

Supplementary Conditions for Design and Operation of Mobile Amusement Rides in Carnival Events

General

1. The owner of an amusement ride (Owner) shall comply with the requirements of the Amusement Rides (Safety) Ordinance (Cap 449) ("the Ordinance"), the Amusement Rides (Safety) (Operation and Maintenance) Regulation (Cap 449B) ("the Regulation") and obtain the necessary approvals from the Director of Electrical and Mechanical Services ("the Director") before operating the amusement ride for public use. The *Code of Practice for Amusement Rides* ("the Code of Practice", downloadable in www.emsd.gov.hk) provides general requirements for the design, installation, testing and commissioning of amusement rides for the safety of the public, while these *Supplementary Conditions for Design and Operation of Mobile Amusement Rides in Carnival Events* elaborate the best practices for application procedures and operation of mobile amusement rides taking into account the nature of carnival events. These Supplementary Conditions should be read together with the Ordinance, the Regulation, the Code of Practice and other applicable guidelines issued by the Director from time to time. The compliance with these Supplementary Conditions shall not relieve the Owner from other responsibilities and liabilities under the Ordinance, the Regulation and the Code of Practice.
2. For a carnival event with large quantity of amusement rides, the holder of the licence under the Places of Public Entertainment Ordinance (Cap 172) (hereafter referred to as "the event organizer") may act as the representative of the Owners when lodging applications for amusement rides under the Ordinance.
3. All application documents shall be in English and/or Chinese.
4. The applicant shall submit to the Electrical and Mechanical Services Department ("EMSD") a tentative schedule showing the key days of the event, for instances the delivery schedule, dates of installation, testing and commissioning, Surveyor's examination, assessment of Competent Person and operators, event opening, etc.
5. Applicant who intends to lodge a large quantity of amusement ride applications at the same time is highly advised to submit the applications to EMSD as early as possible in order to allow sufficient time for application processing. It is most preferred if the applications are lodged at least 6 months prior to commencement of the event.
6. For amusement rides that are stored or in use overseas, the applicant is advised to secure the design and installation approval from EMSD before shipping the rides to Hong Kong. The installation of an amusement ride in Hong Kong without approval granted under section 6 of the Ordinance is an offence of the laws.

7. The applicant is recommended to have a team of staff who are of technical background and familiar with the technical details of the respective amusement rides once he/she starts to prepare the applications. The applicant is also advised to have local technical support for on-site technical issues.

Application for Design and Installation Approval

8. The application documents shall include both technical and operational details demonstrating that the ride is safe for use by members of the public. The submissions shall include the design, specification (refer to the Code of Practice for details), risk assessment report, method and programme of installation, and maintenance record of the ride.

9. The applicant shall ensure that the site is of appropriate conditions for ride installation and operation. The site shall be leveled and be able to sustain the operating loads of the amusement rides. Emergency vehicular access shall be well established. The access points to drainage or other underground utilities/services shall not be obstructed.

10. For mobile rides that have been used / in use, the past maintenance record, survey report, inspection certification, alteration and incident happened, if any, shall be submitted to EMSD for tracking the past operating conditions of the ride. The ride shall comply with all the manufacturer's safety bulletins, if applicable, related to its operation, maintenance and alteration. The relevant documents shall be submitted to EMSD for reference. In addition, the ride shall be inspected by a competent party to be in good working order before it is being shipped to Hong Kong. Such inspection report shall be submitted to EMSD for vetting.

11. If there is any decorative structure attached to the ride, the applicant shall arrange a registered professional engineer or equivalent competent party to certify its structural integrity.

Application for Permit to Use and Operate

(a) Examination of the Ride

12. Upon completion of installation, the Owner shall appoint a Surveyor to examine and certify the integrity and safe operation of the ride. The scope of examination shall be submitted for EMSD's consent. Subject to the actual conditions of the ride and the comprehensiveness of maintenance record, the scope of non-destructive tests on the ride structure may be extended.

13. For systems/components which cannot be inspected after installation, the Surveyor shall examine that particular systems/components prior to or in the course of installation.

14. Certain kind of tests may be carried out by competent parties other than the Surveyor, for instance non-destructive tests of welds, certification of electrical installation, certification of pressure vessels, etc. The Surveyor shall ensure that these tests are carried out properly and the test results are recorded completely. The Surveyor shall endorse these test results and submit them with their examination report.

(b) Examination of the Operation Personnel

15. The requirements of Operation Personnel as stipulated in the Ordinance, the Regulation and the Code of Practice shall be complied with.

16. The Owner shall provide sufficient training to all ride operators. Practical and/or written tests shall be conducted to verify the understanding and competence of the operators on ride operation, safety requirements and legal liability. For high-risk rides, the Owner shall impose minimum requirements on the experience of local operators.

17. The curriculum vitae (CV) detailing the qualifications and experience of the Chief Operators shall be submitted to EMSD for assessment at least 3 weeks before the trial operation stated in condition 23 below. EMSD may conduct interview with individual candidate to assess his/her competence.

18. Both the Competent Person and the Chief Operators shall scrutinize and endorse the training record of the operators before the trial operation stated in condition 23 below.

(c) Operational Arrangement

19. The operational arrangement shall include the procedures for ride operation, passenger loading and unloading, emergency handling, ride maintenance and the number, working positions, roles and duties of operators. The staffing arrangement in peak hours and non-peak hours shall be clearly indicated. The training plan and training materials for operational and maintenance personnel shall be provided. The training materials for the key staff shall include the basic operating principle of the ride, operating procedures, duties of the respective posts, safety requirements, emergency procedures, evacuation and rescue procedures, etc. Pursuant to section 23 of the Regulation, the competent person shall prepare and issue to each operator instructions in writing on action to be taken by operators in the event of stoppage of the ride, malfunction of a safety device, rescue of passengers, fire or accident, safe-keeping of operating keys, and any other instructions that can improve the safe operation of the ride.

20. The Owner shall also prepare an operation plan for different weather conditions. The plan shall include the monitoring method of weather conditions, actions to be taken when inclement weather is forecasted, actions to be taken under inclement weather, and the pre-operational check after inclement weather. An anemometer shall be installed on site to monitor the local wind speed. Information regarding the thunderstorm condition provided by the Hong Kong Observatory shall also be closely monitored.

21. CCTV shall be installed at the ride areas where operators cannot monitor the ride condition directly. It is also recommended to install CCTV at the crowded areas of the rides for better management of the site order. These include the queue and load/unload areas, where it is likely that dispute between passengers and other passenger-related incidents such as tripping, slipping and motion sickness, would occur. The CCTV should be equipped with recording function such that the captured clips can be replayed for review if necessary.

22. A control center shall be established on site for overall site management. Provisions for the monitoring of the site condition and weather condition, as well as the communication system for making central command to the operators, shall be equipped in the control center.

23. A trial operation shall be conducted in the presence of the Surveyor and EMSD with the participation of all designated operational and maintenance staff, including the Chief Operators, operators and emergency staff, to confirm the competency and readiness of the operational team. The Surveyor shall state in the examination report that he/she is satisfied with the performance of the operational team in the trial operation or not. The names of operational team members who have involved in the trial operation should be noted in the Surveyor's examination report.

24. Prior to operation, the name list of Chief Operators and operators shall be submitted to EMSD for record.

25. The organizational structure of the event management team shall be made available prior to event opening. Subsequent staff appointment or re-deployment during the course of event shall be submitted to EMSD.

After Event Opening

26. The Owner shall operate and maintain all amusement rides properly to ensure the safety of the public and the staff. In particular, the Owner shall ensure that all operational staff follow the operational and safety procedures and enforce the rules and regulations of amusement rides effectively. The Owner shall also ensure that routine maintenance is carried out in accordance with the maintenance manual. Proper records shall be made available for the inspection of EMSD. The Owner shall provide facilities for EMSD officers to copy the records.

27. The Chief Operator shall keep a log book to record the attendance of Chief Operators and operators on a daily basis (names, signatures and attendance period). The log book shall be made available for inspection of EMSD.

28. EMSD may stop the operation of any amusement ride if any unsafe acts are observed, such as failure to comply with the operational procedures or failure to enforce the rules and regulations. Before the resumption of operation, the Owner shall provide written report with remedial actions to the satisfaction of EMSD.

Upon Event Completion

29. The Owner shall inform EMSD of the scheduled end date of operation of amusement rides for public use. After the scheduled end date, the amusement rides shall not be operated for the use of members of the public.

Incident Reporting Arrangement

30. Section 11 of the Regulation stipulates the kinds of incidents which the Owner shall report to the Director. In the event of reportable incidents, the Owner shall inform EMSD by phone immediately (within 30 minutes) and submit a written incident report to EMSD within 24 hours of occurrence. The detailed investigation report, if deemed necessary by EMSD, shall be submitted within 7 days recording the cause of incident and the remedial actions taken / to be taken to avoid recurrence. The Owner shall also establish an effective communication channel with the media to handle concerns of amusement rides.

Safety Record

31. The safety record of the Owner in operating and maintaining the amusement rides will be closely monitored. Incidents will be categorized and recorded as per Annex 1.

32. EMSD would take the safety performance of the Owner as a reference in processing future applications. In respect of incidents in previous events, the Owner shall produce an improvement plan to the satisfaction of EMSD.

Electrical and Mechanical Services Department
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Safety Record of Mobile Amusement Rides

Item	Description	Number of Occurrences
1	(a) Incidents resulting in fatality (b) Incidents resulting in hospitalized victims (c) Incidents resulting in minor injuries: (i) carelessness of passengers, e.g. mis-step / trip (ii) health condition leading to motion sickness / dizziness that requires medical treatment (iii) operator's error or passengers' behavior (iv) minor equipment fault	
2	Other occurrences and irregularities	

Note:

1. All incidents and injuries arising from operation and maintenance of amusement rides shall be counted unless the Owner proves to the satisfaction of the Director that such incident or injuries are out of the control of the Owner and not related to the deficiency in the design, installation, operation and maintenance of the rides.
2. If a person is sent to the hospital and is discharged after observation / treatment without admitted to a hospital ward, the person is considered suffering from minor injury.
3. "Other occurrences and irregularities" shall include all the occurrences that shall be reported under section 11 of the Amusement Rides (Safety) (Operation and Maintenance) Regulation, near miss incidents which could have led to injuries, staff failing to comply with the operational procedures, staff failing to maintain the ride in safe conditions and any other unsafe occurrences.