Guidelines for Noise, Vibration, and Odour (for the opening period)



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^{*}This Guideline may be revised as needed.

1. Definitions of abbreviations, contracted names, units, and terms

Abbreviation / contracted name	Official name
BIE	Bureau International des Expositions
ESMS	Event Sustainability Management System
Term	Definition
Convention	The 'Convention Relating to International Exhibitions' signed in Paris on the 22nd of November, 1928, and subsequently amended and supplemented.
The Expo	The International Registered Exhibition, Expo 2025 Osaka, Kansai, Japan, which will be held in Osaka, Japan, from the 13th of April to the 13th of October, 2025.
Registration Dossier	The Registration Dossier submitted to and approved at the 167th General Assembly of the BIE.
General Regulations	The General Regulations included in Chapter 8 of the Registration Dossier approved at the 167th General Assembly of the BIE.
Special Regulations	The Special Regulations set out in Article 34 of the General Regulations.
Guidelines	The Guidelines for the Expo issued by the Organiser in relation to items stipulated in the Special Regulations. The guidelines are intended to assist the Official Participants in all aspects of the preparation and operation of the Expo.
Laws and Regulations	The Convention, the General Regulations and Special Regulations; the laws of Japan, government ordinances, ministry ordinances, government notifications and notices; bylaws, regulations and controls of local governments; supplementary directives, instructions, and guidelines issued by the Organiser.
Commissioner General of the Exhibition	The representative of the Government of Japan for the Expo appointed by the Government of Japan in accordance with Article 12 of the Convention.
Organiser	The Japan Association for the 2025 World Exposition, which was designated by the Minister of Economy, Trade and Industry on the 31st of May, 2019 to carry out tasks relating to the preparation and operation of the Expo, in accordance with the 'Act on Special Measures Necessary for Preparing for and Managing of the International Exposition in 2025', and which was authorised as a public interest incorporated association on the 21st of October, 2019.
Official Participants	Foreign governments and international organisations that have accepted the formal invitation from the Government of Japan to participate in the Expo.
Non-official Participants	Those who were authorised by the Commissioner General of the Exhibition to participate in the Expo outside the sections of the Official Participants.
Concessionaires	Those mentioned in Article 35 of the General Regulations and who have been granted by the Organiser rights solely to conduct commercial activities within the Expo Site.

Participants	Official Participants, Non-official Participants, and Concessionaires.
Expo Site	All areas used and administered by the Organiser as the venue for the operation of the Expo.
Audio Equipment	In this Guideline, the following audio equipment. - Playback apparatuses (apparatuses that play sounds using a combination of recording tapes, disks, and other playback equipment, amplifiers, and speakers) - Musical instruments - Reproducers (apparatuses that amplify sounds using a combination of microphones, amplifiers, and speakers)

2. Introduction

This Guideline describes precautions concerning noises, vibration, and odours (offensive odours) (hereinafter these referred to as "noise, etc.") caused by Participants during the opening period of the Expo.

2-1 Purpose of this Guideline

While Participants who generate noise, etc. shall comply with the various laws and regulations on noise, etc. applied in Japan on the boundaries (perimeter) of the whole Expo site, this Guideline is described to for the purpose of preserving the environment within the Expo site for visitors as well as Participants by applying the provisions of various laws and regulations concerning noise, etc., even within the Expo site, and by ensuring that Participants comply with them.

that Participants comply with various Japanese laws and regulations pertaining to noises, vibration, and odour.

Note that this Guideline accompanies Special Regulations No. 5 and No. 10 and requires compliance not only by the Participants' staff but also by contractors and other associated parties.

2-2 Controls and Guides

This Guideline sets forth two standards, **Control** and **Guide**, since Participants will use the Guideline as reference in planning their operations within the Expo Site.

The Controls and Guides are respectively indicated using an alphabetical code and numerals.

C-00 Control indicates items that need to be complied with and sets forth restrictions and prohibitions in planning and operation.

G-00 Guide indicates items that are preferred and describes methods and proposals on how to meet the targets and purposes of the Expo.

2-3 Compliance with Laws and Regulations

Participants must comply with relevant Japanese laws and Osaka Prefectural ordinances.

Basic Act on the Environment

https://elaws.e-gov.go.jp/document?lawid=405AC0000000091

Act on Noise Regulation

https://elaws.e-gov.go.jp/document?lawid=343AC0000000098

Act on Vibration Regulation

https://elaws.e-gov.go.jp/document?lawid=351AC000000006

Act on Odour Control

https://elaws.e-gov.go.jp/document?lawid=346AC0000000091

Basic Osaka Prefectural Ordinance on the Environment https://www.pref.osaka.lg.jp/houbun/reiki/reiki honbun/k201RG00000371.html

Osaka Prefectural Ordinance on the Preservation of Living Environments, and its enforcement regulations

https://www.pref.osaka.lg.jp/houbun/reiki/reiki_honbun/k201RG00000392.html https://www.pref.osaka.lg.jp/houbun/reiki/reiki_honbun/k201RG00000393.html

Participants should also comply with and refer to other Guidelines, documents, and standards provided by the Organiser.

3. Relevant laws and regulations

3-1 Basic Act on the Environment

<Basic Act on the Environment>

Article 1 To ensure citizens' healthy and cultural lives now and in the future and contribute to human welfare, this law provides for basic philosophies pertaining to environmental preservation, identifies the responsibilities of the country, local governments, business operators, and citizens in environmental preservation, and stipulates the basics in environmental preservation to promote environmental preservation activities in a comprehensive and planned manner.

The Japanese government stipulates environmental standards in the four areas of air pollution, water pollution, soil contamination, and noise as standards "which are recommended to be kept up, so as to protect human health and conserve the living environments."

3-2 Act on Noise Regulation

<Act on Noise Regulation>

Article 1 To preserve living environments and protect the citizens' health, this law stipulates necessary regulations concerning a considerable range of noises that occur due to business activities and construction work at factories and business locations and stipulates accepted ranges of automobile noise.

It provides for regulations on noises that occur due to business activities and construction work, as well as regulations on automobile and night-time noise, etc.

3-3 Act on Vibration Regulation

<Act on Vibration Regulation>

Article 1 To preserve living environments and protect the citizens' health, this law stipulates necessary regulations concerning a considerable range of vibration that occurs due to business activities and construction work at factories and business locations and stipulates measures for requests pertaining to road traffic vibration.

It provides for regulations on vibration that occurs due to business activities and construction work, as well as regulations on road traffic vibration.

3-4 Act on Odour Control

<Act on Odour Control>

Article 1 To preserve living environments and protect the citizens' health, this law stipulates necessary regulations concerning offensive odours that occur due to business activities at factories and other business locations and promotes other offensive odour prevention measures.

It provides for regulations on offensive odours that occur due to business activities.

- 4. Standards in the Expo Site
- 4-1 Standards on noise
- **C-01** Participants must comply with the following regulation standards at the boundary lines of their Plots.

(The regulation standards apply to all areas at the vertical line extending from the Plot boundary line.)

Period of time	Morning (6:00 a.m.– 8:00 p.m.)	Daytime (8:00 a.m.– 6:00 p.m.)	Evening (6:00 p.m.– 9:00 p.m.)	Night time (9:00 p.m.– 6:00 a.m. of following day)
Regulation standard	60 decibels	65 decibels	60 decibels	55 decibels

However, this does not apply to those stipulated in the Event guidelines. In the event of a complaint by another Participant, even if it is below the regulatory standard, the Participant shall follow the instructions of the Organiser, consult with the parties concerned, etc. and take measures in order to protect the environment better.

G-01 Participants are advised to comply with the following regulation standards to prevent noise exposure in their Plots.

Noise exposure prevention	Equivalent noise level
Regulation	Less than 85
standard	decibels

- C-02 If the noise exposure may exceed 85 decibels, Participants should take measures, such as clearly indicating on sign boards that considerable noise occurs at the location.
- G-02 If the noise exposure will not be less than 85 decibels, Participants are recommended to select appropriate hearing protection equipment and have subject visitors and associated parties use such equipment.
- **G-03** Even if the noise exposure is less than 85 decibels, Participants are advised to prepare calm down spaces as such noise exposure may cause stress-related panicking.

◆ Rough measures of noise volume

120 ^{decibels}	Near airplane engines
110	Automobile horns (2 m in front), riveting
100	Under railway overpasses when trains pass
90	Solo singing in loud voice, inside noisy factory
80	Inside metro train cars

70	Phone ring, noisy streets
60	Quiet passenger vehicles, normal conversation
50	Quiet office
40	Late-night hours in the city, quiet residential area (daytime)
30	Suburban area (late at night), whispering voice
20	Sound of tree leaves rustling, sound of second hands of stationary clocks ticking
20	(1 m in front)

^{*}Source: document by Environment Bureau, Osaka City on cooperation in complying with regulation standards to maintain a quiet city

4-2 Standards on vibration

C-03 Participants must comply with the following regulation standards at the boundary lines of their Plots.

Period of time	Morning (6:00 a.m.– 8:00 p.m.)	Daytime (8:00 a.m.– 6:00 p.m.)	Evening (6:00 p.m.– 9:00 p.m.)	Night time (9:00 p.m.– 6:00 a.m. of following day)
Regulation standard		65 decibels		60 decibels

However, this does not apply to those stipulated in the Event guidelines. In the event of a complaint by another Participant, even if it is below the regulatory standard, the Participant shall follow the instructions of the Organiser, consult with the parties concerned, etc. and take measures in order to protect the environment better.

◆ Rough measures of vibration

decibels 100	When cracks occur in house walls, and gravestones fall	
90	When houses shake intensely, and unstable objects fall	
00	When houses shake, and lighting and the surface of water	50-3
80	in vessels moves	- (12)
70	When felt by general people, and sliding doors slightly	- WAS
70	move	667
60	When felt only by people that are not moving	
50	Degree that cannot be felt by the human body	
40	Degree that cannot be left by the numan body	

*Source: document by Environment Bureau, Osaka City on cooperation in complying with regulation standards to maintain a quiet city

4-3 Standards on odour

C-04 Participants must comply with the following regulation standards at the boundary lines of their Plots.

(The regulation standards apply to all areas at the vertical line extending from the Plot boundary line.)

Odour	Odour index	
Regulation standard	Less than 10	

In the event of a complaint by another Participant, even if it is below the regulatory standard, the Participant shall follow the instructions of the Organiser, consult with the parties concerned, etc. and take measures in order to protect the environment better.

♦ Odour index

The odour index quantifies the level of offensive odour based on the human sense of smell. The logarithm of the dilution ratio (odour concentration) when an odour sample is diluted with odour-less air to the extent that the odour can no longer be smelled is multiplied by 10.

It is said that there are more than 400,000 substances with odours, and in order to deal with the combined odour of these substances, three bags filled with odourless air are prepared, one of which is filled with a diluted odour sample, which is then selected by the person sensing the presence or absence of the odour. The process of sensing the presence or absence of an odour is then repeated for bags with a further dilution of the odour concentration, and the dilution factor (odour concentration) is measured by determining the stage at which the odour is no longer detectable by the persons.

◆ Relation between odour intensity and odour index

Odour intensity	Definition	Odour index
0	Odourless	
1	Odour that is barely smelled	
2	Weak odour whose source one can identify	
(2.5)	(Between 2 and 3)	10–15
3	Odour that can be easily smelled	12–18
(3.5)	(Between 3 and 4)	14–21

4	Strong odour	
5	Extreme odour	

^{*}Source: leaflet by Osaka City on offensive odour regulation

4-4 Restrictions on use of Audio Equipment

G-04 Participants are recommended to comply with all of the following regulation standards when using audio equipment for commercial advertisement purposes. Note that Participants should comply with the regulation standard pertaining to their Plot boundary line (C-01).

Prohibited location	Locations 10 m or higher above ground
Prohibited time	Between 8:00 p.m. to 9:00 a.m. of the following day
Method of use	When using loudspeakers in the same location, they should be used for 10 minutes or less per time and suspended for 10 minutes or more per time.
Regulation standard	The volume of sounds from loudspeakers should not exceed 70 decibels at 10 m away from the point immediately below the loudspeakers.

Note that the above will not apply in disasters or when the Organiser determines otherwise.

This does not apply to those stipulated in the Event guidelines.

In the event of a complaint by another Participant, even if it is below the regulatory standard, the Participant shall follow the instructions of the Organiser, consult with the parties concerned, etc. and take measures in order to protect the environment better.

Contact

The Official Participants can send inquiries concerning the content of this Guide or uncertainties concerning procedures to the Organiser using the Queries function in the online portal for the Official Participants.

If you have any trouble using the online portal for the Official Participants, please contact us by email to ; participant@expo2025.or.jp



