

Ziplining

(Guidelines & Regulations)

The Department of Tourism,
The Administration of Union Territory of
Ladakh



ZIPLINING IN LADAKH

Out of many adventure sports activities at Ladakh, the region provides opportunities for Ziplining activities for adventure seekers. Ziplining is also often hailed as one of the most exciting activities in the region. While exploring the heavenly mountains, rivers, and sceneries of Ladakh, this adventure sport provides the adrenaline rush among all age groups to have a mesmerizing experience.

BACKGROUND

The Department of Tourism, Administration of Union Territory of Ladakh to streamline and promote adventure activities in Ladakh in a regulated manner is issuing the Guidelines & Regulations for carrying out Ziplining. These guidelines shall extend to the whole of the Union Territory of Ladakh and come into force from the date of its notification.

The Department of Tourism, Administration of Union Territory of Ladakh recommends following the guidelines & regulations for Ziplining, issued by the Adventure Tour Operators Associations of India (ATOAI) and endorsed by the Ministry of Tourism, Government of India.

These guidelines will act as a defining force with respect to the procedures to be followed, mandatory trainings for guides/instructors, equipment to be used, Standard Operating Procedures (SOPs), necessary documentation, risk mitigation processes, addressing medical concerns, emergencies, rescue operations, safety briefing, etc. All Adventure Tour Operators (ATOs) shall follow these guidelines while conducting Ziplining in the Union Territory of Ladakh.

VALIDITY

The 'Guidelines & Regulation for Ziplining' will remain valid for five (5) years, from the date of its notification. All Adventure Tour Operators (ATOs) are advised to strictly adhere to the terms and conditions of these guidelines and follow its best implementation for the sustainable development of the adventure tourism ecosystem in the Union Territory of Ladakh.

ENCLOSURES

- Annexure 1 – Guidelines & Regulations for Ziplining in the Union Territory of Ladakh
- Annexure 2 – Implementation Framework for the Union Territory of Ladakh

ANNEXURE 1

GUIDELINES & REGULATIONS FOR ZIPLINING

1. INTRODUCTION

All owners & operators of Zip Wire and High Ropes Courses should aspire to install and operate their courses to the following European Standard: EN 15567:2015; Sports and recreational facilities – Ropes courses:

- Part 1: Construction and safety requirements
- Part 2: Operation requirements

What follows is an abridged version of these courses.

1. High ropes and zip wire courses involve participants engaged in activities while attached to ropes or cables more than 1.0m above ground level. A zip wire is defined as an activity system or ropes course in which the participant glides under gravity in a sloping direction. Both high ropes and zip wire courses are distinct from playground equipment in that they have restricted access and require supervision.
2. Such activities involve risks that should be managed by the operators. This is achieved through careful supervision, training, instruction & information. Based on a risk assessment, operators should take reasonably practicable measures to ensure the safety of participants, including safety devices and protocols designed to limit the risk or consequences of falls or collisions. However, such risks cannot be eliminated.

2. MEDICAL CONCERNS

High ropes and zip wire courses should only be undertaken by those who are physically and mentally able to comply with the safety requirements specified by the operator. Participants must get a medical opinion from a qualified doctor clearing them for participating in high ropes/ zip wires activity, in case any of the following concerns are highlighted:

1. Asthma (must carry inhalers)
2. High Blood Pressure
3. Heart disease or recent open-heart surgery
4. Diabetes
5. Knee-related problems
6. Spinal issues
7. Severe allergies
8. Recent surgery/hospitalization
9. Any other ailments of a serious nature
10. Pregnancy (expecting mothers should not participate in the activity)

3. GUIDES

Any guides or instructors involved in high ropes and zip wire courses must have the right combination of training and experience to carry out the following tasks:

1. Provide participants with the information required to ensure that the equipment and elements are used correctly.
2. Check that participants use the right equipment.
3. Assess a participant's self-sufficiency on a high ropes or zip wire test course.
4. Ensure that the operator's safety instructions are complied with.
5. Carry out a mid-span rescue, safely bringing a participant back to the ground within 30 minutes; or alert an onsite rescuer if required.
6. Assist participants.
7. Provide participants with First Aid, including stretcher evacuation if required.

4. TRAINING

As a basic minimum, all high ropes and zip wire courses should have guides trained to the following level:

1. All guides are to be trained in the First Aid / CPR course, provided by a reputable organization approved by ATOAI.
2. All guides are to be trained in basic high ropes and/or zip wire operations – in-house training, to a standard approved by ATOAI.
3. Guide competence in all safety-critical roles validated via regular assessment, containing clearly defined pass and fail criteria, by a senior instructor.

4. Regular field monitoring to assess guide competence with participants while not under direct supervision.
5. At least one guide per course to be rescue trained and assessed as capable of conducting a mid-span rescue, safely bringing a participant back to the ground within 30 minutes.

The manager and/or senior instructor to have:

1. A minimum of 2 years' experience as a full-time guide on a high ropes or zip wire course.
2. An advanced first aid/ CPR qualification above that of an 8-hour course.
3. Adequate training and assessment to validate their competence in a senior role.

5. EQUIPMENT – THE INSTALLATION

1. **Choice of Site:** The High Ropes or Zip Wire Course shall be located in an area of reasonable operating safety; it shall be possible to evacuate participants from any part of the course.
2. **Materials:** Materials shall be fit for purpose. Timber parts shall be designed in such a way that precipitation can drain off freely and water accumulation can be avoided. Metal parts shall be weatherproofed against atmospheric conditions.
3. **Wire Rope:** Only galvanized or stainless-steel wire ropes shall be used. Terminations around trees and poles shall have a closure angle of less than or equal to 60 degrees. Wire rope inspections and discard criteria shall conform to ISO 4309.
4. **Wire Rope Terminations and Grips:** All wire rope terminations shall conform to EN 13411 Parts 1-7. The number of wire grips shall depend on the nature and diameter of the wire rope and the types of wire ropes and grips used. It shall not be possible to undo critical components without a tool. Points of attachment on wire ropes may create local fatigue and shall be given special attention during inspections.
5. **Design and Manufacture:** High Ropes or Zip Wire Courses shall be designed with consideration for the size and body weight of the participants. The dynamic load (generated by a falling participant) shall not exceed 6kN. Installations using self-belay systems made out of steel wire rope shall be calculated using safety factor 3.0 in relation to the ultimate load.
6. **Support System:** The support system (artificial and/or natural structure intended for installation of activity and safety systems) shall have the stability and resistance appropriate for the load calculated. In instances where the zip line course transmits loads to the existing structure (e.g. building), care shall be exercised to ensure that the existing structure can bear the loads created by the zip lines. When rocks are used as supporting structures the anchor pull-out strength must be at least four times the applied load.
7. **Activity System:** The activity system (e.g. landings, platforms, descending devices, zip wires) shall be designed to accommodate the imposed loads. The safety connection between the participant and the zip wire shall be made with the appropriate personal protective equipment (PPE). Wire ropes shall have no exposed broken wire ends within the reach of the participants. If any part of the zip wire and landing area is not visible from the start point a departure regulation system shall be used. Appropriate training and equipment shall be provided if participants are required to brake actively during the descent; a passive braking system (e.g. gravity, buffer, bungee, net) shall always be in place.
8. **Safety System:** The safety system can be collective (e.g. railings, landing mats, belay anchor) or individual (e.g. safety harness & belay to fall arrest device). When participants' feet are more than 1.0m from the ground, a safety system shall be in place. Systems, in particular with movable trolleys, shall be designed in such a way as to reduce the entrapment of body parts or clothing.
9. **Inspection and Maintenance:** Before the site is inaugurated a competent body, approved by ATOAI, shall certify that the site follows this standard. The following shall be carried out: a visual inspection, a functional inspection, a design validation, documentation including structural analysis, date, and location of inspection, the result of the inspection, and details of any defects detected. The inspection report shall be included in the operations manual of the course. After the inauguration, the equipment and its components should be inspected or maintained as follows:
 - Routine Visual Check: before each opening
 - Operational Inspection: every 1-3 months
 - Periodical Inspection: at least once per year by an inspection body, including visual inspection, functional inspection, determination of replacement state of worn parts, inspection including manufacturer's instructions for maintenance
10. **User Manual for Operators:** The manufacturer or installer of a zip line course shall provide a manual containing at least the following information:
 - Technical description of the facility and its components
 - Use of the course & marking
 - Manufacturer's declaration, containing: the basis of static load calculation, normative references, and exclusions of liability, if any.
11. **Personal Protective Equipment (PPE):** All participants are required to wear PPE while engaged in High Ropes and Zip Wire Course activities. As a minimum, the PPE should include:
 - Rock climbing sit harness

- Additional chest harness or full body harness where appropriate, e.g. when a sit harness is ill-fitting around the waist
- Two points of attachment (e.g. lanyards & screw gate karabiners) to the safety system
- All PPE to conform to UIAA or EN / CE standards
- The fitting of PPE shall be checked by a guide before use. The PPE shall be inspected and controlled as follows:
 - I. Routine check – before participants use equipment
 - II. Complete check by an inspector – at least every 12 months; after an exceptional event; after the equipment has been withdrawn from use following a routine check
 - III. A personal protective equipment inspection register is required for each set of devices.
- All exceptional events affecting the equipment, the checks performed as a result of such events, and the minimum annual checks shall be entered on the register.
- Competence of the inspectors. An inspector of PPE is deemed to be competent if:
 - I. They hold an advanced national climbing certificate (e.g. mountaineering, climbing); or
 - II. They have completed a special course run by an organization that can certify that the person in question has specific skills in the equipment mentioned; or
 - III. They can prove that they have at least 24 months of experience as a trainee inspector, supervised by a competent inspector.

6. SOPs & OPERATING INSTRUCTIONS

Safety brief; instructions and practical assessment of participants. Before commencing an activity, all participants shall be informed of the safety instructions, which should include:

1. Explanation of the high ropes/zip wire course and inherent risks.
2. Explanation of the equipment (PPE) to use when required.
3. Demonstration by the instructor or manipulation of the equipment by the participant.
4. Explanation of the safety instructions, especially the need to be always connected to the safety system by at least one connector.
5. Explanation of any marking placed at the beginning of every course or action system.
6. Identification of instructors and how and when to communicate with them (at any time any participant shall be within range of sight of either an instructor or an adult participant).
7. Action to be taken in event of an accident.
8. All of this information shall be documented.
9. All instructors and guides should be able to give a thorough safety briefing that covers all safety aspects and detailed paddling and rescue instructions in detail. This briefing must be clear and must have the ability to be given in English and/or Hindi, with the ability to command guests for the activity.
10. The principles of the various technique participants will have to perform during the course shall be explained. All participants shall demonstrate their understanding of these techniques by means of a practical assessment by a trained guide on a practice zip or high ropes area. All participants shall pass an assessment of competence on the test course, to a defined pass and fail criteria, before progressing.
11. **Supervision – General Points:** During a rescue operation, a rescuer shall be dispatched without any adverse effect on-site supervision. Communication between participants and the guide shall be ensured. At any time, any participant shall be within range of sight of either a guide or another adult participant.
12. **Course Supervision:** Supervision by trained guides is divided into 3 levels:
 - Level 1: a situation whereby a guide can physically intervene.
 - Level 2: a situation whereby a guide can clearly see the participant and intervene verbally.
 - Level 3: a situation whereby a guide is in a position to communicate verbally with and provide adequate assistance to participants.
13. **Continuous Belay System & Zip Wire Belays:** A minimum of one, and preferably two, trained guides shall ensure participants are correctly attached to the safety system on High Ropes or Zip Wire Courses using a continuous belay system.
14. **Self-Belay & Assisted Belay:** In the event of participants being required to self-belay, there shall be an adequate number of guides to ensure the following:
 - All participants are to demonstrate their understanding of the activity procedures and safety instructions in a practice area under Level 1 supervision & assessment.
 - The first five elements negotiated by a participant shall be under Level 2 supervision. During this period guides shall pay particular attention to the changeovers. After this period participants shall be under Level 3 supervision by guides.
 - For assisted belays, there shall be a minimum of one guide for 4 participants (at height). In such instances, the belayers shall be under the Level 1 supervision of the guide.
 - Children between the ages of 10 and 14 shall be under Level 2 supervision by a guide throughout the activity.
15. **Inspection and Maintenance:** The equipment or its components should be inspected or maintained as follows:

- Routine visual check, which shall be carried out before each opening.
- The operational inspection should be carried out every one to three months (e.g. cleanliness, equipment ground clearances, ground surface finishes, exposed foundations, sharp edges, missing parts, excessive wear of moving parts, and the structural integrity of the safety system).
- Periodical inspection, at least once a year. The following should be carried out: a visual inspection, a functional inspection, a determination of the replacement state of worn parts, and inspections including all manufacturer's/supplier's instructions for maintenance. Any safety-relevant defects observed shall be eliminated. Specific considerations on safety critical wire ropes shall be given to the potential effects of fatigue. For periodical inspections, an inspection report shall be drawn up, including the following:
 - I. Date and place of inspection
 - II. Results of the inspection indicating the defects observed
 - III. Assessment, whether there are any misgivings about further use of the facility
 - IV. Information on necessary re-inspection
 - V. Name, address, and signature of the examiner

7. DOCUMENTATION

The following documentation is required to be kept onsite:

1. Administrative:
 - I. Name and address of owner and operator
 - II. Document indicating the annual inspections carried out by an inspecting body
 - III. List of site personnel and their job titles
 - IV. Evidence of public and other liability insurance
2. Operational:
 - I. Logbook containing the daily operation sheets (including faults observed during inspections at opening and closing, and relevant events concerning safety). These need to be kept for three years
 - II. Accident and incident report sheets
 - III. Personal protective equipment inspection registers and operation log
 - IV. Risk assessment and management plan – drawn up by the zip line course operator
 - V. Instructor and rescue training to be documented
 - VI. Manufacturer's product manual
 - VII. Rescue and emergency plan
 - VIII. Current inspection report
3. Information to be provided for participants and visitors:
 - I. Description of the activity and safety instructions
 - II. Limits and restrictions for use
 - III. Information relating to personal public liability insurance of the operator.

8. RISK MITIGATION & EMERGENCIES

1. **Risk Assessment:** Each operator of a High Ropes / Zip Wire course is required to conduct a basic risk assessment, at least once per year, according to the format approved by the ATOAI. Documentary evidence of this risk assessment should be kept onsite. The risk assessment will give rise to the Security and Emergency Plan.
2. **Security and Emergency Action Plan:** The security and emergency action plan shall be appropriate to the surface area of the High Ropes / Zip Wire course and the number of participants it can accommodate. It shall contain the following:
 - I. Names of the rescuers and the name and address of the operator
 - II. Means of communication
 - III. Emergency equipment
 - IV. Drawings indicating the emergency paths, accesses, and exits
 - V. Procedures for evacuation due to injury or extreme weather
 - VI. Documentation for training in emergencies and reporting accidents
 - VII. Every High Ropes / Zip Wire Course to have a First Aid kit and stretcher/spinal board onsite.

9. BASIC MINIMUM STANDARDS FOR GRANT OF RECOGNITION TO OPERATORS

1. The operator should be registered with the local tourism authorities.
2. All guides must be trained/certified to the standards listed above.
3. Operational procedures as listed above, must be strictly adhered to and documented.
4. A third-party audit by a qualified/ certified engineer must be conducted before commencing operations.
5. Periodic site inspections and PPE inspections must be conducted as listed above.

6. A comprehensive Risk Management Plan and Emergency Action Plan should be in position and the staff trained periodically on the same.
7. It is highly recommended that any outfit, entity, establishment, or company seeking a grant for recognition must fulfill these desirable criteria:
 - I. The entity must own specialized equipment commensurate with the needs of undertaking and running such an operation.
 - II. The entity must have qualified personnel on its payroll. These personnel must carry the requisite experience in the activity and be certified in First Aid & CPR.
 - III. The entity must operate with the required permits/licenses.
 - IV. The entity is recommended to be recognized by the Ministry of Tourism.
 - V. The entity must have a registered office.
 - VI. The company must follow a strict 'leave no trace policy and conform to high sustainability standards.

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ANNEXURE 2 IMPLEMENTATION FRAMEWORK FOR THE UNION TERRITORY OF LADAKH

1. CONSTITUTION OF THE TECHNICAL COMMITTEE

The Department of Tourism, Administration of Union Territory of Ladakh shall, by notification/ order will constitute a 'Technical Committee' for Ziplining with the following members:

Composition of the Technical Committee	
Director (Tourism), UT Ladakh	Chairperson
Chief Wildlife Warden / Representative, Wildlife Department	Member
Principal ISM, Kargil Branch	Member
Principal FCI/ IHM, Leh	Member
Representative of the State Disaster Response Force (SDRF)	Member
Representative of the Adventure Tour Operators Association of India (ATOAI) for Ziplining	Member
Representative of the Ladakh Association for Ziplining	Member
Assistant Director (Tourism), Concerned	Convening Member

2. FUNCTIONS OF THE TECHNICAL COMMITTEE

The Technical Committee shall meet once every year before the start of the tourist season in the Union Territory of Ladakh, and shall be responsible for the following:

- Inspect and certify the equipment with the operator from a safety point of view.
- Scrutinize the credential of the personnel responsible for conducting Ziplining, the medical fitness of the guide, and conduct their physical test to ascertain their expertise.
- Ensure that the operator and the guide shall follow all safety procedures indicated in their rules.
- Identify new areas/ routes/ tracks for Ziplining in the Union Territory of Ladakh.
- Notify the exact stretches on the identified areas/ routes/ tracks where the operation can be safely conducted, considering the area's environmental sensitivity, critical wildlife hotspots and fragile water systems.
- Formulate a plan for containing the environmental impact strictly inside the designated activity area.
- Forecast the potential ecological impacts and ensure a plan for eco-conditioning to minimize the impact and offsetting the potential environmental impact.
- Ensure preparation and implementation of a Risk Management Matrix, and Emergency & Evacuation plan.
- Ensure preparation of a plan for tourist awareness and education.
- Determine the capacity of each track every year before the start of any operation.

3. CONSTITUTION OF THE REGULATORY COMMITTEE

The Department of Tourism, Administration of Union Territory of Ladakh shall, by notification/ order will constitute a 'Regulatory Committee' for Ziplining with the following members:

Composition of the Regulatory Committee	
Assistant Director (Tourism), Concerned	Chairperson
Wildlife Warden or Representative, Wildlife Department	Member
Representative of the District Disaster Response Force (DDRF)	Member
Representative of the Chief Medical Officer (CMO)	Member
SHO/Choki of the Concerned Area	Member
Representative of the Adventure Tour Operators Association of India (ATOAI) for Ziplining	Member
Representative of the Ladakh Association for Ziplining	Member
Officer in-charge of the Department of Tourism, UT Ladakh at Sub-Division and Tehsils	Convening Member

4. FUNCTIONS OF THE REGULATORY COMMITTEE

The Regulatory Committee shall meet once every year before the start of the tourist season in the Union Territory of Ladakh, and shall be responsible for the following:

- Overall control for regulating the Ziplining operations, in coordination with the concerned stakeholders and associations.
- Surprise inspections during the Ziplining operations to ascertain adherence of the guidelines, assess the quality & condition of equipment being used and assess the ecological impact, to help develop adaptive management strategies. The Regulatory Committee shall constitute a joint inspection or verification team with the Department of Youth Services & Sports, UT Ladakh and Adventure Sports Association, if any.

- Establish a mechanism for receiving and addressing complaints, concerns, and feedback from local communities, tourists, and stakeholders.
- Any other functions concerning Ziplining operations in the Union Territory of Ladakh.

5. CLAIM ON ACCOUNT OF ANY MISHAP

The Department of Tourism, or any other Department/ Authority of the Administration of Union Territory of Ladakh shall, in no way be responsible for any claims on account of any mishap.

6. SHOW CAUSE NOTICE

If any operator, guide, or personnel responsible for conducting Ziplining operations is found to be violating these Guidelines & Regulations for Ziplining, appropriate action shall be taken by the Department of Tourism, Administration of Union Territory of Ladakh.

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