EXPO 2010
SHANGHAI CHINA

World Exposition Shanghai China 2010 Online Guide For Development And Construction Of The Experiencing Pavilion

1st Edition

Bureau of Shanghai World Expo Coordination

你的精彩，无时不在，无处不在
Your Pavilion, Anytime, Anywhere

Contents

Contents

INTRODUCTION

This "World Exposition Shanghai China 2010 Online-Guide for Development and Construction of the Experiencing Pavilion" (hereinafter referred to as the "Guide") is formulated to serve as guidelines to assist with the development, construction, organization and implementation of the Experiencing Pavilion of World Exposition Shanghai China 2010 Online (hereinafter referred to as "Experiencing Pavilion").

This Guide contains information in the following aspects: overview, description of Experiencing Pavilion, construction procedures and miscellaneous information about development and construction. Appended are technical specifications, description of the "Online Pavilion Exhibition & Construction Proposal", templates of forms to be filled out by the Participant, description of online pavilion appearance content materials, etc. This Guide is made in two versions in Chinese and English. Along with further progress of the preparation of Expo 2010, the Organizer will update the Guide for Development and Construction on a timely and continuous basis to ensure that all necessary information will be promptly provided for Participants.

1. Applicability of the Document

The Guide provides Participants with such information as construction procedures, technical specifications, reference templates and guide for composition of the "Online Pavilion Exhibition and Construction Proposal" of Experiencing Pavilion. The related definitions and descriptions are quoted from the "Participants Manual" and other correlative documents. The Guide aims to instruct Participants to organize and manage the development and construction work of their Experiencing Pavilions, and serves as the basis for service providers engaged in Experiencing Pavilion construction.

2. Terms and Definitions

[World Exposition Shanghai China 2010 Online]
Featuring a joint participation by the Expo Organizer and Participants, World Exposition Shanghai China 2010 (hereinafter referred to as "Expo Shanghai Online ") will present by using internet and multimedia technologies an online version of Expo 2010 Shanghai China featuring a combination of virtual presentation and reality, thus creating an internet platform enabling alternative experience and real time interaction, in addition to other supportive functions.

As an integral part of Expo 2010 Shanghai China, as well as its introductory channel, supplement and extension, Expo Shanghai Online offers functions including promotion, tour guide, exhibition and education.

[Online Pavilion]
Built on the basis of the Online Platform of Expo Shanghai Online, the Online Pavilion features a combination of the virtual display of the physical pavilion and the online virtual exhibition space. The Online Pavilion falls into two types depending on varying degrees of exhibition presentation desirable to the Participants: Browsing Pavilion, and Experiencing Pavilion.

[Exhibited Items]
Exhibited items are items displayed in the forms of text, picture, video, animation, 3D object, etc., to be browsed and interacted with by online visitors. Exhibited items can be substantially the same as those exhibited in the physical exhibition, or virtual items not existent in the real Expo 2010 Shanghai China.

[Browsing Pavilion]
Also known as the Type A Online Pavilion. It enables online visitors the all-around view of the spatial layout and main contents in the online pavilion through its browsing functions, and to have an in-depth understanding of the exhibited items through texts, pictures, audios, videos and animations. The Browsing Pavilion features an interior layout substantially the same as that of the corresponding physical pavilion.

The Browsing Pavilion is constructed by the Organizer and provided free of charge for Participants that have selected this pavilion type.

[Experiencing Pavilion]
Also known as the Type B Online Pavilion. Online visitors can roam in the online pavilion to get an in-depth understanding of the exhibited items through texts, pictures, videos and 3D objects, as well as more vivid experience through real-time interaction and other individualized functions.

The Experiencing Pavilion features an interior layout substantially the same as that of the corresponding physical pavilion, on which basis an extended virtual space and virtual exhibited items can be constructed to extend and expand the Expo theme and the artistic conception of the corresponding physical pavilion.

The Experiencing Pavilion is funded and constructed by the Participant.

[Extended Virtual Space]
Extended virtual space is a space not existent in the physical world exposition, designed by the Participant according to its own concepts and ideas, aiming to extend and expand the Expo theme and the artistic conception of the corresponding physical pavilion. Items exhibited in the extended virtual space are virtual ones, which will help Participants to further the Expo theme presentation.

[Virtual Exhibited Items]
The items exhibited in the extended virtual space.

[Recommended Service Providers]
The companies authorized by the Organizer and recommended to the Participants to help implement the development and construction work of Experiencing Pavilion.

3. Overview

3.1 Construction Target

Based on the online platform offered by the Organizer, and by using various advanced technologies applied in the fields of internet, 3D, multimedia and so on, Participants will be able to present their wonderful physical exhibitions on the internet, so as to attract more visitors to their physical pavilions, and promote their social, scientific, historic and cultural information in a wider scope and for a longer period.

Participants can also make full use of the features and advantages of the internet to achieve a variety of interactions between online visitors and Participants as well as between visitors themselves, to help perfect the presentation of their ideas and concepts, to offer online visitors with vivid and unforgettable alternative and interactive experience, and to provide an opportunity for those who cannot make it to the physical Expo site.

3.2 Designing Principles

1. Giving prominence to the Expo theme

The layout of the Experiencing Pavilion and its exhibited items should focus on the theme of Expo 2010 Shanghai China, "Better City, Better Life", as well as participant's own Expo theme; and should meanwhile reflect the exhibited contents and forms of participant's physical exhibition.

2. User-oriented

Exhibit contents and forms of the Experiencing Pavilion should be designed on the basis of nationality, age structure, educational level, operational habit, etc, of targeted online users. The interactive functions to be configured should be easy for users to understand and operate.

3. Ingenious and interesting

The design is recommended to take on knowledgeable, interesting, interactive and innovative features in content and form in order to attract and inspire more online visitors to actively participate in the experience and interaction.

4. Taking advantage of the internet

Participants are recommended to make proper use of various visual media (such as text, graphics, images, animation etc.) and audio media (such as voice, music etc.) to enhance interactions with visitors as well as between the online and physical pavilion, depending on the exhibition presentation desirable to the Participants.

3.3 Technical Principles

1. The Experiencing Pavilion is to be developed by using 3D, internet, multimedia and other correlative technologies. Files to be submitted should be minimized in size at no cost of quality to assure proper transmission through the web. The network bandwidth required for interaction should be sufficient for any online visitor with average bandwidth access.

2. The operation environment of Experiencing Pavilion should be compatible with the configurations for server hardware and software, as well as the network bandwidth stipulated in "Appendix A: Technical Specifications".

3. Interactions of Experiencing Pavilion should be planned and designed in the "KISS principle" (Keep It Simple and Stupid). Visitors' excellent experience should include available and convenient experience, logical consequence and uninterrupted transition during experience and interaction, and implication of aesthetics of the presentation. Avoid by all means paying too much attention to the visual effects while ignoring the meanings that are supposed to be presented.

4. Restrictions on users should be minimized. Online visitors should be able to browse and use all the introductory contents of the Experiencing Pavilion without having to log in. To guarantee convenience of the online browse, Participants are required to adopt the plug-ins only specified by the Organizer.

5. Appropriate techniques, tools and media should be selected for the development and construction, so as to optimize the performance of Experiencing Pavilion, and to be compatible with the mainstream operation environment suitable for online visitors.

4. Description of the Experiencing Pavilion

The Experiencing Pavilion contains an interior layout substantially same as that of the corresponding physical pavilion. In addition, Participants can construct an extended virtual space that is not existent in Expo 2010 Shanghai China, offering an extended and expanded presentation of pavilion images and concepts. Online visitors can roam in the online pavilion to get an understanding of the exhibited items through texts, pictures, videos and 3D objects, as well as more vivid experience through real-time interaction and other individualized functions.

Participants are required to construct the Experiencing Pavilion according to the "Technical Specifications" as specified in Appendix A. While developing the physical pavilion's interior and the physical exhibited items, Participants can also build an extended virtual space to extend and supplement their exhibition ideas and concepts that cannot be presented in the corresponding physical pavilion.

Functions of the exhibited items in the Experiencing Pavilion include but not limited to the following:
• Display in the form of picture and text
• Display in the form of audio and video
• Display in the form of 3D object
• Rotating, zooming in/out of the exhibits
• Changing texture/color of the exhibits
• Others

4.1 Theme of Online Presentation
Theme is the soul of Participants' online presentation. For theme presentation of the online pavilions, please refer to the "Theme Presentation" chapter of the "World Exposition Shanghai China 2010 Participation Guide". Participants shall abide by the following rules while giving full play to the creativity to develop their themes:

•   The layout of the virtual space and virtual exhibited items should focus on the Expo theme, 'Better City, Better Life';
•   The Online Pavilion is not meant to become a summary or congregation of national or regional achievements in economic, social, educational and other fields;
•   The Online Pavilion is not suitable for showcase of corporate images, commodities, or any other presentation irrelevant to the Expo theme.

4.2 Content Planning
The Participant should focus on the theme of World Expo to define its essential concept and contents of online exhibition. A clear-cut and logical sequence or structure for online exhibition should be framed so as to organize the exhibition and to optimize the exhibit forms (in text, picture, 2D/3D animation, interaction, audio, video, and etc.)

Generally, content planning involves the theme of the online presentation, the layout of pavilion interior, the exhibited items, the extended virtual space, etc.

4.3 Display Approaches

The Experiencing Pavilion and its exhibited items should be displayed in the form of 3D models to build up a spatial sense and vivid experience. Participants are encouraged to take various approaches of creativity, such as roaming inside the pavilion, interaction with the exhibited items, interactive online games, to name a few, to achieve diverse, novel and entertaining presentations of the online exhibition.

The **Online Pavilion Appearance**, to be provided by the Participant and built free of charge by the Organizer, is basically the same as that of the corresponding physical pavilion.

The **Online Pavilion Interior** describes the pavilion interior layout, including the building structure and the spatial layout of each floor, all the booths, hallways, sidewalls, entrances and exits therein, as well as the interior design pattern, the interior decoration effects, lighting effects, sound effects, visual effects, etc. The interior layout of an Experiencing Pavilion shall be substantially the same as that of the corresponding physical pavilion.

The **Extended Virtual Space** can be built by Participants in addition to constructing the pavilion interior substantially same as the corresponding physical one. The Extended Virtual Space should be marked with visible sign to help online visitors to perceive the difference between the virtual and the physically existent space.

The **Exhibited Item** falls into two types: the real exhibits that already exist in the physical pavilion; and the virtual exhibits not physically existent, which can be presented by various media forms such as text, image, 2D / 3D animation, interaction, audio, video and so on.

Functional Approaches are functions and effects designed according to the Participant's planning of the Experiencing Pavilion, such as exhibition, interaction, etc.

A probable Experiencing Pavilion is illustrated below:

5. Construction Procedures

5.1 Responsibilities of the Organizer and the Participant
The Organizer shall take responsibilities in the following aspects:
1. Developing, building and maintaining the system online platform.
2. Developing and building the Experiencing Pavilion appearances.
3. Formulating, elucidating and revising the "Guide for Development and Construction of the Experiencing Pavilion".
4. Integrating Experiencing Pavilions completed by the Participants into the system online platform.
5. Operating and maintaining Participants' Experiencing Pavilions.
6. Other relevant work.

The Participant shall take responsibilities in the following aspects:
1. Selecting its Experiencing Pavilion developers.
2. Completing its "Online Pavilion Exhibition & Construction Proposal" of the Experiencing Pavilion and other relevant documents in line with the "Guide".
3. Developing, constructing and updating its Experiencing Pavilion.
4. Submitting to the Organizer the required content materials for production of the Experiencing Pavilion appearance, etc.
5. Other relevant work.

5.2 General Procedures
The general procedures of the development and construction of the Experiencing Pavilion are divided into six major stages. The important dates are scheduled as follows:

Jun. 30th, 2009   Conclusion of participation confirmation

Jul. 31st, 2009   Conclusion of submission of "Online Pavilion Exhibition & Construction Proposal"
Conclusion of Online Pavilion appearance content materials delivery

Sept. 30th, 2009 Conclusion of Experiencing Pavilion delivery

Mar. 31st, 2010   Conclusion of Experiencing Pavilion pre-launch

May 1st, 2010   Opening of Expo Shanghai Online pavilions

Oct. 31st, 2010   Conclusion of Expo Shanghai Online updates

The general flow chart is shown as follows:
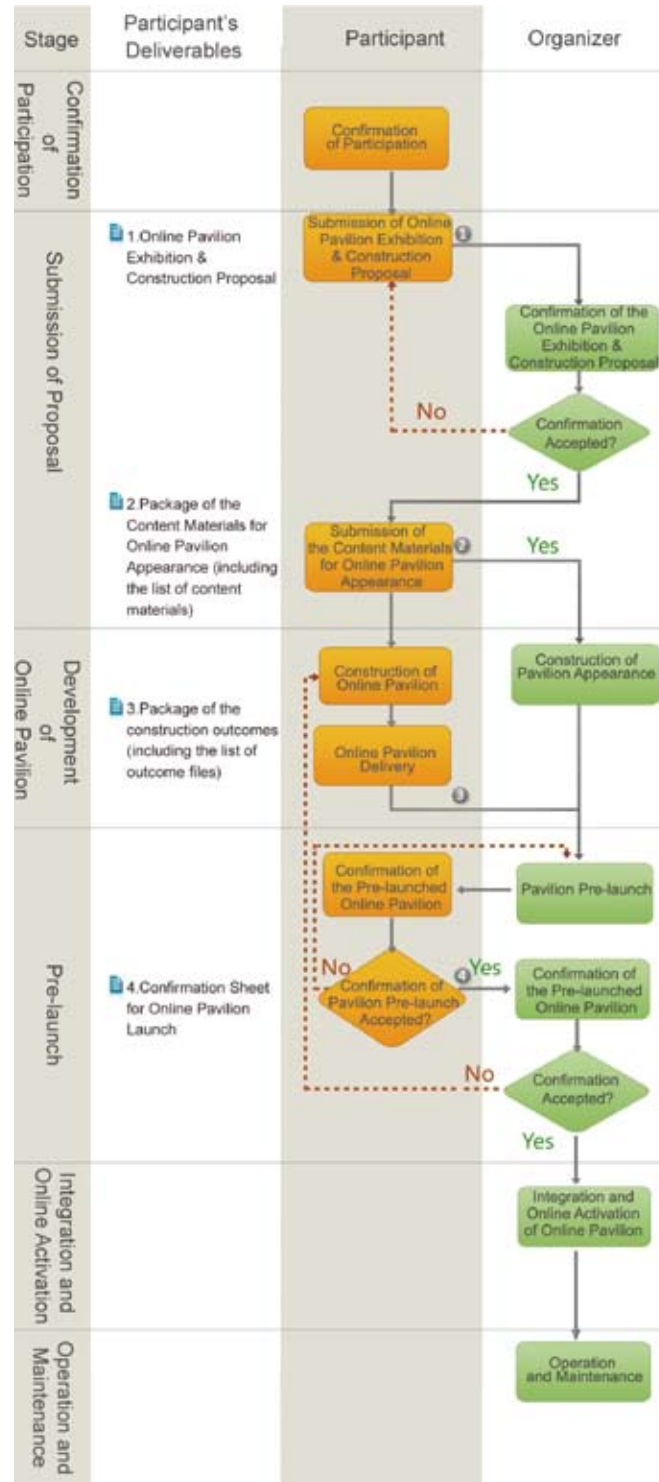
In case of a need for updating the information displayed online after the online pavilion activation, the Participant shall submit a written application to be reviewed by the Organizer, before moving forward into the "Content Update Procedures" stage.

The Content Update Procedures are shown as follows:
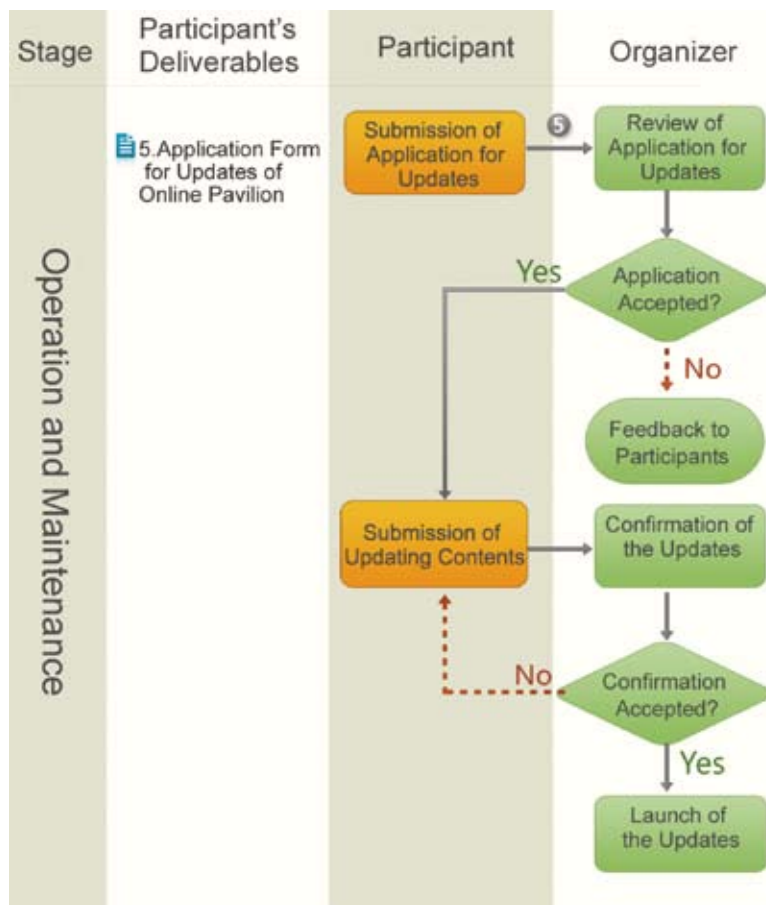
5.3 Detailed Description of Construction Procedures
5.3.1 Confirmation of Participation
Description:
Participation confirmation marks the initiation of the development and construction of Experiencing Pavilion. During the stage, the Participant shall confirm with the Organizer its participation in the Experiencing Pavilion construction. Upon receipt of the confirmation, the Organizer shall convene consultations or meetings on Expo Shanghai Online with the Participant.

When the Participant has confirmed its participation, the Organizer will designate contact persons to keep in close communication with the Participant for related matters.

5.3.2 Submission of Proposal
Description:

Proposal submission is the second stage of the whole process of development and construction. During the stage, the Participant shall submit to the Organizer the "Online Pavilion Exhibition & Construction Proposal" and "Package of Content Materials for Online Pavilion Appearance", which are to be reviewed by the Organizer. Upon acceptance of the "Proposal" by the Organizer, the Participant proceeds to the next stage, i.e., development and construction of its Experiencing Pavilion.

Participant's deliverables:

"Online Pavilion Exhibition & Construction Proposal", (See Appendix B for details)
"Package of Content Materials for Online Pavilion Appearance" (including the "list of content materials for online pavilion appearance") (See Appendix C for details)

5.3.3 Development and Construction of Online Pavilion
Description:

Development and construction is the third stage. During the stage, the Participant shall build the online pavilion according to its "Online Pavilion Exhibition & Construction Proposal" and the "Technical Specifications". Upon completion of development and construction, the Participant shall submit to the Organizer a file package of the construction outcomes. Meanwhile, the Organizer shall develop the online pavilion appearance based on the content materials submitted by the Participant. Then the construction outcomes package and the completed online pavilion appearance will be combined together for pre-launch.

Participant's deliverables:

"Package of Online Pavilion Construction Outcomes" (including the "list of construction outcomes") (See Appendix A for details)

5.3.4 Pre-launch
Description:

Pre-launch is the fourth stage. During the stage, the Organizer shall deploy the mentioned combination of the construction outcomes package and the completed pavilion appearance to the pre-launch environment, which is to be confirmed by both the Organizer and the Participant. Then the confirmed combination of completed online Experiencing Pavilion will be integrated into the online platform and activated online.

Participant's deliverables:

"Confirmation Sheet for Online Pavilion Launch" (See Appendix D for details)

5.3.5 Integration and Online Activation
Description:

During the fifth stage of development and construction, the Organizer will deploy on the Expo Shanghai Online Platform the already confirmed combination of the completed online Experiencing Pavilion, which is to be officially online activated on May 1st, 2010.

5.3.6 Operation and Maintenance
Description:
During the stage, the Organizer will offer operation and maintenance services for the activated online pavilions, so as to guarantee trouble-free access for online visitors.

5.3.7 Content Update
Description:
In case of a need for updating the information displayed online after the online activation, the Participant shall submit a written application to be reviewed by the Organizer. Upon acceptance of the application by the Organizer, the Participant shall submit the contents that are to be updated by the Organizer.

The deliverables:
"Application Form for Updates of Online Pavilion" (See Appendix E for details)

Package of Updates

5.4 Participant's Deliverables
5.4.1 Online Pavilion Exhibition & Construction Proposal
Participants are required to complete and provide the Organizer with the "Online Pavilion Exhibition & Construction Proposal". The "Proposal" shall describe the exhibited contents of the Experiencing Pavilion, the relevant technical details and the timetable of construction, so that the Organizer can have a comprehensive understanding of the contents and effects of the Experiencing Pavilion, as well as the technical methodologies to be taken by the Participant.

Please refer to the "Guide for 'Online Pavilion Exhibition & Construction Proposal' Composition" as specified in Appendix B for detailed information of the template, the guide for composition and an example of the "Proposal".

5.4.2 Package of Content Materials for Online Pavilion Appearance
A package is a collection of standard, non-encrypted compressed files in ZIP or RAR format. The "Package of Content Materials for Online Pavilion Appearance" consists of content materials needed by the Organizer for construction of the appearance of the Experiencing Pavilion.
Please refer to the "Notes on Content Materials for Online Pavilion Appearance" as specified in Appendix C for detailed information of the package.

5.4.3 List of Content Materials for Online Pavilion Appearance
The "List of Content Materials for Online Pavilion Appearance" is a document defining information such as name, type, quantity, content and path of the files associated with the content materials to be submitted by the Participant to the Organizer. The "List" shall be located under the root directory of the content materials package.

Please refer to the "Notes on Content Materials for Online Pavilion Appearance" as specified in Appendix C for explanatory information and a template of the "List".

5.4.4 Package of Online Pavilion Construction Outcomes

The "Package of Online Pavilion Construction Outcomes" contains files associated with the Participant's completed online pavilion.

5.4.5 List of Online Pavilion Construction Outcomes

The "List of Online Pavilion Construction Outcomes" is a document defining information such as name, type, quantity, content and path of the files associated with the construction outcomes to be submitted by the Participant to the Organizer. The "List" shall be located under the root directory of the construction outcomes package.

Please refer to the "Technical Specifications" as specified in Appendix A for the template.

5.4.6 Confirmation Sheet for Online Pavilion Launch

The "Confirmation Sheet for Online Pavilion Launch" is a document made by the Participant to confirm the official launch of the online pavilion.

Please refer to the "Confirmation Sheet for Online Pavilion Launch" as specified in Appendix D for the document format.

5.4.7 Application Form for Updates of Online Pavilion

The "Application Form for Updates of Online Pavilion" is a written request submitted by the Participant, who is in need of updating the information displayed online after the official activation of its online Experiencing Pavilion, to the Organizer for updates. This "Application Form" shall describe the contents to be updated as well as the related timetable.

Please refer to the "Application Form for Updates of Online Pavilion" as specified in Appendix E for the template.

6. Miscellaneous

6.1 Commercial Activities

The general regulations on commercial activities of the physical World Expo 2010 Shanghai China also apply to the Expo Shanghai Online. As the World Expo is in nature an operation for public interest and due to the special nature of the Internet, commercial activities in relation to Expo Shanghai Online are restricted to a certain extent. Where commercial activities are involved, the Participant shall promptly consult the Organizer and proceed only upon written consent from the Organizer.

In principle, the Participant must not display any advertisements in the online pavilion. In case of a need for posting advertisements in the Experiencing Pavilion due to special reasons (e.g., to acknowledge the sponsor of the Experiencing Pavilion), the Participant must submit a written application to the Organizer and the Organizer shall review the application and determine whether the advertisement posting is allowed and, if allowed, the time, position, content and form of the posting.

Listed below are guidelines followed by the Organizer when reviewing applications of Participants for online advertisements:

1. The General Regulations of Expo 2010 Shanghai China shall be abided by;
2. Generally speaking, only sponsors directly related to construction of the Experiencing Pavilions are entitled to advertise;
3. There exist no industrial or business conflicts between sponsors of the online pavilions and sponsors of World Expo Shanghai 2010;
4. Content of the advertisement in the online pavilions shall comply with the relevant regulations of World Expo Shanghai 2010;
5. Advertisement in the online pavilions shall only consist of the company logo and name, and shall not influence the normal browsing and experiencing of online visitors; and
6. Other relevant regulations.

For general regulations on commercial activities, please refer to Chapter III of the General Regulations of Expo 2010 Shanghai China.

6.2 Intellectual Property Rights

As part of Expo 2010 Shanghai China, Expo Shanghai Online shall follow the general regulations applicable to Expo 2010, and the Special Regulation No.11 Concerning Intellectual Property Rights issued by the Organizer shall also apply to Expo Shanghai Online.

The Organizer pays full attention to the IPR protection of official Participants in relation to their online exhibitions; however, the content materials provided by official Participants must not be involved in any IPR infringement against other parties. The Organizer shall not make any examination as to substance of the content materials provided by official Participants and their related rights. In the event that the Organizer is involved in an IPR dispute with other parties caused by the content materials provided by an official Participant, the Organizer shall be entitled to demand necessary remedial measures from the official Participant concerned, while reserving the right to claim damages.

Participants shall wholly and independently own the Intellectual Property Rights of content materials and related files.

Unless otherwise stated, the confirmation by an official Participant of participation in Expo Shanghai Online shall be deemed to permit the Organizer, or any institution(s) designated by the Organizer, to use free of charge all or part of its content materials in the form of online transmission or by any other reasonable means during the existence of Expo Shanghai Online. Official Participants may indicate to the Organizer restrictions on using the online content materials. However, any indications that are contrary to any of the following three conditions shall be deemed invalid:
a) The Organizer, or any institution(s) designated by the Organizer, shall have the right to use the content materials in the form of online transmission on the website of Expo Shanghai Online and its related web pages;
b) The above right shall be valid until at least October 31st, 2010;
c) The above right is not subject to geographical restrictions.

6.3 Emergency Plan
Where the Participant fails to submit the construction outcomes of online Experiencing Pavilion by September 30th, 2009; or where there is any dispute regarding contents of the exhibition, the Organizer shall have the rights to make for such Participant a simple introductory presentation in the form of web pages.

In case of any failure that occurs after the official online activation of Participant's Experiencing Pavilion, the Organizer shall cooperate with such Participant to promptly determine the cause and remedy the failure.

Appendix A: Technical Specifications

This Appendix serves as the technical specifications, which are to be strictly followed during development and construction of the Experiencing Pavilion. It provides descriptions and definitions of the relevant technologies, and is of great assistance to the trouble-free process of construction, launch and operation of the Experiencing Pavilion. Specifications in this Appendix for information formats, quantity, contents submission, the list of construction outcomes, are applicable only to the Package of Online Pavilion Construction Outcomes to be delivered by the Participant.

A.1 Basic Requirements of the Operation Environments
A1.1 Configurations of Server Hardware
The hardware configurations of the standard server running on the Expo Shanghai Online platform are listed below. Participants' online pavilions should run properly on such a standard server.

- Standard rackmount server;
- 1 Intel 4-kernel Xeon CPU, X3210, 2.13 GHz;
- Gigabit Ethernet card;
- 8G ECC memory;
- 1x160G SATA hard disk.

A.1.2 Configurations of Server Software
The software configurations of the standard server running on the Expo Shanghai Online platform are listed below. Participants' online pavilions should run properly on such a standard server. Generally, the Expo Shanghai Online platform provides neither database support, nor integration of software in any form, including database and middleware, from any third parties.

- Operating system: Suse Linux 10.1 Enterprise edition;
- Compiler such as GCC and Glibc, standard built-in version where the standard database is Suse Linux 10.1 Enterprise edition;
- HTTP Server: Apache 2.0.59 or later, using the default configuration.

A.1.3 Client Configurations of Computers
The following client computer configurations will be sufficient for proper access to the Expo Shanghai Online platform and online pavilions:

The minimum hardware configuration:
- CPU: PIII 800M CPU or equivalent;
- Memory: 512M;
- VGA Cards: Integrated video adapter which supports DirectX8
- Hard Disc: 5G free space or above

Recommended hardware configuration:
- CPU: PIII 1G CPU or above;
- Memory: 1G;
- VGA Cards: Stand-alone video adapter with 64M video memory, which supports DirectX8 and hardware acceleration
- Hard Disc: Above 10G free space.

Operating system: Windows 2000/XP/Vista.

A.1.4 Client Screen Resolution
The best screen resolution for all web pages of the Expo Shanghai Online is 1024x768. At this resolution, all pages should avoid horizontal scroll bars. When the client screen fails to meet the best resolution, the Expo Shanghai Online system platform and all online pavilions should still be able to be browsed properly.

The maximum resolution of the pop-up web page developed by the Participant is 800x600.

A.1.5 Client Browser
The following client browser configurations will be sufficient for proper access to the exhibitions and basic functions of the Expo Shanghai Online platform and online pavilions.

- Internet Explore 6.0 or above; other browsers with the IE core, or Mozilla Firefox 2.0 or above. The programs of the Experiencing Pavilion shall be able to automatically identify and display the browser editions.

A.1.6 Browser plug-ins
In order to provide more visitors with a better experience and better access to the relevant functions, Participants are required to apply only the browser plug-ins specified by the Organizer, so as to prevent impaired experience as a result of downloading too many plug-ins.

FLASH 9.0 or above are the plug-ins authorized by the Organizer at present. Other web plug-ins are now being evaluated, and will be published and elucidated in the follow-up of this document.

A.1.7 Client Network Environment
The client network speed not less than 256 kbps should be sufficient for users' proper access to the online exhibitions and basic functions of the Expo Shanghai Online platform and online pavilions, while a client network speed of 512 kbps or higher should ensure an easy and fast access.

A.2 Information Format and Quantity
A.2.1 Language
Presentation and input in texts on the Expo Shanghai Online website support only Chinese and English. In case of a need for presenting a third language, the correlative texts shall be converted into static pictures, whose standards are subject to the regulations stipulated in Section A.2.2 of Appendix A. The Expo Shanghai Online website provides no support for any text input of a third language except Chinese and English.

Texts as mentioned hereinafter shall be submitted only in Chinese and English. In case it is difficult to submit the texts in Chinese, the Participant can seek help from the Organizer. Any text in a third language other than Chinese and English that the Participant expects to present must be converted into static pictures.

Text files submitted by the Participant shall be saved only in UTF-8 format.

A.2.2 Picture
The static pictures submitted by the Participants shall be in PNG or JPG format.

Participants shall minimize the size of static pictures while maintaining most of the details. In order to guarantee easy access for the online visitors, unless otherwise specified, the static pictures in the web page presentation shall be at most 1024*768 in resolution, and shall be less than 1M (1024K) bytes in size.

The compression ratio of pictures in JPG format shall be around 85, and 95 at most.

Pictures in PNG format shall be in an 8-bit format with alpha channel.

A.2.3 Flash and the Player
The Flash presented in the Experiencing Pavilion submitted by the Participant shall use Action Script 3.0 or above as logic control, and in SWF 9.0 or above format. SWF 8.0 or its earlier editions are not allowed to be loaded in the FLASH files.

The default Flash player of Expo Shanghai Online is Adobe Flash Player 9.0 or above, with a default frame rate of 24 fps. Participant's FLASH files shall be properly played with the aforementioned players and frame rate.

A.2.4 Video and Audio
In the Expo Shanghai Online website, videos are presented for the online exhibitions (including both online pavilion and exhibited items), Video-on-Demand of recorded news and events, as well as users' video sharing. Relevant standards for videos are shown as follows:
Videos shall adopt the standard FLV format. Size of the proposed video play window is 320*240 so as to fit the needs of embedded play.

The default video frame rate is 25 fps, with a code rate of not more than 400 Kbps. The video-coding mode shall be H.263, or VP6, or H.264.

The corresponding audio can be in MP3 or ACC compressed format.

In order to make it easy for users to play and download, the video file should not exceed 100M bytes in size and 30 minutes in playing time.

A 2.5 Size of Web Page
The size of web page of the online pavilion developed by the Participant should be smaller than that of the Expo Shanghai Online platform. The proposed resolution is 800x600.

A.3 Contents Submitted by Participants

The Package of Online Pavilion Construction Outcomes submitted by the Participants must comply with the following format requirements and naming rules:

Numbering rules of information and construction outcome types

To facilitate the retrieval and management of the Experiencing Pavilion construction outcomes delivered by Participants, the following unified rules are applied to number the various types of outcome files of Expo Shanghai Online for the aspects of submission, retrieval and storage.

Numbering of information type:

Online Pavilion-01	Exhibited item-02	News-03
	Event-04	Schedule-05

Numbering of construction outcome type:

*.txt file-01	*.xml file-02	*xls file-03
Static picture-04	*.swf file-05	*.flv file-06
MP3 audio file-07		

Information or file types not listed above will be added on a regular basis in the future revisions of this document.

The maximum size of any single package of outcome files submitted by the Participant is 2G bytes.

A.3.1 Numbering Rules of Pavilion and Exhibited Items

To facilitate retrieval and management, all pavilions and exhibited items in the Expo Shanghai Online must be numbered on a unified basis. Each number uniquely identifies a pavilion or an exhibited item, and is not repeated or reusable.

The Organizer stipulates the numbering rules of the pavilions on a unified basis and delivers the specific numbers to the Participants.

The serial numbers of the exhibited items are determined by the Participant and submitted together with the exhibited item information to the Organizer. Each exhibited item belongs exclusively to a certain pavilion, which is numbered as "serial number of pavilion. XXXX", where "XXXX" are 4-digit natural numbers ranging from 0001 to 9999. Be cautious that the serial numbers of exhibited items are not reusable; in other words, in case there is a change to the distinct features (e.g. name, appearance, function) of an exhibited item, it will be identified as a new one, therefore a new serial number must be allotted to replace the formerly used number, which is not valid and cannot be reused for the changed exhibited item.

A.3.2 Submission of Pavilion, Exhibited item, News and Event Information

The Participants must submit the information about pavilions, exhibited items, news and events in *.xml files plus auxiliary pictures, packaged together with video or audio files if applicable. Each single information item, for example, an exhibited item, a news report or an event is submitted as an independent information package file.

In submitting the information package, each information package must contain an index file in the XML format, named "index.xml", which specifies the title of the submitted information, the summary, and names, types and purposes of all files in this information package.

An example of the index file:
```
<root>
    <pavilion_ID>pavilion identification </pavilion_ID>
    <info_type> numbering of information type</info_type>
    <title> title of information</title>
    <desc> description of information</desc>
    <file_list>
        <file_name>file 1name </file_name>
        <file_type>file 1type numbering</file_type>
        <file_desc>file 1description </file_desc>
    </file_list>
    <file_list>
    </file_list>
</root>
```

Definition of the mentioned Tag in this example of index.file will be provided in the updated revision of this document.

The information package must be compressed in the standard, non-encrypted *.ZIP or *.RAR format, and named as "serial number of pavilion, information type (ZIP or RAR)", where "serial number of pavilion" is the serial number of the pavilion associated with the information. If the information is public and does not belong to any single pavilion, its serial number should be the "public serial number" (determined and delivered exclusively by the Organizer).

A.3.3 Submission of Information for Searching Functions

Together with the abovementioned information, the Participant shall submit a document related to the information for searching functions, to facilitate search of the pertinent information such as pavilions, exhibited items, news and events.

This document shall be submitted as an XML file and named as "key.xml". Information of each pavilion, exhibited item, news report and event is paired with a children node under the root node. Information of each node contains four fields: Type, Name, Summary and Searching Keyword.

"Type" field specifies the information types of this row, as detailed in section A.3.1 of Appendix A.

"Name" field displays the title of this information, shown in the texts not more than 50 English characters or 25 Chinese characters long.

"Summary" field shows a summary of this information, presented as an information summary responding to user's search command. The length of this field inclusive of punctuations shall not be more than 200 English characters or 100 Chinese characters.

"Searching Keyword " field displays the keyword for searching. At most 10 keywords can be loaded for each single searching. Length of each keyword shall not be more than 50 English characters or 25 Chinese characters. The keywords shall be separated from each other by the asterisk "mark".

An example of the XML file:
```
<root>
    <pavilion_ID> pavilion_ID </pavilion_ID>
    <info_list>
        <info_type>information 1type numbering</info_type>
        <info_title>information 1title </info_title>
        <keyword>information 1keyword search</keyword>
        <desc>information 1description </desc>
    </info_list>
<info_list>
        <info_type>information 2type numbering </info_type>
        <info_title>information 2 title </info_title>
        <keyword>information 2 keyword search </keyword>
        <desc> information 2 description </desc>
    </info_list>
</root>
```

A.4 Specifications for Pavilion Data Access
A.4.1 Data Storage
All data required for online pavilion construction shall be stored on the platform built by the Organizer.

Each Participant will be allotted with a 2G space for storage. The maximal size of any single file (excluding the video files) is 50 M. The maximal size of any single video file is 200 M.

A.4.2 Data Access Protocol
The standard HTTP protocol is the protocol for data exchange between the client and the platform. Data can be accessed by users from the platform. However, neither data upload nor data update from client's end is supported by the platform.

A.4.3 Data File Naming Rules
The data files shall be named with only lowercase English letters (a~z) and the underline mark "_". The file name and the suffix are separated with the punctuation mark.

A.5 List of Online Pavilion Construction Outcomes
List of Online Pavilion Construction Outcomes

Serial No.	File name	File description	Relative path of package	Information type	Outcome file type	Remarks
1	Index	Index file of news materials			XMLfile-02	Shall be contained in the package
2	Key.xml	Index file of information re pavilion, exhibited items, news, events and etc.			XMLfile-02	Shall be contained in the package
3						
4						
5						
6						
7						
8						
9						
10						

An Example of the List

Serial No.	File name	File description	Relative path of package	Information type	Outcome file type	Remarks
1	Index	Index file of news materials	\news\	News-03	XMLfile-02	

Appendix B: Guide for "Online Pavilion Exhibition & Construction Proposal" Composition

Made in three parts, the template of the "Online Pavilion Exhibition & Construction Proposal", the Guide for composition of the "Proposal" and a proposed example of the finished "Proposal", this Appendix aims to help Participants understand the purpose of finishing and submitting such a "Proposal", and provides guides and suggestions concerning the composition. This "Proposal" shall be submitted by the Participant after its official confirmation of participation in the construction of the Experiencing Pavilion.

B.1 Template of "Online Pavilion Exhibition & Construction Proposal"

Participant	
Date of Proposal Submission	YY MM DD

Online Pavilion Exhibition Proposal

Notes on the Online Pavilion Exhibition Proposal are recommended to comprise the following three parts:
1. The introduction of the Online Pavilion Exhibition Proposal
2. The Online Pavilion Exhibition Proposal
3. Others
(Please attach the Online Pavilion Exhibition Proposal in a single document with this form)

Online Pavilion Construction Proposal

Notes on the Online Pavilion Construction Proposal are recommended to comprise the following two parts:
1. Description of functions
2. Description of technologies
(Please attach the Online Pavilion Construction Proposal in a single document with this form)

Developer of Online Pavilion			
Plug-ins required for users to install to access the online exhibition?			
Whether there will be video-playing available in online pavilion?	☐ Yes ☐ No		
Time schedule of online pavilion construction	(Please list here the other important dates) Online Pavilion Appearance submission YY MM DD Online Pavilion submission YY MM DD		
Plan for updates of online pavilion	Contents to be updated	Timetable for updates	
		YY MM DD	
		YY MM DD	
		YY MM DD	
Other requirements or notes			
Signature of the authorized representative of the Participant			
Please Contact	Expo Shanghai Online Program Office, Communication and Promotion Department, Bureau of Shanghai World Expo Coordination Address: Expo Mansion, 3588 Pudong (S) Rd., Shanghai, 200125 Fax: +86-21-2206 0311 Contact person: Mr. Chen Xiaobo Tel: 86-21-2206 2085 Ms. Yu Lei Tel: 86-21-2206 2086 Email: tech@expo2010.gov.cn		

Online Pavilion Exhibition & Construction Proposal

B.2 Guide for "Online Pavilion Exhibition & Construction Proposal" Composition

The Participants is required to deliver to the Organizer a brief description of its "Online Pavilion Exhibition and Construction Proposal", and shall fill out the template of the "Proposal" according to the guidelines specified by the Organizer.

Notes on Proposal Submission

Please submit a hard copy of the "Online Pavilion Exhibition & Construction Proposal" in English, along with an electronic version in PDF format in CD-ROM, to the Expo Shanghai Online Program Office prior to July 31st, 2009.

Please contact:
Expo Shanghai Online Program Office, Communication and Promotion Department,
Bureau of Shanghai World Expo Coordination
Address: 3588, Pudong (S) Rd, Shanghai, 200125, China
Fax: +86-21-2206 0311
Contact person: Mr. Chen Xiaobo (+86-21-22062085), Ms. Yu Lei (+86-21-22062086)
Email: tech@expo2010.gov.cn

B.2.1 Online Pavilion Exhibition Proposal

The "Online Pavilion Exhibition Proposal" of the Experiencing Pavilion can be substantially the same as that of the physical exhibition at Expo 2010 Shanghai China; a virtual space can be designed on the basis of the physical Exhibition Proposal. In case the exhibited items of the physical exhibition are not to be displayed online, an explanation shall be given herein.

Aimed at demonstrating the Participant's expectation and idea of the online exhibition of its Experiencing Pavilion, and describing contents and forms of the exhibition, it is recommended that the "Online Pavilion Exhibition Proposal" is recommended comprise the following three parts:

1. Introduction of the online exhibition

To introduce the designing concept, construction target, spatial layout of the online pavilion interior, as well as the functions and effects oriented to users for better experience.

2. Proposal for Exhibited items

To introduce the background information, designing concept, exhibit forms, interactive functions and effects of the exhibited items of this Experiencing Pavilion.

3. Others

Matters not mentioned so far can be described herein.

B.2.2 Online Pavilion Construction Proposal
1. Description of functions

A technical illustration of the Experiencing Pavilion functions

2. Description of technologies

The description of the major technologies adopted to achieve the Experiencing Pavilion functions

B.2.3 Time Schedule of Online Pavilion Construction

To highlight the important dates for the Participant to submit to the Organizer its deliverables across the construction procedures of Experiencing Pavilion.

B.3 Example of an "Online Pavilion Exhibition & Construction Proposal"

    Online Pavilion Exhibition & Construction Proposal

Participants	XX
Date of Proposal Submission	November 15th, 2008
Online Pavilion Exhibition Proposal	
The Online Pavilion Exhibition Proposal of XX (Participant) Experiencing Pavilion of XX will unfold around the theme, "Wisdom in urban development". Representative elements will be selected from across time and space to construct four online exhibition spaces inside the Experiencing Pavilion. To upgrade the digital features of this Experiencing Pavilion, we will take full advantages of the swift and diverse interactions, endeavoring to help bring our visitors with brand-new visual effects as well as experience with more flexibility and possibility. We expect that our visitors, after touring around our online pavilion, will not only have a comprehensive knowledge of what we've shown in our physical national pavilion, but also a wonderful experience that they could never have in the real exhibition.	

I. Online Pavilion Exhibition Proposal

Emphasis will be given to the interior layout and the surrounding areas to enable online visitors to feel as if touring in our physical pavilion.

Exhibiting function 1: Tour guide of the pavilion layout

The tour guide map will help online visitors to have a clear picture of the pavilion layout. Fast access to a certain point of the exhibition space can be achieved by clicking the corresponding marked point in the tour guide map.
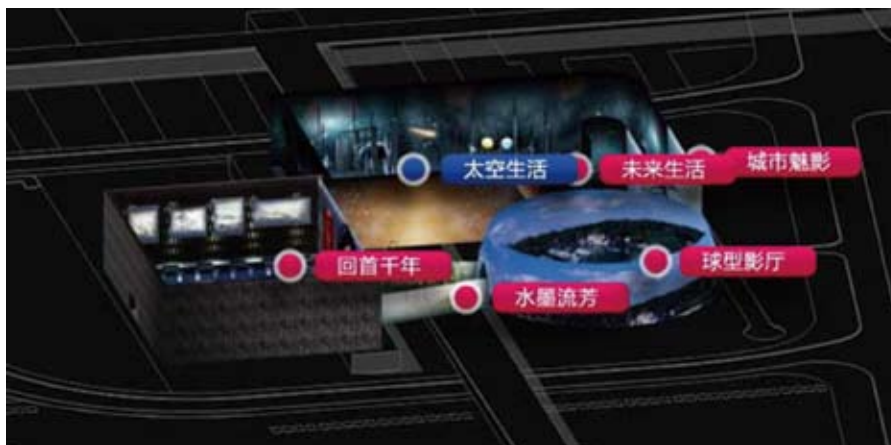
Fig. A tour guide map of this Experiencing Pavilion, via which our online visitor can instantly access the chosen area of the six exhibition spaces displayed in the map.

Exhibiting function 2: Roaming inside the pavilion
With the subjective perspective, visitors can roam in the Online Pavilion and stroll across the different exhibition spaces.

Fig. Visitors roaming in the exhibition space

Exhibiting function 3: Panoramic browse
Visitors can have a 360° view and feel as if in the physical pavilion.

Exhibiting function 4: Browse in details
Through easy zoom-in/out operations, visitors can take a very close and detailed look at the exhibits.

Fig. A vivid showcase of the movable Chinese character matrix in different sizes

Exhibiting function 5: Sound simulation
Sounds in our physical pavilion can be simulated in the Experiencing Pavilion, such as sounds of water flow and the background music, etc.

Exhibiting function 6: Environmental simulation

The environmental characteristics of our physical pavilion can be simulated in the Experiencing Pavilion, such as materials, textures, lightings etc.

Exhibiting function 7: Video simulation

Visitors can watch the videos, designed as embedded in the interior of the Experiencing Pavilion, such as the sidewalls, aiming to replay what happened in the physical pavilion.
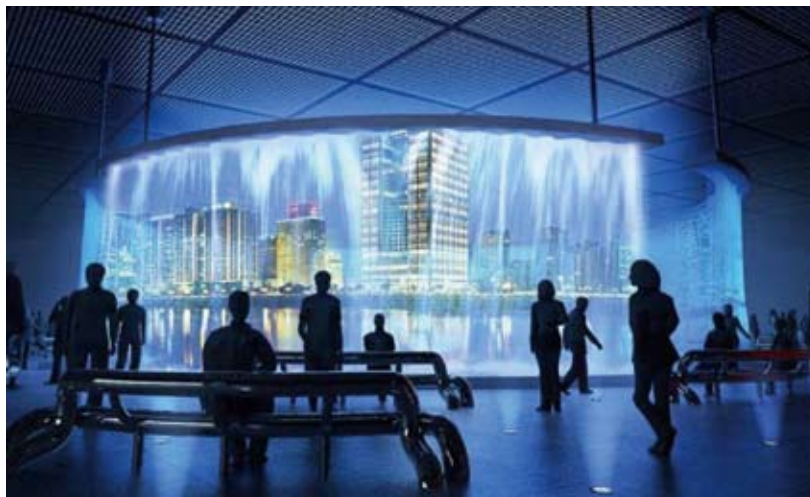

Fig. Stimulated video powerfully representing the eye-catching city skylines and diverse urban life

II. Exhibition Proposal of Exhibited Items

In addition to the virtual tour around the pavilion interior, the Experiencing Pavilion also allows visitors to get an all-round knowledge of the exhibits. What' more, exhibited items can be felt and touched?visitors will have the opportunity to touch the items that must be kept in distance in the physical pavilion, such as the ancient relics and large-size exhibits?they can be rotated, zoomed in and out; with help of the human voice, texts and pictures, visitors can get a much larger amount of information about the exhibited items than in the real pavilion.

Exhibiting function 1: Introduction of the exhibited items

A concise summary will be given so that visitors can have a general idea about the basic background information of the exhibited items.

Exhibiting function 2: A 360 degree view

An exhibited item can be freely manipulated by the visitor? it can be viewed from directions of 360 degrees, and can be rotated, zoomed in and out.

Exhibiting function 3: Stories behind

Background story of the exhibit will tell you everything about its origin and evolution.

Exhibiting function 4: Interactive game

By means of interactive online games, visitors can have an in-depth understanding of the exhibited item, such as characteristics of the appearance, the procedures and techniques of its production, etc.
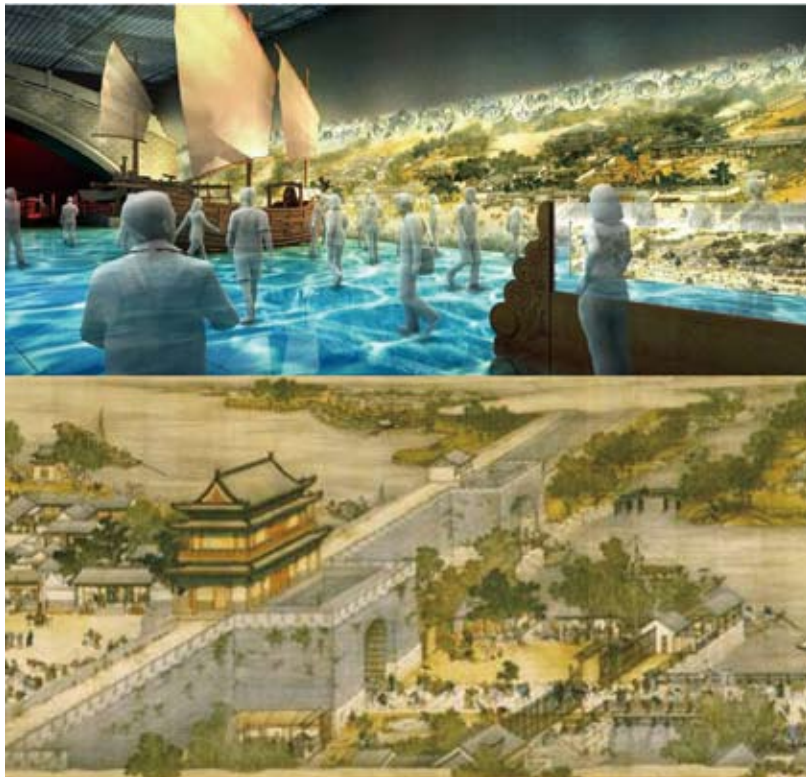
Fig. By roaming in the painting and interacting with carts, boats and people in the picturesque scene, online visitors can experience the busy and prosperous urban life in ancient China.

Exhibiting function 5: Miscellaneous
Navigating wizard
Virtual guide designed as the "navigating wizard" will show visitors around all exhibition spaces of the Experiencing Pavilion, explain the pavilion and exhibits, and help visitors to save and share with each other what they feel the best part of the exhibition.

Function No.1: Collection
With aid of the navigating wizard, visitors can save their favorite information and contents in the folds on their PCs in the form of text, picture and video.

Function No.2: Output
Navigating wizard can help visitors to send the contents they've experienced to their friends, or to print them out as pictures.

Function No.3: Q&A
Navigating wizard can answer visitors' questions about the pavilion.

Function No.4: Guide

Navigating wizard can show visitors around the pavilion and provide introduction to the pavilion and the exhibits.

Online Pavilion Construction Proposal	
The Online Pavilion Construction Proposal of XX (Participant) **1. Description of functions** In this Experiencing Pavilion, seven functions including layout tour guide, space roaming, panoramic browse, fine browse in details, sounds simulation, environmental simulation and video simulation will be applied to present the interior layout of the pavilion and space-related experience. Meanwhile, by means of introduction of the exhibited items, the 360 degrees browse, background stories and interactive games, visitors can explore the many dimensions and aspects of the exhibits. In addition, a virtual navigating wizard can be evoked to show visitors around the pavilion, and help visitors to save and share with each other the contents they're experiencing. **2. Description of technologies** Technologies involved are: N-View 360° multi-display technology, N-Street virtual technology, and 3D fine modeling technology	
Developer of Online Pavilion	XXX Co., Ltd
Plug-ins required for users to install to access the online exhibition	FLASH9.0 version or above
Whether there will be video playing available in online pavilion?	☑ Yes ☐ No
Time schedule of online pavilion construction	(Please list here the other important dates) Online Pavilion Appearance submission December 20th, 2008 Online Pavilion submission March 15th, 2009

Plan for updates of online pavilion	Contents to be updated	Timetable for updates
	Item on display (No. 04.0002) sculpture background story updates (pictures, text updates)	June 1, 2010
	Video update of pavilion	September 20th, 2010

Other requirements or notices	The National Pavilion Day will be promoted and reported on the home page of the Expo Shanghai Online website
Signature of the authorized representative of the Participant	XXX
Please Contact	Expo Shanghai Online Program Office, Communication and Promotion Department, Bureau of Shanghai World Expo Coordination Address: Expo Mansion, 3588 Pudong (S) Rd., Shanghai, 200125 Contact person: Mr. Chen Xiaobo +86-21-2206 2085 Ms. Yu Lei +86-21-2206 2086 Fax: +86.21.2206.0311 E-mail: tech@expo2010.gov.cn

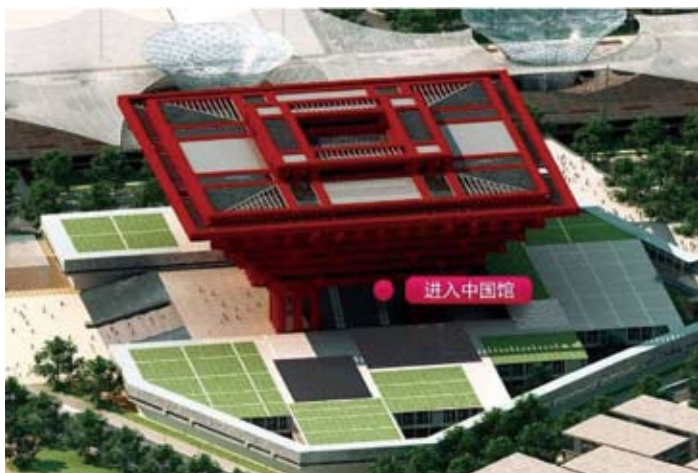# Appendix C: Notes on Content Materials for Online Pavilion Appearance

Made in two parts, the "Notes on Content Materials for Online Pavilion Appearance" and "Submission of Content Materials for Online Pavilion Appearance", this Appendix aims to help Participants understand the content materials required for construction of an online pavilion appearance, including the description, the purpose and the specifications.

C.1 Notes on Content Materials for Online Pavilion Appearance
The content materials of the online pavilion appearance are of great importance to the whole construction procedure of Expo Shanghai Online, and are contents that must be submitted by Participants.

The Experiencing Pavilion consists of the pavilion appearance and the pavilion interior. The pavilion appearance will be built by the Organizer on the basis of the appearance content materials provided by the Participant. The pavilion interior will be developed and built by the Participant itself according to its "Online Pavilion Exhibition & Construction Proposal".

The content materials to be offered by the Participant shall include simulated drawings such as the ground plan, photo of the model, computer-simulated drawing, and the design plans such as the drawings with plan, elevation and side views, or the 3D model originals.

Requirement of Content Materials for Online Pavilion Appearance

Deliverable		No.	Quantity	Specifications	Usage
Online Pavilion Appearance Content Materials	Concept drawing	1	>4	• No less than 1500x1200 pixels and 150 dpi; • In JPG, TGA, TIF format; • 4 angles from the front, rear, left and right side	Production of online pavilion appearance model
	Design plan	2	>4	• Design plans of the online pavilion, with plan, elevation and side views • In DWG format • 4 angles from the front, rear, left and right side	Production of online pavilion appearance model
	3D model	3	Optional	In max, or SketchUp, or DWG format	Production of online pavilion appearance model

C.2 Submission of Content Materials for Online Pavilion Appearance

Participants are responsible for providing the content materials for Online Pavilion appearance, which shall be packaged by category and submitted via channels specified by the Organizer prior to July 31st, 2009. The package of Online Pavilion appearance content material shall include the List of appearance materials file list of Online Pavilion.

List of Content Materials for Online Pavilion Appearance

Deliverable		No.	Quantity	File Path / File Name
Online Pavilion Appearance Content Materials	Effect drawing	1		
	Design plan	2		
	3D model	3		

The example of the file path or file name:
Participant / YYYMMDD/appearance/concept drawing/file N.jpeg

Appendix D: Confirmation Sheet for Online Pavilion Launch

Confirmation Sheet for Online Pavilion Launch

We hereby confirm acceptance of the effect of the online pavilion pre-launched on

_____DD_____MM_____YY, and grants permission to the Organizer to officially launch

the online pavilion on the Expo Shanghai Online platform on May 1st, 2010.

Participant: _____

Signature of the authorized representative of the participant: _____

Stamp of participant: _____

Appendix E: Application for Online Pavilion Updates

Application Form for Online Pavilion Updates

Participant			
Date of Application			
Plan of Online Pavilion Updates	Description of Updates	Timetable of Updates	
		Y M D	
		Y M D	
		Y M D	
		Y M D	
		Y M D	
		Y M D	
Signature of the authorized representative of the Participant			
Date of Submission of Application for Updates	Y M D		
Please send to	Expo Shanghai Online Program Office, Communication and Promotion Department, Bureau of Shanghai World Expo Coordination Address: Expo Mansion, 3588 Pudong (S) Rd., Shanghai, 200125 Contact person: Mr. Chen Xiaobo +86-21-2206 2085 Ms. Yu Lei +86-21-2206 2086 Fax: +86.21.2206.0311 E-mail: tech@expo2010.gov.cn		

Appendix F: Costs for Construction of Experiencing Pavilion

Appendix F aims to make it easier for Participants to understand the basic cost for developing and constructing an Experiencing Pavilion. The segmented details of the construction work and the relevant notes are hereby provided below.

Work in relation to the construction of an Experiencing Pavilion

Items	Segmented work	Description
Plan and Design	Requirement analysis and technology selection	Finalize the technical solution on the basis of the technical standards and specifications offered by the Organizer, and the analysis result of the survey of participants' requirements for online pavilion and online exhibition.
	Detailed design of pavilion and exhibited items	Describe the online pavilion in details, including its exhibited items, the exhibition pattern, the exhibiting approach, and content materials as well as relevant preview information.
Pavilion Construction	Pavilion appearance	Modeling and image rendering of the pavilion appearance (normally excluded)
	Pavilion interior (including virtual space)	Fine modeling, mapping and rendering of the interior space, layout, deco materials and lights, etc.
	Exhibited items (including virtual exhibited items)	Fine modeling, mapping and rendering of the exhibited items, including the shape, quality, texture, and lights, etc.
Function Development	Interfaces	Interface design, web page design, invocation of embedded code of web page and plug-in
	Interactions	Data searching: hotspots, searching information (e.g., video, FLASH, commentary, picture, web page, etc.); these materials are to be provided by the Participants
		2D tour guide: navigating map, real time localizing, fast access, etc.
		Interactive roaming: camera path animation, real time collision, walking, flying, swiveling camera, etc.
		3D tour guide: 3D guide design and modeling, skeleton animation, commentary recording, human-machine interaction design and production, etc.
	Environments	Simulation of various environments, e.g. sky, cloud, sun, fog, halation, perspective, lamplight, decoration, texture, etc, most probably in the extended virtual space
	Special effects	Simulation of special effects, e.g. bird, butterfly, fountain, volume light, seawater, wave, glass reflection, water pond, moving auto, fluttering flag, snowing, raining, etc, most probably in the extended virtual space
Integration and Launch	Integration and launch	Integrate and publish pavilion interior, exhibited contents and other functions
Maintenance	Technical supports Post-sale services	Technical supports and post-sale services for participants

Notes

1. Participants having selected the Experiencing Pavilion are required to do nothing more than design, develop and deliver their online pavilions. Completed online pavilions should be integrated by the Organizer into the system online platform of Expo Shanghai Online, which will have already been built and offered by the Organizer. Participants don't need to equip any hardware involved in the online platform construction and maintenance, therefore they don't need to bear any costs incurred therein.

2. Indirect costs incurred from business trips, conferences and salaries for employees are not listed in the above table. The actual spending on construction of the Experiencing Pavilion depends to a certain extent on the complexity of functions to be developed and achieved. In addition, Participants may need to pay for using licensed software in relation to Web 3D.

3. The Organizer provides two approaches as follows to make it easier for Participants to calculate their costs:

a. Public enquires: based on the above-listed "segmented construction work", Participants can ask for quotes from local developers or service providers of their own countries or regions before applying for government funds.

b. Empirical formula:
   Total Costs=5÷3 ×3D modeling costs, or
   Total Costs=10÷7 ×3D modeling costs.
   3D modeling costs=total interior floor area of pavilion × unit price /m2.

(*Please be advised that this formula only reflects costs for the work in direct relation to development and construction of the Experiencing Pavilion, with just the fundamental functions listed the above table.)

你的精彩，无时不在，无处不在
Your Pavilion, Anytime, Anywhere

Should you have any suggestions and comments on the information contained in the Guide, please feel free to contact the Organizer:

Expo Shanghai Online Program Office
Communication and Promotion Department
Bureau of Shanghai World Expo Coordination
Address: Expo Mansion, No. 3588, Pudong South Rd
                    Shanghai, China
Postal Code: 200125
Contact persons: Ms. Rong Jiachen, Ms.Yu Lei, Mr. Shen Feifei
Tel: +86-21-2206 2084 / 2206 2086 / 2206 2264
Fax: +86-21-2206 0311
Email: tech@expo2010.gov.cn
Website: www.expo2010china.com