Technical Guideline for Safety in Events/play areas
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1. Definitions

Amusements rides/device: means a device or set of devices, elements or equipment that carrying, transporting or directing a person or more through a fixed track or restricted or within a specific area for the entertainment purpose.

Amusement devices: Any arrangements of equipment that transfers/ move the rider/passenger whereby the desired effect achieved in the first place by the autonomous move for example.

Simple Amusement devices: Any devices that are used or intended to be used which are permitted only for people whose their height is below 1.1 m and unaccompanied.

Amusement rides: They are structural elements or mechanical (or both) which the main function is providing central movement in any controlling way and not necessarily these elements move to acquire the desired effect.

Permanent Amusement Rides /Devices Area: Locations where fixed rides exist on the same location for more than 180 days.

Temporary Amusement Rides /Devices Areas: Locations where fixed rides exist in the same place for less than 180 days and its transfer from one location to the other systematically with or without dismantling.

Permanent Amusement Devices Locations: Location where fixed rides exist and cannot be moved or replaced easily.

Inflator rides/device: The ride which consists of an air-filled structure it could consist but not limited to jumping bouncing climbing sliding and interaction play areas. It's made of soft tissue. It is filled with continuous airflow by one or more of blowing devices and rely on air pressure to maintain their shape.
Laser games/device: Any device, instrument or game that generates high-intensity optical beams and a narrow beam emitted by wavelengths extending from the short UV area (180 nanometers) to the long infrared region (1 mm) through the visible region.

Entertainment Area: It’s occupied by activities shows device entertainment devices it’s mainly designed for fun shows to entertain the audience, all structure receives powers from separate source the same serves all device within the fun area.

The owner: The person who owns or controls, however, has the authority to operate the rides and entertainment devices.

Operator: The person in charge of controlling the start/stop of the ride and attractions, however, it should be noted that the person who is operating the rides and attraction should not be the same person who’s assisting in other works such as helping in going up and get off of the ride or ticketing.

The scope of inspection includes: Access and exit slopes, ladders, passages, rides including electric equipment, structures, foundations and pillars including also within this range power source fun areas middle paths which might be dangers for the audience.

Certificate of inspection or certificate of safety: It is a certificate issued by a competent authority that indicates the ride/entertaining device has been inspected as per rules and regulations by the concerned administration and it should be safe to be used by people, This content would be found at Emirates International Center for Accreditation EIAC-REQ-IB-06.

(BSEN): Is the British version of the European Norm, in this case BSEN 13814.

(ASTM): Is an American Society for Testing of Materials International (ASTM) standards entitled “Standard Practice for Ownership and Operation of Amusement Rides and Devices” currently designated F 770, and any amendments, supplements, replacements or substitutions therefore
**Operations manual:** Written Instructions recommendations and operation Specifications commended by the manufacturer and operating policies safety and emergency measurements that are prepared as per relevant international standards whereas it has to be accessible on every entertainment ride.
2. Play areas

2.1. Design

- The layout of the play area should be taken into consideration in accordance with the specified age group to play in this area.
- Take all necessary safety measures to regulate the public in terms of identifying safe entrances and exits and organizing play routes.
- A distance of 25% minimum of floor space should be left for walking and seating.
- All rides should be surrounded by an unbreakable fence with height should not be less than 1.2 m; space between any two adjacent types of equipment in the fence should be no more than 10 cm.
• All floors, fences, and chairs materials must be with fire-resistant according to the standard specifications in force in the emirate.

• In case of indoor playground, all terms and conditions related to ventilation conditioning must be follow, in accordance with the Dubai Municipality Green Building Guide.

• The viewing area in the ride's operation room has to be clear to observe all rides parts.

• Must be aware that the places dedicated to playing are committed to providing all the requirements of the owners of inspiration (SN) in the area.

2.2. Rides/ Devices distributions

• The distance between rides and equipment should be considered in playing area as per the specification of each entertaining equipment where it should not be less than 6ft between rides and equipment.

• Be sure to specify adequate distances between rides, equipment, and the surrounding barriers it should not be less than 6ft between ride and equipment.

• Rides or mobile equipment (such as swings) should be on the fringes of the dedicated play area, and putting all the equipment in suitable locations for the purpose of the equipment in the area.

• Rides should not be changed, relocated or change distance before taking all playing area safety precautions and obtaining approval from health and safety administration.
2.3. Public Safety & Emergency procedures

Public safety

- All precautions should be taken to organize the public entrance in terms of determining the entrances and exits according to the size of the equipment area, the number of equipment and the quality of the equipment.
- Must comply with the permitted noise rate in the recreational area.
- The capacity of persons allowed to be present at the same time must be observed in the recreational area.
- Provide adequate lighting and ventilation commensurate with the entertainment area and accompanying events.

Electrical safety and fire prevention

- Each play area must contain electric circuit breakers proportional to the area of the play area and the number of equipment plus protection against excess loads.
- All electrical connections must be protected and hidden from the public so that they are not easily accessible.
- Make sure that all the equipment, devices, rides in the play area are grounded as per specifications in the emirate.
- Materials should not be stored in unsafe locations in the area such as: elevator room, electric room, pump room, equipment cabinet as storage areas or underneath the rides as storing areas
- Non-combustible cables and wires must be used the connections must be made by qualified and specialized technical staff.
Emergency and Accidents

- Securing the area outside working hours to prevent unauthorized persons from entering the recreation area.
- Setting a plan for emergency and the precautions that should be followed in a recreational area.
- Notify the Municipality about any accidents or injuries in the Entertainment area and keep records of them on recreation area.
- Notify the Municipality about any warnings or global incidents on any of the existing rides.
- Risk assessment and setting a plan for emergencies and procedures must be adapted for any ride/equipment.

3. Entertainments Rides/Devices

3.1. General Requirements for all rides/Devices

3.1.1. Design & Manufacturing

Designer and manufacturer of entertaining rides should take into consideration the maximum load weight so that it does not affect any part of the ride or any of the safety requirements such as the protective belt of the ride.

Rides should be designed as per applicable international standards taking into consideration the approvals of the inspection companies based on the designs before starting the manufacturing, provided that the following points as a minimum:

- General drawing in charts width and height and sections of the ride/equipment
- Data of the required distance between equipment for the mobile parts in the ride/equipment of the public presence.
• A detailed chart showing all parts and particulars of ride/equipment which indistinguishable in the general chart along with detailed graphics of Etisalat connections and the single objects of structural mechanical or electric nature that could affect the reliability of the ride, and operation of the entertainment device.

• May be a need to clarify some of the elements in the ride such as gear mechanisms, lifting, drives control, bolts and the scope of winching, swivel.

• Clarify all parts and tips and details of the dimensions of the overall vehicle and the passenger's trailers in the ride /entertainment device even internal dimensions in connection with passengers safety (Seats Rear side seats Leg and foot)

• Safety equipment must be provided with non-open door (lap bars) safety belts to ensure that ride users cannot move while the ride is running.

• Transmission and Load Details wheels, movement axes unrestrained movement of the trail directing and control safety against deviation and rollover, stores, Trailers, protective devices, disk drives and brakes.

• Hydraulic, pneumatic circuits, wiring, electrical connections and electronic diagrams.

• Rides should be designed in a safe way that they do not pose a danger if run on maximum power within the confines of the recognized safe practice.

• These rides should be designed According to international standards applicable in the emirate in accordance with the requirements of the Emirates International Accreditation Center EIAC-REQ-IB-06.

• All the rides evacuation and emergency requirements should be considered while designing the ride In terms of providing reserve emergency supplies in the ride to ensure smooth evacuation in case of emergency.
Mandatory safety requirements:

- **Emergency brake:** Emergency brake should be provided in the event of any collisions in the ride/device when normal controls fail, and a spare brake mechanism should be provided to avoid riding or collision of the trailer in the control station in case of unbalanced movement.

- **Anti-REVERSIBLE:** The rides/entertainment devices that have slopes or inclination in track should be fitted with automatic anti-back in order to stop rebound movement in case failure of the automated forward movement.

- **Speed Control Devices** the ride/entertainment device should be operate at a safe speed with the accelerating and velocity measuring equipment (traveling acceleration).

- **Guests transport equipment** all devices trailers that carry guests should be assembled, operated and maintained in accordance with recognized safe practices.

- **Protection from scratches and tingling injuries:** Internal parts of all trailers/devices that carry guests and they have direct contact with should be Free of sharp materials, prominent buttons, nails and other hazardous materials that cause injuries to customers.

- **Protection from the injuries of hard surfaces** All means of reducing injuries caused by the direct impact of hard surfaces should be provided in rides such as safety goggles.

- **Loading and unloading** All equipment and safe means should be provided to facilitate the safe entry and exit of passengers according to the applicable specifications and according to the manufacturer’s manual of the ride. The entrances and exits of the ride must reach safe ways to get out of the surrounds area.

- **Support and backstopping** All rides should be provided with support and required backstopping for example such as seat belt/ Headrests / Footrests plus any other necessary support by each ride, in accordance with applicable safety practice. Seat belts, safety bars, and equivalent means should be provided and similar means used with bolts or latch cannot be opened easily or unintentionally by the customer, Ergonomic chairs should be fitted with appropriate belts, Customer carriages in recreational rides such as a carousel and a children's train should be provided with means to prevent children from standing if the distance from the ride floor to the
ceiling such as the entrance is less than 6 feet. When using the belts in the rides must be made according to the requirements that are determined by the manufacturer.

3.1.2. Installing & Assembly

- All requirements for installing and assembling the ride must be done according to the standard specifications in the Emirate, and Dubai Municipality, Health and safety unit, Emirates Accreditation Center EIAC-REQ-IB-06.
- Original parts only should be provided and used for the ride.
- The assembly and installation of the recreational rides must be done by a qualified technical staff and under the supervision of the authorized inspection bodies in the Emirate.

**Stability** The chosen places to install the rides should be suitable for public riding so as not to contain any uneven pits or surfaces. In the case of the construction of any platforms or concrete slabs must be approved by building management to ensure the appropriate requirements.

**Electrical cables** all riding equipment, and play area should be minimum 3 meters away from electric cables insulated with an electrical voltage exceeding 50 volts and less than 50 kV. In case of the cables exceeding the Electric voltage of 50 kilovolts, safety distance should be increased by 10 cm for each unit KV above 50 kV.

**Assembly** : rides should be assembly under the supervision of qualified technicians, specialized in the assembly of rides as per manual of each ride.

**Electrical Connections**: All electrical connections and equipment operating on a voltage exceeding 50 V or more shall be protected by placing them in uninsulated, non-accessible boxes. Any equipment or wires that are worn and damaged shall be repaired periodically and shall be separated immediately until they are repaired. All cables and fittings are corrosive by covering
them with insulation for these uses. The voltage of non-isolated electrical connections shall not exceed 50 volts.

3.1.3. Testing

Ride should go through an inspection by competent authority Accredited by Emirates International Accreditation Center and the inspection should be conducted as per EIAC-REQ-IB-06.

**Inspection Phases** rides/entertainment devices should go through an inspection by a certified examination company which is accredited by Emirates International Accreditation Center as follow:

**Design review** After creating the ride idea and design it, certified specialist third party company should review the designs to ensure its compatibility with the best manufactures practice depending on the possibility, this phase should be well-suited to the design phase.

**Inspection of manufacturing process** manufacturing process should be subject to inspection and scrutiny by a certified body and it has to be the same company which conducted the inspection/assessment on ride/equipment design.

**Initial inspection** all entertainment rides equipment should be subject to this inspection prior to first time operating.
Independent inspection: Rides / devices / entertainment equipment must be subject to this independent comprehensive examination, so that all engineering examinations are covered in the examination, and this examination must be performed before the validity of the examination certificate expires.

Continuity of inspections processes: the pace of inspection is clearly defined in laws, regulations, regulations, standards and other related requirements.

Inspection certificate: The inspection certificate shall be issued after the completion of the examination and the removal of all the points to be corrected which have been monitored in the examination.

3.1.4 Operation

First-Time Operation:

High Risk Rides (HIGH ACCELERATION) level 1/level 2:

In case of operating rides for the first time classified as high risk (LEVEL 1/Level 2 high acceleration), all below instructions must follow:

- Start with a soft opening after completing all the requirements, tests and approvals required to start.
- The soft opening should be started on weekdays and not on weekends or official holidays to ensure low numbers of users and to experiment with little usage intensity.
- After finishing the soft opening for 5 days a comprehensive report must be prepared on the soft opening, challenges, lessons learned, and any adjustments or improvements to the operating plan, operating hours number of hours of use and category of ride users.
• Lessons learned will be applied to the second trial week of the ride and a comparative report shall be made in the event of an amendment or development in the operating plan and shall be submitted to the municipality.

Amusement rides operators

• Must be permanently present while loading and unloading passengers and running the ride/device.
• Provide permanent supervision of the ride control unit at all times while running the ride.
• Operators must pay attention and caution to prevent any dangerous behavior practiced by passengers or the public.
• Operators must pay attention and caution to avoid any apparent mechanic failure in riding the ride.

Control panels: Control panels should be highly protected from accidental, unintentional operation or public access.

Entertainment devices controlled by the passenger: All these devices must be readily available for use by the passenger as soon as they are ready for operation, verbal and written instructions must be given to control the entertainment ride by passengers.

Automatic restart: All rides/devices/equipment should be unable to restart automatically including power failure.

Operating: Ride capacity and velocity might not be determined as specified by the manufacturer, fewer capabilities and lower velocities are determined if they are identified in ride tests or by the owner of the ride.
Ride supervisor: The person in charge of the ride upload offload making guest seated also his responsibilities

- To be present at the location specified by the manufacturer.
- To be a reliable source to use the ride safely.
- To ensure that guest moves securely to and from the ride.
- To make sure that the guest using the ride/entertainment device are aware of safety rules and instructions of the ride.
- To ensure that all ride parts equipment works properly, safely and according to manufacturer's instructions and all safety requirements are available before giving the operating signal
- To ensure a safe entrance and exit of the ride.
- To be the in charge of safe usage.
- Follow daily and periodically maintenance of the amusement ride and document it.
- To ensure that the guest is within the technical conditions of the ride (height, weight, etc).
- Educate the passengers/guest about the conditions and rules of the ride while playing.
- Immediate and effective response to emergencies, reporting accidents and keep appropriate records.

Operator:

The person who is in charge of the amusement ride and safe operation, his role is to:

- Full knowledge of ride rules and mechanism and should be trained to do so.
- Not operating the amusement ride unless it is ready for operation and making sure that all safety measurements are taken.
- Do not leave the control panel to operate the ride/device without taking precautions to unauthorized operation of the ride/device.
- To be present at the location identified by ride manufacturer.
Operator duties

Operators duties include but not limited to:

- Ensure that all passengers comply with the safety regulations of the appropriate seating and seat belts and not carry any materials may fall from the ride/device when playing.
- Maintaining a good level of experience and knowledge and the mental ability to run the ride according to the requirements of the safe operating rules.
- Examining the ride before the public to ride it, this examination differs from maintenance inspection.
- Immediately report any failure of the ride and take appropriate action as per risk assessment.
- Immediate and effective response to emergencies and taking necessary precautions.

3.1.5 Training

The owner of the amusement device / ride should provide the proper training for rides/devices operators and keep training records and competency certificates for staff performing the following duties:

- Safety Supervisor
- Play Zone ride supervisor
- Rides operator
- Rides operator's Assistant
- Maintenance Technician
- Maintenance Technician Assistant
- Supervisors and operators of children 's play areas (soft play area )
- Supervisors and operators of skill device/arcade device

Should be available to Dubai Municipality at request.
Play area/Events staff competency requirement:

owner-operator of amusement ride/device make sure that the operator is competent as per each ride requirement and specifications:

- Reading and understanding the operation manual, the operator must be examined and he had passed the training programme, also full awareness of the operation.
- Final inspection after maintenance and before opening for the audience.
- Pass a field training to run the ride with all its possibilities and the appropriate behavior for each case.

Training programme

The training programme should be one of the following programmes:

- Certified program by Health and Safety department- Dubai Municipality.
- Certified Program by the amusement park to be within Approved standards.
- Certified program from Accredited certifications bodies in the Emirates of Dubai.
- Certified Program by amusement rides manufacturers or international expert companies in the field.

The training programme outcome should be recorded including all training steps that have been conducted without issuing attendance certificates, training programme should include for example but not limited to a minimum to be recognized as a training programme:
Category 1: Includes safety supervisor.

Safety supervisor/officer in the amusement park is in charge of overall safety in the amusement area and responsible directly for the follow-up of all checks and periodic checks and is responsible for reporting any incident occurring in the recreational area.

In the case of small play areas (which include 5 rides or less) safety supervisor can supervise the operation of rides.

Required Experience qualifications for Category 1 are determined as follow:

<table>
<thead>
<tr>
<th>Category</th>
<th>Experience Required Prior To Training</th>
<th>Minimum training hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Big Rides level 1, 2 HC</td>
<td>Engineer (mechanical, electrical, electronics, experience not less than 3 years in the field operating and supervising amusement parks.</td>
<td>24</td>
</tr>
<tr>
<td>o Permanent event area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Amusement park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Big rides zone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Rides level 3,4, level 2 LC</td>
<td>Diploma in one of the technical fields in addition to the experience of not less than a year in the field of operation and supervision of amusement rides</td>
<td>24</td>
</tr>
<tr>
<td>o Temporary events area</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Training should include the following:

- Identify how to isolate and secure power sources (LOCKOUT, TAGOUT)
- The electric risk associated with rides
- Personal protection equipment (PPE)
- Handling and storage of materials
- Lifting, loading and unloading equipment
- Work on the heights
- Handling of hazardous chemicals
- Work safely inside confined spaces
- How to act in an emergency
- How to prepare technical reports
- Roles and responsibilities of the safety supervisor.

**Category 2: Includes play area operation Supervisor, ride/device operator, and ride/device operator assistant:**

- Instructions of operations procedures as per the manufacturer’s manual or standard specification of the ride or as determined by competent authority.
- Responsibilities and tasks of each category of operators.
- Daily screening procedures before the operation
- Pinpoint how energy sources are isolated and secured (LOCKOUT, TAGOUT)
- Technical terminology used in the operation process.
- Instructions on general safety measurements of the ride and surroundings, for example, height weight ride balance)
- Guest upload and offload
- Instructions in regards to emergency measures and ride turning off and dealing with hazardous situations.
- Demo to run the ride and actions to follow
• How to communicate with members of the rides operational team for the play area.
• Defining places where the public has no access.
• Define operators with local regulations, customs, traditions and public behavior and deal with owners of inspiration.

Qualifications, experience and training hours for Category 2 shall be determined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>experience required before start training</th>
<th>Minimum training hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play area operation supervisor</td>
<td>o Technical University Certificate in addition to one year experience in ride/device playing field.</td>
<td>12</td>
</tr>
<tr>
<td>Ride operator</td>
<td>o A secondary certificate in addition to the experience of six months or 50 training hours under the supervision of qualified person</td>
<td>12</td>
</tr>
<tr>
<td>Ride operator assistant</td>
<td>o A secondary school certificate in addition to the experience of six months or 50 training hours under the supervision of a qualified person.</td>
<td>8</td>
</tr>
</tbody>
</table>
Category 3: Include Maintenance Technician and assistant Maintenance Technician:

- All maintenance staff must be trained properly according to manufacturer’s recommendations for replacement / calibrate repair ..... etc each in their specialization.

- Maintenance staff must not to do any adjustment, changes or exchange parts only with original parts according to the manufacturer’s instructions, an understanding is made upon the undertaking between the owner and the maintenance team and no substantial modification or repair is undertaken without the written consent of the manufacturer with the method of repair and change.

- Inform the inspection company in the event of any substantial modification or repair of the ride to ensure compliance with the manufacturer's recommendation for maintenance.

- A comprehensive record of maintenance should be maintained in the building and available upon request.

- The maintenance technician must take the necessary training courses according to the manufacturer's instructions on how to maintain the rides.

Qualifications, experience and training hours for Category 3 shall be determined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of required experience</th>
<th>Minimum training hours</th>
</tr>
</thead>
</table>
| Maintenance Technician  | o Technical Diploma in addition to one year experience plus 50 hours training under the supervision of a qualified person.  
o First Aid Certificate. | 24                     |
| Maintenance Technician Assistant | o Technical Diploma in addition to one year experience plus 50 hours training under the supervision of a qualified person. | 12                     |
The amusement ride maintenance team should be subject to periodic training programs. These training programs should be updated according to the updates that are made in the maintenance procedures used worldwide. The maintenance team must be trained in the procedures of the manufacturer of each ride. The training program should also include the following points:

- Introducing mechanical and electrical parts of the ride.
- Description of the ride control procedures.
- Identify the different types of maintenance that the ride is subject to.
- Defining different types of faults and how to deal with them.
- Specification of the ride parts according to the requirements and instructions of the factory.
- Definition of risks arising from dealing with hazardous substances (oils, grease, etc.).
- Identify the risks of dealing with electrical connections and cables.
- Define how to secure and deal with different energy sources.
- Define safe working practices in jaw, structure, and replacement for different parts of the ride/device.
- Define how to behave in emergency situations and the procedures to be followed to restart the ride.
Category 4: includes Operating supervisors and operators for Soft ply area, supervisors, operators and assistant operators of skill game (SKILL DEVICES, ARCADE DEVICES)

Qualifications, experience and training hours shall be determined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of experience required before training hours</th>
<th>Minimum training hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating supervisors and operators for Soft ply area</td>
<td>Technical Diploma in addition to 8 hours training under the supervision of a qualified person.</td>
<td>4</td>
</tr>
<tr>
<td>supervisors, operators and assistant operators of skill game (SKILL DEVICES, ARCADE DEVICES)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The training programme should include the following:

- Define how to sterilize and clean the used tools
- Introducing Standards for Children's Devices (EN71)
- Operating and Closing Procedures
- Define safe working practices and permitted practices for each devices.
- Defining what is forbidden to the public.
- The definition of local regulations, systems, customs, traditions and public behavior.
- Instructions on emergency procedures and dealing with dangerous situations.
Category 5: Includes Rides Emergency Evacuation Staff

Qualifications, experience and training hours for category 5 are defined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of experience required before training hours</th>
<th>Minimum training hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>staff involved in emergency evacuation operations</td>
<td>o Diploma or certificate of civil defense with two years experience, 48 hours of practical training under the supervision of a qualified person.</td>
<td>16</td>
</tr>
</tbody>
</table>

Training program should include the following:

- Identify how energy sources are isolated and secured (LOCKOUT, TAGOUT)
- Instructions on various emergency procedures and procedures for dealing with dangerous situations
- Identify how to use emergency equipment in the right way
- Define how personal protection equipment is used
- How to communicate and coordinate with all the officials in the entertainment area
- How to review evacuation plans after actual application
- How to set up a technical report
### Competency certificates required:

<table>
<thead>
<tr>
<th>Category</th>
<th>Required Test</th>
<th>The validity of the certificate</th>
</tr>
</thead>
</table>
| 1        | o 2 hours theoretical Test  
           o 4 hours practical assessment  
           (Depending to rides category) | 2 years from the date of issue |
| 2        | o theoretical Test  
           o 2 hours Practical assessment  
           (based on play area type category) | One year from date of issue |
| 3        | o One hour theoretical Test  
           o 2 hours Practical assessment  
           (based on play area type) | 2 years from the date of issue |
| 4        | o 2 hours theoretical Test  
           o 2 hours Practical assessment  
           (based on play area type) | One year from date of issue |
| 5        | o 2 hours theoretical Test  
           o 2 hours Practical assessment  
           (based on play area type) | One year from date of issue |

- In case of the test is not passed from the first time, the test may be retested no later than thirty days but the test should not be the same.
- The person authorized to perform the test for the operators.
- Safety certificates shall be issued by accredited companies in the field, provided that such companies shall separate the training procedures and the testing procedures according to the specifications.
- Each company shall have at least two persons, one of whom is an examiner and the other a decision maker, provided that the experience of either of them is not less than the previously
required experience in each category in case the company does not carry out any training services.

- In case that the company provides training services, the persons authorized to conduct the training must be separated from the persons authorized to perform the tests so that the trainer does not test a person who has trained him during the previous two years.

**The content of Competency certificates:**

- Photo
- Issue an expiry day of the certificate.
- Examination date (re sitting date if any).
- Certificate level.
- Any addition determinants of the certification (according to the test and competency).
- Exam place (awarding body).
- Certificate standard (guideline) and the examination.
- Ref. number of the certificate.
3.1.6 Maintenance

- Defined as the procedures held by specialists that required guaranteeing the proper performance of the instrument.
- All the amusement equipment should be maintained according to the type of the equipment, periodic and daily inspection checklist and manufacturer’s instructions.
- Amusement equipment must be maintained by a specialist technician in the field of amusement equipment maintenance.
- Original spare part must be used in the maintenance of the rides/devices in proportion to each one according to the manufacturer's manual.
- Owner of the amusement equipment should keep an updated maintenance and inspection records as per the manufacturer’s instructions, these records should include a copy of all inspection reports from the last year that issued by the approved inspection company, description of all the inspection activities and description of any (mechanical, structural or operational) failure and the corrective actions.

3.1.7 Daily inspection & Periodic inspection

Daily checks is defined as the procedures and checks carried out by competent persons before the ride/device is opened for use each day.

Some components may be required to undergo thorough periodic checks, follow the manufacturer recommendations, record as appropriate.

Make sure that each ride/device has a daily check before the public uses it. For an amusement device the daily check needs to be in writing, filed in the operations manual and:
• Any instructions from designers, manufacturers, importers, suppliers and inspection bodies;
• List all parts and other matters which need daily checking to ensure safety and describe how they should be checked.
• Check all safety regulations, and controls, including communication systems in the ride/device, and ensure their effectiveness.
• Make sure that barriers, guards, walkways etc are in place and in good condition, and that all locking devices and securing pins are in place and in good condition;
• Materials and chemicals used to perform the cleaning of certain components of amusement ride or device or play area shall be carefully selected not to affect the public health and safety.
• Ensure that cabinets, boxes, enclosures etc containing hazardous equipment and/or substances are suitably secured;
• Perform at least one complete operating cycle, while observing the ride/device performance, record the findings if any;

3.1.8 Re-testing, Re-installation, changing ride location.

• Once an amusement ride or device has been shifted from where it was inspected (even within the same site; regardless of the distance), the inspection certificate will be considered void and re-inspection is mandatory; refer to Administrative order 30/2007, for general mandatory requirements. (EIAC-REQ-IB-06) for the specific inspection requirement applies.
• Simple amusement devices, as defined in (EIAC-REQ-IB-06), can be inspected once annually and can be moved within the city of Dubai without re-inspection. Re-installation shall be done in accordance with the manufacturer recommendations.
• Disassembly, shall follow the manufacturer recommendations and procedures.
3.1.9 Turn off the ride/device for long period.

In case of the ride/device has stopped for a period exceeding three months from the last run of the ride, the operator / owner must follow these requirements:

- Operate the ride/device in case it is in good condition.
- Prepare full maintenance required for the ride/game to make sure can operate for long time.
- Prepare specific report and submit it to Health and Safety Department.
- Submit the report to the approved inspection company (third party) when checking the ride/device before the next operation of the ride/device.

3.1.10 End of rides/Devices lifecycle

- In case of the end of the life of any ride/ equipment / amusement device, both the owner and the inspection body should notify Dubai Municipality after being taken out of service. The owner must provide written notice to the Health and Safety Department that the equipment will never be used anywhere else.

3.2. Trampoline

All requirements of jump devices are observed according to EIAC as per (EIAC-REQ-IB-06) as per the general requirements for all amusement rides (3.1) with taking into account the following:

- Make sure that all the required safety requirements are provided in jumping devices (trampoline) according to the manufacturer’s instructions and the standard specifications.
- Players should be classified as per their age categories when using jumping devices according to the manufacturer’s instructions.
- The operator of jumping devices (trampoline) must stick to the number of players at the same time and the same place.
• Make sure to provide a place for the supervisory staff in the place of jumping and appropriate to the trampoline and the branches of the trampoline and does not pose a risk to the Trampoline users or supervisory staff.

3.3. Water Attractions (Aqua Games)

All requirements of water attraction/devices are observed according to EIAC as per (EIAC-REQ-IB-06) and as per the general requirements for all amusement rides (2.1).

• Enough number of lifeguards should be available in the play area (Beach, Pool), they should be approved by a company under EIAC accreditation. Record of lifeguards should be provided.
• All lifeguards should be provided with the required rescue tools and precaution signs (whistle, Turbine and stick extension ….etc.)
• All the water attraction/rides should be stopped in bad weather.
• Water safety systems should be tested and all disinfection and sanitation systems should be provided. Water should be tested periodically as per the water testing guideline of Dubai Municipality.
• Water devices/rides/parks (Bumper boat, Paddle Boat etc) should provide third party safety certificate to tested periodically as per the (EIAC-REQ-IB-06) and guideline of Dubai Municipality.
3.4. Inflatable’s, Soft Play Area

3.4.1. Inflatable

The following requirements had been set to include some but not all the technical guiding instructions and the recommendations to install and safe use of inflatable, these procedure and requirements of installation and operation of inflatable consider vary from a company to another and from a game to another. Therefore, all the instruction and operating manuals made by the manufacturer should be followed as well the standard specifications in addition to the following requirements:

- The minimum number of the operators at each inflatable with a height more than 4.5 m should be (2 operators).
- The minimum number of the operators at each inflatable with a height less than 4.5 m should be (1 operator).
- The recommended weight of each player is 90 Kg or as per the recommendation of the manufacturer.
- The manufacturer’s instructions regarding the maximum load and the maximum number of passengers permitted for each inflatable toy must be observed.
- Guideline of the layout, inflatable procedures, fixes the installation cords, fixing methods at the beach, temperature, daily operation, daily checks. Cleaning and suitable cleaning tools, drying, Collapse the game, storage and transportation must be followed.
- The weight of the anchor on the ground that used to install inflatable ranges between 30 – 225 Kg according to the type of the inflatable or as per the manufacturer instruction, this range of weight indicates that the inflatable operator should follow the manufacturer’s instructions.
- Anchors should be available at the suitable locations according to the manufacturer instructions at all times for indoor or outdoor use, the anchors are vary between a direct installation on the ground by screws and installation on the ground by sand sacs. The height used anchors ranges between 0.75 m – 1m with the presence of at least 75% of the length of these anchors in the ground or anchor installer.
• Anchor’s cords and tie strength must be enough to resistance cutting and deformation when used

• Inflatables should not be used in bad weather when the wind speed exceeds the recommendations of the manufacturer. Manufacturing companies recommend maximum wind speed between (25 – 40) Km/h when using inflatable’s. Inflatable’s must be vacuumed when the wind speed exceeds 40 Km/h.

• The blower should be installed in the irreversible flap and suitable for the indented environment with respect to classification of protection

• It is important to keep in mind that the inflatable devices do not collapse in the event of a power outage or in case of a defect; all the required tools must be used to avoid such situations.

In addition to that, companies renting inflatable’s are strictly recommended to provide the following requirements to the players:

• Training programs or training videos to the operators on how to install, assemble and safe operating of inflatable’s.

• A copy of operating manual for rental period.

• Operating instruction that should be followed by the operators.

3.5. Trains

Includes club car, locomotive and trailer are wheel-free, which operate in corridors and spaces for the public and pedestrians, which must follow the following:

• Do not allow the use of locomotives in public roads and must be protected and the road is isolated and does not exceed the speed of 15 km / hour.

• The driver must be familiar with the rules of public safety and safety requirements of passengers in the case of entry and exit and the requirements of first aid.
• The driver must have a driving license issued by the United Arab Emirates.
• A clear path for the trailers should be provided with signs showing the trailer path.
• Provide safety signs to the public within trailer vehicles in a clear location for all passengers.
• Trailers with more than two vehicles should be equipped with a vision system that provides a clear and comprehensive view of all aspects of trailers, vehicles and passengers like (cameras, mirrors, auxiliary operator, etc.).
• The trailer games must be equipped with automatic shut-off system in case of approaching any object that may be dangerous.

3.6. Mazes and Mental Games

• Public health and safety requirements in this guideline must be complied with.
• Suitable lighting and ventilation should be provided at the game site.
• Emergency and evacuation requirements plans must be provided at the play sites.

3.7. Shooting Games

Shooting games, not only archery shooting, pistol and gun shooting, electronic shooting, shooting (paintball).

• Provide trained technical staff for supervision and operation
• All devices and equipment used by players must be secured and checked for safety prior to use by the public.
• All entrances and corridors of play areas must be secured from unauthorized access.
• Proper and safe barriers should be established between the playing tracks
• Personal protective equipment (PPE) must be provided to players and supervisors in the play area.
- All materials must be kept in play and ensure their safety and compliance with the required specifications and standards.

### 3.8. Ski Games

- Separate ski areas by age group
- Ensure that all the hard and sharp sides are secured and covered in the ski areas and there is no risk if the skiers collide with them.
- Ensure the safety and security of ski boots from the access of unauthorized persons.
- Ensure the efficiency, knowledge and ability of users of ski areas to control the various ski areas
- Ensure safe operation of ventilation, air conditioning and refrigeration systems.

### 3.9. Zipline

- Provide qualified and trained supervisory staff according to the required specifications in this manual
- Cover all sharp edges and hard edges in places of descent and collisions.
- Provide all the personal protection equipment required for the players to be examined by an accredited body.
- All types of Zipline are subject to the general requirements of all recreational games in this manual (3.1)
3.10. New ideas/new rides/devices

For any new ideas, new rides or devices, new innovation; a full study should be submitted in the application of the permit, which contains the following:

- Technical specifications for the new idea
- Risk assessment study for the new idea
- Operation procedure plan for the ride/device
- Emergency plan for the ride/device

4. Theme Parks

- All the device requirements (equipment) as per the type and specifications of each game according to this manual and the standard specifications should be considered in recreational cities.
- Taking into account the socialist manpower such as operators, supervisors, health and safety engineer and maintenance team.
5. Public parks/Theme Parks

5.1. Children Devices/equipments (Swings, etc...)

- This amusement equipment should manufacture as per the approved specifications of manufacturing of equipment according to (EN71) and GCC standard for children play area in addition to adopted standards for manufacturing.
- All the amusement equipment should be assembled and installed according to the manufacturer’s instructions by skilled and trained staff.
- Floors of the play area should be made chock proof materials as per the following table:

<table>
<thead>
<tr>
<th>Allowed Floors</th>
<th>Not Allowed Floors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Shockproof flooring to be tested and approved according to the standard specifications of these floors</td>
<td>• Solid flooring</td>
</tr>
<tr>
<td>• Sand (it should be free of stones and waste)</td>
<td>• Grass</td>
</tr>
<tr>
<td>• Recycled Rubber sawdust</td>
<td>• Soil</td>
</tr>
<tr>
<td>• Wood sawdust (copper chromates untreated)</td>
<td>• Wood sawdust (treated by copper chromates)</td>
</tr>
</tbody>
</table>

- The floors surrounding the equipment must be shock proof (not solid), with the level of shock protection according to the height of the equipment and the manual.
5.2. Bicycles

- Bicycle parking must be away from the street and cars parking.

- Renal of bicycles should be only for adults and children should be accompanied by an adult person.

- Bicycles should have protected specific route.

- Bicycles rental activity should stop when changing the area.

- Bicycles should be ride by a determined number of bikers.

- Bikers are not allowed on the street or cars barking.

- Bicycle users should not be allowed to climb green areas, walkways, sidewalks and damage public possession.

- Bikers are not allowed on sidewalks.

- Bicycles must be maintained as per approved maintenance standards.

- All cautionary instruments must be provided on the bike (lights, reflectors)

- Bicycles should be used on an approved route according to the allowed specifications.
6. Responsibilities

3.1. Owners

Save Records:

- All the records related to equipment safety should be maintained by the owner of the play area and present it when required.
- The owner of each entertainment site must prepare the operating manual for operational policies and procedures. The fact sheet is available to the game operators / equipment / entertainment device or any interested persons.

Required Records:

- The assembly and installation examination report of the amusement equipment.
- Daily checks and trial operation report.
- NDT test of the amusement equipment.
- Operational hours form the last NDT test.
- Any other records recommended by the manufacturer in addition to best practices recommendations on the annexure of the standard specifications number BSEN 13814.
- Records should be kept in the play area for at least 30 days from the last NDT test and should be accessible all the time. Records should be kept for at least 7 years in the entertainment establishment.

Records Accuracy: Authorized person to sign these records should make sure it is current and accurate.
4. **Safety Guidance & instruction Signboard:**

The owner of the amusement equipment should display signboard explaining the safety measure that should be followed by the players according to what mentioned on this manual and other rules and regulations followed in the play area to report accidents.

Signboard should include the following:

- Safety instruction before riding the equipment and according to each equipment features.
- Limitations on using the equipment.
- Potential risk before and while using the amusement equipment.
- Players’ height, weight, and age allowed riding the amusement equipment; height and weight devices should be displayed at each the amusement equipment.
- Players with illnesses that put them at risk when using amusement equipment.
- Prohibited Behaviors and practices while riding the amusement equipment.
- Suitable clothing to ride amusement equipment.
- Operational instructions for players.
- First aids stations and emergency equipment.

**Safety instructions in the amusement equipment:** all the safety information in the amusement equipment should be provided to the players which include the following:

- The way of seating before and during the run of the amusement equipment.
- Prohibited devices while using the amusement equipment (example: mobile phones).
- Safety instructions for each amusement equipment while using amusement equipment.

**Emergency signs and instructions:** emergency signs and instructions should be provided according to the specifications and the location of the equipment. Emergency signs and instructions should be clear and readable.
Specifications of the safety instructions signboard:

- It should be in clear and readable font with the follow specifications:

<table>
<thead>
<tr>
<th>Minimum Font size</th>
<th>Reading Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>feet</td>
</tr>
<tr>
<td>24 pt</td>
<td>3.3</td>
</tr>
<tr>
<td>32 pt</td>
<td>5.0</td>
</tr>
<tr>
<td>160 pt</td>
<td>25.0</td>
</tr>
</tbody>
</table>

- It should be written in English and Arabic
- Should contain some prohibition icons.
- Font type should be readable.
- Color-coding should be used for basic prohibitions.
5. Accidents and injuries reports & investigation

Accidents, injuries, and death cases of the players should be reported during a ride or during checking, assembly, training on emergencies, maintenance... etc. according to the following reporting laws:

- Injuries that need medical remedy more than the first aids in the play area should report by the owner or his representative to the top management after taking all the measures to protect lives and properties. First aids at the play area include immediate medical therapy such as taking off clothes, cold and hot compresses and anti-bacterial ointments that needed for treatment.
- Inform the Department of any injuries requiring first-aid medical treatment on site by the end of the working day.
- All injuries should be recorded and retained in the play area and should be available for revision by the municipality. A copy of this report should be handed over the municipality when requested.

Accident records should contain the minimum following information:

- Date and time of injury.
- Injury description.
- Any evidence from the accident scene.
- Cause of the accident.
- Name of the amusement equipment caused the accident.
- Name, age and contact details for the injured person.
- Name, age and contact details of the witnesses of the accident.
6. General Safety requirements

Position and installation:

- All amusement equipment should be installed on solid and flat surfaces.
- All amusement equipment should be installed by suitable means of installation and support to protect them from movement.
- Cribbing or crossing rules should be followed in case of the foundations made of two or more layer.

Trailers:

- All the transmission in amusement equipment should be in a good condition and usable according to the manufacturer system.
- Safety tools (Belts, safety bars, chains, doors, ..etc) must be installed in a proper way to avoid fall of the players.
- Pillows and cushions in the amusement equipment in a good condition and free of defects.
- All the trailers should have a code with serial numbers.

Safety procedures:

- All the valves and screws should be closed safely by suitable “R” key type, cotter key, spring key or any other closing instrument to keep the screws in a proper way.
- All the valves must be set in the right place and should be of the suitable type and size.
- Holes and screws should be reformatted as per standard specifications.
- Critical areas of the ride/device must be tested during the informal test (NDT), in addition to what is necessary for the safety of the game.
- In cases where the manufacturer requires the NDT, or when necessary (ie, cracks, bends, date of the game, etc.). This must be done by a certified inspection company. The inspection record is maintained.
Maybe there is a need for more safety tools such as secondary cable pillars or more when the approved inspection company or municipality decide, in this case, the manufacturer needs to be consulted.

**Velocity and overloading:**

- Amusement equipment should be operated as per the designed speed according to manufacturer's instructions.
- Amusement equipment should not be overloaded (as per the manufacturer's instructions) and loads should be balanced in the amusement device.

**Cables and cords:**

- Cords and cables should be inspected according to the manufacturer's specifications or in case there are no determined specifications, international industrial specifications should be followed.
- Cables and wires that have been damaged will be replaced with new wires or cords that are efficient for their intended purpose. The proper installation and connection of cables and wires should also be ensured.

**Cleanliness of the amusement equipment:**

Amusement equipment should be kept clean. Cleaning activities should be recorded on the cleaning log sheet.
Firefighting:

- The fire extinguisher must be in a remote and accessible location in the play area, internal combustion engine or any other area.
- The fire extinguisher must be located at any place that containing inflammable materials.

Climate conditions:

All park owners, game owners, and game operators during the unstable weather period when wind up (15 m / s), lightning, and any other condition that will make the entertainment or game location unsafe. The owner should shut down the amusement equipment.

Shutting down the amusement equipment:

Amusement equipment owner should inform the operator to shut down the equipment in case of keeping it running might affect the safety of the players. Operators have the right to refuse drop in the players that are not fulfilling the requirement or may cause risk to other players.

Electrical Safety

All electrical wiring, equipment and devices used for entertainment or lighting equipment must be installed, operated and maintained by trained and qualified personnel. Equipment and electrical connections must contain insulators and must be free of hazards that are likely to cause death or serious bodily injury to staff or the public.

Earting/Grounding

- Amusement equipment should be Earthed/grounded when providing temporary power to amusement equipment by generators.
- Each electric powered entertainment device must be effectively grounded. Earthing shall be applicable to all non-circulating metal parts that may become active and subject to contact by any person.
Electricity Breaker

Each electric entertainment device that is not designed to be controlled directly by the passenger must be equipped with a detachable power switch that the operator can easily access.

Protection from overcurrent:

Electricity wire should be provided with electronic breakers according to the power load as well fixing such instrument in neutral wires or grounded. This protection should be maintained all the time of power on.

Protection of the staff

No employee is allowed to work near any part of the electrical circuit that he can contact during his work unless he is protected from shock by deactivating the circuit or grounding it correctly or by effectively isolating it. If protection is provided by deactivating the circuit, the key that controls the circuit must be closed to prevent unintended operation.

Warning signs

High-voltage warning signs are deployed at locations where non-qualified personnel can connect to live electrical parts and connections.
### Organization Unit: Health & Safety Department

<table>
<thead>
<tr>
<th>Form Sheet title:</th>
<th>Guideline for Safety in Events/play area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doc Ref.</td>
<td>DM-H&amp;SD-GU02-SEPA</td>
</tr>
</tbody>
</table>

For more information please contact

Health & Safety Department – Dubai Municipality

800900