

Power Driven Devices and Installations regarded as “Amusement Rides”

The Amusement Rides (Safety) Ordinance (Cap. 449) (“AR(S)O”) regulates the design, manufacture and installation of amusement rides, as well as the operation, maintenance and examination of amusement rides to avoid dangerous conduct and safeguard public safety.

Due to the rapid development of technology, various power driven devices have emerged in the market, such as “Electric Mobility Devices (EMDs)¹”, “Dynamic Driving Simulators” and “Dynamic Training Facilities²”.

If the riders are not fully aware of the hazards and risks involved in, or in the absence of guidance of professionals and appropriate safety measures for the use of the power driven devices, accidents and injuries may easily result.

When these power driven devices are driven or ridden by members of the public and are primarily used for amusement purposes, the design, operation and use of the relevant devices will be regulated by the AR(S)O.

The definition of “amusement ride” as stipulated in the AR(S)O:

Amusement Ride means a power driven³ device, together with the machinery, equipment and plant connected to, or used in connection with, such device, which is designed to be driven or ridden by members of the public primarily for amusement purposes —

- (a) and includes any such device that is capable of being moved from one place of operation to another;*
- (b) but does not include any such device which is driven solely either by human physical effort or by gravity or partly by such effort and partly by gravity only (that is, it is neither wholly nor partly power driven), other than a device which is specified in “Schedule 2”.*

¹ Including electric scooters, electric unicycles, electric hoverboards, electric skateboards, electric bicycles, etc.

² Use of sensors and actuators to train core muscles, range of motion, balance and posture, including ski simulators.

³ Power driven, as defined in the AR(S)O, includes magnetically, pneumatically, hydraulically, electrically or otherwise mechanically driven but does not include driven by human physical effort.

Kiddie Ride means an amusement ride —

- (a) *designed primarily for use by children aged not more than 12 years;*
and
- (b) *having —*
 - (i) *a designed carrying capacity of not more than 100 kilogrammes;*
and
 - (ii) *a motive power of not more than 1.1 kilowatts.*

Amusement rides that the general public may think of mainly include large scale rides in theme parks, such as roller coasters, Ferris wheels, merry-go-round, etc., or common coin-operated rides for children. However, as defined in the AR(S)O, apart from roller coasters, Ferris wheels and coin-operated children's rides, a power driven device that is operated for the members of the public to drive or ride on; and is primarily used for amusement purposes would be considered as an amusement ride.

The EMSD will consider different factors when reviewing whether the relevant case is primarily for amusement purposes, including but not limited to:

- The design intent declared by the designer or manufacturer of the power driven device;
- The purposes of operation claimed by the relevant operator who intends to operate the power driven device concerned and relevant supporting documents;

Note: For instance, if the relevant operator claims that the device is used for training purposes (such as driving or sports training), a structured training programme and details, rules and qualifications of the training instructors should be prepared for reference.

- The location where the power driven device is installed and the perception of people using the device, as well as the environment, layout, décor and ambience of the location; and

Note: If the device is installed in a fitness centre, the public generally notices that the device is similar to other fitness equipment in the same location. They should be aware that before using this equipment or device, they should have a good understanding of the device, including the proper procedure and risks during use, and the degree of supervision by the trainer during its operation, etc.

The location where the power driven device is installed should be consistent with the purpose of operation claimed by the relevant operator.

- The nature of business registered by the operator for the location where the relevant power driven device is operated.

Note: As mentioned above, the purposes of operation claimed by the relevant operator should be consistent with the registered nature of business of the location where the device is operated. For example, if the device is operated in a location where Places of Public Entertainment Licence / Temporary Places of Public Entertainment Licence is required (including cinemas), it does not sound convincing if the claim is not primarily for amusement purposes.

There is **no one single conclusive factor to distinguish** whether the operation of a power driven device for driving or riding by members of the public is primarily for amusement purposes. To distinguish whether a device is an amusement ride which is regulated by the AR(S)O, all relevant factors must be considered, and there is no hard and fast rule as to how important a particular factor should be.

This is not a legal document. For details of the legislative requirement, persons who intend to operate the power driven devices should refer to the Amusement Rides (Safety) Ordinance (Cap. 449) and its subsidiary legislation which have been uploaded to the Bilingual Laws Information System.

Frequently Asked Questions

Question 1: I intend to provide some low power children's battery cars that can be easily bought from the market for children to drive and play in the shopping mall. Parents can watch their children playing by the side. Is it necessary to apply for a use permit of kiddie ride in accordance with the AR(S)O?

Before purchasing any power driven product from the market, one should pay attention to the specifications of the product and understand the risks of using it, and ensure that the product is maintained in accordance with the maintenance recommendations to avoid dangerous occurrences. If these power driven devices are provided for the members of public to drive or ride for amusement purposes, it is necessary to apply for a permit to use and operate amusement ride or kiddie ride in accordance with the AR(S)O in advance. In order to safeguard public safety, when considering whether the device is suitable for the members of the public to use as an amusement ride, the EMSD will assume that the users can be reasonably safe in using the device without knowing the specifications and risks of the device in details. For example, when assessing the risks of some self-controllable amusement rides (including bumper cars and children's battery cars), the case that a passenger may stop controlling the device when he / she is moving forward at full speed will be considered such that the resultant risk is still at a manageable level if the passenger is equipped with personal protective equipment provided. Therefore, when formulating the maximum driving speed of the ride, the protection effectiveness of personal protective devices (including seat belts, helmets and pads) at different speeds and protection facilities at the playing area will be considered at the same time.

Question 2: The dynamic driving simulator I am using does not swing much, why do I still need to apply for a permit according to the AR(S)O when it is used for amusement purposes?

During the safety assessment of amusement rides, apart from considering the design specifications of the device itself (including load capacity, structural safety, braking system, control system, etc.), the EMSD will also evaluate the conditions of the ride during operation, such as the possibility of causing injury

to the passengers or people in the vicinity by fixed or moving objects, and establish a safety distance and envelope. Besides, in addition to operational considerations, the maintenance and examination of related devices will also have to be reviewed to ensure public safety is safeguarded.

Question 3: I plan to install a ski simulator, which is mainly used for fitness training in my store to train core muscles, agility and balance. However, I also want to operate the same ski simulator for the public to experience skiing fun during the holidays. At that time, there will be trainers supervising the operation. Will the above operation be regarded as use and operation of amusement rides?

When a ski simulator is use for amusements purposes, the general public will see riding on an amusement ride should be safe with a prerequisite of understanding the risks of using it. Therefore, using a ski simulator for experiencing skiing fun will be considered as primarily for amusement purposes, the ski simulator will be regarded as an amusement ride defined in the AR(S)O, and application for relevant permits in accordance with the AR(S)O is required.

Question 4: I intend to use the same device for training and amusement purposes. Since it is the same device, it should be equally safe no matter whether it is used for training or amusement purposes. Why do I still need to apply for a license under the AR(S)O when it is used for amusement purposes?

Due to the difference in proficiency and skill level of the users, the user experience may be different when using the same device under different modes such as training or amusement purposes. Therefore, when the EMSD assesses the safety requirements of a power driven device designed to be ridden by a general public and is primarily for amusement purposes, the motion of the device (including degree and amplitude, acceleration, speed, etc.) may need to be adjusted and restricted taking into account the personal protective equipment provided. When it is used for training purposes, the relevant operator and the user should implement a system that can ensure the safety of training, and the user can disregard the above adjustments and restrictions according to the safety system. Before using it as an amusement ride again, the Competent Person of

the device must ensure that the device has been set according to the adjustments and restrictions stated on the permit, and the user has put on the personal protective equipment provided. Besides, the location where the amusement ride is operated should apply for a Places of Public Entertainment License / Temporary Places of Public Entertainment License under the Places of Public Entertainment Ordinance (Cap. 172). Please consult the Food and Environmental Hygiene Department for details.

Question 5: Are all power driven devices and installations suitable for application as amusement rides?

Not all power driven devices are suitable to the public for amusement purposes. For examples, some electric hoverboards or electric unicycles may not be equipped with an auto-balancing system, considerable balance and coordination are required when using them. Children or first-time users may trip or pose an injury hazard to other users or bystanders. Therefore, when planning to provide a power driven device for use as an amusement ride, the applicant should consider the specifications of the device itself, the requirements of the site, the maximum driving speed, the maximum number of devices that can be used at the same time, the personal protective devices to be worn, and the minimum allowable age of the user, etc.

Question 6: When I bought an electric scooter, the manufacturer said it was designed for commuting. If I provide an electric scooter for public use, is it not considered primarily for amusement purposes?

All relevant factors must be considered when examining whether a case is primarily designed for amusement purposes, the intention claimed by the designer or manufacturer is only one of them. Other factors include the perception of the users of electric scooters, as well as the environment, layout, décor and ambience of the location; and the nature of the business registered by the operator for the location, and there is no hard and fast rule as to how important a particular factor should be. Besides, using EMDs (for example: electric scooters, electric unicycles, electric hoverboards, electric skateboards, electric bicycles, etc.) on carriageways, footpaths or cycle tracks may commit an offence under the Road Traffic Ordinance (Cap. 374), its subsidiary legislation and other

relevant legislation. Please consult the Transport Department for details.

Question 7: I intend to introduce several karts (also known as go-karts) for “racing competition”. Do I need to apply for a license under the AR(S)O? It will be meaningless if the contestants cannot run at full-speed in the competition (e.g. 80 km/h). Can the maximum allowable operating speed be released?

Karts provided for members of the public to drive primarily for amusement purposes are regarded as amusement rides defined in the AR(S)O, and application of relevant permits is required. When reviewing similar cases in the past, the EMSD limited the maximum speed of karts according to the age restriction of drivers, design of karts, track design, etc., and required locking and preventing the maximum speed of the kart from being increased. Besides, no competition of any form, including race training, is allowed. Personal protective equipment and clothing instructions should be provided and executed. Therefore, the use of karts for “racing competition” with full speed will not meet the requirements for the application for a use permit of amusement ride. If no members of public will participate in the kart race, you may check with the Karting Association of Hong Kong, China.

Question 8: I intend to install a ski simulator in a private club for members only for amusement purposes. Do I need to apply for a license under the AR(S)O?

The public referred to in the AR(S)O includes members of private clubs. Therefore, any ski simulator being set up in private clubs for members for amusement purposes will be regarded as an amusement ride defined in the AR(S)O and application for relevant permits in accordance with the AR(S)O is required.

Question 9: In order to enhance visual effect, some stage performances are now equipped with mechanically driven devices, such as revolving stages. As performances will surely be regarded as a form of amusement, is it necessary to apply for a license under the AR(S)O?

If the mechanically driven device is only used by the stage performers for performance purposes, it does not fall within the definition of amusement rides under the AR(S)O. However, it is recommended that the responsible person of the device should ensure that the design and installation of the device are certified by an authorized person and that system testing, maintenance and repairs be carried out according to the requirements of the designer. Operators and performers should also fully understand the hazards and risks involved in the device, pay attention during operation and use to ensure safety.

Question 10: Is it necessary to apply for a license under the AR(S)O if a power driven device is provided for public use without charging a fee?

As long as the power driven device is operated for members of the public to drive or ride and it is primarily for amusement purposes, no matter the user is allowed to ride with or without payment, the relevant operation is regulated by the AR(S)O and application for relevant permits in accordance with the AR(S)O is required.