mandatory daily inspections and all routine maintenance performed on vessel. Under no circumstances shall the operator and/or crew utilize any equipment outside the parameters for which it was designed and must at all times adhere to manufacturers' specifications, requirements and/or recommendations. Similar conditions should apply for land based parasailing vehicles.
3. **Passenger Weight Restrictions:** At no time shall a passenger be allowed to participate in parasailing activities unless they meet the manufacturers' recommendations or requirements in terms of weight. Passenger must be able to

be comfortably and safely fitted into harness.

4. Towline Length Limitations: At no time

(a) shall any vessel's winch drum be equipped with more than 500 feet of towline, while conducting parasail flight operations. Similarly land based operations should not use more than 500 feet of rope.

(b) Exceed a maximum of 300 feet AGL (Above Ground/ Water Level).

5. Minimum Age Requirements: Children may participate in parasailing activities only after the operator has made reasonable prior judgment that wind and sea conditions are conducive to such activities and extreme caution should be exercised. Children under 12 are not to be allowed.

6. Towline Inspection and Maintenance: Towline in its entirety shall be inspected daily for damage and/or wear and if necessary shall be immediately replaced. Towline shall be kept clean and maintained in accordance with manufacturers' specifications, requirements and/or recommendations.. A written log of such inspections and maintenance shall be kept at all times.

7. Pre-Flight Weather Evaluation: It is the operators responsibility to evaluate and determine if weather conditions are favorable for parasailing. He shall use all means available to make such a determination. No operator shall knowingly parasail in rain, heavy fog or during a known lighting storm within 50 km from the parasailing area, in addition a daily weather log shall be maintained.

8. Multiple Passenger Flights: Multi-passenger flights shall only be conducted under the following conditions and only after the operator has made reasonable judgment prior to each and every flight. Extreme caution shall be exercised:

a) At no time shall there be more than 2 passengers in any canopy.

b) Wind conditions must be adequate, stable and

consistent.

- c) Conditions must be conducive to such activities.
- d) Commercial equipment specifically designed and professionally manufactured for multi-passenger flight operations must be utilised.
- e) All equipment must adhere to manufacturers' specifications, requirements and/or recommendations.
- f) Vessel's winch system must be equipped with a functional level-winder during all multi-passenger flights.

BUNGEE JUMPING

1. **Essential requirements:** All parts of the jump line must be duplicated. This extends from the connection of the bungee to the jumper and the connection to the structure at the other end of the line. Normally the jumper should have an attachment to ankle straps, and another to a body or sit harness.
2. **Equipment** (harnesses, karabiners) should be of sound construction and suitable for this use. Mountaineering equipment from reputable suppliers is appropriate. Karabiners should be of the screw gate type.
3. **Braided ropes:** At least 2 braided ropes should be used and matched to the weight of the jumper; they should be to BS 3F 70 1991 specification for heavy duty braided rubber cord, or to a demonstrably similar standard.
4. **Unbraided ropes:** Normally one unbraided rope is adequate because of the in-built redundancy from its structure of approximately one thousand individual strands bound together. Each rope should have an examiners certificate from an independent source and be selected according to the weight of the jumper.
5. **Rope log books** should be kept, describing maximum load,

and numbers of jumps and drop tests undertaken, and in the case of unbraided ropes, any other conditions required by the examiner (eg length of time in sunlight). Ropes have a finite life and operators should be able to demonstrate that this has not been exceeded.

6. **There should be a written operating procedure.** If not written, elements will be more likely to be forgotten or short circuited. Both operators and enforcement officers should be able to check that safe procedures have been established and are being followed.
7. **The procedure should cover at least:**
 - (1) medical enquiry;
 - (2) age verification - if under 18, parental consent should be required;
 - (3) if under 14, they should not be allowed to jump;
 - (4) weighing and rope selection: There should be a method of checking that the weight of the jumper has been correctly measured and recorded so as to ensure that the correct rope is selected for each jumper;
 - (5) attachment of each part of harness and ropes, and the checking of each action by a second trained person;
 - (6) briefing of jumper;
 - (7) entry into and riding in cage;
 - (8) re-instruction and jump; and
 - (9) retrieval of jumper.
8. **Use of mobile cranes:** Use of mobile cranes is not recommended allowed as this is too dangerous.
9. **Other important elements:** Training of personnel is of paramount importance. Each job undertaken requires a different level of training and experience. Those in charge should be able to demonstrate that everyone who is carrying out a task has enough experience to do so, unless under direct supervision by another experienced person. There should be

a proper training schedule showing how a person progresses from one level of competence to the next. The schedule of work should clearly state, who carries out every safety critical action and who checks it. Each person should know the tasks, which they are permitted to carry out and those which they are not authorised to do. To date, all known fatal accidents world wide have resulted from human error.

10. **The person in overall charge** should keep close control of the site. Arrangements should be made to exclude spectators from the jump zone for their own safety and to avoid distraction of the operators.
11. Anyone in a cage should be securely attached to it. Spectator riding, especially by children, should be discouraged.
12. There should be a dead-weight drop test of the whole line at the beginning of the day to ensure its integrity.
13. Spares for all the components in the jump line should be kept on site so as to be available for immediate replacement of suspect components.
14. An air bag should be used for jumps over land with unbraided ropes. The purpose of the bag is to prevent a jumper striking the ground if an incorrect rope selection is made. It is not to safeguard jumpers who fall due to a failure to properly connect them to the supporting structure. Braided ropes to BS 3F 70 have an outer covering which tightens when stretched. Unbraided ropes do not, so there is more risk of a jumper descending too far if a wrong rope selection is made. If a jump is made over water with an unbraided rope, relying on the water to perform the function of the airbag, steps should be taken to ensure that there are no obstructions under the water surface. In addition, suitable arrangements should be made for rescue from the water.

ENFORCEMENT AGENCY

1. **An ACCREDITATION COMMITTEE** may be formed for operators and outfitters in one or several activities. The constitution of this accreditation committee should be as follows:-

- (a) Chairman (Designated by Ministry of Tourism, Government of India).
- (b) Members: Members must be proven specialists with actual experience of adventure activities, who meet the minimum criteria for guides and trip leaders.

Two members nominated by Adventure Tour Operators Association of India (ATOAI).

One member each nominated by National Institute of Water Sports (NIWS) and the Indian Association of Professional Rafterers (IAPRO).

One member nominated by Parachuting Federation of India

One member nominated by Indian Mountaineering Foundation

- 2. The committee may also appoint examiners, in consultation with relevant Adventure Trade Associations, who have proven experience in the activity to carry out inspection of the operator's facilities and certify compliance to safety regulations. The appointed examiners must be individually capable of conducting the activity independently and must themselves meet the minimum requirements for trip leaders or instructors.
- 4. This committee will also be empowered to look into any complaint against any adventure tour operator.
- 5. This committee may further keep upgrading the guidelines and safety regulations, as and when required on a yearly basis.
- 6. This committee may also do training programmes/refresher courses and coordinate any relevant issues impacting the smooth running of the adventure activities in India.

LIST OF INSTITUTIONS

The suggested list of institutions whose certificates would be recognised as guide or Trip leaders qualification for the specified activity are as follows : -

Land based

1. Himalayan Mountaineering Institute, Jawahar Parbat, Darjeeling.
2. Nehru Institute of Mountaineering, Uttarkashi.
3. Western Himalayan Mountaineering Institute, Manali.
4. Indian Institute of Skiing and Mountaineering, Gulmarg.
5. Armed Forces Training Establishments (In respect of ex-servicemen).
6. Any other equivalent institution from abroad recognized nationally or internationally.

Water based

1. National Institute of Water Sports, Goa.
2. Regional Water Sports Centre, Pong Dam, Himachal Pradesh.
3. Armed Forces Training Establishments (In respect of ex-servicemen).
4. Any other equivalent institution from abroad recognized nationally or internationally.

Air based

1. Armed Forces Training Establishments (In respect of ex-servicemen).
2. Any other equivalent institution from abroad recognized nationally or internationally.