

**GOVERNMENT OF ANDHRA PRADESH  
ABSTRACT**

TOURISM - Formulation of "The Andhra Pradesh Registration, Renewal and Operational Guidelines for Adventure Tourism Activities, 2025" – Orders -Issued.

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**YOUTH ADVANCEMENT, TOURISM AND CULTURE(T) DEPARTMENT**

**G.O.Ms.No.15**

**Dated:26.06.2025**

**Read the following:**

E.file bearing. No.APTDC-15070/6/2025-MRK SEC-APTDC, C.No.2821836 received from VC & MD, APTDC on 11.5.2025.

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**ORDER:**

Andhra Pradesh's diverse natural landscape including its long coastline, rivers, backwaters, and varied terrain offers immense untapped potential for adventure tourism activities like water sports, trekking, paragliding, and river rafting. To harness these opportunities in a structured and sustainable manner, formal guidelines are essential. Adventure tourism, being labour-intensive, can create significant employment, particularly for rural communities, women, and youth, while also fostering entrepreneurship through support for small and medium enterprises.

2. Given the inherent risks involved, standardized safety protocols, operating procedures, and a mandatory registration framework are vital to ensure tourist safety, build trust, and manage liability. Regulation will also help prevent environmental degradation, over-tourism, and community disruption by promoting eco-friendly practices and community participation. Clear operational standards will enhance the overall tourist experience and align the State with national and global best practices, attracting more visitors and investment. Additionally, a formal registration system will generate data to track sector growth, identify infrastructure needs, and inform targeted policy interventions.

3. In the reference read above, the Vice Chairman & Managing Director, Andhra Pradesh Tourism Development Corporation has prepared the guidelines for adventure tourism, with reference to the National Institute of Water Sports (NIWS), Goa, Adventure Tour Operators Association of India (ATOAI) Guidelines, Jammu & Kashmir Adventure Tour Guidelines, Rajasthan ATO Policy, Odisha Water Sports Guidelines, Maharashtra Adventure Tourism Activities Policy and Kerala Adventure Sports Framework.

4. Government, after careful consideration of the matter and the suggestions of the line departments viz., Infrastructure & Investment, Water Resources, Revenue, MA&UD and Finance Departments, hereby issues "The Andhra Pradesh Registration, Renewal and Operational Guidelines for Adventure Tourism Activities, 2025" as Appended to this order.

5. The Vice Chairman & Managing Director, Andhra Pradesh Tourism Development Corporation shall take necessary action in the matter accordingly.

**(Contd..2)**

**//2//**

6. This order is issued with the concurrence of Finance Department vide U.O.No.FIN01-FMU0PC(GAD2)/29/2025, (Computer No.2849990), dated 02.06.2025.

7. A copy of this Order is available on the internet and can be accessed at [www.goir.ap.gov.in](http://www.goir.ap.gov.in).

**(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)**

**AJAY JAIN  
SPECIAL CHIEF SECRETARY TO GOVERNMENT**

**To**

The Vice Chairman & Managing Director,  
Andhra Pradesh Tourism Development Corporation Limited,  
Vijayawada.

**Copy to:**

The P.S. to Secretary to Chief Minister.  
The P.S. to Chief Secretary to Government.  
The OSD to Minister for TC&C.  
The I&I Department.  
The Water Resources Department.  
The Revenue Department.  
The MA&UD Department.  
The Finance Department.  
All District Collectors in the State.  
All Sections in YAT&C Department.  
The G.A. (Cabinet-I) Dept., (w.r.t. C.R.No.228/2025)  
Sf/Sc (2824003)

**// FORWARDED :: BY ORDER//**

**SECTION OFFICER**

(Annexure Continues)

**ANNEXURE**

**(G.O Ms.No.15, YAT&C(T) Dept., Dt:26.06.2025)**

**Registration, Renewal and Operational Draft Guidelines for  
Adventure Tourism Activities,  
2025**

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## Definitions:

1. **"Adventure Sports"** refers to physical activities involving significant risk, excitement, and challenges. These activities often take place in natural environments, requiring exploration, endurance, specialized equipment, and skill training.
2. **"Adventure Tourism"** refers to trips that include at least two of the following three elements: physical activity, interaction with a natural environment, and cultural immersion.
3. **"Adventure Tourism Activity"** refers to travel experiences that involve adventurous physical challenges, new environments, and cultural exploration.
4. **"Adventure Tourism Guide"** (ATG) refers to a qualified person possessing valid certification to assist, organize, or lead outdoor adventure tourism activities or trips on land, air, or water, adhering to laid-down standards.
5. **"Adventure Tour Operator" (ATO)** means an entity engaged in the business of adventure tourism, responsible for designing, marketing, selling, and booking adventure tour packages for monetary considering the safety of Tourists.
6. **"Certified Inspector"** refers to an individual qualified and certified under applicable safety standards to inspect and verify the safety protocols of adventure tourism activities.
7. **"Certified Trainer" refers** to a qualified person holding valid certification as a trainer or instructor from a recognized training institution or provider for adventure tourism activities.
8. **"Competent Person" (CP)** a person possessing the skills, knowledge, experience, training, and judgment to perform assigned tasks or activities satisfactorily as determined by the employer, industry standards, or authority having jurisdiction. A competent person acts under the supervision of a qualified person.
9. **"Designer"** a qualified person who specifies in details the design and operation of the adventure tourism facility or product/equipment before it is put into services.
10. **"Qualified Person" (QP)** refers to an individual who has received adequate training and holds the necessary certification from a recognized body for conducting or supporting adventure tourism activities.
11. **"Participant"** an individual who participates or engages in adventure tourism activities under the observation of adventure tourism guide, activity provider or tour operator.

12. **"Designated Adventure Tourism Site"** refers to an area notified by the Government for the purpose of adventure tourism activities, as updated from time to time.
13. **"Safety Standard"** means the standard prescribed by ISO, BIS, or any other recognized body for the management and conduct of adventure tourism activities.
14. **"Equipment"** refers to all tools, devices, and apparatus used in adventure tourism activities, including protective gear and activity-specific instruments.
15. **"Adventure Tourism Facility"** refers to the infrastructure created or utilized for the operation of adventure tourism activities.
16. **"Approved Operation Reviewer"** refers to a qualified individual or entity with substantial knowledge of operational requirements, authorized to review activity-specific operations as per prescribed standards.
17. **"Appellate Authority"** means any officer, as appointed by the State Government by notification for the purposes of this purpose.
18. **"Blacklist"** refers to a list maintained and published by the APTDC/ MoT/Any other State Government or their tourism Authorities / Corporations, identifying adventure tour operators, activity providers, and service providers barred from operating.
19. **"Certificate of Registration"** refers to a certificate issued by the registering authority under this Guidelines, signifying compliance with registration requirements.
20. **"Government"** refers to the Government of Andhra Pradesh.
21. **"Malpractice"** includes but is not limited to operation of any adventure tourism activity without a valid Certificate of Registration. Conducting activities without requisite safety equipment or using substandard or uncertified equipment. Charging tourists higher-than-notified prices. Failing to issue proper receipts. Engaging in fraudulent practices or illegal operations. Wilful non-compliance with competent authority orders.
22. **"Official Gazette"** refers to the Gazette of the State of Andhra Pradesh.
23. **"Registration"** means the formal process of registering an entity or individual interested in conducting adventure tourism activities, as approved by the designated authority following due procedures.
24. **"Registration Authority"** refers to the APTDC for the registration and renewal of adventure tourism entities and the issuance of relevant approvals.
25. **"License"** A formal authorization issued by the designated authority to a guide, tour operator, or adventure tourism activity provider, permitting them to operate within the



scope of adventure tourism activities as per the conditions and standards prescribed under these rules.

26. **"Permit"** specific authorization granted by the designated authority to a guide, tour operator, or adventure tourism activity provider, allowing them to conduct activities in a designated area or during a specified period, subject to conditions outlined in this Act and its rules.
27. **"Designated Area"** Area of Operation will be within the operational limits, as per prescribed by APTDC for Adventure Operations
28. **"State"** refers to the State of Andhra Pradesh.
29. **"Ministry of Tourism"** refers to the Ministry of Tourism, Government of India.
30. **Sustainable Growth** means growth through tourism that takes full account of its current and future economic, social and environmental aspects, addressing the needs of visitors, the industry, the environment and host communities.
31. **Houseboat** means a boat that has been designed or modified to be used primarily as a temporary accommodation, kept stationary at a fixed point or sailing and often tethered to land to provide utilities/facilities of a luxurious stay. A vessel primarily designed for use as a dwelling, equipped with sleeping, cooking, and sanitary facilities.
32. **Mooring Site** means a location where a house boat may be allowed to be placed.
33. **Responsible Tourism** means is about "making better places for people to live in better places for people to visit". Responsible tourism requires that operators, hoteliers, governments, local people and tourists take responsibility, take action to make tourists more sustainable.
34. **Local Community** means the local residents/Islanders residing in state, specially around the area of operation.
35. **Eco-friendly practices** is actions, processes, and habits that minimize harm to the environment, conserved natural resources, and promote sustainability.

## **Abbreviations**

<b>Abbreviation</b>	<b>Description</b>
ACCT	Association for Challenge Course Technology
ACI	Aero Club of India
ADC	Air Défense Clearance
AED	Automated External Defibrillator
AFNOR	French Association of Normalization
AFNOR	French Association of Normalization
AME	Aircraft Maintenance Engineer
AMO	Aircraft Maintenance Organization
AMP	Aircraft Maintenance Program
AMS	Acute Mountain Sickness
APA	Army Parachute Association
APTDC	Andhra Pradesh Tourism Development Corporation
ARC	Airworthiness Review Committee
ATC	Air Traffic Controller
ATO	Adventure Tour Operator
ATV	All Terrain Vehicle
BCDs	Buoyancy Control Devices
BPA	British Parachute Association
CAM	Continuing Airworthiness Manager
CAMCO	Continuing Airworthiness Management Organization
CAME	Continuing Airworthiness Management Exposition
CoC	Certificate of Competency
CRS	Release to Service
DGCA	Director General of Civil Aviation
DHV	Deutscher Hängegleiter Verband
DSD	Discover Scuba Drive
DTO	District Tourism Officer (DTO)
EN	The European Committee for Standardization
FATA	Foreign Aircrew Temporary Authorization
FFA	Fire Fighting Appliances
FIC	Flight Information Centre
FRP	Fibre Reinforced Plastic
GMC	Group Medical Cover
IACS	International Association of Classification Society
IRS	The Indian Register of Shipping
ISP	Integrated Student Program
LSA	Life Saving Apparatus
LST	Life Saving Techniques
MPAs	Marine Protected Areas
NAUI	National Association of Underwater Instructors
NIWS	The National Institute of Water Sports

OBM	Out Board Motor
OEM	Original Equipment Manufacturer
PA	Personal Accident
PADI	Professional Association of Diving Instructors
PBH	Power Boat Handling
PFDs	Personal Floatation Devices
PRCA	Professional Ropes Course Association
PSU	Public Sector Undertaking.
RTO	Regional Transport Office
SHV	Swiss Hang Gliding and Paragliding Association
SSI	Scuba Schools International
SOP	Standard Operating Procedure
UIAA	International Climbing and Mountaineering Federation
USPA	United States Parachute Association
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions

## **1 Introduction to Andhra Pradesh Tourism**

Andhra Pradesh is celebrated for its rich cultural heritage, historical landmarks, and natural beauty. With a wide array of attractions, including ancient temples, pristine beaches, verdant hill stations, wildlife sanctuaries, and distinctive art, cuisine, and architecture, the state possesses immense potential to become a leading tourism destination for both domestic and international travellers.

In alignment with the Swarna Andhra Vision 2047, which envisions transforming Andhra Pradesh into a \$2 trillion economy with an annual Gross State Domestic Product (GSDP) growth target of 15%, the tourism sector has been identified as a cornerstone of this transformative agenda.

Tourism is recognized as a major driver of employment generation and a vital catalyst for economic growth. The Government of Andhra Pradesh accords this sector the highest priority, acknowledging its role in empowering local communities, supporting small enterprises, fostering cultural exchange, and advancing environmental sustainability.

Currently, Andhra Pradesh ranks third in domestic tourism, attracting 278 million domestic visits annually, alongside 0.18 million foreign visitors. In response to evolving tourist preferences, technological advancements, and intensifying competition, the Andhra Pradesh Tourism Policy leverages the state's distinctive assets to promote niche segments such as eco-tourism, cruise tourism, beach circuits, and backwater tourism, offering immersive and experiential experiences.

The policy underscores the development of anchor destinations to serve as pivotal hubs for drawing both domestic and international tourists. It also aims to foster a robust investment ecosystem by streamlining approval processes, providing fiscal and non-fiscal incentives, and implementing investor-friendly measures. Furthermore, the policy emphasizes strategic branding and marketing, sustainable infrastructure development, and the creation of innovative tourism experiences.

By harnessing its unique strengths, the policy seeks to unlock Andhra Pradesh's full potential, positioning the state among India's top three tourism destinations. This initiative is expected to stimulate economic growth, create employment opportunities, and promote cultural exchange, significantly contributing to the state's holistic development.

The Registration, Renewal and Operational Guidelines for Adventure Tourism Activities, 2025 aim to establish a comprehensive framework to regulate and monitor adventure tourism in the State. These rules are aligned with national standards and integrate region-specific protocols adapted to Andhra Pradesh's ecological, cultural, and geographical context.

By implementing this regulatory mechanism, Andhra Pradesh envisions to:

- Promote safe, sustainable, and responsible adventure tourism practices.
- Institutionalize safety and training standards across all stakeholders.
- Encourage investment and employment opportunities in rural and tribal regions.
- Strengthen interdepartmental coordination for streamlining permissions and monitoring.
- Protect the environment and biodiversity through standard operating protocols.
- Foster the growth of a skilled workforce to support the adventure tourism sector.

This Guidelines will enable the State to emerge as a model for responsible adventure tourism governance and further consolidate its standing as a preferred destination for domestic and international adventure seekers.

Andhra Pradesh Adventure Tourism Guidelines, 2025 are hereby notified to establish a regulatory and monitoring mechanism for adventure tourism activities in the State of Andhra Pradesh. These guidelines focus on the processes of registration, licensing, granting permissions, safety standardization, risk management, and monitoring of adventure tourism activities.

These Guidelines help service engaged in adventure tourism activities carried out by individual operators, adventure activity providers, adventure tour operators, traders, entities, or institutions—whether for monetary consideration, non-monetary exchange, compensatory services, or even when provided free of cost.

These Guidelines has been notified by the State of Andhra Pradesh.

## **2 Adventure Tourism in Andhra Pradesh**

### **2.1 Introduction to Adventure Tourism**

#### **A. Purpose**

The purpose of these Guidelines is to outline on boarding process of Adventure Tourism Operators (ATOs) as part of the initiative to promote Andhra Pradesh as a premier adventure tourism destination.

#### **B. Background**

Andhra Pradesh, with its diverse topography, ranging from beaches to hills and forests, offers a plethora of opportunities for adventure tourism. To capitalize on this potential, there is a need to integrate local adventure tourist Operator (ATO) into the state's tourism framework.

#### **C. Scope**

This document will detail out the process for registration of Adventure Tour Operators (ATOs) as well as the standards, practices, licenses, Revenue sharing and safety mechanisms to be followed.

### **2.2 Objectives**

1. To create a Framework for registration, Licensing, operational and safety and sustainable mechanisms for ATOs in the state of Andhra Pradesh.
2. To create economical opportunities to ATOs in Andhra Pradesh
3. To enhance the global competitiveness of Andhra Pradesh as an adventure tourism destination.

### **2.3 Adventure Tourism at glance**

Adventure tourism is a type of niche tourism where exploration or travel involves some degree of risk (real or perceived) and may require special skills, and physical effort. Adventure tourism experiences are generally divided into types High risk and Low risk adventure.

- **High risk Activities** - Higher Risk, Higher Physical Exertion, Greater Mental and Physical fitness, Greater level of Expertise, Skill and experience. Eg - High altitude mountaineering, river rafting, scuba diving, hang gliding, skydiving
- **Low risk Activities**- Low to moderate level of Risk, No set of skill or experience required. Eg - Hiking, camping, biking.

- Provider of any adventure activity known as **Adventure Tour Operator (ATO)**.

## 2.4 Adventure Tour Operator (ATO) – Definition

An Adventure Tour Operator (ATO) is the one who is engaged in activities related to adventure tourism in the Andhra Pradesh in the state namely, **land-based activities, water-based activities and air-based activities**.

## 2.5 Categories of Adventure Tourism

Adventure Tourism is categorised into Land, Water and Air.

Land	Water	Air
<ul style="list-style-type: none"> <li>➤ All-Terrain Vehicle (ATV)</li> <li>➤ Bungee Jumping</li> <li>➤ Trekking</li> <li>➤ Zip Wires &amp; High Ropes Courses</li> <li>➤ Rock climbing, Artificial Wall Climbing &amp; Abseiling</li> </ul>	<ul style="list-style-type: none"> <li>➤ Speed boating</li> <li>➤ Boat Parasailing</li> <li>➤ Jetskiing</li> <li>➤ Kayaking / Sea Kayaking</li> <li>➤ Snorkelling</li> <li>➤ Banana/Bumper</li> <li>➤ Scuba Diving</li> <li>➤ Floating Restaurant</li> <li>➤ River Cruising</li> <li>➤ House Boats</li> </ul>	<ul style="list-style-type: none"> <li>➤ Paragliding / Hang Gliding</li> <li>➤ Para Motoring</li> <li>➤ Hot Air Ballooning</li> <li>➤ Sky Diving</li> <li>➤ Air Safari</li> </ul>

This may be modified from time to time by APTDC

### 3 Registration Procedure

#### 3.1 Notification /Expression of Interest

APTDC will issue notifications/Expressions of Interest (EOIs) from time to time, indicating potential locations for adventure activities and inviting interested Adventure Tour Operators (ATOs) to register with APTDC. There is no time limit for registration. The locations mentioned in the notifications are indicative only; applications for any other feasible locations where the ATO is interested in developing adventure activities will also be considered.

Before, registration, the ATO shall conduct a Safety and Feasibility Assessment, Prepare and submit a Pre-Feasibility Report including:

- a) List of proposed activities
- b) Area of operation
- c) Total investment
- d) Employment generation
- e) Environmental and safety measures planned

This report supports the decision-making on permit issuance.

#### 3.2 Registration Process:

Interested ATOs satisfy the eligibility criteria shall apply for registration online through the APTDC portal by duly submitting the required documents listed below.

##### 3.2.1 Eligibility Criteria/ATOs:

1. The ATO shall be an individual/proprietor/ company registered under Indian Companies Act 2013,
2. Limited Liability Partnership company registered under Limited Liability Partnership Act 2008,
3. Society/ Trust registered under relevant Indian Act.

##### 3.2.2 Required Documents

Any entity intending to operate as an ATO in Andhra Pradesh must register with APTDC and provide the following documents:

S. No	Criteria	Supporting Documents
1	Proof of Identity (Applicant must be	Aadhaar Card, PAN, any other Government of India issued ID, Mobile Number, and Email ID



	a resident of India)	
2	Pre-Feasibility Report	Details of proposed activities, total investment, area of operation, and employment generation
3	Business Incorporation Details	Certificate of Incorporation (under Companies Act 1956/2013), Partnership Deed, or Proprietor Firm documents, along with GST registration
4	Non-Blacklisting Certificate	Affidavit stating the applicant is not blacklisted by any authority in India
5	Licenses for Adventure Activities	Valid licenses for each sport/activity proposed
6	Experience Certificate (if any)	Relevant certificates of past experience, if available

### 3.3 Registration Fees and Validity:

1. A registration fee of **INR 10,000/-** is applicable for both new registration and renewal.
2. The registration is valid for **5 years**.

### 3.4 Temporary Permission

Upon verification of documents, APTDC will proceed with granting temporary permissions with the approval of the Committee on Adventure Activities with the following members

- 1) Managing Director, APTDC (Chairmen)
- 2) Executive Director Operations, APTDC (Convenor)
- 3) Executive Director, Projects
- 4) General Manager, Finance
- 5) GM Water Fleet, APTDC
- 6) Expert from air based adventure- 1 member
- 7) Expert from land based adventure – 1 member
- 8) Expert from water based adventure – 1 member

#### 3.4.1 Role and Responsibilities of the Committee

##### I. Role of APTDC

- a) Registration of ATOs
- b) Preliminary Verification/examination of ATOs applications
- c) Approval and renewal of ATOs
- d) Entering into agreement with the ATOs.
- e) Grievance redressal mechanism
- f) Regulating adventure activity operations

- g) Notify restricted areas and publish operational maps for transparency.
- h) Any other specific Land/Water/Air Adventure activities not listed in the SOPs will be issued separately as and when new activity operations are proposed.
- i) Recommend temporary restrictions based on weather, environmental, or safety factors.
- j) Appoint certified inspectors/auditors and reviewers to audit facilities, equipment, and SOP compliance and to oversee that they will visit the places atleast once in three months.
- k) Establish a risk management framework for ensuring adequate insurance coverage for all stakeholders.

## II. Role of Expert Member

- l) Verification and Scrutiny of Documents submitted by ATO
- m) Conduct division level Inspections based on requirement and recommend APTDC for final Approvals and renewals
- n) Conduct inspections for every Quarter/as directed by APTDC and submit the report to APTDC for ensuring following.
  - Safety
  - Adherence to Guidelines / SoPs for Safe Operations
  - Assist APTDC time to time to on latest developments in Adventure Activities
  - Capacity Building as an when required for APTDC
- o) APTDC will issue **a temporary permission within 30 days** of document verification.
- p) This permission is for procurement of equipment and obtaining required licenses, insurances, permits, and payment of security deposits.
- q) The ATO must fulfil all **compliance conditions within 90 days**.

### 3.5 Licensing Framework:

1. ATOs must obtain necessary licenses for specific adventure activities from valid institutions.
2. Documents related to the qualifications and certifications of individuals, such as guides or trainers, equipment must be submitted as part of the approval process.
3. List of Certificates required for each sport.

S No	Activity	Certification / Licensing
1	ATV	Indian ATV Safety Institute
2		Regional Transport Office (RTO)
3	Bungee Jumping	New Zealand standards (AS/NZS 5848:2000)
4	Trekking	Indian Mountaineering Foundation (IMF)
5	Ziplining	Association for Challenge Course Technology
6		Professional Ropes Course Association
7	Rock Climbing, Artificial Wall Climbing & Abseiling	Advanced Method of Instructions' from JIM&WS
8	Speed Boating, Boat	National Institute of Water Sports

9	Parasailing, Jet Ski, Kayaking, Snorkelling, Scuba Diving, Houseboats	Rastriya Life Saving Society
10		Yatching Association of India
11		Professional Association of Diving Instructors
12		National Association of Underwater Instructors
13		[PBH-4 (LEVEL 3)] certification from the National Institute of Water sports
14		World Under Water Federation
15		Buoyancy Control Devices (BCDs)
16		International Association of Classification Society
17		PBH license/Certification from NIWS, Goa/YAI/RYA
18	Paragliding	Paragliding Association of India (PAI)
19	Paramototring	Paragliding Association of India (PAI)
20		Swiss Hang Gliding and Paragliding Association
21		Deutscher Hangegleiter Verband
22		French Association of Normalization
23	Hot Air Ballooning	Continuing Airworthiness Management Organization
24		Aircraft Maintenance Organization
25		Air Operator Permit
26		Director General of Civil Aviation
27	Floating Restaurant	AP Inland Waterways Authority / Maritime Board,
28		Food Safety and Standards Authority of India (FSSAI) for food services,
29		State Tourism Department (where required),
30		Pollution Control Board (for waste management compliance).
31		Fire Safety Certificate from the State Fire Department is mandatory.
32	River Cruising	AP Inland Waterways
33		Ship Classification Society
34	Sky Diving	Fédération Aéronautique Internationale
35		Aero Club of India
36		USPA (United States Parachute Association
37		BPA (British Parachute Association)
38		Army Parachute Association
39		Aero Club of India
40	Air Safari	Microlight Pilot License (MPL),
41		Glider Pilot License (GPL),
42		Director General of Civil Aviaitaion

Note: First Aid and CPR Certification is mandatory for all instructors, guides, and operators, irrespective of sport

### 3.6 Permits:

1. APTDC from time to time will issue notifications limiting the number of operators permitted to operate in a particular location.

2. Permit to operate in a location will be issued on a first come first serve basis limited by the number of permits for the location. Nothing prevents APTDC to increase the number of permits in a location depending on increase in tourist footfall/demand.

### **3.7 Issuance of NoC**

Upon fulfilment of all requirements, APTDC will conduct a site inspection to evaluate the suitability of the location, review safety protocols, equipment, and staff certifications, and assess the environmental impact and carrying capacity of the area.

Based on this assessment, APTDC will grant a NoC (No Objection Certificate) to operate the specified adventure activities within the approved area and timeframe. Each NoC will clearly specify:

- Operational boundaries
- Approved list of activities
- Validity period
- Safety and environmental compliance requirements

#### **NoCs issued by APTDC are:**

- Location-specific
- Activity-specific
- Season-dependent

While issuing NoC, APTDC will fix the annual lease rent to be paid by the ATO based in the location and Category of the sports fixed from time to time.

**Note :** The NoC does not confer any technical approval. It is issued solely for registration purposes. Technical approval is entirely dependent on the licenses issued by the competent regulatory agencies.

### **3.8 Cancellation Clause**

If the ATO fails to obtain the necessary licenses, procure equipment, or meet compliance conditions within the stipulated 90-day period, the temporary permission will be deemed cancelled and formally notified.

### **3.9 Advisory Committee for Strategic Guidance**

The Advisory Committee is constituted to provide strategic guidance and oversight for adventure tourism in the state of Andhra Pradesh. The committee is mandated to meet at least once a year, prior to the commencement of the tourist season , comprising of the following members:

1. Secretary of Youth Advancement, Tourism & Culture (YAT&C),
2. Secretary of Forests
3. Secretary of the Water Resources Department
4. Secretary of Fisheries,
5. Secretary of the Home Department
6. CEO of the AP Inland Waterways Authority.

### **3.9.1 Responsibilities of the Advisory Committee**

- a) Guidelines formulation and strategic direction for adventure tourism.
- b) Monitor and enforce safety standards, sustainability criteria, and rescue protocols.
- c) Coordinate with neighbouring states to ensure seamless operations and non-conflicting regulations.
- d) Supervise the implementation of multi-layered risk management protocols.
- e) Promote inclusivity for person with disabilities and gender responsive strategies and plans.
- f) Identify new adventure activities and their operational areas, address the carrying capacity of the area to avoid mushrooming/ over-crowding.
- g) Suggest measures for identifying new tourist destinations and to develop versatile adventure circuits for tourists.
- h) Ensure preparation and implementation of a risk management matrix, and emergency and evacuation plan.

### **3.10 Ongoing Monitoring and Compliance**

#### **1. Safety & Security Guidelines for Adventure Tour Providers (ATOs)**

##### **a) Responsibility:**

- The safety and security of tourists are the sole responsibility of the ATOs, as per the Standard Operating Procedures (SOPs).

##### **b) Permit Compliance**

- ATOs must maintain continuous compliance with all terms and conditions of their permits.

##### **c) Adherence to Safety Protocols**

- ATOs shall strictly adhere to all safety guidelines, SOPs, and activity-specific operating procedures

##### **d) Safety Auditor Appointment**

- ATOs must appoint a qualified Safety Auditor after commencement of operations to ensure daily safety checks and monitoring.

##### **e) Tourist Safety Priority**

- ATOs must treat **tourist safety as the highest priority**, ensuring **utmost care** in all daily operations.
- f) To follow the instructions issued by APTDC from time to time
- g) Promote inclusive tourism by engaging local communities and diverse stakeholders

## **2. For Tourist Safety Enforcement Team (TSET):**

**The team consisting of** Divisional Manager (Concerned), District Tourism Officer, Control Room (concerned), Technical experts in the relevant field shall conduct quarterly /half-yearly regular inspections of registered ATOs and shall be responsible for the following activities

- a) Communicate weather and safety instructions via WhatsApp, email, etc., before, during, and after operations.
- b) Recommend operational changes based on environmental or seasonal risks.
- c) Submit safety reports to the District Tourism Council.
- d) Monitor the following as per SOPs and agreements:
  - Inspections & maintenance
  - Licence & insurance renewals
  - Procedures, documentation
  - Emergency response & rescues
  - Medical readiness
  - Safety briefings
  - Risk mitigation
- e) The unit Manager and DVM shall ensure the payment of annual lease rent on regular basis

## **4 Minimum Obligations**

### **4.1 Environmental Considerations**

#### **4.1.1 Cleanliness for all activities**

1. The cleanliness of the Land/Water/Air based Adventure activities within the jurisdiction of the operational activity, is the sole responsibility of the ATO.
2. ATO shall deploy suitable number of workers per sport to ensure cleanliness.
3. ATO shall arrange toilets/washrooms/changing rooms facility within walking distance of the operational area.
4. A feedback register shall be maintained by the ATO for obtaining remarks from tourists on cleanliness.

#### **4.1.2 Pollution and Waste Disposal**

1. The ATO shall follow the pollution control norms as prescribed by PCB
2. Waste generated by the ATO must be processed as per waste management rules issued by GoI for both liquid and solid waste updated from time to time.
3. Entire premises shall be a "No Plastic" zone.

#### **4.1.3 Compliance to Environmental Regulations**

All ATOs would have to comply with provisions and conditions of following Acts/ Rules:

1. Guidelines of Andhra Pradesh State Pollution Control Board
2. Water(Prevention and Control of pollution) Central Act 6 of 1974
3. Environment (Protection) Act, 1986 (Central Act 29 of 1986)
4. The Air (Prevention and Control of Pollution) Act of 1981
5. CRZ Regulations issued by Ministry of Environment and Forests, Government of India updated from time to time.
6. Any other applicable law, rules as imposed by Government of India / Government of Andhra Pradesh.

### **4.2 Tariff**

The APTDC shall periodically monitor the tariffs collected by the ATO. Additionally, in the event of any exploitation by ATO in Tariff collection, it will be viewed seriously and penalties will be levied as per section 4.5.2 (b).

### **4.3 Dispute settlement**

In the event of any dispute or difference between the APTDC and the ATO, such disputes or differences shall be resolved amicably by mutual consultation. If such resolution is not

possible, then the unresolved dispute or difference shall be referred to arbitration of the sole arbitrator to be appointed by VC & MD, Andhra Pradesh Tourism Development Corporation. The provision of Arbitration and Conciliation Act, 1996 (No.26 of 1996) as amended in 2015 shall be applicable to the arbitration. The Venue of such arbitration shall be at Vijayawada. The language of arbitration proceedings shall be English. The arbitrator shall make a reasoned award (the "Award"), which shall be final and binding to APTDC and the Agency. The cost of the arbitration shall be shared equally by the APTDC and ATO. However, expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself.

(ii) Pending the submission of and / or decision on a dispute, difference or claim or until the arbitral award is published; the APTDC and the ATO shall continue to perform all of their obligations under this Agreement without prejudice to a final adjustment in accordance with such award.

**Jurisdiction:** All disputes are subject to the jurisdiction of courts in Vijayawada only.

#### **4.4 Insurance**

Securing insurance coverage is an essential obligation for the ATO. This insurance acts as a safeguard for both the ATOs and the individuals partaking in adventure activities. It is compulsory for the ATO to offer insurance coverage minimum of Rs. 2 Lakh guaranteeing financial protection for participants / crew/ support staff against potential accidents, injuries, or damages incurred during adventure activities. The specifics of the insurance prerequisites for conducting adventure activities safely are to be detailed, and it is imperative that all registered ATOs comply with these insurance requirements.

The following Mandatory insurance

- CGLI – Comprehensive General Liability Insurance
- Personal Accident (PA) and Group Medical Cover (GMC) for their staff

#### **4.5 Safety checks**

The equipment and facilities of the ATO will need to undergo safety checks every quarter as prescribed by the APTDC. Further, the ATOs at their own discretion shall submit safety audit report every year to APTDC.

##### **4.5.1 Safety Precaution**

1. It is imperative to display maps for directional guidance, as well as banners that communicate risks and provide instructions related to Adventure Tourism Activities. Additionally, watchtowers should be erected at the site of the Adventure Tourism Activity, and sirens should be operated in areas identified as high-risk.



2. Adequate safety measures must be implemented at the site of the Adventure Tourism Activity, including safety nets, life jackets, and fire-fighting equipment etc.
3. Precautions must be taken in accordance with the directives of the Fire Brigade Department to prevent the outbreak of fire at the Adventure Tourism Activity site. Furthermore, it is the responsibility of the ATO to maintain communication with fire brigade personnel and rescue teams to ensure timely assistance, if necessary.
4. The ATO shall ensure the availability of a First Aid Kit at the site of the activity.
5. It is essential to ensure that no obstruction is caused to traffic in the vicinity of the Adventure Tourism Activity.
6. Due diligence must be exercised to prevent any form of betting at the site of the Adventure Tourism Activity.
7. Care must be taken to ensure that no illegal activities are conducted at the Adventure Tourism Activity site. Should the APTDC become aware of any illegal business operations, the relevant officials shall file a complaint and take appropriate action under the Indian Penal Code.

#### **4.5.2 Penalty**

ATOs violating the guidelines for Land/Water/Air based Adventure activities in any manner shall be liable for penalties as mentioned below:

##### **a) Major Violations**

The ATOs will be regularly inspected by the APTDC on issues related to Safety and Accidents based on the guidelines. Penalties for major violations may include fine, forfeiture of the security deposit, termination of registration and/or penal proceedings as applicable.

##### **1. Safety**

- a) The ATO must ensure that all Land/Water/Air Adventure during operations or during standby time must not be overloaded. Tourist capacity shall be as per the number of tourists mentioned in the registration of that particular Adventure Activity.
- b) The ATO must ensure that their Equipment's must not in any way be damaged or be compromised as per the specified guidelines/ SoPs / Equipment Standards.

##### **2. Accidents**

In the event of a fatal accident, the following procedure shall be followed:

- a) The fatal accident shall be investigated thoroughly by the competent authorities

b) Till the investigation is completed, the registration of the ATO shall stand suspended automatically for that activity.

c) Based on the outcomes of the investigation:

- If it is found that the fatal accident is due to the reason beyond the control of the ATO or due to natural calamities or Acts of god, then the suspension will be rescinded and the registration will be considered valid again.
- If it is found that the fatal accident is due to sheer negligence on part of the ATO or reasons attributable to ATOs fault, the registration of the ATO shall immediately cancelled / terminated and the security deposit shall be forfeited. The ATO shall be blacklisted for all operations in Andhra Pradesh for a period of 5 years.
- Compensation etc is the responsibility of the ATO.

#### **b) Minor Violations**

Except above violations remaining violations by ATO will attract a fine of Rs.10,000 (INR Ten Thousand only) per instance will be levied on the ATO for upto 2 Violations in a year, the penalty shall increase to Rs.20,000 per instance for the additional minor violations beyond 2 violations. If such instances occur more than four (4) times, the performance security will be forfeited. If the violations are continued even after forfeiting the performance security, further action will be initiated by terminating the agreement and blacklisting/barred the ATO for a period of two (2) years.

### **4.6 Responsibilities of the Adventure Tour Operator (ATO)**

1. The ATO shall follow Guidelines as specified in this document and amendments/notifications issued time to time by APTDC.
2. The ATO must specify their areas of expertise in adventure activities and keep all relevant maps and reference materials related to their chosen activities readily available at their office premises.
3. Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult/Guide. It is imperative to follow the distinct guidelines set for each adventure activity, and ATOs bear the responsibility of maintaining the safety of these activities.
4. A guide must accompany every group participating in an adventure activity.
5. Individuals joining adventure activity groups must undergo preliminary training, and leaders must ensure participants possess the necessary skills/License for involvement.

6. All group participants should be trained in the use of radios if they are part of the equipment being used.
7. The manufacturer's specified capacity for adventure activity equipment must not be exceeded, and no unauthorized alterations should be made, except for additional safety features, nor should inferior materials be utilized.
8. ATOs must provide detailed information about the adventure activity, operational area, duration, potential risks, and emergency contacts to the designated safety and rescue teams.
9. Access to a qualified doctor on call is required.
10. Communication means such as mobile phones and walkie-talkies must be accessible.
11. ATOs must adhere to strict 'leave no trace' policy to uphold high environmental sustainability standards.
12. All SOPs and operational guidelines relevant to each adventure activity must be strictly followed to the letter.
13. The ATO will obtain a undertaking/declaration from the participant/tourist as mentioned in the annexure.

#### **4.7 Responsibilities of Guides**

The ATOs are responsible for ensuring that their guides for adventure activities meet the following criteria:

1. Guides must hold the necessary licenses/technical qualifications and skills as outlined in these and activity-specific guidelines.
2. Guides must be well-versed in search procedures and provide thorough briefings to all group members.
3. Guides must be adept at navigating with maps and compasses under all weather conditions.
4. Guides need to confirm that all participants are medically cleared for the adventure activity.
5. Guides must ensure that all equipment adheres to safety standards for the specific activity, has undergone manufacturer-recommended inspections, and is in suitable condition for use.
6. Guides must be knowledgeable about all adventure operations, including safe approach techniques and procedures for winching, when applicable.
7. Guides are required to be certified in first aid/CPR and capable of instructing others in first aid techniques, including the use of stretchers.

8. ATO shall at its own discretion shall submit safety audit report every year to APTDC.

#### **4.8 Rescue operations**

Accidents may occasionally occur during the execution of adventure activities. In such instances, it is imperative to initiate rescue operations promptly. Voluntary organizations and experienced individuals often assist the government in conducting these rescue operations, particularly in remote mountainous regions. To facilitate effective rescue efforts, it is essential to establish a system that encourages the participation of these voluntary groups and provides insurance coverage for the rescue teams. In collaboration with experts, the APTDC will develop an Action Plan to supply the necessary equipment, training, and financial assistance to the organizations and individuals involved in the rescue operations.

## 5 Common Standards for All adventure activities

### 5.1 Risk Mitigation

1. **Risk Assessment:** All adventure service providers must conduct activity-specific risk assessments covering terrain, equipment, environment, and participant capability.
2. **Standard Operating Procedures (SOPs):** The ATO must adopt SOPs as mentioned in this document for activity including risk controls, emergency actions, and participant management.
3. **Qualified Personnel:** Only trained, certified, and experienced personnel should conduct or supervise activities.
4. **Weather Monitoring:** Continuous weather monitoring is required. Activities must be postponed or cancelled in case of adverse weather conditions.
5. **Equipment Checks:** Regular inspection, maintenance, and replacement logs must be maintained for all safety gear and equipment.
6. **Children below 18 years:** Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult/Guide. Children between the ages of 10 and 14 shall be under Level 2 supervision by a guide throughout the activity.
7. **Indemnity Bond:** The participant shall submit the declaration /undertaking as per the prescribed format by APTDC.

### 5.2 Emergencies and Rescues

1. **Emergency Action Plan (EAP):** Every site must have a clearly documented EAP with contact numbers, evacuation routes, and roles assigned.
2. **First Aid Kit:** At least one team member must possess CPR certificate and always be present at the location with First Aid Kit.
3. **Rescue Equipment:** Appropriately maintained and activity-specific rescue equipment must be available on-site.
4. **Communication:** Reliable two-way communication (radio, mobile network, satellite phone) is mandatory in remote or high-risk locations.

### 5.3 Safety Briefing

1. **Pre-Activity Orientation:** All participants must receive a comprehensive safety briefing covering:
  - Nature and risks of the activity
  - Use of personal protective equipment (PPE)
  - Do's and Don'ts
  - Emergency signals and procedures

2. **Language and Comprehension:** Briefing must be in a language understood by the participants.
3. **Demonstrations:** Hands-on demo or simulation should be used to reinforce critical safety steps.

#### **5.4 Medical Concerns**

1. **Medical Declaration:** Participants must declare any pre-existing medical conditions before engaging in activities.
2. **On-Site Medical Support:** Basic medical kit and access to emergency medical services must be ensured.
3. **Acclimatization and Hydration:** Especially in high-altitude or endurance activities, gradual acclimatization and hydration protocols must be emphasized.
4. **Medical Evacuation Plan:** Especially for remote activities, there must be a defined evacuation plan for medical emergencies.

#### **5.5 Basic Minimum Standards**

1. **Participant to Instructor Ratio:** Clearly defined maximum participant-to-instructor ratios must be followed per activity type.
2. **Minimum Age and Fitness Levels:** Activity-specific eligibility based on age, fitness, and health status must be enforced.
3. **Environmental Responsibility:** Leave No Trace principles must be adhered to, and no activity should harm the local ecology or community.
4. **Documentation:** Providers must maintain logs of:
  - Risk assessments
  - Briefings conducted
  - Equipment checks
  - Incident and near-miss reports .

## 6 Annexures

### Annexure 1

#### Application Form

#### New Registration and Renewal of Adventure Tour Operator

To,

Managing Director,

Andhra Pradesh Tourism Development Corporation,

1. New Registration /Renewal (Registration No.) \_\_\_\_\_

2. Adventure Activity (name of all adventure activities from the list below, for which the registration is sought):

\_\_\_\_\_

(1. All Terrain Vehicle (ATV), 2. Bungee Jumping, 3. Trekking, 4. Rock climbing, Artificial Wall Climbing & Abseiling, 5. Zip Wires & High Ropes Courses, 6. Speed boating, 7. Boat Parasailing, 8. Jetskiing, 9. Kayaking / Sea Kayaking, 10. Snorkelling, 11. Scuba Diving, 12. Banana/Bumper, 13. House Boats, 14. Floating Restaurant 15. Paragliding / Hang Gliding, 16. Para Motoring, 17. Hot Air Ballooning, 18. Sky Diving, 19. Air Safari)

3. Name of the entity:

4. Details of the entity:

Registered Address			
Website		Mobile Number	
Email		Office Number	

5. Entity incorporation status (sole proprietorship/ partnership/ private/ public limited/Other):

6. Year and month of establishment of entity:

7. GST registration details:

8. Name of Director/ Directors/ Proprietors:

S.No.	Name	Designation	Mobile Number	Adhar Number
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9. Andhra Pradesh Resident Certificate (APRC) details:

10. Details of guide with required certification details:

<b>Name</b>	<b>Role</b>	<b>Certifications</b>	<b>Mobile Number</b>	<b>Adhar Number</b>

CV of the staff along with all certifications to be enclosed

11. Attach Proof of insurance:

12. Proposed Locations:

13. Attach Detailed Report or Pre-Feasibility report:

14. Details of equipment:

<b>Equipment</b>	<b>Specifications</b>	<b>Quantity</b>	<b>Purpose</b>

**15.** Non Blacklisting certificate:



**Annexure 2**  
**Self-Declaration**

**New Registration and Renewal of Adventure Tour Operator**

I/ We \_\_\_\_\_ do  
solemnly state that:

1. I/We commit to not exceeding the recommended capacity of the equipment.
2. I/We will conduct adventure sports activities exclusively within the zones authorized by the competent authority, as specified from time to time.
3. I/We will faithfully execute the approved adventure activity in accordance with the stipulations outlined in these guidelines.
4. I/We will comply with all directives issued by the competent authority as they arise.
5. I/We will ensure that my/our clients are equipped with the necessary safety gear before commencing the activity.
6. I affirm that the guides/instructors I employ for adventure activity operations possess the requisite educational qualifications, professional certifications, and practical experience to serve as professional guides for the specified adventure sports.
7. I/We will undertake adventure activities strictly within the designated zones as determined and will follow all instructions provided by the competent authority on an ongoing basis.
8. I/We acknowledge that any breach of these guidelines or submission of false information or misrepresentation may result in appropriate action by APTDC against me.

Signature:

Name of the ATO:

Authorized Representative:

Designation:

### **Annexure 3**

#### **Risk Assessment**

#### **Declaration & Liability Release**

I, the undersigned, voluntarily choose to participate in adventure activities organized at \_\_\_\_\_. I understand these activities involve inherent risks beyond those encountered in daily life, and I acknowledge that medical services may not be readily accessible during such activities.

Activities may include, but are not limited to: All-Terrain Vehicle (ATV), 2. Bungee Jumping, 3. Trekking, 4. Rock climbing, Artificial Wall Climbing & Abseiling, 5. Zip Wires & High Ropes Courses, 6. Speed boating, 7. Boat Parasailing, 8. Jetskiing, 9. Kayaking / Sea Kayaking, 10. Snorkelling, 11. Scuba Diving, 12. Banana/Bumper 13. House Boats, 14. Floating Restaurant, 15. Paragliding / Hang Gliding, 16. Para Motoring, 17. Hot Air Ballooning, 18. Sky Diving, 19. Air Safari

I affirm that I am medically fit to participate and do not suffer from any condition (including cardiac illness) that would hinder safe participation. I accept the authority of \_\_\_\_\_ and its representatives during the activity and commit to following all safety protocols, SOPs, and instructions provided.

I have received and understood the safety briefing and agree to act in accordance with the instructions. I understand that failure to comply may result in personal liability and release \_\_\_\_\_ from any responsibility.

In consideration of my participation, I fully assume all associated risks and hereby release, indemnify, and hold harmless \_\_\_\_\_, its staff, partners, and affiliates from any claims, liabilities, or damages arising out of or connected to my participation.

I confirm that I have read and understood this declaration and sign it voluntarily.

**Participant**

**Name:**

\_\_\_\_\_

**Signature:**

\_\_\_\_\_

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



## **7 Guidelines and Regulations for Land Based Adventure Tourism Activities**

### **7.1 All-Terrain Vehicle's (ATV's)**

#### **7.1.1 Introduction**

ATVs (also known as quad bikes), when operated properly, can be exciting and safe. However, their incorrect use can lead to serious injuries. Though ATVs are very similar to cars & motorcycles, their operation is very different. ATV operation requires a different level of instruction and training. These minimum standards have been outlined to promote safe practices among operators of ATV tours.

#### **7.1.2 Guides/ Instructors**

Guides supervising participants on All Terrain Vehicles (ATV). Accreditation given by any International Institute may be accepted. Alternatively, the guide should have a driver's training course on All Terrain Vehicle (ATV), or a valid license from the Regional Transport Office (RTO) and an in-house training program that focuses on the following topics:

1. An introduction to the ATV machine, protective clothing, equipment, and pre-ride inspections
2. Range signals, rules, and warm-up exercises
3. Controls and starts the engine
4. Starting, shifting gears, and braking
5. Turning
6. Riding strategies/ risk awareness
7. Riding circles and figures of eight
8. Quicker turns
9. Sharp turns
10. Quick stops and swerves
11. A quick stop in a turn
12. Riding over obstacles
13. Safe and responsible driving practices
14. U-turns and traversing hills
15. Circuit or trail rides

In addition, all guides must be familiar with (and assessed on) the operating manual(s) of the ATV(s) in which they operate.

### **7.1.3 Customer Training**

ATV operators should always follow the instruction in their owner's manual for recommended operating techniques. All participants of an ATV tour must receive a basic training course before their tour commences. The basic minimum training course should cover the following:

1. To mount and sit on the ATV correctly, locate and operate the controls, and dismount.
2. Use the brakes properly to bring ATV to a smooth, safe stop.
3. To demonstrate basic turning skills by shifting weight properly to maintain balance and avoid the possibility of losing control of the ATV.
4. All participants must pay attention to the instructions provided by their guides

### **7.1.4 Equipment**

1. **ATV Machine:** ATVs are subject to considerable wear and tear owing to the nature of their use outdoors. Therefore, only use an ATV from a reputable manufacturer and ensure maintenance is undertaken as per operating manual instructions.
2. **Helmet:** The single most important piece of protective gear riders must wear is a helmet, which can help prevent serious head injuries. Wearing an approved motorcycle helmet does not reduce essential vision and hearing. Use either a full-face or three-quarter (open face) helmet. Helmets must be properly fitted to the participant – they should be snug, comfortable, and securely fastened.
3. **Face Shield or Goggles:** If the ATV tour is in a jungle or areas with dense foliage, a face shield or goggles should be used to prevent eye injuries.
4. **Gloves:** Gloves should be of a quality that will help prevent your hands from getting sore, tired, or cold, as well as offering protection in the event of a spill/ fall. Off-road style gloves, available at leading motorcycle and ATV dealerships, provide the best combination of protection and comfort. They are padded over the knuckles for added protection.
5. **Footwear:** The minimum protective footwear is a pair of ankle-length shoes or boots with low heels to help prevent feet from slipping off the footrests.
6. **Clothing:** It is important to protect your skin from scratches. A long-sleeved jersey/ sweater, shirt or t-shirt, and long trousers are requirements for rider protection.
7. **Spares & First Aid:** It is recommended that guides carry an appropriate first aid kit and tool kit during an ATV tour. Examine the tool kit that came with your machine.

### **7.1.5 Inspections and Maintenance Procedures**

Before commencing each trip, guides must carry out an inspection of any ATV to be used by themselves or their customers before each ride. An inspection will minimize the chance of injury or malfunction and ensure long-term usage of your ATV.

#### **7.1.6 SOPs and Operating Instructions**

The following rules should apply to all participants and guides during an ATV tour:

1. All participants must wear a helmet and other protective equipment.
2. Always keep both hands on the handlebars and both feet on the footrests of the ATV during operation.
3. Avoid paved surfaces – ATVs are designed to be operated off paved roads.
4. Avoid public roads unless the machine has been specifically manufactured for this purpose and complies with the relevant automotive licensing requirements for road use.
5. Never allow riding under the influence of alcohol or drugs and is a punishable offence.
6. Never carry a passenger unless the machine has been specifically designed and manufactured to do so.
7. Ride only on designated trails and at a safe speed as mandated by the manufacturer of the machine.
8. Extreme care must be taken not to undertake random off-roading as it has a deep impact on the ecology of the area.
9. ATV Capacity: All ATV ride operators must strictly adhere to the manufacturer's seating capacity, ensuring that no ATV is overloaded. ATVs are designed with specific safety parameters, & unauthorized modifications to increase seating capacity is strictly prohibited.
10. Overloading ATVs compromises the stability and control of the vehicle, significantly heightening the risk of accidents that can lead to serious injuries or fatalities. Operators found violating this safety standard will face immediate suspension of their registration and shall be liable for appropriate action as deemed necessary by the Competent Authority.

#### **7.1.7 Special Arrangements for Children**

1. Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult.
2. Always follow the manufacturer's minimum age recommendations which will be shown on the ATV or in the operating manual and shall be written on the ATV.

#### **7.1.8 Documentation**

1. The following is the basic minimum documentation required:
2. ATV and associated equipment purchase documentation, including warranty, service & maintenance history documentation.

3. Owner's/ operating manual for each ATV.
4. Training and assessment log for all guides.
5. First aid certificates for all guides.

#### **7.1.9 Risk Mitigation**

A basic risk assessment should be conducted on any trail intended for the use of ATV tours before participants are permitted to use such a route. An emergency action plan must be in position and regular training imparted to the staff for the same.

#### **7.1.10 Emergencies and Rescues**

A first aid kit must be available and the venue/route itself must be easily accessible. In addition, a detailed emergency procedure must be written that includes contact numbers of the available emergency services. Evacuation routes and emergency procedures must also be included in the company's risk assessment.

#### **7.1.11 Safety Briefing**

A pre-ride safety briefing covering all aspects of risks and action to be taken both by conducting staff and the participants should be covered in detail, some aspects are highlighted below:

1. Rules and speed limits
2. Wearing protective gear
3. ATV controls operation and pre-ride checks
4. Rider responsibilities and risk awareness
5. Group riding procedure to include lane position, following other vehicles, headlights, signals, and parking
6. Handling dangerous surfaces and any special riding conditions
7. Indemnity bond by the participant
8. Avoiding alcohol before/during the ride
9. Staying hydrated and rest stops.

#### **7.1.12 Medical Concerns**

These are of two types: personal and accident-related during the ride.

1. For personal medical conditions, clients should be advised to carry medication and inform the ride leader.
2. For accident-related concerns, the ride leader should have a plan in addition to a first aid kit.

### **7.1.13 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfil the following criteria:

1. The agency must own ATVs and all accessories and safety gear as specified above. The ATVs must be well maintained, serviced and in perfect working order with the required documentation.
2. The agency must have at least two full-time trained ATV guides duly qualified, knowledgeable about conducting ATV activity safely, group dynamics, rules, communication skills, repairs/ punctures, etc. They must possess valid first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
3. The operator must have SOPs for conducting ATV trips and an emergency action plan for all trips.
4. A detailed risk assessment must be carried out before conducting ATV trips.
5. A list of hospitals in the vicinity of the tour should be carried out by the ATV guides.
6. A detailed SOP for inspecting ATVs, documentation, and safety gear before conducting trips must be in position.
7. The agency must be registered with APTDC.
8. The company must follow a strict 'leave no trace policy' and conform to high sustainability standards.

## **7.2 Bungee Jumping**

### **7.2.1 Introduction**

Bungee jumping is a land-based extreme adventure sports activity in which the jumper is made to jump from a height with a rubber cord tied to his ankle. It is an extremely dangerous activity if proper precautions are not taken, and safety procedures are not followed. However, once the safety procedures are followed and the jump platform is constructed according to safety guidelines this activity is very safe, and the chances of accidents are greatly reduced.

### **7.2.2 Guides/ Instructors**

The jump staff particularly the jump master should be properly trained and have vast experience in this activity. They should possess a calm and mature attitude and have an eye for detail/ errors. They require a very high level of physical fitness, self-discipline, excellent communication, and risk management skills, and the motivation to perform these activities.

### **7.2.3 Equipment**



The equipment used for the bungee jump should be certified (BIS/International Institutes etc) and procured from reputed companies. The storage and maintenance of the equipment have to be proper. Regular inspection of the equipment should be carried out and records should be maintained. No unauthorized person should have access to the equipment. All the discarded equipment should be removed from the site and destroyed.

Rubber has to be procured from a reputed and recognized source. Its shelf life should be recorded. The rubber has to be stored in a cool dark place and saved from UV rays. Regular inspections should be carried out. Bungee cords should be made by the jump master and certified. The record of jumps must be maintained.

#### **7.2.4 Inspections and Maintenance Procedures**

The inspection should be done as per the safety manual. Daily, weekly and yearly inspections should be carried out and recorded. The record of all inspections should be entered in the safety log to be maintained at the site. Regular maintenance of the equipment being used must be done and recorded.

#### **7.2.5 SOPs and Operating Instructions**

Since there are no Indian standards, it is recommended that operations are carried out as per Australian and New Zealand standards. No dilution in these standards is acceptable. The site should have SOPs for operations and rescue drills. The age limit for bungee jumping is 12-70 years. The minimum weight allowed for a jump is 40 kg and the maximum weight allowed is 110 kg. Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult.

#### **7.2.6 Documentation**

##### **1. Inspection Certificate**

- Equipment must be inspected and certified by a qualified engineer or third-party safety auditor.
- Includes harnesses, cords, winches, platforms, cranes, etc.

##### **2. Structural Safety Certification**

- For the jump platform, whether permanent or mobile (e.g., crane-based), certified for load-bearing and stability.

##### **3. Employee Certification**

- Instructors and staff must be trained and certified in:
  - Adventure sports safety.
  - First aid and CPR.
  - Rescue operations.

#### **4. The following documents are required to be maintained at the site:**

- Record of equipment
- Safety log
- Maintenance log
- Record of rubber
- Jump log
- Incident folders
- Medical record
- First aid kit record
- Insurance record
- Staff training record
- Dossier of jumpmaster

#### **7.2.7 Risk Mitigation**

The following measures will reduce the risk factor:

1. Every Jump should be treated as a first jump
2. A highly experienced person should be appointed as the jump master
3. Jump master's word should be final and binding
4. Continuous training of the staff
5. Regular testing of the staff
6. Regular practice of rescue drills
7. Inspection and updating of the equipment
8. Recording of the jumps
9. All incidents are to be reported, discussed, and recorded
10. Updating of safety procedures
11. Motivation and welfare of the staff

#### **7.2.8 Emergencies and Rescues**

The staff should be fully prepared to deal with emergencies and carry out rescue as per the SOP without looking for orders and in a minimum time frame. The following will help in mitigating risk:

1. Awareness of risks
2. Training in rescues
3. First aid/ CPR & other medical training of the staff
4. An Emergency Action Plan should be in position and training for the same provided periodically to the staff

5. Doctor on call
6. Rescue evacuation to be worked out
7. Tie up with local hospital
8. Procedure for reporting incidents
9. Insurance of the jumpers and staff
10. Funds earmarked and available for medical cover
11. Regular briefing of the staff

### **7.2.9 Safety Briefing**

A safety briefing is to be given personally by the jump master and an audio-visual briefing is also recommended. The disclaimer form should be signed by the jumpers. Safety briefing should be repeated before the activity. The safety measures should be displayed in several places prominently.

### **7.2.10 Medical Concerns**

The medical restrictions should be displayed prominently. Fitness certificate to be signed by the jumpers. No compromise is to be made in case of any medical problem. Medical restrictions for bungee jumping include:

1. Heart problem
2. High blood pressure
3. Neurological disorder
4. Spondylitis
5. Back issues
6. Recent fracture, surgery, or hospitalization
7. Epilepsy
8. Osteoporosis
9. Pregnancy

### **7.2.11 Basic Minimum Standards for Grant of Recognition to Operators**

Since there are no Indian standards, it is recommended that operations are carried out as per New Zealand standards (AS/NZS 5848:2000). This standard specifies and gives guidance on the site and site approval, the design, testing, and approval of equipment, the management of the operation, the operating procedures, the emergency provisions and procedures and

registration of operating staff of a bungee jumping operation. No dilution in these standards is acceptable.

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfil the following criteria:

1. The ATO must own specialized certified equipment commensurate with the needs of undertaking and running such an operation (listed above).
2. The ATO must have qualified personnel (minimum one qualified jumpmaster & one assistance) on their payroll. These personnel must carry the requisite experience in the activity and have valid first aid & CPR certification.
3. The ATO must operate with the required permits/ licenses.
4. The ATO must be registered with APTDC.
5. The ATO must follow a strict 'leave no trace policy' and conform to high sustainability standards.
6. The site may provide facilities for mild adventure such as trampoline, swing, etc.

### **7.3 Trekking**

#### **7.3.1 Introduction**

Trekking is the most popular adventure activity in the country. These basic minimum standards will apply specifically to commercial trekking expeditions across the country and at altitudes above 2000 meters.

#### **7.3.2 Guides/ Instructors**

1. Those who are leading trekking activities must be skilled and qualified to lead trekking groups. Trek leaders should have a certificate issued by an MOT recognized adventure tour operators stating that the individual validated by the operator and the clients and is independently capable of guiding trekking groups and carrying out rescue operations" OR, completed the Basic Mountaineering Course from any of the National Mountaineering Institutes and carry a certificate duly authenticated by an Indian Mountaineering Foundation (IMF) recognized body OR IMF accredited tour operator.
2. Maintain a logbook containing authenticated records of trekking experience.
3. Must have a valid certification of a minimum 16-hour (2-day) first aid/ CPR certification by Red Cross or an equivalent body, or any other similar course conducted/ recognized by the Government of India. The maximum group size should be fixed depending on the nature of the trek. The treks can be divided into different categories like low altitude treks/ glacier treks/ high altitude treks/ trekking expeditions, etc.

### **7.3.3 Equipment Care and Maintenance**

1. The correct use and proper maintenance of trekking equipment are essential for conducting trekking activities and should never be taken lightly.
2. Trekking equipment such as tents, sleeping bags, etc. should be appropriate for the terrain in which it is being used.
3. All equipment is subject to wear and tear and must be checked before every use. Operators and leaders must have sound knowledge of this and have systems in place to control and manage their equipment. Equipment must be stored properly and inspected periodically. Unserviceable equipment should be discarded immediately. Operators and leaders must have sound knowledge of this and have systems in place to control and manage their equipment.

### **7.3.4 Inspections and Maintenance Procedures**

Inspection and maintenance require a sound knowledge of the systems and equipment and must be carried out by qualified persons, as a minimum the inspector must be a qualified guide/ instructor. Basic inspections must be carried out before every use with detailed inspections carried out regularly in accordance with their operational procedures and risk assessments.

### **7.3.5 SOPs and Operating Instructions**

1. All trekking tour operators must maintain and update a standard operating procedure for their operations and get the same vetted from APTDC time to time.
2. SOP for organizing the trekking expedition, such as assessing members' qualifications, medical condition, and experience, procedures for obtaining various permissions, travel to the trekking area, maintenance of base camp including hygiene, precautions for avoiding high altitude sickness, safety precautions, communication, weather reports, the procedure for emergencies, communication protocol, casualty evacuation, incident and accident reporting, and feedback mechanism must be well documented and part of staff training. The following must be included in the SOPs:
3. The guiding and porter staff on the mountain and the material supply must be adequate for the party and the stated level of service offered.
  - Advance arrangements must be known for medical help. Advance arrangements must also be made for evacuation assistance in case of emergency. A detailed emergency action plan must be in position and communicated to all concerned before the commencement of the trek.

- Advertising must give a true picture of all the difficulties and dangers involved and avoid promising the impossible. For commercial trekking expeditions, information about the guiding team and their experience should be sent to the clients beforehand.
- Do not litter. Encourage trekkers to collect waste from the trail, segregate it and dispose of it safely in the cities. The trash generated and collected must not be left behind in the mountains.
- Use composting dry toilets on the trek. They save water and benefit the environment. Do not create many small pits. Before leaving the campsite, make sure all pits are closed and covered with mud higher than the ground level. As waste decomposes, the pit's volume reduces, and even if covered, it sinks. Considering this, the pits need to be packed well with soil.
- Use water judiciously. Washing areas and toilets must be at least 100 mt. from the water source. The campsite must be at least 50 mt. away from the water source.
- Educate trekkers on the best sustainable practices, such as composting, segregating nondegradable waste at campsites, and having conversations about how to bring sustainability and minimalism back into their lives.
- The client must truthfully reveal his experience, supported by documentation/ photographs, medical history, etc. to the organizer so that the organizer can make an informed choice about the potential client. For high-altitude treks, a doctor's fitness certificate for clients is recommended.
- Information supplied in advance will include a clear statement of the guiding, portage, and equipment which will be supplied by the organizer, together with a detailed gear/clothing list for the clients.

**Prohibition of Fixed Camps:** To preserve the natural environment and ensure a minimal ecological footprint, no trekking operator shall be permitted to establish fixed camps/ permanent camps along any designated trekking routes or trails & camping points. This includes the installation of permanent or semi-permanent structures such as tents, shelters, or other accommodations that remain in place beyond the duration of a single trek.

Operators are required to adhere strictly to a 'leave no trace' policy, ensuring that all camping setups are temporary and that all equipment and waste are removed from the site at the end of each use. Compliance with this regulation shall be monitored regularly, and violations may result in penalties including fines, suspension of registration or any other appropriate action as deemed necessary by the Competent Authority.

**Advisory on Solo Trekking:** Tourists (foreigners & domestic) are advised not to go on treks alone and should go for such trips in groups, under the supervision of trained/ experienced

guides only. Solo trekking in Andhra Pradesh is strongly discouraged due to safety concerns and potential difficulties with rescue operations. To ensure both safety and efficient rescue, trekkers shall explore the routes with a qualified local guide.

Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities above 8 years are only allowed.

### **7.3.6 Documentation**

The tour operator must maintain, at the minimum the following documentation:

1. Details of all guides and instructors including copies of certifications, a record of trekking experience, and feedback from clients.
2. Copies of all permits and permissions of current trekking expeditions.
3. Copies of identification documents, insurance cover, and details of next of kin for all participants, guides, and instructors.
4. Copy of SOP.
5. Current list of emergency contact numbers.
6. Emergency action plan for the trek.

### **7.3.7 Risk Mitigation**

1. Unless guided by a highly experienced guide, at least two members of the party have experience in high-altitude trekking with valid first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
2. Ensure that environmental safeguards are implemented in their program so that the area visited by them suffers no damage and is left clean for subsequent expeditions.
3. The operator must ensure that a comprehensive risk assessment is done and properly documented before operating any trekking expedition.

### **7.3.8 Safety Briefing**

1. Safety briefing should be given on daily basis by the lead guide/ trip leader.
2. Where significant risks have been identified, lead guides should explain these risks and advise clients of any action needed to safeguard themselves.
3. Local guides/ trip leader's primary responsibility is to ensure the safety of the clients, support staff, and themselves.
4. This requirement comes before all other responsibilities and the lead guides/ trip leaders should be assured that any decision made by them to ensure the safety of all will be supported by the company.

5. Safety briefing should also include information about weather forecast (if available), elevation profile, time taken on the trail, hazards, hydration, and trail hygiene.

### **7.3.9 Medical Concerns**

1. Local guides/ trip leaders should be aware of any common health problems that may affect trekking expeditions and know how to tackle those problems. This may include environment related conditions such as hypothermia, sunstroke, or altitude sickness.
2. The lead guide/ trip leaders should be aware of any pre-existing medical conditions/ allergies within the group and this information should be checked during the main briefing. The lead guide must speak to the client/s who declare such conditions to gain a clear understanding of the medical concern.
3. The lead guide/ trip leaders must be aware of the local/ nearest possible emergency services available and how to contact them.
4. Must carry first aid/ medical kit with emergency medicines as required and it is important that first aid kits are routinely checked for the expiration of medicines and serviceability and replaced as necessary.

### **7.3.10 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfill the following criteria:

1. The operator should have a minimum of two qualified staff including the owner of the firm. Either the Owner / Director or their Operations - Chief should be well qualified in the trekking activity with recognized national or international certification or a minimum of three years of practical experience.
2. The ATO must have their own adventure equipment.
3. The field staff of the ATO must be qualified for the activity or must have a minimum of three years of practical experience.
4. The ATO must be registered with the APTDC.
  - a) Field staff of the company must be qualified in first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
  - b) The ATO must follow a strict 'leave no trace policy' and conform to high sustainability standards.

## **7.4 Zip Wires & High Ropes Courses**

### **7.4.1 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.

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.

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.

#### **7.4.2 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)

### **7.4.3 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.

### **7.4.4 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 certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
2. All guides are to be trained in basic high ropes and/ or zip wire operations – in-house training, to a standard approved by the Competent Authority.
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 midspan rescue, safely bringing a participant back to the ground within 30 minutes.

The manager and/ or senior instructor to have:

1. A minimum of 1-year experience as a full-time guide on a high ropes or zip wire course.
2. An advanced first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
3. Adequate training and assessment to validate their competence in a senior role.

### **7.4.5 Equipment – The Installation**

The ATO shall adopt the ACCT (Association for Challenge Course Technology) or PRCA (Professional Ropes Course Association) standards or any other reputed organizations certified by National and international institution for Ziplining.

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 the APTDC, along with operators' association of Andhra Pradesh, 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. The inspection, certification & periodic maintenance shall be the sole responsibility of the ATO

#### **7.4.6 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.

#### **7.4.7 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:
  - a) Routine check – before participants use equipment
  - b) 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
  - c) 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:
  - a) They hold an advanced national climbing certificate (e.g. mountaineering, climbing); or
  - b) 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
  - c) They can prove that they have at least 24 months of experience as a trainee inspector, supervised by a competent inspector.

#### **7.4.8 SOPs and 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 and displayed at the locations.
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.

#### **7.4.9 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.

#### **7.4.10 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.

#### **7.4.11 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.

#### **7.4.12 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 under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult. Children between the ages of 10 and 14 shall be under Level 2 supervision by a guide throughout the activity.

#### **7.4.13 Inspection and Maintenance**

The equipment or its components should be inspected or maintained as follows:

1. Routine visual check, which shall be carried out before each opening.
2. 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).
3. 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:
  - a) Date and place of inspection
  - b) Results of the inspection indicating the defects observed
  - c) Assessment, whether there are any misgivings about further use of the facility
  - d) Information on necessary re-inspection
  - e) Name, address, and signature of the examiner

#### **7.4.14 Documentation**

The following documentation is required to be kept onsite:

##### **1. Administrative:**

- a) Name and address of owner and operator
- b) Document indicating the annual inspections carried out by an inspecting body
- c) List of site personnel and their job titles
- d) Evidence of public and other liability insurance

##### **2. Operational:**

- a) 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
- b) Accident and incident report sheets
- c) Personal protective equipment inspection registers and operation log
- d) Risk assessment and management plan – drawn up by the zip line course operator
- e) Instructor and rescue training to be documented
- f) Manufacturer's product manual
- g) Rescue and emergency plan
- h) Current inspection report

### **3. Information to be provided for participants and visitors:**

- a) Description of the activity and safety instructions
- b) Limits and restrictions for use
- c) Information relating to personal public liability insurance of the operator.

#### **7.4.15 Risk Mitigation and 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 APTDC. 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:

- a) Names of the rescuers and the name and address of the operator
- b) Means of communication
- c) Emergency equipment
- d) Drawings indicating the emergency paths, accesses, and exits
- e) Procedures for evacuation due to injury or extreme weather
- f) Documentation for training in emergencies and reporting accidents
- g) Every high ropes/ zip wire course to have a first aid kit and stretcher/ spinal board onsite.

#### **7.4.16 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfill the following criteria:

1. The agency must be registered with APTDC.
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 commercial operations. Rope strength certification by Dhanbad lab may be considered.
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 fulfil these desirable criteria:



- a) The ATO must own specialized equipment commensurate with the needs of undertaking and running such an operation.
- b) The ATO must have qualified personnel on its payroll. These personnel must carry the requisite experience in the activity and be certified in first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
- c) The ATO must operate with the required permits/ licenses.
- d) The ATO must follow a strict 'leave no trace policy' and conform to high sustainability standards.

## **7.5 Rock Climbing, Artificial Wall Climbing & Abseiling**

### **7.5.1 Terms and Definitions**

1. Single Pitch – An easily accessible climbing venue where both top and bottom of the climbing surface can be accessed safely by foot without the need for personal protective equipment and roped systems.
2. Fixed protection systems – “Bolts” or “anchors” specifically designed and fitted for the purpose of attaching roped systems to a structure/ natural climbing venue.
3. The safety chain includes the anchor; the rope; the carabiners and slings; the knots; the harness and the alert belayer.
4. Bottom roping where the belayer is situated at the bottom of the climb and the rope is directed through an anchor at the top of the climb and back down to the climber.
5. Top roping where the belayer is situated at the top of the climb and the rope is directed from the belay system directly to the climber.
6. Lead climbing where the climber places protection during the climb.
7. Leader placed protection is protection specifically designed for the use of lead climbing and rigging where no fixed protection is available.
8. Fall factor a method in which to scale the severity and force of a fall.

### **7.5.2 Guides/ Instructors**

Guides and instructors who are supervising climbing and abseiling activities should, as a minimum, hold valid certificates for the following:

1. A minimum 8 hour (1 day) first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
2. A mountaineering course, preferably 'Advanced Method of Instructions' from JIM&WS, Pahalgam or any other National Mountaineering Institutes and be certified by a MOI qualified instructor to have assisted climbing and abseiling activities for a minimum of 100

hours OR Indian Mountaineering Foundation (IMF) recognized sports climbing instructors' course or should have sufficient experience certified by suitably qualified coaches/ instructors duly recognized by IMF.

### **7.5.3 Equipment**

1. The correct use and proper maintenance of climbing equipment is essential for conducting safe climbing and abseiling activities and should never be taken lightly.
2. Although these standards do not cover the fitting or construction of fixed protection systems, these systems should be rated by the manufacturer and have a quantifiable safe working load. As a minimum standard for such systems, operators must adhere to a safety factor of 3 in accordance to the operator's' weight limitations. In addition, fixed protection systems must be proven to withstand 10KN (1 ton) without displaying any visible deformation or damage. In order to fully understand appropriate fixed anchor/ protection systems an operator must also have sound knowledge of static/ dynamic load and fall factors.
3. Rated and quality assured personal protective equipment or PPE must be used. An internationally recognized safe working load for such equipment is 25KN (2.5 tons). In order to comply with this standard, it is recommended that all PPE is CE (European Conformity) approved. Here is a list of the minimum PPE requirements for an average climbing and/ or abseiling session:
  - a) **Harness:** The single most important piece of personal protective equipment which allows the climber to be safely attached to the roped system and is also a "link" of the safety chain. Harnesses however do not fit themselves and when fitted incorrectly introduce further risk due to providing a false sense of security. For this reason, all harnesses must be checked by a qualified leader to ensure they are fitted correctly prior to leaving the ground and being exposed to a potential fall.
  - b) **Helmets:** Climbing helmets are designed to withstand impact from above by falling rock and equipment, NOT the head impacting on the ground from a falling climber. As such, it is the responsibility of the owner/ operator to deem if a climbing helmet is necessary in accordance with their risk assessments. The general rule however is that in natural rock venues use a helmet; in bottom rope artificial venues a helmet is optional; in top rope/ abseil artificial venues, use a helmet. If in doubt, use a helmet.
  - c) **Rope:** There are many different types of rope. The operator and leader must have a sound knowledge of specifically designed climbing rope, including the different types and applications. In order for the operator or leader to fully understand the applications or different climbing ropes they must also fully understand fall factors. Climbing rope comes

in different diameters and specifications but the basics are dynamic, semi static and static. The operator must consult the manufacturer's manual to ascertain its intended use. Rope not intended for climbing is made with different materials and has different specifications. Rope that isn't designed specifically for the use of climbing and abseiling activities must NEVER be used for this purpose. A safe working load of 25KN (2.5 tons) and CE approval is the internationally recognized standard for climbing rope.

d) **Hardware (carabiners, belay devices etc.):** There is a wide range of climbing aids and devices and the operator and instructor must have a complete and sound knowledge of their applications including which devices are necessary to operate climbing and abseiling activities safely. These devices are also a "link" in the safety chain. As per all other climbing equipment items a safe working load of 25KN (2.5 tons) and CE approval is the internationally recognized standard for climbing hardware and devices.

4. All equipment is subject to wear and tear and must be checked before every use. Incorrect storage, use and monitoring of rated and approved equipment is usually the cause of equipment failure. Operators and leaders must have sound knowledge of this and have systems in place in order to control and manage their equipment. Details of how to do this is included in the Indian Climbing Leader Award.

#### **7.5.4 Inspection and Maintenance Procedures**

Inspections and maintenance require sound knowledge of the systems and equipment themselves and therefore must be carried out by qualified persons as a minimum the inspector must be qualified to be a guide/ instructor. Basic inspections must be carried out before every use with complete and detailed inspections carried out on a regular basis in accordance with their operations procedures and risk assessments.

#### **7.5.5 SOPs and Operating Instructions**

1. For rock climbing and abseiling, the systems required at each individual venue vary. The following is the minimum requirement and standards that apply to all climbing and abseiling activities.

2. The safety chain:

- **The Anchor:** Is permanent and been fitted with the intention to be used for this particular activity. Has been tested to withstand a minimum of 10 KN (1 ton). Does not show any signs of damage or deformity.
- **The rope:** Is a climbing rope that has been made by an approved manufacture. It is the correct type of rope for this particular activity. It does not show any signs of damage or deformity i.e. excessive "fluffing", cuts, rips or tears, thin bits, fat bits etc. Is correctly secured to the anchor.

- **The carabiners and slings:** Equipment is for its intended use only. There are no signs of damage, deformity or wear and tear. Are correctly secured.
- **The knots:** Are the correct knots. Have been double-checked before exposing anyone to a potential fall.
- **The harness:** There are no signs of damage, deformity or wear and tear. Is correctly fitted.
- **The alert belayer:** Has the belay device fitted correctly. The belayer knows how to use the device. The belayer alert, paying attention to the climber and performing the correct 5 point belaying technique (covered in the Indian Climbing Leader Award).

**3.** During all following applications and systems, and in line with the exception of this minimum standard, neither the instructor nor participant should ever be subject to potential fall greater than a fall factor of 1.

#### **4. Bottom rope system:**

The weight of the climber and belayer should be calculated to judge if a ground anchor for the belayer is necessary.

- The appropriate belay system for the venue/group should be utilized.
- It is preferable that the belay device be locked off under load allowing the instructor to escape from the system – applicable to customer/ group belaying and ground anchor belay systems.

#### **5. Top rope system:**

- The instructor must always be attached via an independent safety line that allows him/her to escape from the system whilst the climbing rope is under load.
- The instructor must be able to lock off the belay device under load.
- Group abseil (releasable abseil) system:
- The abseil rope, safety rope and instructor safety line must be attached to individual anchor points.
- The abseil rope must be a redundant system that is releasable under load enabling it to be discarded if necessary.
- The instructor must be able to lock off the safety rope whilst under load.

#### **7.5.6 Participants**

- Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult. While age is not a

critical factor, but a participant must be of suitable size in order to be fitted safely into their harness. Chest harnesses are to be used where necessary.

- Participants must be aware of the risks involved and in turn must listen and adhere to the instructions of their instructor.
- Specific health concerns must be considered before participating.
- Layering & Hydration: Participants must be advised to wear appropriate layering systems for protection against cold and to stay hydrated in the dry, high-altitude environment.

#### **7.5.7 The venue**

- All venues under the purview of this minimum standard must remain within the definition of single pitch.
- Artificial structures must be designed and certified to withstand the forces involved and include a safety factor of 3 on all safety critical components.
- Anchor points on both artificial and natural venues must be accessible without the need for lead climbing or leader placed protection. Failing this, they must be rigged, checked and accessed by suitably trained and experienced instructors.

#### **7.5.8 Documentation**

1. Associated equipment purchase documentation, including warranty, service & maintenance history documentation.
2. Documented installation/ structure checks.
3. Logbook of instructor training and qualifications.
4. Valid first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
5. Emergency action plan

#### **7.5.9 Risk Mitigation**

1. A basic risk assessment of the venue is required before use.
2. Emergency/ evacuation procedures must be formulated in which all leaders are trained.
3. Buddy System: Participants should always climb in pairs or groups, with an emergency protocol in place if a climber is injured or stuck.

#### **7.5.10 Emergencies and Rescues**

If the above systems are adhered to, climbing and abseiling rescues are simple and safe, the details of which are covered in the Indian Climbing Leader Award. In addition:

1. A first aid kit must be available on site.

2. Evacuation routes must be easily accessible as per the definition of single pitch.
3. A detailed and documented evacuation/ emergency procedure must be written which includes the contact numbers of the closest available emergency services which can be called upon as required.
4. There must be an emergency rescue system in place that includes techniques for rescuing climbers who may fall or become injured on the ice. Instructors must be trained in crevasse rescue (if applicable) and in using pulleys and other rescue equipment.

#### **7.5.11 Safety Briefing**

1. All instructors and guides should be able to give a thorough safety briefing that covers all safety aspects and detailed climbing/ abseiling and rescue instructions in detail.
2. This briefing must be clear and instructors must have the ability to give the safety briefing in English, Hindi or local language, with ability to prepare guests for the activity.

#### **7.5.12 Medical Concerns**

1. All instructors and guides must have information on medical issues before the activity is conducted.
2. It is recommended that heart patients, those with spinal issues, recent surgery or any other medical issue of concern, expecting mothers and underage children do not undertake the activity. It is also recommended that epilepsy and asthmatic patients, avoid this activity. Asthma inhalers must be carried by guests for the activity.

## **8 Guidelines and Regulations for Water based Adventure Tourism**

### **8.1 Speed Boating**



#### **8.1.1 Introduction**

Speed Boat have become extremely popular in India. It is imperative to ensure that these activities are conducted in a manner which is safe, enjoyable and a rewarding experience for the participants. A number of precautions must be taken to mitigate risk.

#### **8.1.2 Trained Manpower**

Personnel responsible for conducting Speed boating must be skilled to a high level in conducting those activities, rescue and life saving techniques and qualified/certified in First Aid/C.P.R.

#### **8.1.3 Instructors/Supervisors: Basic Minimum Qualifications And Experience**

1. The ATO has to establish water sports adventure centre within 50 mts from the activity must have a minimum of two supervisors/instructors monitoring the activity, throughout the period that water sports activities are being conducted.
2. Speed boat operator /Driver should have NIWS – Power Boat handling (PHB) training certificate.
3. They should be a strong swimmers trained by reputed institutions NIWS or equivalent.
4. A minimum 16 hours (2 day) first aid/ CPR certificate by a recognised and qualified provider red cross or approved by GoI.
5. Qualification from a recognized National or International body for the particular activity and a certificate from the operator that the individual "has experience of 2 years in assisting in the particular activity and is independently capable of instructing/ supervising groups and carrying out rescue operations".
6. A logbook containing authenticated record of water sports experience.
7. Qualified and proficient in life saving and rescue techniques.
8. All center staff must be familiar with emergency oxygen equipment and training sessions should be held for all staff annually

#### **8.1.4 Equipment**

1. Life jackets or Personal Floatation Devices (PFDs) (must meet the minimum buoyancy requirement, be appropriate for the intended activity, be certified/approved by IRS) or Safety of Life at Sea (SoLAS) certification.
2. The boat should be constructed under any classification society or procured in compliance with the standards prescribed by a recognized classification society or as per the provisions of the Andhra Pradesh Boat Rules, 2021 (framed under the AP Maritime Board Act, 2021), subject to the condition that the drawings, designs and stability to be certified by the naval architect as per Inland Vessel Act 2021.
3. Throwable rescue devices must be available for immediate use.
4. Equipment should be serviced annually and should be changed once every five years / as recommended by the manufacturer.
5. Equipment should be washed, dried and checked thoroughly after each use.

#### **8.1.5 Operations**

All water sports activities must begin with a thorough safety briefing. The briefing must highlight the equipment used, correct technique, do's and don't's, demarcation of the boundary for the activity, rescue and emergency procedures. A liability waiver form clearly highlighting the risk involved must be signed by all participants prior to the commencement of the activity. Participants with any medical condition making them unfit for participation in the activity must be informed prior to the commencement of the activity and not allowed to participate.

#### **8.1.6 Risk Mitigation**

1. **Life Jackets:** Water sports activity must be undertaken with a lifejacket throughout the time spent on the water. The life jacket must have adequate buoyancy, should be fastened properly and checked by the instructor prior to commencement of the water sports activity. The lifejacket must be of the appropriate size for the intended user.
2. **Lifeguards:** No water sports activity should be conducted without the presence of trained lifeguard/s.
3. **Alcohol/drugs** during the activity and at least six hours prior to the activity are strictly prohibited.
4. **Sign boards:** With all rules and clearly mentioning that no water sports activity is to be undertaken without supervision.
5. **No water sports** activity should be conducted in the dark and preferably finish an hour before dark.
6. **Assurance** that the person can swim and is comfortable in the water.



7. **Centers must** be aware of local weather conditions and inform participants of special conditions prior to the activity. During bad weather conditions, lightning and storms, water sports activity should not be conducted.

8. **Boats for safety** / rescue must be available in the immediate vicinity (within visual distance) for prompt deployment with personnel duly qualified to operate/ carry out rescues operations:

- Each boat must have a crew of one or preferably two people, be dedicated to safety and support the participants in any way that they can.
- The boat driver must have a boat driving license from an appropriate authority and have adequate knowledge of the water sports activity and location. He should have a First aid/CPR certificate. The boat must have an oxygen cylinder and mask and life jackets and throwable rescue devices for emergency situations.
- The boat must be able to communicate with the centre at all times using a walkie-talkie, phone, radio telephone or any other direct communication device.

**iv)** The boats must have enough fuel to make trips to the activity site and accommodate any changes.

#### **8.1.7 SOPs And Operating Instructions**

1. All Water Sports Operators must maintain and update a Standard Operating Procedure for their operations.
2. The SOP must mention the methodology adopted by the agency in organizing the activity such as assessing medical condition and experience, procedures for conduct of the activity, avoidance of injury/ drowning, safety precautions, communication, weather conditions, procedure for emergencies, casualty evacuation, incident and accident reporting and feedback mechanism.

#### **8.1.8 Documentation**

The water sports operator must maintain the following documentation:

- a) Personnel responsible for conducting Speed boating must be skilled to a high level in conducting those activities, rescue and life saving techniques and qualified/certified in First Aid/C.P.R.
- b) Details of all Instructors including copies of certifications, record of experience and feedback from clients.
- c) Copies of all Permits and Permissions required for operations.
- d) Copies of identification documents, insurance cover and details of next of kin for all participants, guides and instructors.
- e) Copy of SOPs.

- f) Current list of emergency contact numbers.
- g) Emergency Action Plan.
- h) Advertising must give a true picture of the activity and those who can participate in the activity.

#### **8.1.9 Emergencies And Rescues**

- a) Adequate first aid medical equipment, oxygen cylinder and mask must be available at the centre.
- b) An Emergency Action Plan must be in position and all personnel/crew trained regularly in scenarios. Advance arrangements must be in position for medical/evacuation assistance in case of emergency.
- c) Evacuation/rescue procedures known to participants and instructors.

#### **8.1.10 Safety Briefing**

All instructors and guides should be able to give a thorough safety briefing covering all aspects of the water sport activity and safety/ rescue. This briefing must be clear, given in English, Hindi, Telugu and ensure the attention of clients during the briefing.

#### **8.1.11 Medical Concerns**

Checking on any medical ailments is a must before the activity. Each participant should fill out a medical form prior to conduct of the activity. All instructors and guides must ensure that medical issues if any are discussed before the activity is conducted.

It is recommended that heart patients, those with any serious ailments of concern, epilepsy, expecting mothers and under age children do not participate in the activity. Asthma inhalers must be carried by clients with asthma.

#### **8.1.12 Basic Minimum Standards for Grant Of Recognition To Operators**

- a) The ATO should be registered with APTDC. The entity must operate with the required permits / licenses.
- b) The staff should meet the qualifications defined above.
- c) The center should have a full set of equipment for the maximum number of clients it can service.

- d) The ATO must have an Emergency Action Plan for which regular training must be imparted to the staff.
- e) The ATO must have a registered office
- f) The ATO must follow a strict 'leave no trace' policy and conform to high sustainability standards.

## **8.2 Boat Parasailing**

### **8.2.1 Introduction**

Parasailing offers a thrilling way to experience the region's stunning landscapes. While this activity can be exhilarating, it also carries inherent risks that must be managed to ensure the safety of participants. Proper training, adherence to safety guidelines, and equipment checks are essential for a secure parasailing experience.

### **8.2.2 Guides/Instructors**

- If operating over water, the boat operator must have a remote-control powerboat handling [PBH-4 (LEVEL 3)] certification from the National Institute of Water sports or Authorized Agency.
- Parasailing operators to have a minimum of 6 Months of experience and should have worked for a minimum of 50 days as a parasailing pilot and have an experience of at least 20 flights irrespective of whether operating over land or water.
- A Parasailing (Equipment) guide is responsible for safely conducting parasailing for clients by monitoring the sources of danger at land/deck, sea and air during every ride. The guide/instructor should work in close coordination with the driver, launcher and receiver.
- Must have adequate experience in carrying out parasailing operations independently.
- They should have valid FA/CPR certification.
- The operator must ensure that the Supervisor/Observer/ Look-out stationed on the Parasailing boat is adequately experienced in operations. It is also desirable for such person to have proficiency in handling of the boat to act in emergency situations.
- Under no circumstances shall the operator & crew utilize any equipment outside the parameters for which it was designed & must always adhere to manufacturers' specifications.
- Must prepare a risk assessment plan for all unforeseen events.
- The guides/instructors should have a high level of fitness (both cardiovascular and motor) to withstand high endurance activity for long durations in open and sun exposed areas. The person should have proficient analytical ability as well as a friendly/approachable and motivating personality to deal with all kinds of clients.

- Wins meter to available in the boat and wind speed to be checked before going to the "Sortie". Manufacturere wind speed limitation to be followed.

### **8.2.3 Customer Training**

Before taking activity, all participants must undergo a comprehensive training session led by certified instructors. This session will cover essential skills such as proper use of parasailing equipment, safety protocols, and activity procedures. Participants will learn about the significance of weight distribution, harness adjustment, and the importance of following verbal and visual signals during the activity.

Additionally, training shall include information on assessing weather conditions, understanding local terrain, and emergency response procedures in case of unexpected situations. Instructors shall emphasize the necessity of wearing safety gear, such as life vests, and the importance of adhering to guidelines to minimize environmental impact. By completing this training, customers will be better prepared to enjoy their parasailing adventure while prioritizing safety and responsibility.

### **8.2.4 Equipment**

The equipment used for parasailing in Andhra Pradesh must be sourced from reputable manufacturers and certified for safety and performance. Equipment required for operations include Parasailing boat with Min. 300 HP capacity engine, parachute as required, harness, rope, wind meter, rectangular rescue tube, helmets, lifejackets, fire extinguisher and rescue-boat, Lifebuoys, rescue quoits, fire buckets with lanyards, communication equipment, medical kit, anchor with 30 meters of rope and mobile phone. Regular maintenance and proper storage of all gear essential to ensure reliability during operations.

- If operating over water, a proper floatation device is to be used. If operating over ground a certified helmet, knee and elbow protection must be used.

Only trained and authorized personnel should have access to the equipment, preventing unauthorized handling that could compromise safety. All equipment that is deemed defective or past its service life must be promptly removed from use and disposed of in accordance with safety regulations. Additionally, materials used in the construction of parasailing gear, such as ropes and harnesses, should be regularly checked for wear and tear, with records kept of their condition and replacement dates.

### **8.2.5 Inspections and Maintenance Procedures**

Inspections and maintenance procedures are vital for ensuring the safety and functionality of parasailing equipment in Andhra Pradesh. All equipment must be inspected in accordance with the established safety manual, with daily, weekly, and yearly checks conducted to identify any potential issues. Each inspection should be meticulously documented in a safety

log maintained at the site, providing a clear record of the equipment's condition over time. Regular maintenance should be performed on all gear, including parachutes, harnesses, and towing systems, to prevent wear and tear that could compromise safety. These maintenance activities must also be recorded, ensuring transparency and accountability in the upkeep of equipment.

#### **8.2.6 SOPs and Operating Instructions**

1. Conduct thorough equipment inspections, including harnesses, parachutes, and towing systems.
2. Verify weather conditions, ensuring wind speeds and visibility are within safe limits.
3. Cloud/night flying is strictly prohibited.
4. No aerobatic manoeuvres are permitted.
5. No operator shall knowingly parasail in rain, heavy fog or during a known lighting storm within 50km from the parasailing area, in addition a daily weather log shall be maintained.
6. A wind meter must be kept on-board throughout operations to measure the wind-speed and direction.
7. A stretch of 200 feet shall be clearly marked on the water body with a notice board warning others to keep clear.
8. If operating over water, Life jacket and light helmets (ISI approved) should be made mandatory for the passengers. At all times participants shall wear a properly fitted type approved life jackets.
9. Provide detailed safety briefings to participants before launching, covering equipment usage, emergency procedures, and physical requirements.
10. The operator shall strictly ensure that passengers are free from health, medical problems such as blood pressure, heart problems, etc. and shall obtain necessary undertaking regarding risk & release of liability waiver from all passengers prior to starting the activity.
11. The riders wearing loose cloths such as sari, dhoti, dhupatta etc. shall be discouraged totally from undertaking the rides.
12. In no circumstance, pregnant women and children below 16 years of age, be allowed to parasail.
13. No operator shall allow more than 2 passengers to take a ride on a single chute at a time.
14. Implement a clear communication system between the ground crew and parasailing operator to monitor conditions and participant safety.

15. Establish and train staff on emergency protocols, including landing procedures in adverse conditions and rescues.
16. Ensure first aid kits and emergency response equipment are readily available on-site.
17. A rectangular rescue tube recommended by the National Institute of Water Sports / authorized agencies should be always available in the parasail and rescue boats.
18. Adhere to local environmental regulations to minimize ecological impact, including avoiding wildlife disturbance and littering.
19. Conduct routine maintenance checks and keep records of all equipment inspections.
20. Monitor participants throughout the experience to ensure adherence to safety protocols.
21. Use reliable weather forecasting tools to assess conditions regularly and make informed decisions about operations.
22. Conduct post-activity debriefings with participants to gather feedback and improve future operations.
23. Inspect and clean equipment after each use to maintain safety standards.
24. Engine and winch logbook to be maintained.

#### **8.2.7 Special Arrangements for Children**

1. Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be carried out under supervision of guide.
2. Provide comprehensive safety briefings tailored for young participants and their guardians, explaining safety procedures, equipment usage, and emergency protocols in clear, accessible language.
3. Staff must be trained in first aid and emergency response specific to younger participants. A first aid kit should be readily accessible on-site.

#### **8.2.8 Documentation**

The following documents are required to be maintained at the site:

1. Signed consent forms from parents or guardians for minors, acknowledging risks and confirming eligibility.
2. Records of safety briefings conducted for participants, including attendance sheets and materials used.
3. Daily, weekly, and yearly inspection logs for all parasailing equipment, detailing condition assessments and maintenance performed.
4. Documentation of routine maintenance activities, including repair records and replacement dates for equipment.

5. Daily weather logs noting wind speeds, visibility, and any adverse conditions encountered, along with decisions made regarding operations.
6. Document outlining established emergency procedures, including landing protocols and rescue operations.
7. Copies of first aid and emergency response training certifications for all staff involved in parasailing operations.

### **8.2.9 Risk Mitigation**

The following measures will reduce the risk factor:

1. Conduct a thorough risk assessment prior to operations, identifying potential hazards and developing strategies to mitigate them.
2. Implement a checklist for pre-flight inspections of all equipment, including parachutes, harnesses, and towing systems, to ensure they are in optimal condition.
3. Continuously monitor weather conditions using reliable forecasting tools. Establish protocols for postponing or cancelling flights in adverse weather (e.g., high winds, rain, or low visibility).
4. Ensure all operators and crew members are certified and trained in safety procedures, emergency response, and equipment handling to enhance operational safety.
5. Screen participants for health conditions that may pose risks (e.g., heart issues, high blood pressure) and require signed waivers acknowledging the inherent risks of parasailing.
6. Establish clear communication protocols between ground crew, instructors, and participants to monitor conditions and ensure prompt response in case of emergencies.
7. Train staff on emergency protocols, including rapid response procedures for rescues, safe landing techniques, and first aid measures.
8. First Aid kit, stretcher (spinal board) and qualified staff should be available at the site.
9. Require all participants to wear approved life jackets and helmets during the activity to enhance safety and reduce injury risk.
10. Enforce regulations that limit the number of participants per chute to two, ensuring better control and safety during ride.
11. Schedule routine maintenance for all equipment, keeping detailed logs of inspections, repairs, and replacements to ensure reliability and safety

### **8.2.10 Emergencies and Rescues**

The staff should be fully prepared to deal with emergencies and carry out rescue as per the SOP without looking for orders and in a minimum time frame. The following will help in mitigating risk:

1. Awareness of risks
2. Training in rescues
3. First aid/ CPR & other medical training of the staff
4. An Emergency Action Plan should be in position and training for the same provided periodically to the staff
5. Doctor on call
6. Rescue evacuation to be worked out
7. Tie up with local hospital
8. Procedure for reporting incidents
9. Funds earmarked and available for medical cover
10. Regular briefing of the staff

#### **8.2.11 Safety Briefing**

A comprehensive safety briefing is essential for all parasailing participants in Andhra Pradesh and should be conducted personally by a certified instructor. This briefing must cover vital information such as equipment usage, safety protocols, emergency procedures, and proper harness adjustments.

Additionally, an audio-visual presentation can enhance understanding and retention. Participants must sign a disclaimer form acknowledging the risks involved before the activity begins. To reinforce safety awareness, key safety measures should be prominently displayed in multiple locations around the launch area. The briefing should be reiterated immediately before each activity to ensure that all participants are well-informed and prepared for their parasailing experience.

#### **8.2.12 Medical Concerns**

The medical restrictions should be displayed prominently. Fitness certificate to be signed by the participants. No compromise is to be made in case of any medical problem. Medical restrictions for Parasailing include:

1. Heart problem
2. High blood pressure
3. Asthma or Chronic Obstructive Pulmonary Disease (COPD)
4. Severe Motion Sickness
5. Neurological Disorders
6. Recent fracture, surgery, or hospitalization



7. Epilepsy

8. Pregnancy

### **8.2.13 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any entity, establishment, or company seeking a grant of recognition must fulfill the following criteria:

1. The entity must own specialized certified equipment commensurate with the needs of undertaking and running such an operation (listed above).
2. The entity must have qualified personnel (minimum one qualified master operator & one assistance) on their payroll. These personnel must carry the requisite experience in the activity and have valid first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
3. The entity must operate with the required permits/ licenses.
4. The agency must be registered with the APTDC.
5. The company must follow a strict 'leave no trace policy' and conform to high sustainability standards.

## **8.3 Jet skiing**



### **8.3.1 Introduction**

A jet ski is a small, motorized watercraft designed for one or more riders. It is typically powered by a jet propulsion engine, which draws water in and expels it through a nozzle to propel the craft forward. Jet skis can be ridden either sitting or standing and are popular for recreational activities, such as water sports, and sometimes used in lifeguarding or rescue operations. "Jet Ski" is originally a brand name of personal watercraft made by Kawasaki / Yamaha but is commonly used to refer to any similar type of vehicle.

### **8.3.2 Guides/ Instructors**

Personnel responsible for conducting water sports must be skilled to a high level in conducting jet ski activities, rescue and life saving techniques and qualified/certified in First Aid/C.P.R.

### **8.3.3 Basic Minimum Qualifications and Experience**

1. Qualification from a Recognized National or International body for Jet Ski and a certificate from the operator that the individual "has experience of 2 years in assisting in the particular activity and is independently capable of teaching, assisting, leading trips and carrying out rescue operations".
2. They should be a strong swimmer and life guard.
3. A minimum 16 hours (2 day) valid first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
4. A logbook containing authenticated record of Jet Skiing lessons.
5. Qualified and proficient in life saving and rescue techniques.
6. All staff must be familiar with emergency oxygen equipment and training sessions should be held for all staff annually.
7. A powerboat license certificate provided by a recognized and qualified provider.
8. An open water lifeguard certificate provided by a recognized and qualified provider

#### **8.3.4 Operations**

1. It is imperative that personnel responsible for conducting Jet Ski lessons are certified Jet Ski operators with water awareness skills.
2. A detailed weather check must be conducted & displayed before commencing any activity.
3. All activities must begin with a detailed safety briefing. The briefing must highlight the equipment used, dos and don'ts, demarcation of the boundary for the activity, rescue and emergency procedures & current weather conditions.
4. All participants must sign a liability waiver form prior to the commencement of the activity clearly highlighting the risk involvements.
5. Participants with any medical condition making them unfit for participation in the activity must be informed prior to the commencement of the activity and not allowed to participate.
6. The minimum age for jet ski sports is 18 years of age.
7. Before using a jet-ski the participant should be made to sign an indemnity form.
8. The participant should also sign a registration form with relevant personal details including address, phone number, whom to inform in case of accident etc.
9. Jet Ski should be operated in a well-defined area beyond normal swimming and watersports area. It is very important keep in mind that even the wake generated by a Jet Ski would pose danger to kayaks and paddle boats.
10. Jet Ski Rides by Customers Accompanied by a Boat Driver: Water sport center may allow customers to driver a jet ski provided: -

- a) A qualified boat driver seats behind during the ride.
- b) Customer is thoroughly briefed on the controls of the Jet Ski, the rules of the road and basic seamanship during Jet Ski handling. Jet Ski drivers sitting behind on such a ride shall ensure that speed limit and the safety instructions are followed by the rider so as to avoid accident and injury to others. If the customer disobeys the instructions, the driver shall immediately take over the control.

11. Jet Ski Ride by Customers Independently: Water sport center can allow independent riding of jet ski by its customers but same is permitted only after an experienced instructor, holding jet ski certification from NIWS, conducted a short familiarization lesson as per "jet ski" familiarization check list issued by NIWS. Successful completion of familiarization should be recorded on the indemnity bond. No disobeying the instructions, the driver shall immediately take over the control.

### **8.3.5 Equipment**

- 1. Life jackets or Personal Floatation Devices (PFDs) (must meet the minimum buoyancy requirement, be appropriate for the intended activity, be certified/approved by IRS)
- 2. Jet-Skis with a proper kill-switch.
- 3. Suitable floating, soft foam rubber inserted helmets.
- 4. Throwable rescue devices must be available for immediate use.
- 5. Equipment should be serviced annually and should be changed once every five years / as recommended by the manufacturer.
- 6. Equipment should be washed, dried and checked thoroughly after each use.

### **8.3.6 Inspections and Maintenance Procedures**

- 1. To maintain Daily Pre-Operations and Post - Operation Check List and signed by the operator and the supervisor.
- 2. The hull, jet pump and the steering nozzle should check and maintained daily. Engine, ski hull, deck and trailer should maintain annually.

### **8.3.7 Documentation**

The following is the basic minimum documentation required:

- 1. Details of all Instructors including copies of certifications, record of experience and feedback from clients.
- 2. Copies of all Permits and Permissions required for operations.

3. Copies of identification documents, insurance cover and details of next of kin for all participants,
4. guides and instructors.
5. Copy of SOPs.
6. Current list of emergency contact numbers.
7. Emergency Action Plan.
8. Advertising must give a true picture of the activity and those who can participate in the activity.
9. First aid certificates for all guides.

### **8.3.8 Risk Mitigation**

1. **Life Jackets:** Water sports activity must be undertaken with a lifejacket throughout the time spent on the water. The life jacket must have adequate buoyancy, should be fastened properly and checked by the instructor prior to commencement of the water sports activity. The lifejacket must be of the appropriate size for the intended user.
2. **Lifeguards:** No water sports activity should be conducted without the presence of trained lifeguard/s. Alcohol/drugs during the activity and at least six hours prior to the activity are strictly prohibited.
3. **Sign boards:** With all rules and clearly mentioning that no water sports activity is to be undertaken without supervision.
4. No water sports activity should be conducted in the dark and preferably finish an hour before dark.
5. Assurance that the person can swim and is comfortable in the water.
6. Operator must be aware of local weather conditions and inform participants of special conditions prior to the activity. During bad weather conditions, lightning and storms, water sports activity should not be conducted.
7. Boats for safety / rescue must be available in the immediate vicinity (within visual distance) for prompt deployment with personnel duly qualified to operate/ carry out rescue's operations:
  - a) Each boat must have a crew of one or preferably two people, be dedicated to safety and support the participants in any way that they can.
  - b) The boat driver must have a boat driving license from an appropriate authority and have
  - c) adequate knowledge of the water sports activity and location. He should have a First aid/CPR

- d) certificate. The boat must have an oxygen cylinder and mask and life jackets and throwable rescue devices for emergency situations.
- e) The boat must be able to always communicate with the jet ski sport centre using a walkie talkie, phone, radio telephone or any other direct communication device.
- f) The boats must have enough fuel to make trips to the activity site and accommodate any changes.

### **8.3.9        Emergencies and Rescues**

1. All instructors / guides and any employee involved in the activity must have an in-depth knowledge of all Emergency Action Plans, Normal Operating Procedures and Risk Assessments.
2. Adequate first aid medical equipment, oxygen cylinder and mask must be available at the jet ski sport center.
3. An Emergency Action Plan must be in position and all personnel/crew trained regularly in scenarios. Advance arrangements must be in position for medical/evacuation assistance in case of emergency.
4. Evacuation/rescue procedures known to participants and instructors.

### **8.3.10      Safety Briefing**

A pre-ride safety briefing covering all aspects of risks and action to be taken both by conducting staff and the participants should be covered in detail, some aspects are highlighted below:

All instructors and guides should be able to give a thorough safety briefing covering all aspects of the water sport activity and safety/ rescue. This briefing must be clear, given in English, Hindi or local language and ensure the attention of clients during the briefing.

Rules and regulation for operation of Jet-Skis:

1. A clear map of the area should be displayed at the water-sports centre with following details.
  - a) Any underwater obstruction that could pose a danger to jet-ski operations, eg. Rocks, pylons, sand banks etc.
  - b) The special area demarcated where the jet-ski is allowed to operate, preferably visible from the water-sports center.
2. All danger sports areas should be indicated using red buoys and appropriate Signs.

3. A jet-ski participant should be instructed regarding the route rules, especially overtaking, and crossing situation.
4. When two jet-skis are on a collision course, i.e., heading towards each other, both should change course to starboard or the right (green) side, so that they pass each other on their port (red) sides. This changing of course should be done leaving ample time and should be clearly visible to each other.

#### **8.3.11 Medical Concerns**

1. For personal medical conditions, clients should be advised to carry medication and inform the ride leader.
2. For accident-related concerns, the ride leader should have a plan in addition to a first aid kit.
3. Instructor must ensure that the participant can swim in open waters comfortably.
4. Instructor must ensure that the participant is medically fit to learn or participate in the activity.
5. A signed declaration from the participant is essential, if there is any suspicion of prior injuries or medical concerns.
6. Participant with a weak heart condition, epilepsy, spinal issues, recent surgery, or any other medical condition of concern should not be taken for Jet Skiing.
7. Expecting mothers/pregnant should avoid Jet Skiing.
8. Asthma inhalers must be carried by clients with asthma.

#### **8.3.12 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfil the following criteria:

1. The agency must be registered with the APTDC.
2. The staff should meet the qualifications defined above.
3. The center should have a full set of equipment for the maximum number of clients it can service.
4. The operator must have an Emergency Action Plan for which regular training must be imparted to the staff.
5. The entity must have a registered office
6. The company must follow a strict 'leave no trace' policy and conform to high sustainability standards.

## **8.4 Kayaking / Sea Kayaking**

### **8.4.1 Introduction**

Kayaking is amongst the most popular water sports activities globally. Negotiating rapids and paddling in open water or lakes is an exhilarating experience requiring skill and stamina. Kayaks are normally decked and paddled with two-bladed paddles by paddlers sitting inside an enclosed cockpit. Spray decks are used to minimize water in the cockpit, providing better protection for paddlers and reducing the likelihood of hypothermia on cold water rivers. Safe use of spray decks requires training. Training in rescue procedures is required for all kayakers and techniques vary according to craft type and environment.

Since it is a dynamic sport, instructors and guides must be highly qualified and the equipment used should be of the highest standard. There are several types of kayakers:

1. Recreational Kayakers: Short (about 3 mt. for singles) and wide, with large open cockpits. They are suited to flat, sheltered waters only.
2. Touring Kayakers: 3.5 mt. to 4.5 mt. in length, often have bulkheads and hatches. They are suited to open waters such as estuaries and bays, but not the open sea.
3. Sea Kayakers: 4.5 mt. to 6 mt. in length, with bulkheads and hatches, hands-free pump systems, and other equipment and are intended for open sea conditions.
4. Whitewater Kayakers: There are several types of whitewater kayakers, mainly river runner, creek, and freestyle - all with spray decks.
5. Sit on top (SOT) Craft: SOT kayakers are a popular choice among recreational paddlers. Recovery after a capsize is easy, right the boat and re-board. On the other hand, paddlers are more exposed to the elements and more care is needed to minimize sunburn and hypothermia. Damaged or loose fittings and hatch covers, or hull damage may allow the entry of water: these crafts are not unsinkable:
  - a. Recreational types single and double, are fairly short and wide. Being susceptible to wind, they are suitable only for flat-sheltered water.
  - b. Touring SOTs are longer and able to cope with estuary and bay conditions. They are favored by the kayak fishing community.
  - c. Seagoing SOTs have performance and feature similar to sea kayakers but without the enclosed cockpit.
  - d. Specialist SOTs for Whitewater and surf use are available. On open water, tethers can prevent the separation of craft and paddler after capsizing. There is the danger of entanglement.

**6. Inflatable Kayaks:** Inflatable kayaks range from little more than toys to kayaks for use on serious whitewater.

#### **8.4.2 Guides/ Instructors**

1. Lead instructors for water sports activities should, as a minimum, hold the following:
  - a) A minimum 16-hour (2-day) first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
  - b) Qualification from a recognized national or international body for the particular kayaking activity and a certificate from the operator that the individual “has experience of 2 years in assisting in the particular activity and is independently capable of guiding groups and carrying out rescue operations”.
  - c) A logbook containing authenticated records of kayaking experience.
2. Other guides accompanying the trip should be skilled to a high level in conducting the activity, rescue and life-saving techniques, and first aid/ CPR.
3. All instructors and guides should have the ability to carry out the following and ensure that this is done before/ during the trip:
  - a) The ability to communicate clearly and deliver a comprehensive safety briefing before starting the activity is mandatory.
  - b) Gauge participants’ ability to participate in kayaking activity and their ability to do the specific stretch that they are being taken on.
  - c) Ask participants for relevant medical history.
  - d) Check environmental conditions (weather, tide, river levels).
  - e) Conduct systematic hazard management checks to ensure that hazards (sources of harm) are identified, assessed, and either eliminated, isolated, or minimized on an ongoing basis.
  - f) Headcount of all participants before, during, and at the end of the trip.
  - g) Be vigilant for changes in the physical or psychological state of participants.
  - h) Set an appropriate pace for the group and take rest as necessary.

#### **8.4.3 Equipment**

1. Kayaks (should be a good quality stable craft, able to withstand all foreseeable forces, allow for easy exit upon capsize, footrests should not allow feet to become entrapped, should not sink if swamped and appropriate for the activity).



2. Paddles (appropriate for the type of kayak and the skill level of participants, should be able to withstand all forces associated with activity such as impact with rocks).
3. Helmets are mandatory for all kayaking trips taking place on a river (should be made of strong lightweight material like carbon fiber or plastic, provide protection and coverage to the forehead, temple, and back of the head and have a good system to absorb shock from impacts).
4. Life jackets or Personal Floatation Devices (PFDs) (must meet the minimum buoyancy requirement, be appropriate for the intended activity, and be certified/ approved by BIS (Bureau of Indian Standards), US coastguard, British Canoe Union, or equivalent).
5. Throwable rescue devices must be available for immediate use.
6. Safety kayaks must be available in the immediate vicinity (within visual distance) for prompt rescue with personnel duly qualified to operate/ carry out rescue operations.
7. During cold weather operations, wetsuits and spray jackets are recommended.
8. Instructors must all carry rescue bags, knives, and whistles.
9. Each trip must carry a first aid kit.
10. Normal Tourist may be allowed only in k2 Kayak with one professional along with tourist. Further, the tourist should allowed on the basis of declaration / Indemnity bond.

#### **8.4.4 Operations**

All kayaking activities must begin with a thorough safety briefing. The briefing must highlight the equipment used, do's and don'ts, demarcation of the boundary for the activity, and rescue and emergency procedures. A liability waiver form highlighting the risk involved must be signed by all participants before the commencement of the activity. Participants with any medical condition making them unfit for participation in the activity must be informed before the commencement of the activity and not allowed to participate.

#### **8.4.5 Risk Mitigation**

1. **Lifejackets:** No kayaking activity should be undertaken without wearing a lifejacket throughout the time spent on the water. The life jacket must have adequate buoyancy and should be fastened properly and checked by the instructor before the commencement of the water sports activity. The lifejacket must be the appropriate size for the intended user.
2. **Guides:** No kayaking activity should be conducted without the presence of trained guide/s.
3. Only competent swimmers should participate in whitewater kayaking.

4. **Helmets:** Helmets are mandatory for whitewater kayaking. Helmets should be a good fit, tight to not move but not uncomfortable with an effective fastener to keep the helmet in place.
5. **Instructor-to-Client Ratio:** Due to the technical nature of the sport, it is advised that the company ensure the instructor-to-client ratio is always 1:4 in white water kayaking. There should always be at least two qualified instructors on any trip.
6. **Number of Kayaks:** There should be at least three kayaks for a trip to occur, no single kayak trips are allowed.
7. Alcohol/ Drugs during the activity and at least six hours before the activity is strictly prohibited.
8. **Client Ability:** Clients should not be taken on stretches that the instructor deems above their ability level. Their fitness should be assessed, and they should be taken on an appropriate stretch.
9. **Sign Boards:** For properties/ operators that have access to the water/ river. Signboards should be present beside the water/ river with rules mentioning that no water sports activity is to be undertaken unless supervised.
10. No kayaking activity should be conducted in the dark and preferably finish at least one hour before dark.
11. **Age Limit:** Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult.

#### **8.4.6 SOPs and Operating Instructions**

11. All kayaking operators must maintain and update a standard operating procedure for their operations.
12. Besides covering the methodologies that are adopted by the agency in organizing the activity, such as assessing member's medical condition and experience, procedures for the conduct of the activity, avoidance of injury, safety precautions, communication, weather, the procedure for emergencies, casualty evacuation, incident and accident reporting, feedback mechanism the following must be included in the SOPs:
  - An emergency action plan including rescues, evacuations, and medical assistance must be in position. Staff/ guides/ drivers must be trained in all aspects of the emergency action plan periodically.

- Advertising must give a true picture of the difficulties and risks involved and clients briefed accordingly. Information about guides and their experience should be sent to the clients for multi-day kayaking expeditions.

#### **8.4.7 Documentation**

The tour operator must maintain, at the minimum the following documentation:

1. Details of all guides and instructors including, copies of certifications, a record of experience, and feedback from clients.
2. Copies of all permits, permissions, and insurance required for operations.
3. Copies of identification documents, insurance cover, medical concerns, and details of next of kind for all participants, guides, and instructors.
4. Copy of SOPs.
5. Current list of emergency contact numbers.

#### **8.4.8 Emergencies and Rescues**

1. Adequate first aid medical equipment must be available with the kayaking trip.
2. Evacuation routes must be identified and known to participants, guides, and instructors.
3. A detailed and documented evacuation/ emergency procedure must be available with the party along with the closest available emergency services which can be called upon as required.

#### **8.4.9 Safety Briefing**

All instructors and guides should be able to give a thorough safety briefing that covers all safety aspects and detailed instructions about a safe kayaking tour. This briefing must be clear and given in English, Hindi, or the local language that the passenger can understand.

#### **8.4.10 Medical Concerns**

All instructors and guides must be able to ensure that a question regarding medical issues is asked before the activity is conducted. It is recommended that heart patients, those with spinal issues, recent surgery, or any other medical issue of concern, expecting mothers, and underage children do not participate in the activity. It is also recommended to check for epilepsy and asthmatic patients, on the extent of the ailment. Asthma inhalers must be carried by clients and preferably handed over to the guide.

#### **8.4.11 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfil the following criteria:

2. The ATO must own specialized equipment commensurate with the needs of undertaking and running such an operation.
3. The ATO must have qualified personnel (minimum two full-time qualified staff) on their payroll. These personnel must carry the requisite experience in the activity and have valid first aid/ CPR certification.
4. The ATO must operate with the required permits/ licenses and registered
5. The ATO must have at least one certified and experienced person on its Board.
6. The ATO must follow a strict 'leave no trace policy' and conform to high sustainability standards.

## **8.5 Snorkelling**



### **8.5.1 Introduction**

Snorkeling are of two types: Shoresnorkelling and Boat-snorkeling. The first one is launched from the shore and the second from a Boat. Snorkeling is an aquatic activity that allows people to interact with the marine world.

When done correctly, it is enjoyable, fulfilling, and safe. However, a number of precautions need to be taken to ensure quality in execution. For practical reasons, the term 'snorkeling' excludes snorkeling that occurs before or after a SCUBA dive begins or ends. It refers exclusively to swimming at the surface with a snorkel, mask and fins.

### **8.5.2 Instructors/Supervisors: Basic Minimum Qualifications and Experience**

1. Each resort/water sports center providing snorkelling activities should have atleast one lifeguard/supervisor monitoring people.
2. Should be undertaken only in the demarcated area
3. The guests on snorkelling should always be accompanied by a trained and licensed buddy called 'Guide'. It must be ensured that no guest is left unattended while on the water.

4. In case of 'shore-snorkelling' (launched from the shore), a fully equipped rescue boat in readiness should be anchored in the vicinity to attend any eventuality
5. When snorkelling is launched from a boat, besides ensuring that the guest is supervised by a Buddy, he is also constantly watched by the persons on onboard.
6. The Rescue boat used during snorkelling operations should be as per the stipulations provided in this Guideline.
7. The boat used for launching snorkelling could also be used for rescue purposes provided that it also fulfils the requirement of a Rescue Boat.
8. The open-water Snorkelling boat should be fitted with twin engines, each with a minimum capacity of 60 HP. The capacity of the engine is required to be higher in order to ensure that the Boat has enough power to reach ashore faster in the event of emergencies. The twin-engine boat enable to save the persons ashore safely in the event of any engine failure.
9. Open-water Snorkelling boat should have onboard: Licensed boat-handler, at least 02 Certified Snorkelling Guides (it may be more depending on number of guests onboard), minimum 01 certified Life Saver, 01 'Lookout'.
10. The supervisor should be a strong swimmer and be trained and certified in Emergency First Response and First Aid / CPR.
11. It must be ensured that the 'Guide' is not under stressful condition during the activity and number of trips should be limited to a maximum of 07 trips on a particular day, when each trip is about 30 minutes or more.

### **8.5.3 Water Sports Center Requirements**

1. All Centers need to be registered with the APTDC.
2. All centers should be equipped with pure emergency oxygen and have an Emergency Action Plan ready in case of snorkelling related accidents. The Emergency Action Plan should include mechanisms for:
  - Search and recovery of missing swimmers.
  - Providing First Aid/CPR.
  - Transport to the nearest appropriate medical facility.
  - Reporting to the appropriate authorities (police, navy, coast guard, ministry of tourism, etc.).
3. All staff must be familiar with this Emergency Action Plan and be able to act appropriately.

4. The centers must have insurance for employees and clients.

## **8.5.4 Equipment Required**

### **1. Snorkelling Equipment**

Each centre that provides snorkelling activities should have a full set of equipment that matches its capacity. This includes:

- a) Masks, both prescription and nonprescription.
- b) Rash guards and/or wet suits.
- c) Fins of all sizes.
- d) Booties to go with the fins.
- e) Snorkels.
- f) Emergency signalling devices when required.

### **2. Dive boats/Boats used for snorkelling**

- 1. Boats are the responsibility of the center and the crew.
- 2. Each boat must have at least a crew of 2-3, be dedicated to swimmer safety and support swimmers in any way that they can. It is recommended that the following be present on board:
  - a) A boat driving/captain's license from the appropriate authority with significant experience.
  - b) Center staff with adequate knowledge of the snorkelling location or other person approved by the base leader.
  - c) First aid/CPR certificate.
  - d) Oxygen resuscitation and therapy certificate or PADI/DAN Oxygen Provider Course.
  - e) Life jackets for non-swimmers or emergency situations.
- The boats must be able to communicate with the center at all times using a functioning walkie-talkie, phone, radio telephone or other direct communication device.
- The boats must have enough fuel to make trips to the snorkel sites and back, and accommodate any changes.
- The boat should be equipped with two engines or have a back up engine in case of engine failure.
- The center should provide the boat with a spare tank, spare snorkelling equipment, First Aid, Oxygen Kit, a dive flag and a boat ladder that allows easy entry and exit into/from the water.

### **8.5.5 Equipment Care and Maintenance**

1. Equipment should be serviced annually, and should be changed once every five years.
2. Equipment should be washed, dried and checked thoroughly after each use.

### **8.5.6 SOPS & OPERATING INSTRUCTIONS**

#### **1. Minimum qualifications for snorkelers**

- a. Swimmers wanting to snorkel must present the following:
  - Recent medical form stating that the person is fit to snorkel, or if the person has medical condition(s) that are contraindicated for snorkelling, then they should produce a certificate from a medical practitioner clearing them to snorkel.
  - Assurance that the person can swim and is comfortable in the water, and if not be willing to wear a life jacket for safety. Life jackets are compulsory for non/weak swimmers and must be checked by the instructor prior to the conduct of the activity.

#### **2. Supervision of snorkelling activities**

- It is essential to plan snorkelling trips – the center should be aware of any changes made to the trip plan.
- Snorkelling Guide cannot supervise more than 02 guests at a time.

#### **3. Cultural and environmental protection**

- Nothing should be taken from the sea, and particularly not cultural monuments/ artifacts.
- Damaging and extracting cultural monuments is prohibited.
- Snorkelers must protect the marine environment and its inhabitants. Snorkelers should avoid damaging coral and physical contact with marine animals. Sharks should NOT be fed under any circumstances
- Activities detrimental to marine protected areas (MPAs) and protected species are prohibited:
- Permits to swim/snorkel in MPAs may be required. These should be obtained before swimming in them

### **8.5.7 Documentation**

- a) Each center/office must have a record of each swimmer, including:
  - Full name and contact information.
  - Emergency contact information.
  - Details of activities that they did.

- Medical form and liability release waiver.
- All of this information must be kept and maintained by the company for a minimum of 5 years.

#### **8.5.8 Risk Mitigation**

- a) Swimmers should be thoroughly briefed before each trip. The brief should include information about safety regulations, depth limits, snorkel site characteristics, currents, entry and exit techniques, environmental considerations and potential hazards.
- b) The use of a life jacket as a flotation device while snorkelling is mandatory.
- c) Solitary snorkelling, in the absence of a 'buddy' or supervisor is NOT permitted.
- d) Centers must be aware of local weather conditions and inform swimmers of special conditions at each site prior to snorkelling.
- e) Conditions under which snorkelling is prohibited:
  - Extremely rough waters.
  - During storms.
- f) It is essential that snorkelers mark their presence clearly. Any boat with snorkelers operating from it must always have display signals (i.e. flags) by day or night to inform other boat users
- g) The dive flag can be used anywhere where divers or snorkelers are diving and should always be displayed by boats when swimmers are in the water.

#### **8.5.9 Emergencies & Rescues**

1. All centers must have an Emergency Action Plan
2. All center staff must be familiar with emergency oxygen equipment, and training sessions should be provided for all staff annually.

#### **8.5.10 Safety Briefing**

In addition to a site briefing, all swimmers should receive a safety briefing, detailing where emergency and first aid equipment are available on the boat. A boat safety briefing must also be given on boarding the boat.

This briefing should be made in addition to the site briefing.

#### **8.5.11 Medical Concerns**



Each swimmer should fill out a medical form clearing them from conditions that preclude them from snorkelling. If they do experience these conditions, they should receive written medical clearance from a practitioner, allowing them to snorkel.

### **8.5.12 Basic Minimum Standards For Grant Of Recognition To Operators**

1. The operator should be registered with APTDC.
2. The staff should meet the qualifications defined in section (2).
3. The center should have a full set of snorkelling equipment for the maximum number of snorkelers it can service.
4. The operator must have an Emergency Action Plan for which regular training must be imparted to the staff.
5. The Center must ensure that none of the guests would perform 'free dive' especially in shallow waters as the person might end up standing/stomping on the coral and that is harmful.
6. The snorkelling is permitted only in such areas where it is demarcated for snorkelling activities by competent authorities.
7. The company must follow a strict 'leave no trace' policy and conform to high sustainability standards.

## **8.6 Banana / Bumper**

### **8.6.1 Introduction**

1. **Banana rides** and **bumper rides** are popular water adventure activities where participants are towed on inflatable boats behind a speedboat.
2. These rides are thrilling but involve **high-speed movement, sudden turns, and risk of falls**, hence **strict safety** and **operational standards** are essential.
3. These guidelines aim to ensure **participant safety, environmental responsibility, and operator compliance**.

### **8.6.2 Licensing & Regulatory Compliance**

#### **Operators must:**

1. The crew involved in the activity/operations shall have valid license/Inland Vessel (IV) Certificate of Competency issued by the State Maritime Board or the designated authority. Certification from NIWS, YAI, RYA or other such institutions would be considered an additional qualification.
2. Register all boats with the AP **Inland Waterways** ~~or local port authorities~~.

3. Hold valid **insurance policies** covering participants, staff, and equipment.
4. Comply with local **pollution control norms** (no oil spills, garbage in water).

### **8.6.3 Safety & Emergency Management**

1. Mandatory Life Jackets:
  - Every participant must wear a certified life jacket sized appropriately.
2. Pre-ride Briefing:
  - Participants must be briefed on signals (stop, fall, emergency).
3. Escort/Rescue Boat:
  - A separate rescue boat must be on standby in the activity area.
4. First Aid:
  - A comprehensive first-aid kit must be available at the shore and carried by the operator.
5. Staff Certification:
  - Boat drivers and guides must hold valid boat operating licenses and First Aid certification.

### **8.6.4 Operations & Equipment Standards**

6. Speedboat Requirements:
  - Engine capacity must be appropriate (minimum 40 HP recommended).
  - Speed must not exceed **25 knots** during banana/bumper rides.
  - Boats must have emergency shutoff switches (kill cords).
7. Inflatable Requirements:
  - Inflatable tubes must be of marine-grade material and checked for punctures or leaks daily.
  - Inflatable ropes must be strong and rated for towing.
8. Passenger Limits:
  - Number of participants must not exceed the seating capacity recommended by the manufacturer.
  - Ideally, 4–6 passengers on a banana and 2–4 on a bumper at a time.

### **8.6.5 Ride Conduct**

1. Age and Health Restrictions:
  - Minimum age: **8 years** (accompanied by parents if under 12).

- People with heart conditions, epilepsy, recent surgeries, or pregnant women should **not** participate.
- 2. Ride Zones:
  - Clear designated ride zones marked by buoys — away from swimmers, other vessels, and sensitive marine ecosystems.
- 3. Weather Restrictions:
  - No rides during heavy rain, high winds, thunderstorms, or rough sea conditions.

#### **8.6.6 Documentation Requirements**

1. Vessel registration certificates, issued by APIWA being a nodal agency
2. Valid insurance documents,
3. Staff certifications (Boat license, CPR/First Aid training),
4. Daily maintenance and inspection logs for boats and inflatables,
5. Incident report forms (in case of accidents or injuries).

#### **8.6.7 Risk Mitigation**

6. Daily Safety Checks:
  - Check towlines, inflatable air pressure, boat engine conditions before operations.
7. Emergency Preparedness:
  - Staff must be trained for overboard rescues.
8. Incident Management:
  - Immediate reporting and documentation of any accidents, injuries, or equipment failures.

#### **8.6.8 Environmental Sustainability**

1. No oil spills, waste, or garbage disposal into water bodies.
2. Minimize noise levels and boat speeds near marine life-rich zones.
3. Encourage “**Leave No Trace**” behavior among tourists.

#### **8.6.9 Basic Minimum Standards For Recognition**

1. Registered office and valid business licenses,
2. Minimum two full-time trained and certified boat operators,
3. Maintained fleet with regular safety audits,
4. Operating within environmental, legal, and safety standards,

5. Regular participation in water-safety and eco-awareness training programs.

## **8.7 Scuba Diving**



### **8.7.1 Introduction**

SCUBA (Self contained underwater breathing apparatus) diving is an aquatic activity that allows people to interact with the marine world. When done correctly, it is enjoyable, fulfilling, and safe. However, a number of precautions need to be taken to ensure quality in execution.

For the purpose of this Guideline, the term 'diving' here is used to describe recreational diving only. Commercial and military divers and other occupational divers must adhere to these regulations when participating in their own activities.

### **8.7.2 Dive Instructors and Dive Masters: Basic Minimum Qualifications and Experience**

1. Each SCUBA diving center must have at least one dive instructor and one dive master.
2. The Dive Instructor must have a valid instructional license from a recognized national/international diving institute/ association (NIWS/PADI, NAUI, CMAS, etc.).
3. The Dive Master must have an up-to-date and valid license.
4. Only a dive instructor may impart teaching & training and certify students in courses, whereas, Dive Master to play assisting role. Under no circumstances should the Dive Master be permitted to impart training.
5. Dive center must ensure that it has adequate number of Instructors in place proportionate to number of activities it proposes to conduct, as well as the dive equipment's as per its inventory.
6. The Dive Centers offering 'fun dives/ try dives should have minimum 01 Site supervisor (EFR certified preferably a Life Saver), 01 certified Instructor, 02 certified Dive Masters, 01 EFR certified preferably a Life Saver and support staff (Boat-boys) as per requirement.
7. All Dive Centers must have its own website as per the standards and all activities that it offers should be furnished on it thereof. The fees for each type of activity, its duration, eligibility, broad contents for each course etc. must also be uploaded for the information of the Guest/trainees

8. Irrespective of the type of activity- try/ fun dive or training course, all participants should be given class-room session as per the stipulated course contents; and it shall be mandatory of part of the Dive Center to ensure the same.

9. Signage

### **8.7.3 Dive Center Requirements**

1. All Dive Centers need to be registered with APTDC.

2. All dive centers should be equipped with pure emergency oxygen and have an emergency plan ready in case of diving related accidents. The emergency plan should include mechanisms for:

a) Search and recovery of missing divers

b) Providing First Aid Care

c) Transport to the nearest appropriate medical facility

d) Reporting to the appropriate authorities (police, navy, coast guard, ministry of tourism, etc.)

3. All dive center staff must be familiar with this Emergency Action Plan and be able to act appropriately.

4. The dive center must have a Base Leader or manager who is responsible for the dive center and is responsible for day-to-day operation. The dive center manager must be an instructor or dive master.

a. In case the dive center leader is absent, an assistant must assume responsibility for the dive center.

5. The dive center must have enough equipment spare parts, equipment and course material for the courses being conducted.

6. The dive center must have a list of all services and courses conducted, with rates available in writing.

7. Dive centers must have dive insurance for employees and clients, including coverage for decompression chamber treatment.

### **8.7.4 Equipment Required**

#### **1. Diving Equipment**

Each dive center should have a full set of equipment that matches its capacity.

These include:

- a) Air and/or nitrox cylinders (appropriately marked and labeled).
- b) Buoyancy Control Devices (BCDs) in various sizes approved for recreational diving and with oral and low pressure inflators. The BCD should be maintained according to manufacturer instructions.
- c) Regulators approved for recreational diving by the manufacturer and maintained according to manufacturer guidelines. These should have submersible pressure gauges and alternate air sources.
- d) Masks, fins, snorkels, wet suits approved for recreational diving and maintained according to manufacturer guidelines.
- e) Weights and weight belts.
- f) Dive computers that provides depth, time and decompression readings for all dive center staff.
- g) Dive tables must be available for divers to work out their dives manually.
- h) Emergency signaling device – reflective inflatable surface balloon (surface marker buoy) and whistle.
- i) Underwater flashlights suitable for night diving.

## **2. Dive boats**

All dive centers offering boat-diving must have Dive Boat as per stipulation and as per following:

- a) It must be custom-made to suit the requirement of diving- number of passengers/capacity; chambers for placing of the filled cylinders, all essential safety, rescue and recovery gears and equipments- First Aid kit, Emergency Oxygen cylinder etc.
- b) The Hull designed in a manner that it has sufficient space to administer First Aid, CPR etc. to the victim.
- c) The boat should be equipped with two engines of minimum 60 HP each; or it should have a back-up engine in case of engine failure.
- d) The Boat must have a registration as per M.S Act/ I.V Act and its hull must be of IRS approved or as approved by another competent authority thereof. The Boat should be subject to annual reregistration and only such boats should be used for operations.
- e) The boat must have valid insurance coverage as the Law- boat, passengers etc.
- f) The boat should be handled by a master who is licensed and hold valid certificate in Boat-handling and Life Saving Techniques.
- g) Besides the Instructors and Dive Masters, at least one person who is duly certified Life Saving Techniques must onboard on the Dive Boat during the entire period of operations.
- h) While onboard, it is mandatory that everybody wear PFD of appropriate size.

- i) The diving shall be undertaken only at designated sites, where all precautions as per the standards and stipulations including demarcation of the site with buoys etc.

### **8.7.5 Equipment Care and Maintenance**

1. If a dive center professionally fills compressed air into cylinders, they are not to fill cylinders that have not been
2. hydrostatically pressure tested in the last five years. Dive center employees must be made aware of this.
3. Equipment and compressors should be serviced annually, and it is imperative that compressors have their oil changed frequently so that air quality is maintained.
4. All equipment must be washed, dried and checked thoroughly after each dive.

### **8.7.6 SOPs & Operating Instructions**

#### **1. Minimum qualifications for recreational divers**

A diver wanting to dive recreationally must present the following documents to the dive center:

- a) Dive certification card from a recognized agency that allows a person to dive in open water.
- b) Logbook validating open water diving experience.
- c) Recent medical form stating that the person is fit to SCUBA dive, or if the person has medical condition(s) that are contraindicated for diving, then they should produce a certificate from a medical practitioner clearing them to dive.
- d) Completed diver registration form (can be completed at dive center).

#### **2. Supervision of diving activities**

- a) All diving training and certification has to be done exclusively by SCUBA diving Instructors, who may be assisted by assistant instructors or Dive Masters as per the standard.
- b) All dive instructors must be in active teaching status with their dive training agency, and the agency with which the dive center is affiliated.
- c) If a SCUBA diver is certified, and cannot show proof that s/he has dived in the last 12 months, that diver is required to do a 'refresher' course, covering the essential SCUBA diving skills.
- d) It is essential to plan dives – dive centers must be aware of any changes to the dive plan of the dive boat and the divers.
- e) A dive instructor or dive master cannot guide more than 5 divers in the water at a given time.

### **3. Discover SCUBA Diving**

- a) A Discover SCUBA Dive (DSD) is provided to a client who is not a certified SCUBA diver.
- b) This activity MUST be done in the presence of a dive instructor or a dive master.
- c) The ratio of instructor or DM to client must be 1:1; i.e. at any given time, an instructor or DM cannot guide more than one diver during a DSD.
- d) The maximum allowed depth for a DSD should not be more than 12 meters.

### **4. Diving in restricted areas**

Some parts of the Andaman & Nicobar are patrolled/controlled by the military, navy or other government branches and are off limits to divers. It is recommended that dive centers consult with the appropriate authorities to find out about possible restrictions.

### **5. Cultural and environmental protection**

- a) Nothing should be taken from the sea, and particularly not cultural monuments/ artifacts.
- b) Damaging and extracting cultural monuments is prohibited.
- c) Divers must protect the marine environment and its inhabitants. Divers should avoid damaging coral and physical contact with marine animals. Sharks should NOT be fed under any circumstances.
- d) Activities detrimental to marine protected areas (MPAs) and protected species are prohibited:
  - Permits to dive in MPAs may be required. These should be obtained before diving in them.

#### **8.7.7 Documentation**

Each dive center/office must have a record of each diver, including:

- a) Full name and contact information.
- b) Emergency contact information.
- c) Details of dives/courses that they did (including duration, depth, surface intervals).
- d) All of this information must be kept and maintained by the dive company for a minimum of 7 years.

#### **8.7.8 Risk Mitigation**

1. Dive center staff must thoroughly brief divers prior to every dive. The brief should include information about safety regulations, depth limits, dive site characteristics, currents, entry and exit techniques, environmental considerations and potential hazards.
2. After each dive, a safety stop must be made for at least 3 minutes at 5 meters. Divers must commence their safety stop with a tank pressure not less than 50 bar.



3. The use of a buoyancy control device (BCD) is absolutely mandatory for all diving activities.
4. Solitary diving, in the absence of a dive master or dive instructor is NOT allowed under any circumstances.
5. Dive Centers must be aware of local weather conditions and inform divers of special conditions at each dive site prior to the dive.
6. Conditions under which diving is prohibited:
  - a) Dives deeper than 30 meters.
  - b) Dives less than 12 hours before a flight.
7. It is essential that divers mark their presence clearly. Any boat with divers operating from it must always have display signals (i.e. flags) by day or night to inform other boat users.
8. The dive flag can be used anywhere where divers are diving and should always be displayed by dive boats when divers are in the water. The dive flag is used to signal to boats, jet skis and others in the vicinity that divers are below, and that they should approach with caution.

#### **8.7.9 Emergencies & Rescues**

- a) All dive centers must have an Emergency Action Plan as mentioned in section 3(b).
- b) All dive center staff must be familiar with emergency oxygen equipment, and training sessions should be provided for all staff annually.

#### **8.7.10 Safety Briefing**

- a) In addition to a comprehensive dive briefing, all diver should receive a safety briefing, detailing where emergency and first aid equipment are available on the boat. A safety briefing about the boat must also be given after boarding the boat.
- b) This briefing should be made in addition to the dive briefing.

#### **8.7.11 Medical Concerns**

- a) Each diver should fill out a medical form clearing them from conditions that preclude them from diving. If they do experience these conditions, they should receive written medical clearance from a medical practitioner, allowing them to dive.
- b) These medical concerns are listed in the medical statement provided by the SCUBA diving center's certifying agency

#### **8.7.12 Basic Minimum Standards for grant of Recognition to operators**

1. The dive operator should be registered with APTDC.
2. The dive center should be affiliated with one or more international SCUBA diving agencies.
3. The dive staff should meet the qualifications required by the agencies with which the dive center is affiliated.
4. The dive center should have a full set of equipment for the maximum number of divers it can service.
5. The dive center should comply with its agency's requirements for safety standards and documentation of dives and certifications.
6. The dive centre must have an Emergency Action Plan for which regular training must be imparted to the dive centre staff periodically.
7. The ATO must follow a strict 'leave no trace' policy and conform to high sustainability standards.

## **8.8 Floating Restaurant**

### **8.8.1 Introduction**

1. A **Floating Restaurant** is a dining facility located on a vessel (barge, pontoon, houseboat, or anchored ship) offering food and beverage services on water bodies like lakes, rivers, backwaters, or coastal areas.
2. It combines hospitality with marine operations, requiring strict compliance with safety, environmental, and hospitality standards.

### **8.8.2 Licensing & Regulatory Compliance**

1. Operators must secure permissions from:
  - Inland Waterways Authority / Maritime Board,
  - Food Safety and Standards Authority of India (FSSAI) for food services,
  - State Tourism Department (where required),
  - Pollution Control Board (for waste management compliance).
2. Fire Safety Certificate from the State Fire Department is mandatory.
3. Crew of the proposed operations shall attend Fire safety courses mandatorily or frequent workshops may be conducted with the help of Rastriya Life Saving Society /Yachting Association of India/ National Inland Navigation Institute etc

### **8.8.3 Safety & Emergency Management**

1. **Life Jackets:** Mandatory for all passengers and crew, easily accessible at all times.
2. **Safety Drills:** Fire evacuation and emergency response drills must be conducted monthly.
3. **Emergency Exits:** Clearly marked and unobstructed always.
4. **First Aid:** Certified First Aid kits and AED (Automated External Defibrillator) must be available.
5. **Crew Training:** All crew must be trained in First Aid, Firefighting, and Water Rescue techniques.

#### **8.8.4 Operations & Equipment Standards**

1. **Anchorage Stability:** Floating structure must be securely anchored or moored according to tidal, river current, or water body standards.
2. **Structural Integrity:** Regular inspection of pontoons, hulls, and flotation devices.
3. **Electrical Systems:** Marine-grade wiring to avoid short circuits, with backup power supply (generator/inverter).
4. **Fire Equipment:** Fire extinguishers, fire blankets, and automated sprinklers in kitchen areas.
5. **Kitchen Standards:** Proper ventilation, smoke exhausts, and marine-grade gas cylinders with safety cut-offs.

#### **8.8.5 Environmental Sustainability**

1. Zero Discharge Policy: No direct discharge of waste (solid or liquid) into the water body.
2. Waste Management: All solid waste segregated, composted, or disposed of ashore as per local regulations.
3. Eco-friendly Products: Use of biodegradable cutlery, straws, and cleaning materials encouraged.
4. Noise & Light Pollution: Controlled to minimize disturbance to aquatic life and nearby communities.

#### **8.8.6 Documentation Requirements**

1. Vessel Registration Certificate,
2. Annual Seaworthiness Certificate,

3. Insurance (Public Liability, Vessel Insurance, Staff Insurance),
4. FSSAI License for food handling,
5. Pollution Control Compliance Certificate,
6. Staff Certifications for First Aid, Safety, and Firefighting,
7. Emergency Response Plan and Logbook of safety drills.

#### **8.8.7 Customer Briefing & Information**

1. Passengers to be briefed on:
  - Safety exits, life jacket locations, and evacuation procedures,
  - Rules regarding onboard movement and behavior,
  - Emergency contact numbers displayed visibly.
2. Mandatory signage for:
  - No Smoking Zones,
  - Restricted Areas (engine rooms, kitchens, etc.),
  - Safety instructions.

#### **8.8.8 Basic Minimum Standards for Recognition**

1. Must operate with all necessary licenses and approvals.
2. Structure has to be certified by a structural engineer.
3. Must have a minimum of two full-time qualified safety and rescue personnel onboard.
4. Must maintain SOPs for food safety, water safety, and emergency management.
5. Must have a "Leave No Trace" policy towards environmental conservation.
6. Recommended to seek certification from recognized hospitality or safety bodies.

### **8.9 River Cruising**

#### **8.9.1 Introduction**

1. **River Cruising** involves navigating a **navigable river** in a **small-sized cruise ship** to experience activities and visit destinations located along the riverbanks.
2. Ships offer **facilities of starred hotels** along with **safaris and excursions** from the vessel.

3. As a **water-based adventure**, strict adherence to safety and operational guidelines is necessary to ensure the security of guests and crew.

### **8.9.2 Guides / Instructors**

#### **1. Operations are divided into three categories:**

- a) **Navigation** (led by the Master of the Ship),
- b) **Tourism** (excursions and guest experience),
- c) **Hospitality** (onboard services).

#### **2. Navigation Crew:**

- a) **Master of the Ship:** Licensed First-Class Master,
- b) **Second Class Master:** Assists navigation,
- c) **Licensed Engine Driver:** Also acts as Chief Engineer,
- d) **Second Class Engine Operator:** Assists in engine operations.

#### **3. These qualifications are governed under Inland Vessel Operations Statutory Laws.**

### **8.9.3 Equipment**

1. The **Ship** itself is the main equipment.
2. Must be **built as per Marine Ship Building Laws** and monitored by State Inland Waterways Authorities.
3. Optionally, construction under an international **Ship Classification Society** (e.g., Indian Register of Shipping, Lloyd's Register) is encouraged.
4. **Surveyors** inspect each construction stage and are **legally accountable** for quality.

### **8.9.4 Inspection & Maintenance**

1. **Annual Inspections:** Conducted by both the Class Certification Society and State Waterways Authority, whichever is applicable
2. **Dry Docking** shall be carried out as per IV act 2021 and the rules made thereunder.
3. Inspections focus on submerged parts of the ship to prevent deterioration.

### **8.9.5 Sops & OPERATING INSTRUCTIONS**

1. Operations follow the daily logbook system:
  - Navigation supervised by the First-Class Master,
  - Machinery and engines by the Chief Engineer (L.C. Driver).
2. Regular machine maintenance and overhaul is mandatory and recorded.

### **8.9.6 Documentation**

Complete documentation must include:

1. Ship survey reports,
2. Licenses issued by the certification society and statutory authority,
3. Maintenance logs,
4. Insurance papers for ship, crew, and passengers.

#### **8.9.7 Risk Mitigation**

1. Insurance for ship, crew, and passengers is **mandatory**.
2. **Proper design, supervised construction, and regular inspections** are key to risk reduction.
3. All **shore excursions** must comply with **ATOAI safety guidelines**.

#### **8.9.8 Emergencies & Rescues**

- Ships must be equipped with:
  - **FFA** (Fire Fighting Appliances),
  - **LSA** (Life Saving Apparatus).
- Crew must be trained in emergency procedures.
- River cruising offers easier access to **land-based evacuation routes**, making emergencies manageable.

#### **8.9.9 Safety Briefing**

- Upon boarding Guests must receive a detailed **safety briefing**,
- Must explain emergency drills, life jacket use, muster stations, and evacuation procedures through **pictorial demonstrations**.

#### **8.9.10 Medical Concerns**

1. A **qualified senior nursing attendant** is usually onboard as a first responder.
2. With easy road access from riverbanks, **ambulances or helicopters** can be arranged quickly if evacuation is needed.

#### **8.9.11 Basic Minimum Standards for Recognition**

1. **Mandatory approval** by the State Statutory Authority.
2. **Highly recommended** to also get approval from an International Class Certification Society.
3. Operators must:
  - Follow strict **"Leave No Trace"** and **sustainability standards**



## 9 Guidelines for Houseboats

### 9.1 Introduction

Andhra Pradesh offers unique and relatively lesser-known backwater experiences that can captivate travellers looking for tranquillity and natural beauty. The backwaters in Andhra Pradesh are a network of rivers, lakes, canals, and lagoons that lie parallel to the Bay of Bengal coast. This intricate water system is part of the Godavari and Krishna river deltas, which are among the largest in India and suitable for House Boating activities.



### 9.2 Documentation

- 1) Builder Certificate, drawings issued by Classification Society i.e. member of International Association of Classification Society (IACS) approved Boats only permitted or as per the provisions of the Andhra Pradesh Boat Rules, 2021 (framed under the AP Maritime Board Act, 2021), subject to the condition that the drawings, designs and stability to be certified by the naval architect as per Inland Vessel Act 2021”.
- 2) The crew involved in the activity/operations shall have valid PBH license/Certification from NIWS, Goa/YAI/RYA or from other reputed institutions.
- 3) Clearances from Irrigation, Forest, Fisheries and AP inland water ways
- 4) Clearance for Pollution and Waste Management/Disposal from A.P Pollution Control Board
- 5) The Houseboat which will ply in the area of operation/route allotted by the competent authority after successful allocation of the route.
- 6) Certificate of Competency (COC) in respect of all the Crew members as per Safe manning as per IV Indian Vessel Act.
- 7) Houseboat owners must have appropriate insurance coverage for their boats, crew & passengers. The insurance should cover third-party liability, theft, damage, and personal injury.

### 9.3 Technical Safety Standards

- a) The general condition of the boat should be good. This will be depend of the following criteria:
  - The hull and super-structure should be stable.
  - The flooring should be made of marine plywood.



- The hull should be made of Steel or Fiber Reinforced Plastic (FRP) or wood, in consideration of the salinity levels of the waterways of Andhra Pradesh.
  - The operational condition of the transmission system shall be excellent. This will be determined by the condition and firmness of fit of the following components of the transmission system: the engine, the gearbox, the stern gland, the main shaft, the intermediate shaft, the connecting flanges, the couplings, etc.
- b) The alignment of the shaft and engine shall be optimal with nil/very low vibrations. The presence of any excessive vibration should be addressed and fixed before the deployment of any craft.
  - c) (d) Excessive water leakage, if any, from the stern gland shall be checked for and fixed before the deployment of any craft.
  - d) The cooling system shall be in excellent working condition. Water flow shall be continuous while the main diesel engine is running.
  - e) A two stage cooling system shall be adopted in view of the salinity levels in the back waters.
  - f) The Bilge system shall be in excellent working condition. If any defects are found, they are to be addressed and fixed before the deployment of any craft.
  - g) Gross Registered Tonnage (GRT) and Net Registered Tonnage (NRT) shall be determined before fixing the tourist capacity. This data will provided be specified by the manufacturer of the craft. There shall also be a certification provided by the Inland water ways surveyor when the Operator applies for permission.
  - h) Depth indicators are required for House boats before any permission can be issued for sail boats.
  - i) Constructional drawings certified by a Naval Architect are required for new boat permissions.
  - j) If the length: breadth ratio is less than 4, a craft must be a single deck vessel. Second deck seating shall be avoided. This data will be specified by the manufacturer of the craft. There shall be a certification provided by the Inland Water Ways surveyor after operator applies for permission.

#### **9.4 Pollution and Waste Management/ Disposal**

The ATO shall adopt suitable technologies during the construction phase for disposal of both liquid and solid waste as per applicable Rules/Norms specified by reputed institutions updated from time to time and maintain the waste disposal records for compliances.

#### **9.5 Food Safety Certificate**

Online Application through FSSAI at <https://fosc.fssai.gov.in/>

## **9.6 Conditions for Operation of House boats**

1. The Vessel owner/operator shall comply with all safety measures provided by Govt. of India and Government of Andhra Pradesh issued from time to time.
2. For renewal of registration, periodical surveys by APIWA of these/House Boats and other legal requirements will be followed by the owner/operator of the vessels as per Agreement signed by the Operator and APTDC
3. Area of Operation will be within limits as specified by APTDC, as per zone prescribed in the NoC issued by APTDC
4. The House Boat Operator must comply with Employees Provident Fund (EPF) and GST (Goods & Service Tax) laws and proof of compliance/registration under EPF and GST should be submitted to the Director (Admin) for initial registration of House Boats.
5. The House Boat operator shall provide details of staff attached with the House Boats at the time of registration and shall have 60% of staff deployed on the house boats from amongst the local residents on the allotted route.

## **9.7 Standards, Environment Friendly and Responsible Tourism Practices**

1. Responsible tourism friendly policy should opted for sustainable growth which also benefits the local community and does not adversely affect the, marine life, coastal ecosystem and local environment. Use of eco-friendly practices and local products should be encouraged.
2. There should be a provision of facility for segregation of garbage into biodegradable (kitchen waste etc), non-bio-degradable (thermocoal products, aluminium foil, cigarette butts etc) & recyclable (newspapers, bottles, cans etc). Solid waste and sewage disposal should be carried out in an orderly and eco-friendly manner. Each House boat should be provided with a system for the reception, storage and disposal of all refuse and waste water originating from the boat. All such materials should be handled in a manner so as not to create any offence, hazard to health, harbourage for vermin nor permit possible fly/mosquito breeding.
3. Two standard pattern garbage covered receptacles / bins for biodegradable and non-degradable waste should be provided for each boat which should be cleaned at least twice a day.
4. The houseboat should follow an adequate and safe method of sewerage collection and disposal. The sewerage system should be installed in accordance with the requirements of the concerned authorities.

## **9.8 Inspection and Compliance**

APTDC along with its Technical Team and A.P Inland Water way Officials will conduct an initial inspection to ensure the houseboat meets safety and environmental standards after obtaining Registration Certificate.

## **9.9 Periodic Inspections**

Registered houseboats must produce ~~annual~~ IRS Certificate during construction to maintain safety and Standards of the Houseboat and annual inspections and certifications shall be carried out by the appropriate authority as per the Inland Vessels Act, 2021, based on the type and classification of the vessel.

## **9.10 Safety Standards**

Houseboats must comply with the safety and manning requirements. The houseboats must be equipped with life jackets, fire extinguishers, first aid kits, comply with the standards for electrical systems and ventilation and other safety equipment. Houseboats should have an emergency response plan in place for situations such as floods or other natural disasters.

## **9.11 Night Operations**

Permission of houseboat operation for day/ night plying will be subject to operation limitations issued by APTDC.

## **10 Guidelines and Regulations for Air based Adventure Tourism**

### **10.1 Paragliding / Hand Gliding**

#### **10.1.1 Introduction**

Paragliding and hang gliding loosely come under free flying, along with gliding. Unlike gliders, both are very light and can be launched on foot, creating a separate category of foot-launchable gliders. Since it is an adventure activity, instructors/ guides must be qualified, and the equipment used should be of the highest standard.

**Paraglider** is a glider that achieves its aerofoil structure without any solid reinforcement; from RAM air pressure between two layers of fabric.

**Hang Glider** is a delta wing that has a fabric aerofoil with an aluminium frame and inserts.

#### **10.1.2 Adventure Guides: Basic Minimum Qualifications and Experience**

##### **Tandem:**

- a) Pilots must have minimum P4 level training as a solo pilot, achieved 100 hours of solo flying, and a minimum of 100 km xc flight within two days or 60 km xc flight within one day in EN-B class glider. A conversion course to tandem pilot must be undertaken.
- b) 50 non-commercial flights as a sports tandem pilot before converting to commercial flying.
- c) If available, a pilot should be duly certified by an accredited national association.

##### **Instructor:**

- a) P5 solo rating on FAI safe pro levels.
- b) Worked as trainee instructor with a reputed instructor for 2 years.
- c) Taken instructor certification from an accredited association.

##### **Equipment Required:**

- a) EN /SHV/ DHV/ AFNOR certified wing and reserve parachute.
- b) Certified harness and helmet.

#### **10.1.3 Ratings**

Paragliding Association of India (PAI) has developed a National Pilot Rating System, which certifies pilots up to the Sports Tandem level or reputed organizations certified by National and International.

The ratings describe the paragliding proficiency or skill levels of the National Paragliding Rating System – India. These levels are considered equivalent of major systems around the world and follow the FAI Safepro Para system.

<b>Levels</b>	<b>PA1</b>	<b>BHPA</b>	<b>USHPA</b>	<b>APPI</b>
Level 1 (P2)	Student Pilot	Elementary	Novice	Explore
Level 2 (P3)	Novice Pilot	Club	Intermediate	APPI Pilot
Level 3 (P4)	Pilot	Pilot	Advance	Intermediate Pilot
Level 4 (P5)	Advance Pilot	Advanced	Master	Advance Pilot
Level 5	Sports Tandem	Tandem	Tandem Instructor	Non-Commercial Tandem

#### **10.1.4 Equipment Care and Maintenance**

A logbook of equipment and maintenance is to be kept.

#### **10.1.5 Inspections & Maintenance Procedures**

All commercially used equipment must be inspected for fabric porosity and line length annually.

#### **10.1.6 SOPs and Operating Instructions**

1. Passengers should be briefed on the basics of flight and the risks involved.
2. Staff introductions and their training.
3. Passengers should sign liability release waivers.
4. Passengers/ pilots should wear appropriate clothing that is safe and comfortable for the task and weather.
5. No aerobatic manoeuvres are to be done with clients.
6. No overloading or underloading of equipment.
7. Should fly conforming to VFR and in VMC. Cloud or night flying is strictly prohibited.
8. Any incident is to be fully documented and reported.
9. Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult.

#### **10.1.7 Documentation**

1. Pilot certification and logbook.

2. Equipment logbook and service record –

- a) Operator to maintain a copy of all the service records (As per the schedule specified by the OEM)
- b) Capital repairs attended to the Equipment's including hull to be recorded and to be maintained for every craft.
- c) Monitoring Agency to safe guard the service records.

3. Liability insurance, pilot insurance.

4. Emergency action plan.

**10.1.8 Risk Mitigation**

1. Operations are to be undertaken at sites judged to be safe for paragliding/ hang gliding operations.

2. Selected sites should not have any turbulence sources or hazards.

3. Life jackets are to be mandatory if operating near water.

4. Wing should be inspected annually for porosity and line lengths.

5. A first aid kit, stretcher (spinal board), and qualified staff should be available at the site.

6. Pilots should be first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.

7. Emergency response time (ambulance) and distance to the hospital should be conveyed to the passenger and emergency numbers available at the location.

8. A detailed emergency action plan should be in position and training for the same provided to the staff periodically.

**10.1.9 Emergencies and Rescues**

1. First aid and proper equipment for stabilization and removal from a life-threatening situation.

2. Contact numbers for an ambulance and other emergency services.

3. Evacuate at the very earliest.

4. Get witness statements before debriefing them.

5. Write your report.

6. Submit reports and follow up on the injured.

7. Take immediate action to improve any weakness in equipment or staff exposed by the incident.

#### **10.1.10 Safety Briefing**

All instructors and guides should be able to give a thorough safety briefing that covers all safety aspects and detailed instructions about a safe flight. This briefing must be clear and given in English, Hindi, Telugu that the passenger can understand.

1. Passengers should be briefed on equipment and the clip-in, and clip-out process.
2. The briefing should cover emergency procedures.
3. Any sensitive parts within reach of passengers should be marked and briefed upon appropriately.
4. Essential communication terms/ signals should be explained.

#### **10.1.11 Medical Concerns**

There should be a clear declaration of medical conditions that are not suitable for paragliding or hang gliding the operator. Any flight taken with differently abled passengers should be well planned, documented, and reported in advance. All instructors and guides must be able to ensure that a question regarding medical issues is asked before the activity is conducted. It is recommended that heart patients, those with spinal issues, recent surgery, or any other medical issue of concern, expecting mothers, and underage children do not undertake the activity. It is also recommended to check for epilepsy and asthmatic patients, on the extent of their ailment. Asthma inhalers must be carried by clients and preferably handed over to the guide.

#### **10.1.12 Basic Minimum Standards for Grant of Recognition to Operators**

1. It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfill the following criteria:
2. The entity must have qualified personnel (minimum two full-time qualified staff) on their payroll.
3. This person must have the requisite experience in the activity and have valid first aid/ CPR certification by Red Cross, or any other similar course conducted/ recognized by the Government of India.
4. The entity must own specialized equipment commensurate with the needs of undertaking and running such an operation (specified above). Proof of good equipment, certification where applicable, and inspection of safety equipment.

5. The entity must operate with the required permits/ licenses and registered with APTDC
6. The entity must have at least one certified and experienced person on its Board.
7. The company must follow a strict 'leave no trace policy' and conform to high sustainability standards.
8. Inspection of site and permission/ right of use of the site.
9. Declaration of conforming to flight rules, risk mitigation, and airspace rules.
10. Declaration to follow existing association rules and new ones that might be introduced.

## **10.2 Para Motoring**

### **10.2.1 Introduction**

Paramotor is a paraglider powered by a small motor and propeller, either foot launched, or trike based.

The following rules will apply to both PPG (powered paraglider) and powered parachutes. Powered parachutes have lesser performance canopies but able to handle bigger engines.

1. **Paramotors:** paraglider or dedicated paramotor wing with reflex foil design. Powered by sub 350cc engine unless it has torque cancelling technology. Can launch with trike/quad or on foot.
2. **Powered Parachute:** Proper powered parachute powered by engine and based on trike/quad only.

### **10.2.2 Adventure Guides: Basic Minimum Qualifications and Experience**

To regulate paramotoring in India, the Paragliding Association of India (PAI) offers a National Paramotoring Pilot Rating System or any other reputed organizations certified by National and international.

Pilots must have at least P3 level training as a paraglider pilot, completed a conversion course to paramotors, and accumulated a minimum of 200 hours of solo paramotoring experience before carrying passengers. There should be an additional 100 hours of non-commercial tandem flying before undertaking commercial tandem flight.

### **10.2.3 Equipment Required**

1. EN (The European Committee for Standardization) / SHV (Swiss Hang Gliding and Paragliding Association) / DHV (Deutscher Hangegleiter Verband) / AFNOR (French Association of Normalization) certified wing and reserve parachute.
2. A motor/trike set either from a well-known company having sold more than 100 units and been in the market for more than 2 years.



3. If fully or partly self-fabricated, a minimum testing for 200 hours or one year whichever is less (this must be non-commercial flying) before any commercial flying. Self-developed parts of unit should be presented to peers for review.

4. All testing and improvement of the self-developed part of a kit should be well documented in a logbook, with videos and photographs. Once national certification of paramotors comes into force, these should conform to the rules.

#### **10.2.4 Equipment Care and Maintenance**

1. A logbook of equipment and maintenance to be kept.

2. All flying activity, repairs and modifications must be logged. If there are any serious modifications, they will be required to undergo appropriate amount of testing hours again. These hours to be stipulated and declared along with modification entry along with reasoning for the same.

3. Recommended service interval of all major parts to be posted at place of business and in beginning of logbook and strictly followed.

#### **10.2.5 Inspection and Maintenance Procedures**

All commercially used equipment to be inspected as per manufacturers specifications. A peer review of equipment and operations by a group of peers from outside your company (minimum 3 people) must be conducted prior to commencing commercial operations and minimum once a year. Maintenance schedule if given by manufacturer to be strictly adhered to. If assembled equipment, then schedule should match that of known producers/ conducted at shorter intervals.

#### **10.2.6 SOPs and Operating Instructions**

1. Passenger should be clearly briefed on basics of flight covering risks and staff introductions and training.

2. Passenger should sign liability release waiver.

3. Passenger /pilot should wear appropriate clothing that is safe and comfortable for the task and weather.

4. No aerobatic manoeuvres to be done with clients

5. No overloading or underloading of equipment.

6. Should fly conforming to VFR and in VMC. No cloud or night flying allowed.

7. Any incident to be fully documented and reported.

8. Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an Guide.

#### **10.2.7 Documentation**

1. Pilot certifications and logbook.
2. Equipment logbook and service record.
3. Liability cover when and where available.
4. Emergency action plan.

#### **10.2.8 Risk Mitigation**

1. Operations to be undertaken at sites judged to be safe for paramotoring operations.
2. Paramotoring sites should not have any turbulence sources or hazards.
3. Approved Life jacket to be mandatory if operating near water. In such cases, equipment should have flotation attached.
4. Wing should be inspected annually for porosity and line lengths.
5. Motor should be serviced regularly, as per the manufacturer's specifications.
6. First aid kit, stretcher (spinal board) and qualified staff should be available at the site.
7. Pilots should be first aid/ CPR certified.
8. Emergency response time (ambulance) and distance to hospital should be clearly conveyed to passenger and emergency numbers available at location.
9. A detailed emergency action plan should be in position and training for the same provided periodically.

#### **10.2.9 Emergencies and Rescues**

1. Immediate first aid and stabilization and removal from life threatening situation.
2. Contact ambulance and other emergency services and evacuate at the very earliest.
3. Get witness statements before debriefing them.
4. Write your own report.
5. Submit reports and follow up on injured.
6. Take action to improve on any weakness in equipment or staff exposed by incident.

#### **10.2.10 Safety Briefing**

1. Passengers should be briefed on equipment and clip in, clip out process.
2. Briefing should cover emergency procedures.

3. Any sensitive parts within reach of passengers should be clearly marked and briefed upon appropriately.
4. Essential communication terms/ signals should be explained.

#### **10.2.11 Medical Concerns**

There should be clear declarations of what medical conditions are not suitable for sport. Any flight taken with differently abled passengers should be well planned, documented and reported in advance. A formal clearance taken from association in charge if there is one.

#### **10.2.12 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfill the following criteria:

1. The entity must operate with the required permits/ licenses and registered with APTDC
2. Registration with association controlling the sport if any.
3. Proof of trained staff.
4. Proof of good equipment, certification where applicable and inspection of rest of the equipment.
5. Inspection of site and right of use of site.
6. Declaration of conforming to flight rules, risk mitigation and airspace rules.
7. Declaration to follow existing association rules and new ones that might be introduced.
8. The company must follow a strict 'leave no trace' policy and conform to high sustainability standards.

### **10.3 Hot Air Ballooning**

#### **10.3.1 Introduction**

Hot air balloons work according to the natural law that hot air is lighter than cold air. To generate lift and therefore take flight, hot air balloons employ a burner that heats the air within the balloon until it becomes lighter than the external air. The difference in the temperature inside the balloon relative to the outside temperature, determines the amount of lift the balloon will have. Accordingly, by controlling the internal temperature, the balloon's flight is controlled with respect to ascent and descent.

The single most defining factor of balloon flight safety is the weather. From take-off to landing, fog, rain, snow, wind, thermal winds, etc. are all key elements to consider when attempting a safe hot air balloon flight. Before a safe balloon flight can begin, the pilot must always check the forecast and select a suitable departure and landing area. The DGCA. (Director General Civil Aviation) in India has formulated regulations for hot air balloons in the Civil Aviation Requirements, CAR Section 2 – Airworthiness, Series 'F' Part XV, Revision-1, dated 11th November 2008 of DGCA, Ministry of Civil Aviation, Government of India and wherever any clarification needed should be read with this CAR.

There are two main types of hot air balloon flight:

1. **Free Flight** – This is where a Balloon takes off from one location and travels with the wind to land at another alternate location.
2. **Tethered Flight** – This is when ropes are safely attached to the balloon and the balloon ascends and descends on the spot, with the ropes restraining the balloon from flying away with the wind.

There is no difference as far as the regulations are concerned between free flights (without ropes) & tethered flights (with ropes). All the requirements for operator certification, pilot qualifications, equipment registration and maintenance have to be met for tethered flights as well.

### **10.3.2 Adventure Guide/ Instructor – Basic Minimum Qualifications and Experience**

1. To fly hot air balloons, one must have a balloon pilot license issued by the DGCA.
2. If an operator employs foreign pilot, then those pilots must have a valid FATA (Foreign Aircrew Temporary Authorization), which is issued by the DGCA.
3. As part of all pilot license requirements, every pilot must be having a medical certificate endorsed by the relevant Civil Aviation authority.

### **10.3.3 Equipment Required**

Instruments & equipment to be carried by balloons in flight:

1. Hand fire extinguisher of an approved type, in the main compartment carrying personnel.
2. Safety harness for each personnel on board. The harness for each person need not be provided for gondola or basket type of balloons.
3. A compass, an altimeter and a rate of climb indicator.
4. First aid kit (as per CAR Series X Part III).

5. A fuel quantity gauge.
6. An envelope temperature indicator.
7. 3 separate ignition sources.
8. Two-way R/T communication equipment.
9. Flight manuals, operations manual and all other relevant manuals as specified by the DGCA.

#### **10.3.4 Equipment Care and Maintenance**

Balloons are certified aircraft and, as such, are regulated by the DGCA. They must meet manufacturing standards and are subject to periodic inspections, just like a commercial aircraft. All balloons must be registered with the DGCA. and its registration number must be displayed on the balloon.

#### **10.3.5 Inspection and Maintenance Procedures**

Based on manufacturer maintenance manual, operators need to prepare an Aircraft Maintenance Program (AMP) which must be approved by the DGCA. Details of all inspection schedules are as follows:

##### **Part 1: Scheduled Inspections**

These routine inspections are accomplished at regular, planned intervals. They consist of following inspections:

<b>Inspection</b>	<b>Interval Inspection</b>
Pre-flight inspection	Before every flight
100 hr./1 year inspection schedule	At every 100 hr./1 year of flying

##### **Part 2: Component Overhaul & Service Life Limits**

<b>Item</b>	<b>Frequency</b>	<b>Inspection</b>
Envelope	300hr./3 years, whichever is earlier and then every 100 hr./1 year, whichever is earlier	Grab test
Fuel cylinder	5 years & 10 years	Hydrostatic test
Fuel cylinder pressure relief valve (PRV)	Every 10 years	Replace

##### **Part 3: Unscheduled Inspections**

This part contains the special inspections considered necessary if the balloon has been subjected to overheating or a hard landing or contact with power lines. Following are the conditions in which these inspections are to be carried out:

- Inspection after overheating
- Power line contact inspection
- Hard landing inspection

### **10.3.6 SOPs and Operating Instructions**

Hot air ballooning should be undertaken with the following considerations:

1. Operating instructions must be followed as per the operations manual approved by the DGCA.
2. Flight manual information and approval. The flight manual must contain:
  - A description of the balloon and its technical equipment with explanatory sketches.
  - Operating limitations, normal procedures (including rigging, inflation and deflation), emergency procedures, and other relevant information specific to the balloon's operating characteristics and necessary for safe operation.
  - Specification of the permissible lifting gas.
  - Information for ground handling, transport and storage.
3. Height Limit: The maximum height limit for hot air balloons shall be 400 ft. from above ground level (AGL).

### **10.3.7 Documentation**

The following documentation is required to be maintained by the operator:

#### **1. Administrative:**

- Details of owner and operator.
- Document indicating the annual inspections carried out by an inspecting body.
- List of pilots along with copies of relevant certifications.
- Evidence of public and other liability insurance.
- Copies of permission from the Airports Authority and local collector.

#### **2. Operational:**

- Logbook containing the daily operation sheets.
- Accident/ incident report sheets.
- Flight and operations log.
- Passenger manifest sheets.
- Risk assessment and management plan.
- Emergency procedures manual.

- Manufacturer's product manual.
- Current inspection report.

### **3. Following manuals have to be prepared and approved by DGCA:**

- Maintenance Organization Exposition (MOE)
- Continuing Airworthiness Management Exposition (CAME)
- Operation manual.
- Security manual.
- Flight safety manual.
- Safety management system manual.

### **4. Information to be provided for participants and visitors:**

- Description of the activity.
- Safety instructions.
- Weather, medical and age restrictions.
- Information relating to personal public liability insurance of the operator.

### **10.3.8 Risk Mitigation, Emergencies and Rescue**

The PIC should be familiar with all emergency procedures listed in the DGCA approved flight manual including:

- Emergency landings.
- Pilot flame failure.
- Fire on the ground.
- Fire in the air.
- Blast valve failure.
- Contact with power lines.

Each ballooning operator should establish and review procedures for all possible emergencies. Every pilot and passenger should thoroughly understand emergency procedures. Pre-flight passenger briefing must be carried out by the pilot in command. A monthly risk assessment needs to be carried out and reviewed by the chief pilot and the owner/ operator and records shall be maintained.

### **10.3.9 Safety Briefing**

Safety information to passenger is essential, as is certain practical advice, like basket layout and how to access the basket. As per the flight manual, the following briefing must be provided to passengers:

#### **1. General briefing**

2. Passenger briefing (pre-inflation)
3. Pre-flight briefing
4. Pre-landing
5. After landing

#### **10.3.10 Medical Concerns**

As per the DGCA guidelines, all hot air balloons must have comprehensive insurance that includes coverage of all passengers, pilot and third-party liability. As a matter of best practice, all commercial operators should expect every passenger to have a basic level of general health and physical wellbeing, this includes:

- No recent surgery.
- No known significant hip, knee, neck or back problems.
- No recently broken bones.
- Not currently pregnant.
- Ability to stand for at least 1 hour without rest.
- Children under the age of 18 are prohibited from participating in high-risk activities, whereas those aged 12 and above may engage in activities with moderate risk. Minors involved in adventure activities must be accompanied by an adult.
- Not under the influence of alcohol or drugs at the time of flight.

The pilot is responsible to assess the medical condition of all passengers before boarding a hot air balloon flight and the pilot and the operator reserves the right to refuse any passenger to fly if they believe that they are not medically fit to fly.

#### **10.3.11 Basic Minimum Standards for Grant of Recognition to Operators**

It is highly recommended that any outfit, entity, establishment, or company seeking a grant of recognition must fulfill the following criteria:

1. For the commercial operations of hot air balloons, the operator must have a valid Air Operator Permit (AOP) as issued by the DGCA.
2. All balloon organizations have to be approved by the DGCA under the Aircraft Maintenance Organization (AMO) as per CAR-145 and Continuing Airworthiness Management Organization (CAMO) as per CAR-M, Sub-Part G.
3. If the operator is certified as an Aircraft Maintenance Organization (AMO), the Quality Manager (QM) must submit a Maintenance Organization Exposition (MOE) which must be subsequently approved by the DGCA.



4. For approval of Continuing Airworthiness Management Organization (CAMO), the Continuing Airworthiness Manager (CAM) must submit a Continuing Airworthiness Management Exposition (CAME) which must be subsequently approved by DGCA.
5. The agency must be registered with APTDC.
6. Before every flight, the pilot must ensure that the balloon has a valid and current certificate of Airworthiness (C of A) and Airworthiness Review Certificate (ARC).
7. Pilot has to check Certificate of Release to Service (CRS) before every flight which is issued by the Aircraft Maintenance Engineer (AME).
8. Hot air balloons engaged in commercial operations must possess a Type Certificate issued or validated by the DGCA or an export Certificate of Airworthiness issued by a country whose airworthiness standards are equivalent and acceptable to DGCA.
9. All balloon operators must have an emergency action plan. Training for the EAP must be regularly imparted to pilots and ground personnel. A list of emergency contact numbers must always be with the pilots and ground personnel.
10. The company must follow a strict 'leave no trace' policy and conform to high sustainability standards.

#### **10.3.12 Logbooks**

A technical log in respect of each balloon indicating details of every flight, like the date of flight, lift off time, total flight time, the places of departure and arrival, shall be maintained. The entries in the logbook shall be certified by the pilots undertaking the flights. A balloon logbook shall be maintained by every operator to keep a record of the flying hours of a balloon and the modification and other repair work carried out on the balloon.

#### **10.3.13 Documents to be carried on board the flight**

1. Technical log.
2. Certificate of Release to Service (CRS).
3. Certificate of Airworthiness (C of A).
4. Airworthiness Review Certificate (ARC).
5. Certificate of Registration (C of R).
6. Appropriate license for the pilot.
7. Weight schedule, duly approved by the DGCA.

#### **10.3.14 Flying Permission**

1. An operator is required to take permission from the Airport Authority of India (AAI) for each area in which they plan to operate a flight. This permission is issued after clearance and consultation is taken from the nearest aerodrome and ATC authority.
2. Permission is required in writing from all local Police and administrative authorities in the area where balloon flight operations are planned.

3. The operator must file a flight plan with the AAI before every flight.
4. All operators are required to take an FIC (Flight Information Centre) number and ADC (Air Defense Clearance) code from the concerned Departments before every flight. This information must be provided to the concerned ATC (Air Traffic Controller) before any flight can commence operations.
5. Pilots have to request for take-off permission from concerned ATC before every flight and must close the flight plan following the completion of every flight.

## **10.4 Sky Diving**

### **10.4.1 Introduction**

1. A **skydive** is defined as the descent of a person to the surface from an aircraft in flight using a parachute during all or part of that descent.
2. Participants must be familiar with the **Skydiver's Information Manual** and follow all Central, State, and local rules.
3. **Aero Club of India** governs aero sports in India and can issue FAI (Fédération Aéronautique Internationale),) sporting licenses.
4. Skydivers may obtain licenses from recognized bodies like **USPA (United States Parachute Association)**, **BPA (British Parachute Association)**, **APA (Army Parachute Association)** or any other body duly authorised by Aero Club of India.

### **10.4.2 General Requirements**

#### **1. Compliance with Government Regulations:**

- a) No skydive should violate Indian regulations.
- b) Written approval from DGCA under Rule 26(a) of the Aircraft Rules, 1937, is mandatory.

#### **2. Medical Requirements:**

- a) A fitness certificate from a registered physician is needed.
- b) People with heart issues, blood pressure, recent surgeries, epilepsy, or pregnancy must avoid skydiving.

#### **3. Age Requirements:**

- a) Minimum age: 18 years.
- b) Persons 16+ can jump with parental consent and presence at the drop zone.

#### **4. Alcohol and Drugs:**

- a) No skydiving under the influence of alcohol or drugs.
- b) Breathalyzer tests may be conducted.

#### **5. Wind Limits:**

- a) Solo students: 12 mph maximum ground winds.
- b) Licensed skydivers: 25 mph maximum.

#### **6. Minimum Opening Altitudes:**

- c) Tandem jumps: 4500 feet AGL.
- d) Students and "A" license holders: 3000 feet AGL.
- e) "B", "C", "D" license holders: 2500 feet AGL.

#### **7. Drop Zone Requirements:**

- a) Ground-to-air communication must be available.
- b) Minimum hazard-free distances:
  - Solo students and A-license holders: **100 meters**.
  - B and C-license holders, and tandem skydives: **50 meters**.
  - D-license holders: **12 meters**.

#### **10.4.3 Equipment**

- a) Night Jumps:
- b) Skydivers must display visible lights from the time parachute is open until landing.
- c) Students must use:
  - Rigid helmet (except tandem students),
  - Piggyback harness with reserve static line,
  - Altimeter,
  - Automatic activation device,
  - Ram-air main canopy,
  - Steerable reserve canopy,
  - Proper deployment system (ripcord or throw-out pilot chute).
- d) Additional Requirements:
  - Emergency procedure training before using unfamiliar systems.
  - Flotation gear if within one mile of water.

#### **10.4.4 BRIEFING**

1. Comprehensive pre-jump briefing for tandem and student jumps.
2. Student training must follow **USPA Integrated Student Program (ISP)**.
3. Instructors and coaches should be verified through **USPA** or equivalent.

#### **10.4.5 Training**

1. Conducted by experienced, qualified instructors.
2. Areas covered:
  - Equipment handling,
  - Aircraft procedures,
  - Freefall and deployment,
  - Reserve parachute deployment,
  - Canopy flight and landing procedures.

#### **10.4.6 Advancement Criteria**

##### **1. Static-Line Students:**

- Five successive jumps demonstrating stability.
- Progression to freefall under instructor supervision.

##### **2. Tandem Jumps:**

- Instructor must hold current Tandem Instructor rating and type rating.
- Certain manoeuvres exceeding drogue fall speeds are prohibited.

#### **10.4.7 Crossover Training**

- Students can switch training methods after demonstrating required proficiency.

#### **10.4.8 Special Equipment & Oxygen**

- Oxygen is mandatory above 15,000 feet MSL.

#### **10.4.9 Pre-Jump Requirements**

- Assess appropriate exit altitude and surface wind conditions.

#### **10.4.10 Documentation Requirements**

- Administrative: Owner/operator details, inspection records, instructor certifications, insurance evidence.
- Operational: Daily operation logs, incident reports, parachute inspection and packing logs.

#### **10.4.11 Emergencies & Risk Mitigation**

- Establish and rehearse emergency procedures.
- Monthly risk assessments must be conducted and documented.
- Follow strict "leave no trace" and high sustainability standards.

### **10.5 Air Safari**

#### **10.5.1 Introduction**

1. **Air Safaris** are aerial trips undertaken by tourists over wildlife areas or places of scenic beauty.
2. Aircraft used include:
  - Conventional Control 2-Seat Microlight Aircraft,
  - Weight-Shift Control Powered Hang Gliders,
  - Motorized Gliders,
  - Sail Planes,
  - Paramotors (both backpack and trike versions).
3. Microlights are the simplest and most cost-effective option, flying lower and slower than regular fixed-wing aircraft, providing an unobstructed, open "cockpit" view.
4. Operations are governed by the Civil Aviation Requirements (CARs) of the Director-General of Civil Aviation (DGCA), India.

#### **10.5.2 Adventure Guides / Instructors: Basic Minimum Qualifications and Experience**

1. **Licensing:** Pilots must hold one of the following:
  - a) **Microlight Pilot License (MPL),**
  - b) **Glider Pilot License (GPL),**
  - c) Or a permit to fly powered hang-gliders, issued by **DGCA.**
2. **Training Requirements:**
  - a) After completing Grade 12 (with Physics, Maths, and Chemistry), aspiring pilots must register as **Student Pilots.**
  - b) DGCA conducts pilot training exams every 3 months.
  - c) Comprehensive training for all types of microlight aircraft is available domestically, and detailed info is hosted on the **DGCA website.**

#### **10.5.3 Equipment Required**

1. Types of aerial vehicles include:

- Microlight aircraft,
- Powered hang gliders,
- Motorized gliders,
- Paramotors (backpack and trike versions).

2. Registration & Certification:

- After the security clearance of the owner/company, microlights must be **registered with DGCA**.
- Issuance of a **registered number** and an **airworthiness certificate** is mandatory, renewable annually or as advised.

#### **10.5.4 Equipment Care and Maintenance**

1. The owning company must maintain the microlight aircraft according to the manufacturer's maintenance manual.
2. Routine inspections and maintenance are crucial for safety compliance.

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