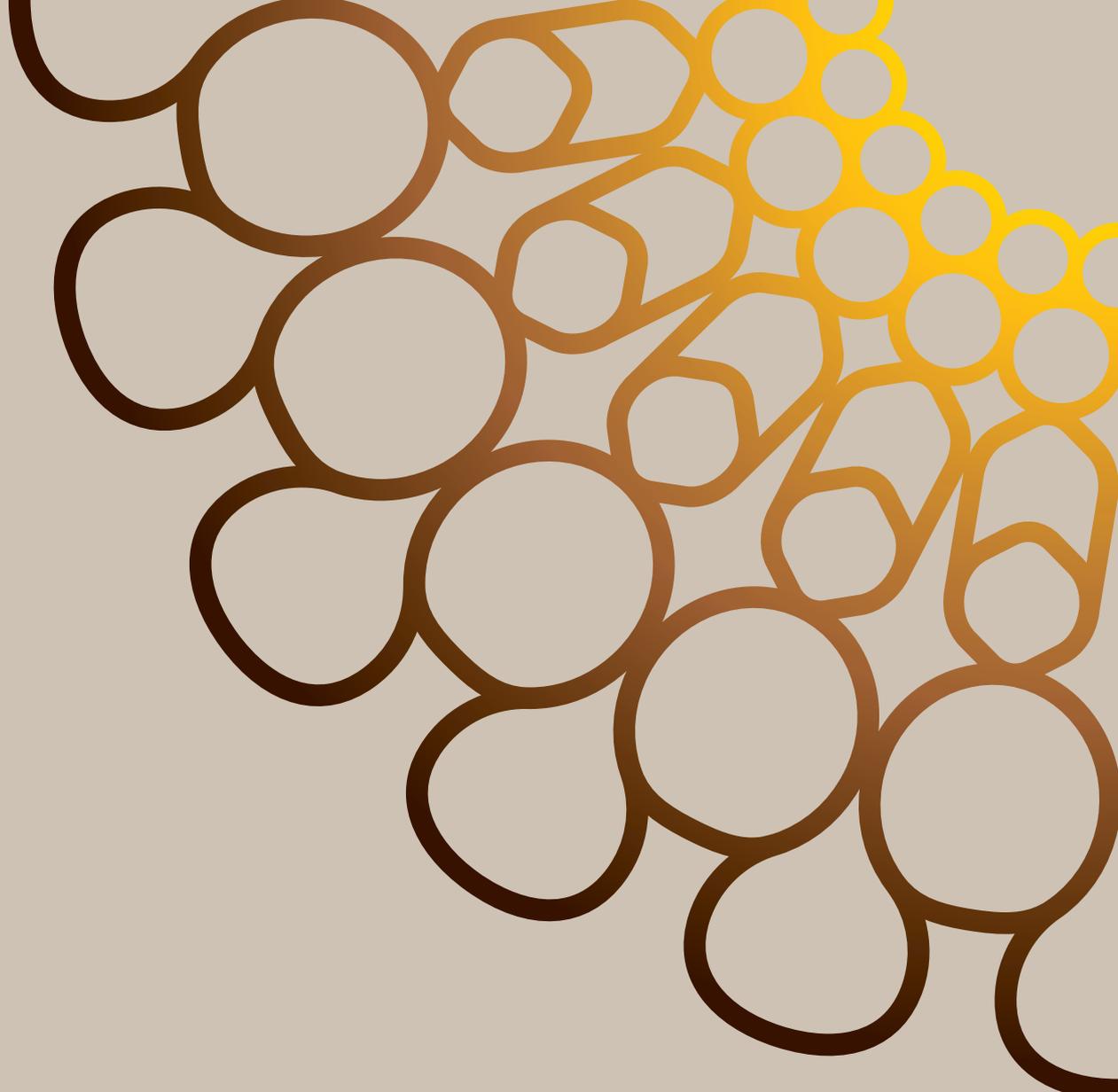




Self-Build Pavilions Delivery Guide



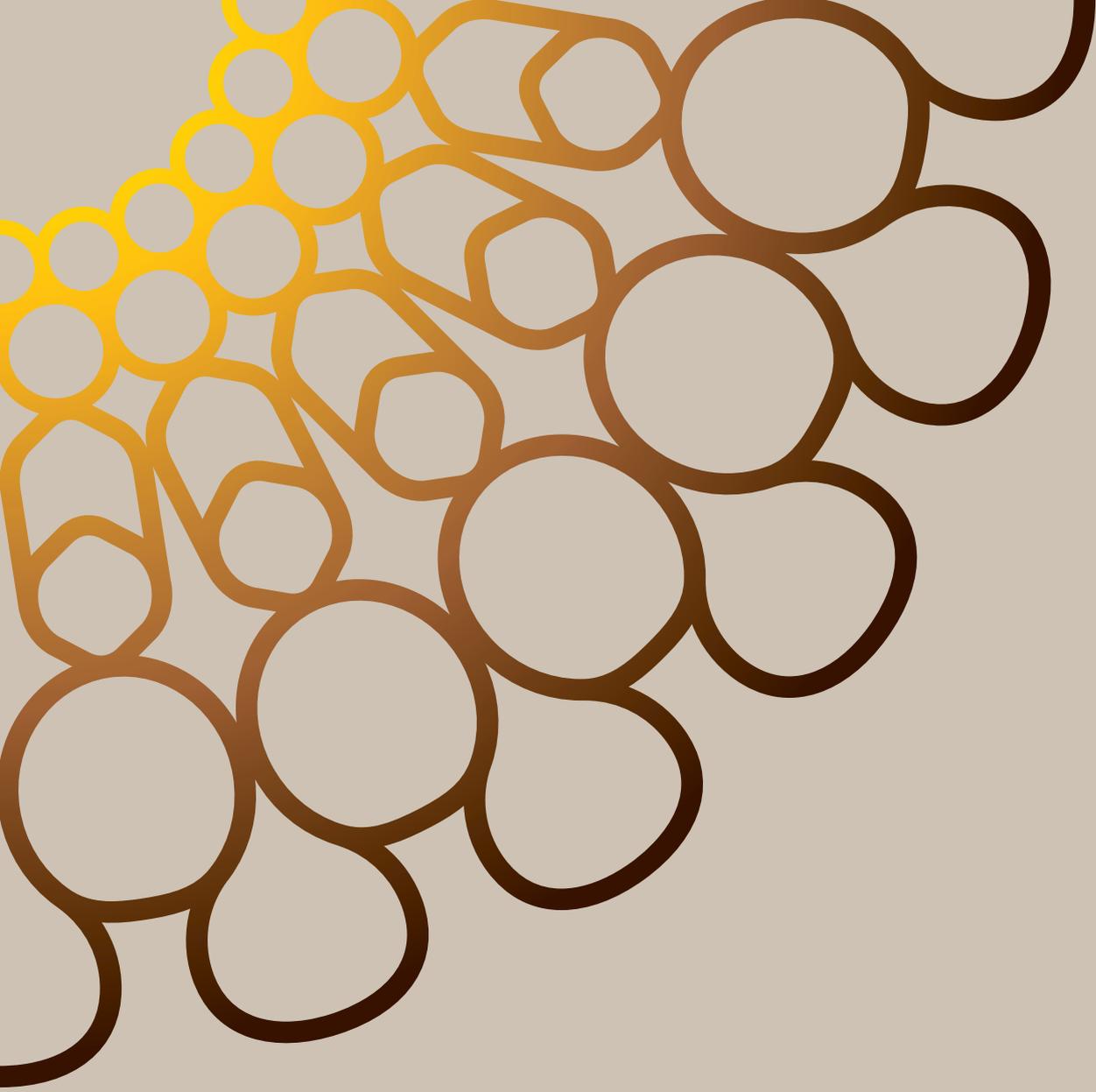
EXPO
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DUBAI
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 Self-Build Pavilions

Preface

The Self-Build Pavilions on the Expo site will be located along the perimeter of the three Thematic Districts. These pavilions will form a key element of the Expo 2020 Dubai Master Plan, and will be designed and delivered by the participants themselves with support from the Organiser through the One-Stop Shop.

To guide the participants in delivering their pavilions, the Organiser has developed two documents: the **Self-Build Pavilions Delivery Guide** (this document) and the previously published **Self-Build Pavilions Guide**.

The Self-Build Pavilions Delivery Guide builds on the information shared in the Self-Build Pavilions Guide, and provides further detail on the delivery process, focusing on construction activities to assist participants in building their pavilions, and after the conclusion of the event, decommissioning and removing the pavilions.

This Guide should be read in conjunction with the Self-Build Pavilions Guide to understand the full design and construction process and the relevant compliance criteria applicable to the Self-Build Pavilions.

The content of this Self-Build Pavilions Delivery Guide is outlined in the accompanying table.

Chapter	Content
CHAPTER 1 Introducing the Delivery Process	High-level description of the delivery process detailing the steps from setting up the participant's team through to decommissioning and removal of pavilion
CHAPTER 2 Managing Construction Logistics	Extracts from the Construction Logistics Plan to assist participants in planning their construction logistics
CHAPTER 3 Designing for Fire and Life Safety	Design requirements to ensure fire and life safety during the Expo event
CHAPTER 4 Connecting to Utility Services	Requirements to connect to utility services
CHAPTER 5 Achieving Sustainability	Sustainability requirements during construction
CHAPTER 6 Complying with Health and Safety Standards	Health and safety as well as fire and life safety requirements during construction
CHAPTER 7 Complying with Worker Welfare Standards	Worker welfare requirements during construction
CHAPTER 8 Complying with Environmental Standards	Environmental requirements during construction
CHAPTER 9 Understanding Governance and Quality Assurance	Communication protocols, non-conformance procedures, reporting requirements, audits and inspections, and quality assurance requirements during construction
CHAPTER 10 Interfacing with Statutory Authorities	Consultant and contractor registration requirements as well as processes and requirements to obtain the necessary approvals, permits, and certificates from the permitting authority, statutory authorities, and service providers
CHAPTER 11 Customs and Import	Special arrangements that the Organiser will offer to participants with regard to taxes and import of goods
CHAPTER 12 Optional Supply Chain Services	Support services that the Organiser will offer and facilitate to assist the participants during construction
CHAPTER 13 Decommissioning, Removal, and Repossession	Requirements prior to decommissioning and removal of pavilions as well as compliance criteria that participants need to adhere to during decommissioning and removal

Understanding Controls and Guides

Example of a Control Statement

C-140

Participants **must** regularly inspect, clean, maintain, and keep their hoarding and gates in a good state of repair.

Example of a Guide Statement

G-99

Construction vehicles **should** use alternative fuel sources such as electricity, fuel cells, or hybrid technology, where possible.

Throughout this document, two criteria for compliance—controls and guides—have been established to assist the participants in the delivery of their pavilions.

Controls are ‘must’ statements that establish the compulsory requirements for all participants taking part in Expo 2020 Dubai to ensure that the standards and aspirations are achieved for the benefit of all parties as a whole.

Guides are ‘can’ or ‘should’ statements that describe methods or suggested ways that a construction practice can demonstrate whether a particular development meets the specified goals and objectives of Expo 2020 Dubai.

Each control and guide is assigned a unique alphanumeric code. The first character of the code identifies if the statement is a control (**C**) or a guide (**G**). The numeric character identifies the sequential order of the control or guide. For example, in the accompanying figure, **C-140** is a control while **G-99** is a guide.

The controls and guides will facilitate the Organiser in assessing the submissions of the participants and managing any audits that may need to be carried out. These will also assist the participants in:

- › Constructing their pavilions in line with the requirements of the Organiser and the statutory authorities
- › Checking their design and construction delivery for alignment with the delivery framework
- › Communicating the standards for construction, decommissioning, and removal of pavilions to their consultants and contractors

The numbering of controls and guides in this document continues from the numbering in the Self-Build Pavilions Guide. Control statements will be numbered from C-117, and guide statements will be numbered from G-89.



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Acronyms, Abbreviations, Units, and Definitions

Acronyms and Abbreviations

Acronym/Abbreviation	Expansion
AS	Australian Standards
ASTM	American Society for Testing and Materials
ATP	Authority to Proceed
BIE	Bureau International des Expositions
BIM	Building Information Modelling
CCTV	Closed-Circuit Television
CEMP	Construction Environmental Management Plan
CIF	Cost, Insurance, and Freight
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CV	Curriculum Vitae
CWMP	Construction Waste Management Plan
DED	Department of Economic Development
DEWA	Dubai Electricity and Water Authority
DM	Dubai Municipality
DWF	Design Web Format
DWG	Drawing (Computer-Aided Design program filename extension)
EIA	Environmental Impact Assessment
EN	European Standards
EPSS-DM	Environmental Planning and Studies Section of the Dubai Municipality
FIDIC	International Federation of Consulting Engineers
ICT	Information and Communications Technology
ISO	International Organization for Standardization
LEED®	Leadership in Energy and Environmental Design
LPG	Liquefied Petroleum Gas
MEP	Mechanical, Electrical, and Plumbing
NCR	Non-Conformance Report
NFPA	National Fire Protection Association
NOC	No Objection Certificate
PDF	Portable Document Format
RTA	Roads and Transport Authority
SIRA	Security Industry Regulatory Agency
UAE	United Arab Emirates
UK	United Kingdom
UNEP	United Nations Environment Programme

Units

Unit	Expansion
AED	United Arab Emirates Dirham
km/h	Kilometres per Hour
kV	Kilovolt
m	Metre
V	Volt

Definitions

Term	Definition
Abnormal Load	An extra long or extra wide delivery that requires prior arrangement such as a vehicle escort or temporary reconfiguration of route (widening of road).
Accreditation	The pass issued by the Organiser to participants and their workforce granting access to the Expo site and to specific areas within the site during construction and during the event.
Architect of Record	A consultant appointed by a participant to take the responsibility of design and obtain necessary permits. The Architect of Record holds the appropriate registration and are prequalified in Dubai to obtain the Building Permit for the project.
Assurance Standards	A set of documents developed by the Organiser defining the minimum requirements applicable to all organisations for Health and Safety, Worker Welfare, Environment, and Quality, published on the Participant Portal.
Building Completion Certificate	A certificate issued by the One-Stop Shop after the completion and acceptance of the final inspection of the works as requested by the contractor.
Building Permit	A permit issued by the One-Stop Shop to participants to build a project according to the approved design submitted by licenced consultants.
Calendar Days	All days in a month, including weekends and holidays. All construction and decommissioning and removal work durations are counted in calendar days.
Central Command Centre	A venue that will act as the central hub of command and control, integrating city operations to the Expo site.
Commissioner General of Section	The official participant's representative appointed to manage the participation file in accordance with Article 13 of the Convention Relating to International Exhibitions signed in Paris on 22 November 1928.
Concourse	Primary pedestrian areas in front of the Self-Build Pavilions.
Construction Equipment	General machines and equipment used in construction works such as cranes and forklifts.
Consultant	The entity appointed by a participant to design its pavilion and/or manage its construction activities. For ease of reference, the term 'consultant' also includes all appointed subconsultants who deliver specific services under the main consultant's contract.
Contractor	The entity appointed by a participant to deliver the construction works for its pavilion. For ease of reference, the term 'contractor' also includes all appointed subcontractors and the supply chain who deliver specific services under the main contractor's contract.
Country Manager	The Organiser's representative appointed to provide end-to-end support to participants throughout their journey.
Delivery Management System	A logistics solution that manages the access of delivery vehicles to the Expo site.
Emergency Services	Agencies or entities that enforce law, protect civilians, and respond to emergency situations. These include police, ambulance, firefighting services, and others.
Enabling Works Permit	A permit issued by the One-Stop Shop to participants to commence early activities such as excavation, shoring, and foundation.
Expo 2020 Dubai®	Name of the event that will be hosted on the Expo site; also referred to as 'Expo 2020,' 'Expo,' 'Dubai Expo 2020,' 'Expo Dubai 2020,' or 'Expo event'
Expo Site	The gated site on which Expo 2020 Dubai will be hosted; also referred to as 'site.'
General Regulations	The regulations of Expo 2020 Dubai, which constitute part of the Registration Document.
Inaccessible Void	A space that is permanently inaccessible once manufacturing, construction, or prefabrication is complete.
Incident	A work-related event in which injury or ill health occurred, or could have occurred.

Term	Definition
Master Plan	The detailed plan that outlines the different real estate elements, open spaces, buildings, and other facilities within the Expo site.
Material Safety Data Sheet	A document provided by a relevant supplier that contains information on the potential risk (such as health, environmental, fire, and reactivity) of a hazardous substance and how to safely use it.
Mechanical Handling Equipment	Mechanical equipment that is used for the movement of materials.
Mobilisation Permit	A permit issued by the One-Stop Shop to participants to access their plots to prepare for construction work.
Non-Conformance Report	A document issued by the Organiser to a participant in the event of breach of contract or the Assurance Standards by the participant itself, or its consultants or contractors.
One-Stop Shop	A combination of a physical representation and a virtual portal (the Participant Portal) that will offer end-to-end support to participants for aspects such as permitting, approvals, submissions, certifications, and inspections. The One-Stop Shop will also respond to any queries or requests raised by participants.
Operation Fitness Certificate	A certificate issued by the Organiser to participants to commence pavilion operations.
Organiser	Expo Dubai 2020 LLC; established by virtue of Decree No. 30 of 2014 issued on 25 June 2014 to administer the organisation and delivery of Expo 2020 Dubai.
Participant Guides	A set of documents issued by the Organiser to participants to explain and guide them in all aspects of the participation process before, during, and after the Expo event.
Participant Portal	A web-based portal that facilitates communication between the participant and the One-Stop Shop.
Participants	Foreign governments, non-governments, and international organisations who have received and accepted the official invitation from the Government of the United Arab Emirates (UAE) to participate in Expo 2020 Dubai. There are two types of participants: official participants and non-official participants. Official participants include countries and multilateral organisations. Non-official participants include corporations, non-government organisations, academic and research institutions, global initiatives, and foundations.
Participation Contract	The contract agreed upon between a Commissioner General of Section and the Organiser to establish the terms and procedures by which the participants will take part in Expo 2020 Dubai.
Plot Affection Plan	An information sheet provided by the One-Stop Shop to participants, detailing the demarcation of a plot.
Plot Entrance	Vehicular or pedestrian entrance to a participant's plot during construction, decommissioning, and removal.
Plot Hoarding	Fence around the participant's plot providing visible and physical segregation from other plots and areas.
Plot Possession and Mobilisation	The process by which the Organiser hands over the plot to participants before mobilising to their plot.
Plot Possession and Mobilisation Request	A request submitted by participants to the Organiser through the Participant Portal to obtain approval for plot possession and mobilisation.
Plot Repossession	The process by which the participant hands back the plot to the Organiser after the completion of the decommissioning and removal activities.
Plot Repossession Certificate	A certificate issued by the One-Stop Shop to participants to confirm that the plot repossession process has been successful.

Term	Definition
Plot Sheet	An information sheet provided by the One-Stop Shop to participants, containing plot details, section details, design notes, plot coordinates, utility demand allocation, and location of utility connection points in a plot.
Prohibited Goods	Goods that are not allowed to be imported into the UAE.
Public Realm	Public spaces within the security fence.
Registration Document	The document relating to the realisation and feasibility of Expo 2020 Dubai which the UAE submitted to the Bureau International des Expositions (BIE), and which the BIE registered during the 158th General Assembly on 25 November 2015.
Restricted Goods	Goods that are required to meet certain conditions before clearance through the UAE customs.
Security Fence	A fence erected by the Organiser to control access to the secure area of the Expo site.
Self-Build Pavilions	Pavilions built by the participants.
Serious Incident	An incident that has the potential severity to cause serious injury or death.
Service Provider	A government or semi-government entity that provides services such as electricity, water, or telecommunications to consumers.
Site Entrance	Vehicular access point located on the site perimeter fence during construction.
Site Perimeter Fence	A fence erected by the Organiser to control access of personnel to the Expo site during construction.
Special Regulations	The Special Regulations listed in Article 34 of the General Regulations.
Subthemes	Expo 2020 subthemes of Opportunity, Mobility, and Sustainability.
Supervision Consultant	The entity appointed by a participant to supervise the works of the contractor.
Sustainability Targets	Expo 2020 Dubai's aspirations and targets on the different sustainability components such as energy, water, materials, waste, carbon emissions, public realm and ecology, and sustainability awareness.
Task Briefing	A meeting at which information and instructions are given to workforce to ensure that they understand their tasks.
Theme	Expo 2020 Dubai theme of <i>Connecting Minds, Creating the Future</i> .
Theme Statement	The first official document submitted by participants to the Organiser for approval through the Participant Portal. The Theme Statement defines the overall theme and the general contents of the participant's pavilion, providing a general overview of the proposed strategy, thematic content, installations, and events.
Wet Riser System	A system of valves and pipes within buildings which are kept permanently charged with water for firefighting purposes.
Work Permit	A permit issued by the One-Stop Shop to participants to carry out decommissioning and removal activities.
Working Days	All official business days of the week, excluding public holidays and weekends. The processing durations for all approvals, permits, and requests by statutory authorities and the Organiser are counted in working days. In the UAE, the official business days are from Sunday to Thursday. All Fridays and Saturdays are considered weekends.

1 Introducing the Delivery Process





This chapter details the Organiser’s delivery process by providing a seamless journey for participants, walking them through the step-by-step procedure for delivering their pavilions.

The Organiser has developed this **Self-Build Pavilions Delivery Guide** to support the participants in the pavilion delivery process and inform them of the requirements and standards to construct their pavilions.

Figure 1.1 shows how the Self-Build Pavilions Delivery Guide and the Self-Build Pavilions Guide complement each other to support the participants in their journey to deliver their pavilions. While the Self-Build Pavilions Guide focuses on the design of the pavilion, this document presents the other aspects, that is, set-up, requirements prior to plot access, construction, and the subsequent decommissioning and removal of pavilions.

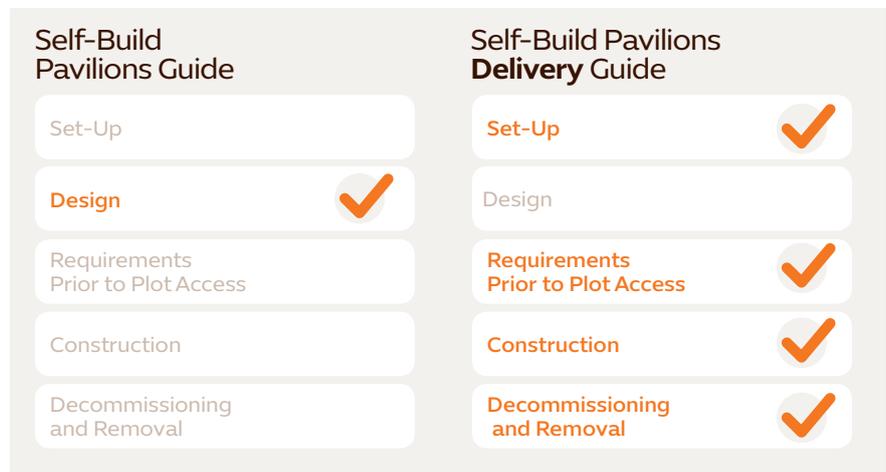


Figure 1.1 Delivery Process

1.1 The One-Stop Shop

Committed to delivering smart and efficient services, the Organiser has set up the One-Stop Shop to provide end-to-end support to participants.

The One-Stop Shop aligns with the Smart Dubai Government initiative that aims to transform Dubai into the world’s smartest and happiest city.

The One-Stop Shop will be a combination of a physical representation and a virtual portal (the Participant Portal) that will respond to the participants’ requirements,

answer their queries, and receive their submissions and requests, offering services such as:

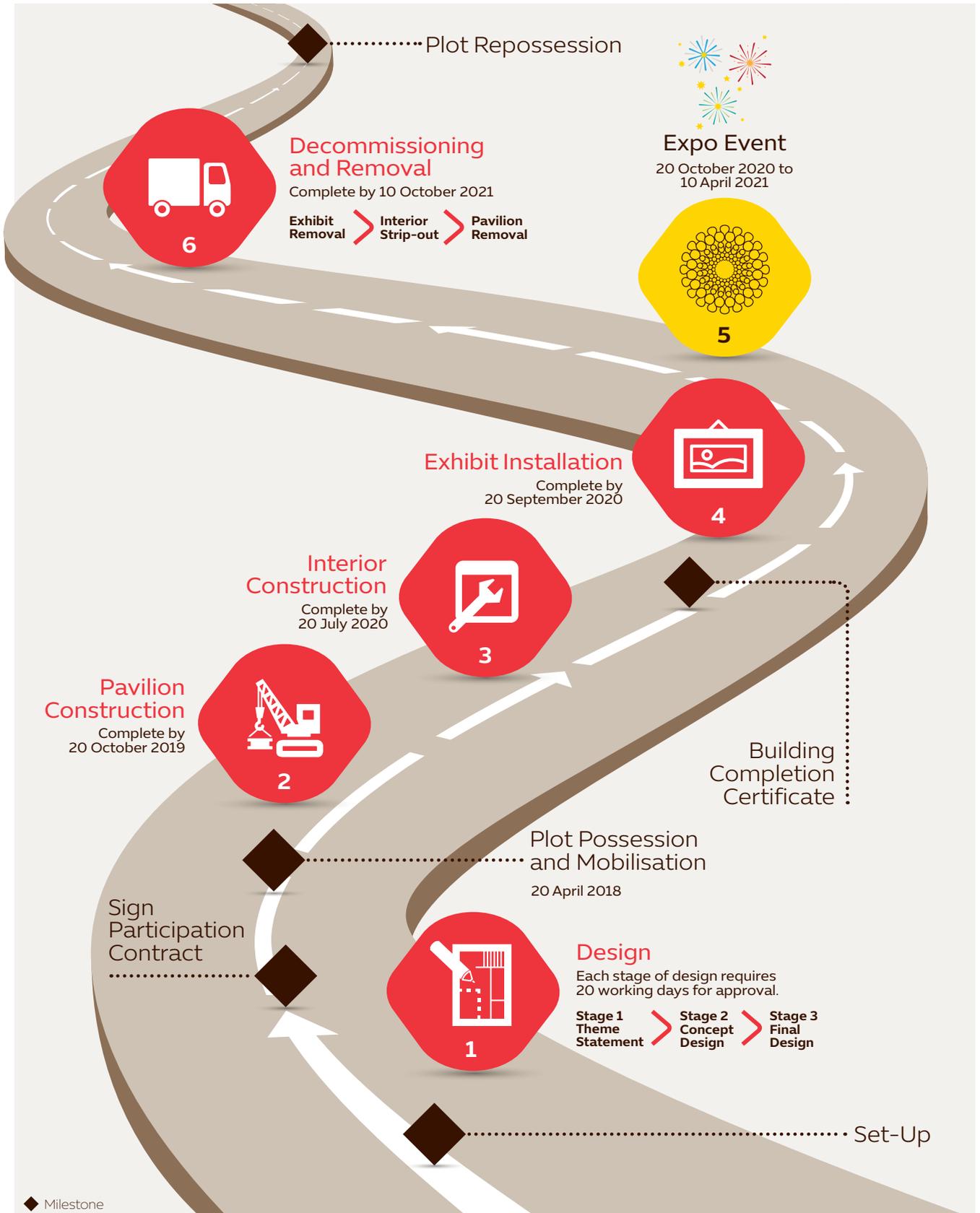
- > Support for and response to technical queries
- > Facilitation of design submission approvals and statutory authority approvals
- > Issuance of permits and certificates
- > Construction site management

All submissions to the Organiser and to statutory authorities will be through the Participant Portal. For further details, see Section 9.1.

1.2 The Journey

Participants will embark on a journey to deliver their pavilions, transforming plots into exciting exhibits that truly reflect their ambitions, national priorities, identity, and culture. This journey will take the participants through the different phases of pavilion delivery, from setting up their team for design and construction through to decommissioning and removing their pavilion. An overview of the participants' journey is shown in Figure 1.2. Each phase is discussed in summary in the following sections.

Figure 1.2 The Journey



At the start of their journey, participants will **set up** their team and identify the designated functions to deliver their pavilion before design activities commence. The designated functions will oversee the delivery of the pavilion from design to construction and finally to decommissioning and removal.

The Commissioner General of Section or the appointed Participant Project Management function, or both, will coordinate all queries, requests, and submissions with the Organiser through the Participant Portal. The Participant Project Management function will be the conduit between the Organiser and the participant’s consultants and contractors. Communication protocols between all parties are discussed in Section 9.1.

Design is split into three stages: Stage 1 Theme Statement, Stage 2 Concept Design, and Stage 3 Final Design (see Figure 1.3). These stages are discussed in detail in Section 10.4 and the Self-Build Pavilions Guide.



Figure 1.3 Stages of the Design Approval Process

On approval of the Theme Statement, Concept Design will commence. The requirements of the Concept Design submission are discussed in Chapter I, Section 5.2 of the Self-Build Pavilions Guide.

The delivery schedule of the participants will be part of the design development and will provide information on the duration of design, construction, and decommissioning and removal. This schedule will be updated and submitted to the Organiser through the Participant Portal on a monthly basis.

C-117 Participants must submit their delivery schedule and Concept Design to the Organiser through the Participant Portal. The delivery schedule must present the details of the pavilion design development as well as an overview of construction and decommissioning and removal activities. A delivery schedule template is available on the portal.

On approval of the Concept Design, Final Design will commence. The requirements of the Final Design submission are discussed in Chapter I, Section 5.3 of the Self-Build Pavilions Guide.

Following the approval of the Final Design, participants may request and obtain Building Permit.

The Organiser will grant the participants access to their plot from January 2018 to carry out soil investigation and topographic survey, if required. Participants will be able to access their plots for possession and mobilisation as early as 20 April 2018 subject to the Organiser’s approval of **requirements prior to plot access**. See Section 1.5 and Chapter 10.

C-118 Participants must sign the Participation Contract before taking possession of the plot from the Organiser.

Plot possession and mobilisation is a milestone signifying the participants taking possession of their plot from the Organiser to mobilise to their plot. The requirements for plot possession and mobilisation are discussed in Section 1.5.3.

All pavilion construction works, including the structure, core services, and building envelope, are to be completed latest by 20 October 2019. Interior construction is to be completed latest by 20 July 2020. Exhibit installation is to be completed latest by 20 September 2020, a month before the opening of the Expo event.

Figure 1.4 shows the key delivery dates, milestones, and the Organiser’s submission processing durations which form the framework for the participants’ delivery schedules.

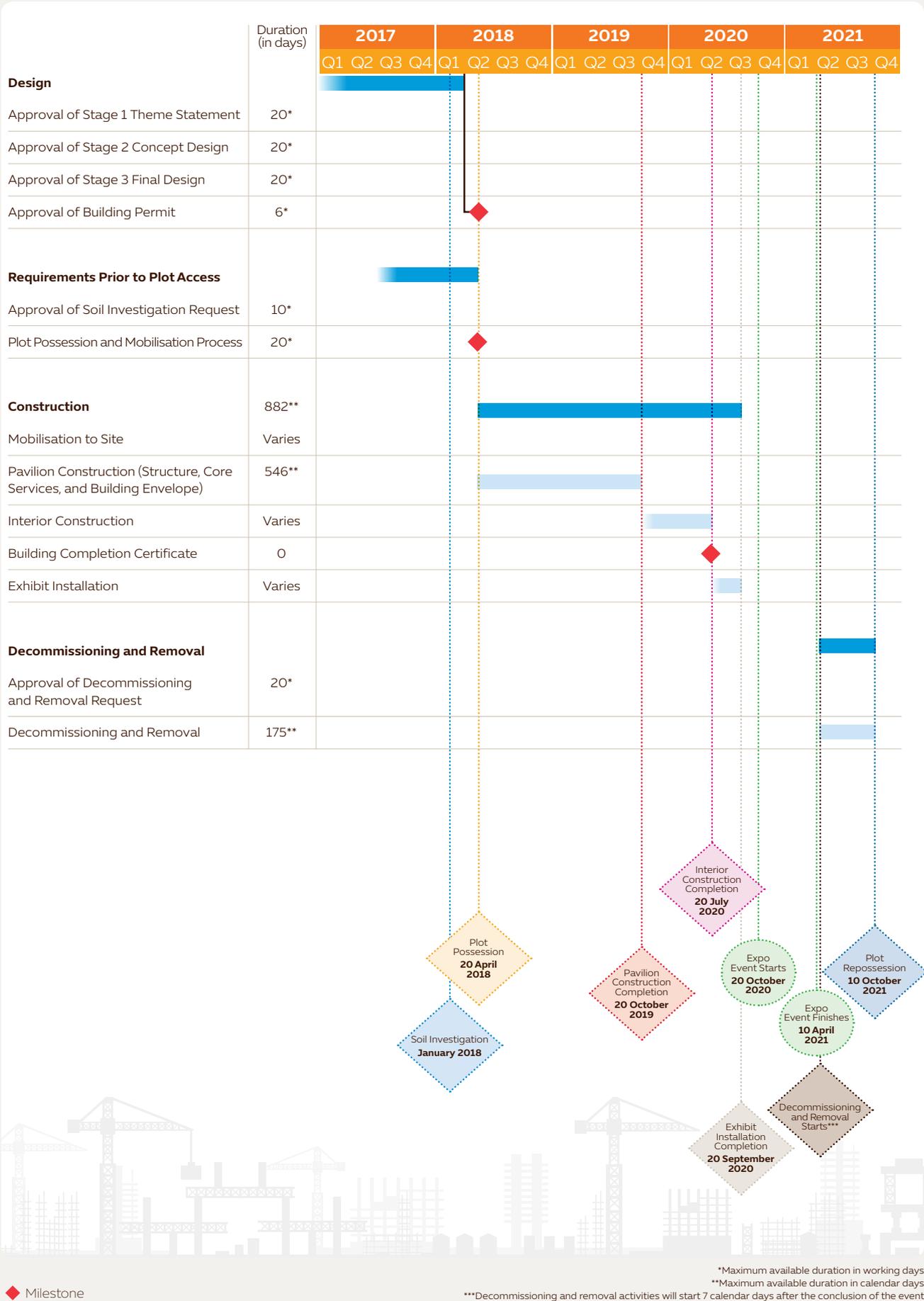
By this stage, the delivery schedule of the participants will be mature and will form an important part of the plot possession and mobilisation process.

C-119 Participants must submit the next iteration of their delivery schedule to the Organiser through the Participant Portal as part of their Plot Possession and Mobilisation Request (see Section 1.5.3). This schedule must present details of construction and decommissioning and removal.

C-120 Participants must ensure that their schedules and milestones are aligned with the Organiser’s Master Schedule and major milestones. See Figure 1.4 and Chapter 10.

Figure 1.4 Fixed Durations and Major Milestones for Self-Build Pavilions

Fixed Durations and Major Milestones



◆ Milestone

*Maximum available duration in working days
 **Maximum available duration in calendar days
 ***Decommissioning and removal activities will start 7 calendar days after the conclusion of the event

G-89 Participants should allow for sufficient time periods within their schedules, given all constraints, to ensure timely delivery of their pavilions. Participants should consider the following factors that may affect their schedules:

- › Summer and Ramadan working hours (see Section 1.9)
- › UAE public holidays (see Section 1.9)
- › Delivery schedule for long lead items, including associated transport and customs clearance durations for materials sourced from outside of the UAE, particularly from a sustainability perspective
- › Approval period of materials not yet endorsed by the statutory authorities (see Section 1.9)
- › Timeframe for consultant and contractor procurement process (see Section 1.3.2)
- › Timeframe for plot possession and mobilisation process (see Section 1.5.3)
- › Timeframes for permitting and approval process (see Chapter 10)
- › Confirmation for site delivery bookings (see Chapter 2)

Following plot possession and mobilisation and after obtaining the Building Permit, participants may commence **construction** which includes pavilion construction, interior construction, and exhibit installation.

All contractors on the Expo site are required to comply with the requirements of the Organiser for construction logistics, sustainability, health and safety, worker welfare, environment, governance, and quality assurance. These requirements are discussed in detail in the following chapters.

After the conclusion of the Expo event, participants will commence their **decommissioning and removal activities**. See Chapter 13.

1.3 Participant Set-Up

As previously discussed, the first step in the participants' journey is setting up their team. Participants are required to assemble their teams in line with the specific requirements of the Organiser and the statutory authorities to manage and deliver their pavilion. See Figure 1.5.

1.3.1 Participants' Designated Functions

C-121 Participants must confirm the following functions in their organisation, as a minimum, to the Organiser in a letter from the Commissioner General of Section:

- › **Participant Project Management:** This function will be the participant's representative and the main point of contact with the Organiser (One-Stop Shop) during the life cycle of the pavilion delivery (design, construction, and decommissioning and removal). This function will also oversee the activities of the consultants and contractors, and report progress to the Organiser through the Participant Portal in accordance with the Organiser's requirements. See Section 9.3.
- › **Participant Assurance Management:** This function will oversee the implementation of the Organiser's requirements for health, safety, worker welfare, environment, quality, and sustainability as stated in the relevant chapters of this Guide. This function will also coordinate with the Organiser, as required, to successfully execute these standards within their plot.
- › **Participant Logistics Management:** This function will supervise the construction logistics activities of the plot and ensure that all parties involved in delivering the pavilion follow the Organiser's construction logistics requirements.

1.3.2 Selecting Consultants and Contractors

Participants are required to appoint a locally licenced and registered consultant (Architect of Record) and contractor with the right qualifications to their teams that will enable them to comply with the requirements of One-Stop Shop. See Chapter 10.

The appointed consultants and contractors need to demonstrate experience in delivering works of similar size, scope, and value as the pavilion. In the interest of health and safety, all contractors need to be prequalified against the Organiser's standards to access the Expo site.

To assist participants with the prequalification of their potential contractors, the Organiser has provided specific controls and guides relating particularly to worker welfare. See Chapter 7.

Participants may choose from the list of consultants or contractors selected by the Organiser to work on the Expo site. The Organiser will provide, on request, an updated list of these consultants and contractors for various works and disciplines.

Figure 1.5 Participant Set-Up



The list will include contractors for works such as:

- › Main construction works and precast fabrication
- › Soil investigation
- › Enabling works
- › Facade and roofing
- › Mechanical, electrical, and plumbing works
- › Landscaping works
- › Interior construction
- › Decommissioning and removal works

See Chapter 12 for other services offered by the contractors.

FIDIC is the most commonly used form of contract in Dubai for hiring consultants and contractors. Participants may use FIDIC in the absence of an alternative.

C-122 Participants must ensure that their consultants and contractors possess appropriate visas in the UAE and relevant trade/professional licences in Dubai.

C-123 On contract awards, participants must submit the details of their appointed consultants and contractors, including licences, prequalification, and insurance, to the Organiser through the Participant Portal.

1.4 Design

The One-Stop Shop will provide each participant with a plot affection plan and a plot sheet to facilitate the development of their design.

The plot affection plan which demarcates the plot is provided by the permitting authority. The plot sheet provides plot details, section details, design notes, plot coordinates, utility demand allocation, and location of utility connection points. Examples of plot sheets are given in the Self-Build Pavilions Guide, Chapter I, Section 4.

A site-wide soil investigation was carried out by the Organiser, and the report is available on the Participant Portal. It is the responsibility of the participants' consultants to ensure that appropriate soil investigation report information is available to justify their design.

Throughout design, participants will receive technical support from the One-Stop Shop (see Section 9.1).

1.5 Requirements Prior to Plot Access

Before commencing any plot activities, participants are required to comply with the following requirements.

1.5.1 Construction Insurance

All contractors are required to possess appropriate insurance coverage before accessing the Expo site.

The responsibility for the insurance of any works within a participant’s plot is jointly held by the participant and their onsite representative.

C-124 Participants must ensure that they have insurance coverage for the entire duration of their presence on site from plot possession and mobilisation before the Expo event until plot handover after the event.

C-125 Participants and their onsite representatives must submit the following insurances to the Organiser through the Participant Portal before construction commences. These insurances must remain in effect while construction works are being carried out on the plot. Participants must ensure that their onsite representatives provide insurance in line with the requirements of the Insurance Guide (as a minimum), as summarised below:

- › Third Party Liability Insurance
- › Construction and Erection All Risk Insurance (covers all risks of physical loss or damage to the pavilion)
- › Contractor’s Equipment All Risk Insurance
- › Workers’ Compensation and Employer’s Liability Insurance

- › Marine Cargo Insurance (land, sea, and air from country of origin)
- › Automobile Liability (including off-road cover)
- › Professional Indemnity Insurance (for any design elements carried out by the participant or their onsite representatives)
- › Other insurances required to comply with the local applicable laws and the Participation Contract

Further information on construction insurance will be provided in the Insurance Guide and will be aligned with Special Regulation Numbers 5 and 8.

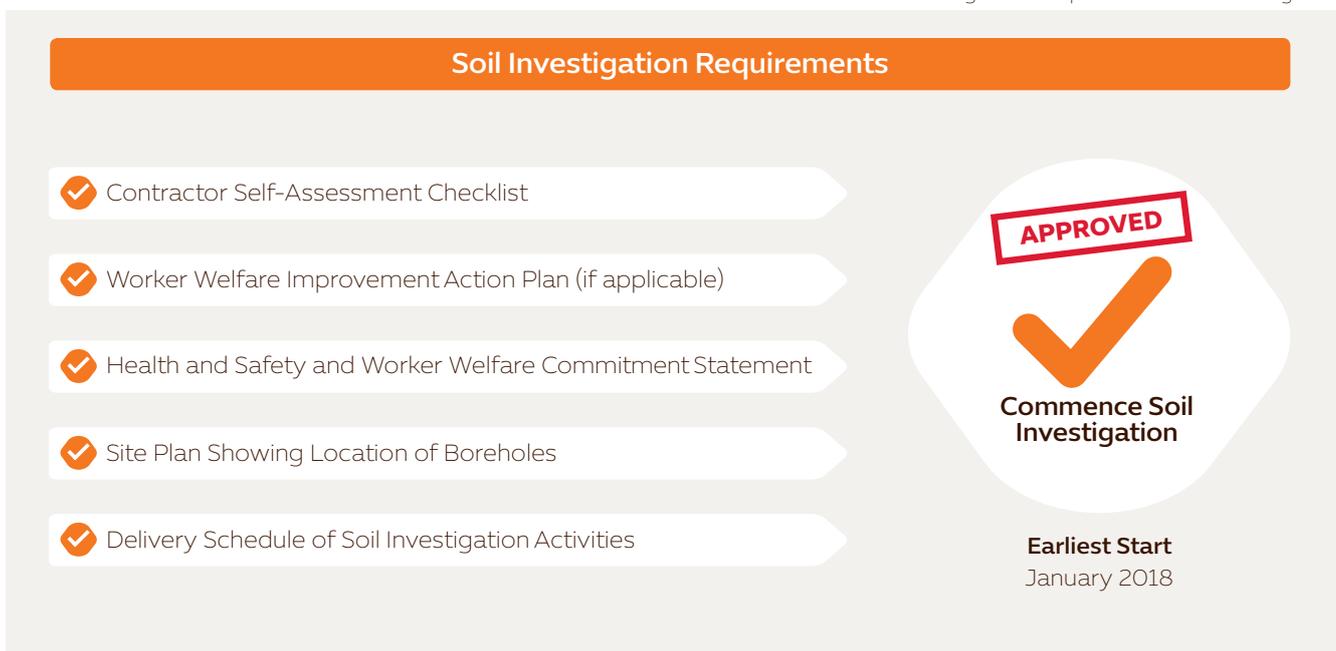
1.5.2 Soil Investigation Requirements

If the information from the site-wide soil investigation report is insufficient to satisfy the participant’s consultant’s requirements, then the participant may request to carry out its own soil investigation. The soil investigation may also include a topographic survey by the same party.

C-126 Participants who require access to their plots to carry out their own soil investigation must submit a Soil Investigation Request to the Organiser for approval through the Participant Portal at least 10 working days before access. The request must be supported by the following documents (see Figure 1.6):

- › Contractor Self-Assessment Checklist, including Worker Welfare Improvement Action Plan (if applicable), and Health and Safety and Worker Welfare Commitment Statement (see Section 6.8 and Section 7.7)
- › Site plan showing the location of boreholes
- › Delivery schedule of soil investigation activities

Figure 1.6 Requirements for Soil Investigation



1.5.3 Plot Possession and Mobilisation Requirements

Plot possession and mobilisation is the process by which participants take possession of their plot from the Organiser to mobilise to their plot.

- C-127** Participants must submit a Plot Possession and Mobilisation Request to the Organiser for approval through the Participant Portal at least 20 working days before the planned date for possession and mobilisation. The request must be supported by the following documents (see Figure 1.7):
- › Contractor Self-Assessment Checklist, including Worker Welfare Improvement Action Plan (if applicable), and Health and Safety and Worker Welfare Commitment Statement (see Section 6.8 and Section 7.7)
 - › Delivery schedule of activities as described in C-119
 - › Construction Logistics Plan, where applicable (see Section 2.1)
 - › Supervision consultant's Health and Safety Management Plan, including the curriculum vitae (CV) of their health and safety lead (see Section 6.4 and Section 6.7)
 - › Supervision consultant's Worker Welfare Management Plan (see Section 7.4)
 - › Supervision consultant's Quality Management Plan (see Section 9.5.3)
 - › Project construction signboard (see Section 2.1.1)

An onboarding meeting will be held 5 working days after the Organiser receives these documents. See Section 1.5.4.

During the approval period, the Organiser may conduct audits or inspections to verify the health and safety and worker welfare information received in the participants' submissions.

On approval of the documents, a Mobilisation Permit will be issued to participants (see Section 10.5.1).

Before plot handover, the Organiser will appropriately mark the boundaries of the participants' plots. A plot possession and mobilisation review meeting will be held between the participant and the Organiser to review the plot demarcation. Once plots are handed over by the Organiser, participants may start mobilising to their plots.

Main construction activities cannot commence without the required Building Permit. See Section 10.5.3.

If participants choose to change or appoint additional contractors after plot possession and mobilisation, then they need to inform the Organiser through the Participant Portal. The appointed contractors will be required to submit all information presented in this section to the Organiser through the portal at least 20 working days before mobilisation.

1.5.4 Onboarding Meeting Prior to Construction

A face-to-face onboarding meeting will be held between the participant, the supervision consultant, the contractor, and the Organiser to reinforce the expectations of working on the Expo site.

- C-128** Participants must ensure that their contractor's site representative and an appropriate member of its senior leadership attend the onboarding meeting.

The Organiser will provide the relevant contact details for site emergency and serious incident notifications to the participants and their supervision consultants and contractors on the Participant Portal.

Figure 1.7 Requirements for Plot Possession and Mobilisation



1.6 Construction

Once the Plot Possession and Mobilisation Request is approved and the Building Permit is obtained from the One-Stop Shop, participants will commence their construction activities on their plot.

1.6.1 Working on the Expo Site

All contractors working on the Expo site are required to work within the framework set up for construction logistics discussed in Chapter 2.

Sustainability is one of the subthemes of Expo 2020 Dubai; therefore participants are encouraged to demonstrate their commitment to sustainability in their construction activities and in their pavilions. See Chapter 5.

1.6.2 Construction Completion

As discussed in Section 1.2, the following dates are the specific key delivery dates during construction. Participants are required to adhere to these dates.

- > Construction works may start as early as **20 April 2018**.
- > Pavilion construction (structure, core services, and building envelope) to be completed latest by **20 October 2019**.
- > Interior construction to be completed latest by **20 July 2020**.
- > Exhibit installation to be completed latest by **20 September 2020**.

The Organiser's Master Schedule will be available on the Participant Portal for reference.

C-129 Participants must obtain an Operation Fitness Certificate from the Organiser (One-Stop Shop) on completion of exhibit installation. See Section 10.8.

C-130 Participants must develop, document, and implement a robust testing and commissioning procedure. The Organiser may audit the testing and commissioning process.

C-131 Following the commissioning of pavilions, participants must obtain the necessary approvals from the One-Stop Shop to confirm the completion of the pavilions. See Chapter 10.

C-132 Participants must submit a copy of their operations and maintenance manual and as-built drawings in PDF format to the One-Stop Shop on completion of construction.

1.7 Decommissioning and Removal

Participants will decommission and remove their pavilion, and reinstate their plot back to its original condition latest by 10 October 2021, six months after the conclusion of the Expo event. See Chapter 13 for further details.

1.8 Deliverables

Table 1.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 1.1 Deliverables

Deliverable Name	Reason for Issue	Time of Issue	Reference
Delivery Schedule	For information	See Section 1.2	C-117, C-119
Letter Confirming the Participant's Designated Functions	For information	Before Theme Statement submission	C-121
Stage 1 Theme Statement Submission Stage 2 Concept Design Submission Stage 3 Final Design Submission	For approval	See the Self-Build Pavilions Guide, Chapter 1, Section 5	Self-Build Pavilions Guide
Soil Investigation Request	For approval	At least 10 working days before the planned date for plot access	C-126
Plot Possession and Mobilisation Request	For approval	At least 20 working days before the planned date for plot possession and mobilisation	C-127

1.9 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. Delivery Schedule Template
2. Dubai Municipality (Construction Materials Laboratories Section)
<https://www.dm.gov.ae/>
3. Insurance Guide
4. Plot Affection Plan
5. Plot Possession and Mobilisation Request Form
6. Plot Sheet
7. Self-Build Pavilions Guide
8. Site-Wide Soil Investigation Results
9. Soil Investigation Request Form
10. UAE Labour Law (summer/Ramadan working hours, UAE public holidays)
<http://www.mohre.gov.ae/en/labour-law/labour-law.aspx>

2 Managing Construction Logistics



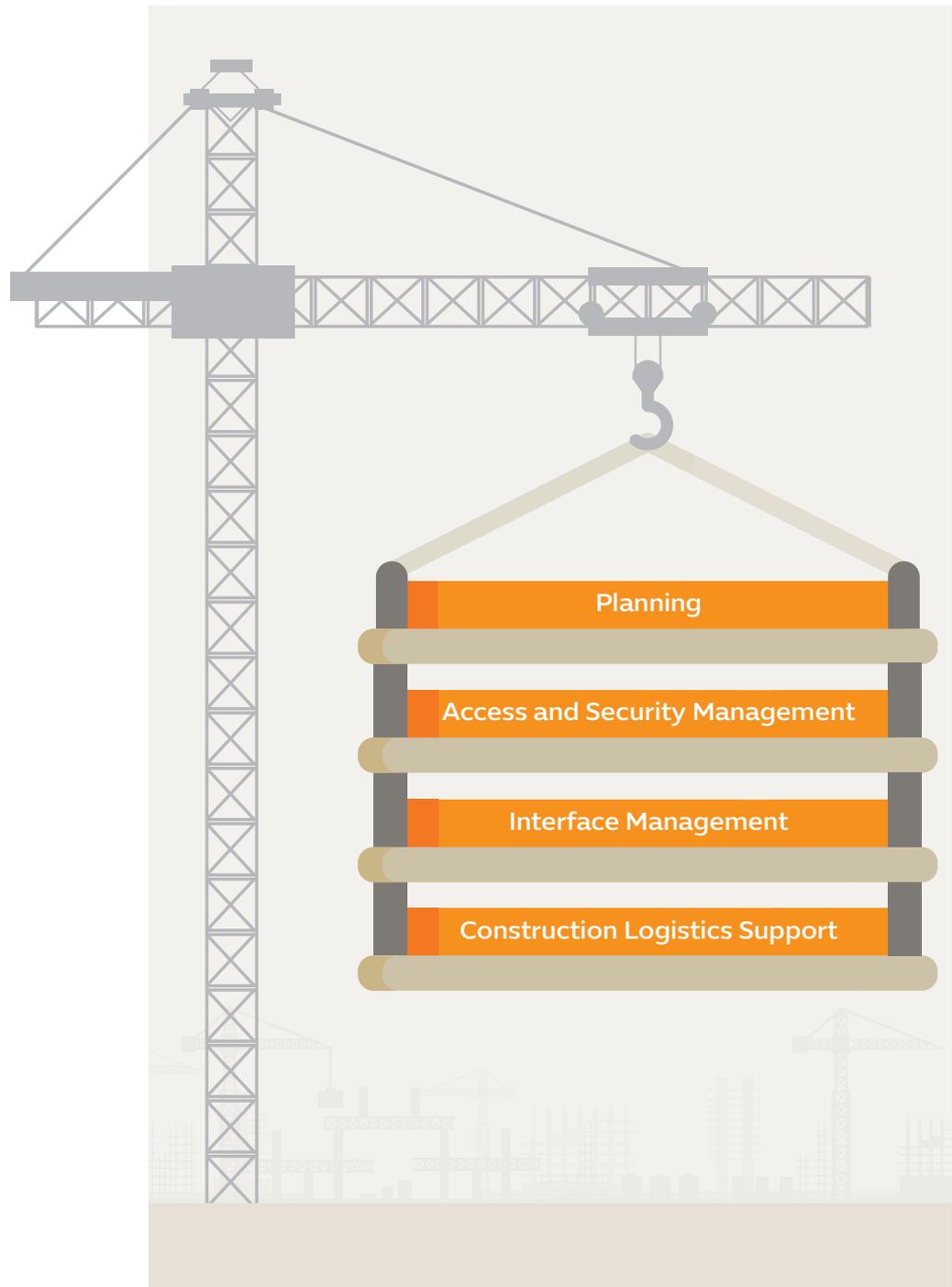


This chapter provides a set of controls and guides on site management to support the participants during construction.

The Organiser has developed a Contractor Site-Wide Logistics Obligations document to assist the participants in managing their plot-specific logistics in tandem with site-wide activities.

This document is available on the Participant Portal and will be updated regularly to reflect changes to construction logistics activities. Figure 2.1 shows an overview of the topics covered in this chapter. Event logistics will be discussed in a separate Guide.

Figure 2.1 Overview of Construction Logistics Management



2.1 Construction Logistics Planning

From possession of their plot up to the opening of the Expo event, participants will work within a large site that will be in full construction mode, hence they are encouraged to effectively and efficiently plan their activities.

The Organiser (One-Stop Shop) will provide construction logistics support to all participants during construction. This support will include construction logistics planning, access control and traffic management, site-wide construction emergency response, and allocation of space and laydown areas.

C-133 Participants must submit a Construction Logistics Plan to the Organiser through the Participant Portal as part of the Plot Possession and Mobilisation Request at least 20 working days before the planned date for possession and mobilisation (see Section 1.5.3). The plan must detail the management of the participants' construction logistics arrangements including:

- › Schedule of deliveries (approximate number and timing of anticipated deliveries, heavy goods vehicles, and light vehicles)
- › Workforce forecast
- › Construction strategy
- › Serious incident notification process
- › Crane operation strategy and the proposed positioning of cranes
- › Plot layout (see Section 2.1.2)

- › Security management within plot
- › Any movements of construction equipment within the Expo site that may need an escort or other special measures
- › Plot access and egress strategy and facility management/operations plan

C-134 Participants must take all the necessary measures to limit the risks and effects of their activities on adjacent plots and on the Expo site as a whole. These measures include confining construction activities to their plot. For exceptional cases, see Section 2.3.

C-135 During their own construction activities, participants must not cause damage to the completed works or works under construction by the Organiser or other participants.

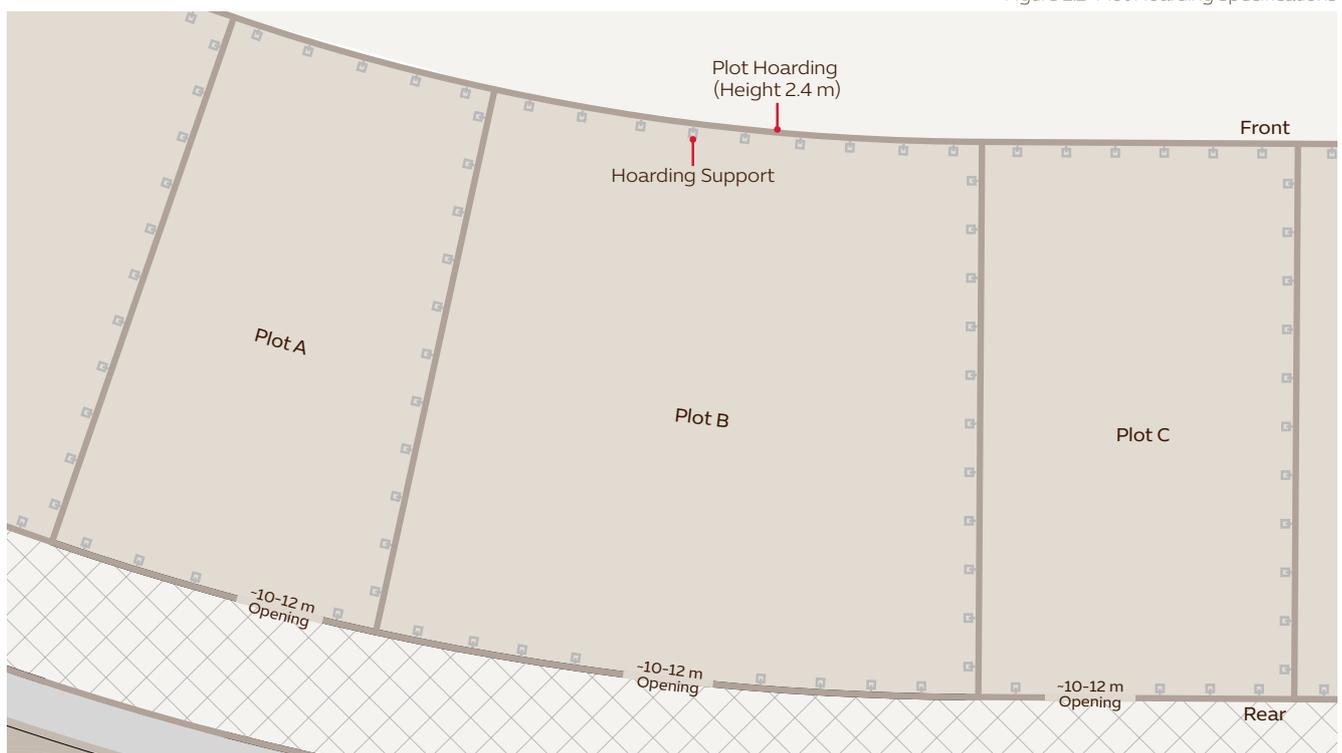
C-136 Participants must report and take liability for any damage caused by themselves or their contractors to any works within the Expo site. If required by the Organiser, participants must repair any damaged works or refund the costs of any repairs sustained by the Organiser or other participants.

2.1.1 Plot Boundaries and Hoarding

The Organiser will survey and demarcate a plot as per the plot sheet before it is handed over to the participant.

The Organiser will erect a 2.4-m high rigid continuous hoarding around each participant's plot (support struts and counterweights on the inside of the plot) – with approximately 10 to 12 m left out for an access/egress point at the rear of the plot. See Figure 2.2.

Figure 2.2 Plot Hoarding Specifications



The Organiser will manage the hoarding including any adjustments between plots, as required.

C-137 The Organiser will only remove the plot hoarding on receipt of a written request from the participant. This request must be submitted to the Organiser through the Participant Portal at least 10 working days before the requirement. All hoardings must be removed from the Expo site before the event commences. The deadline for removal of hoarding will be communicated to the participants through the Participant Portal.

C-138 Participants must supply, erect or install, and manage their own gates and access systems to the plot.

C-139 Participants must conduct their construction activities within their plot boundaries and in coordination with the adjacent plots and the site-wide work to:

- › Minimise the risk of injury to people working near their plot
- › Minimise disruption or delay to works of participants on adjacent plots or to other nearby construction activities

C-140 Participants must regularly inspect, clean, maintain, and keep their hoarding and gates in a good state of repair.

C-141 Hoarding must not be affixed with advertisements or any commercial branding without prior approval from the Organiser.

C-142 Participants must ensure that all temporary works are designed, installed, and maintained to withstand inclement weather.

C-143 A project signboard must be erected at each plot entrance and must be properly illuminated and clearly visible at all times. The project signboard must contain the specific requirements of the One-Stop Shop such as a unique plot identification name or number. This will assist with the emergency services and deliveries to reach the plot. An example of a project signboard is shown in Figure 2.3. Further specifications of a typical project signboard are provided in Section 2.7.

2.1.2 Plot Layout and Planning

C-144 Participants must produce a plot layout that efficiently uses the space available and includes:

- › Specific plot location and coordinates of the plot boundary
- › Vehicle and pedestrian access and egress routes
- › Location of project offices, welfare facilities, and cabins on the plot
- › Material storage areas, loading and unloading areas, and manoeuvring areas

› Firefighting equipment and means of raising an alarm during construction

› Worker bussing drop-off and pickup points

› Agreed assembly points within the plot

› Waste management area including location of segregation space and storage area for bins, skips, washout areas, and hazardous materials

› Sewer holding tank location, size, and collection strategy

G-90 Participants should allocate space for vehicle parking within their plots, where possible, and manage their parking arrangements. Parking within plot is subject to the Organiser's approval of a vehicle pass. Parking outside the plot on site roads is not permitted.

2.1.3 Project Offices and Temporary Buildings

C-145 Project offices and temporary buildings during construction must be contained within the plot.

C-146 To set up an alternative temporary establishment or office accommodation, participants must submit a Laydown Area Access Request to the Organiser through the Participant Portal at least 20 working days before the required access. The request form is available on the portal. Approval of the request will be on a first come, first serve basis depending on the availability of space.

C-147 Participants must take responsibility for the transport of their workforce to their plots.

2.1.4 Temporary Plot Utilities and Services

C-148 Participants must provide their own temporary supply of power, construction water, and sewage collection until connection is made to permanent services. The Organiser will provide utility services on a rate card basis, if required.

C-149 Participants must pay the costs of all utility consumption on their plot.

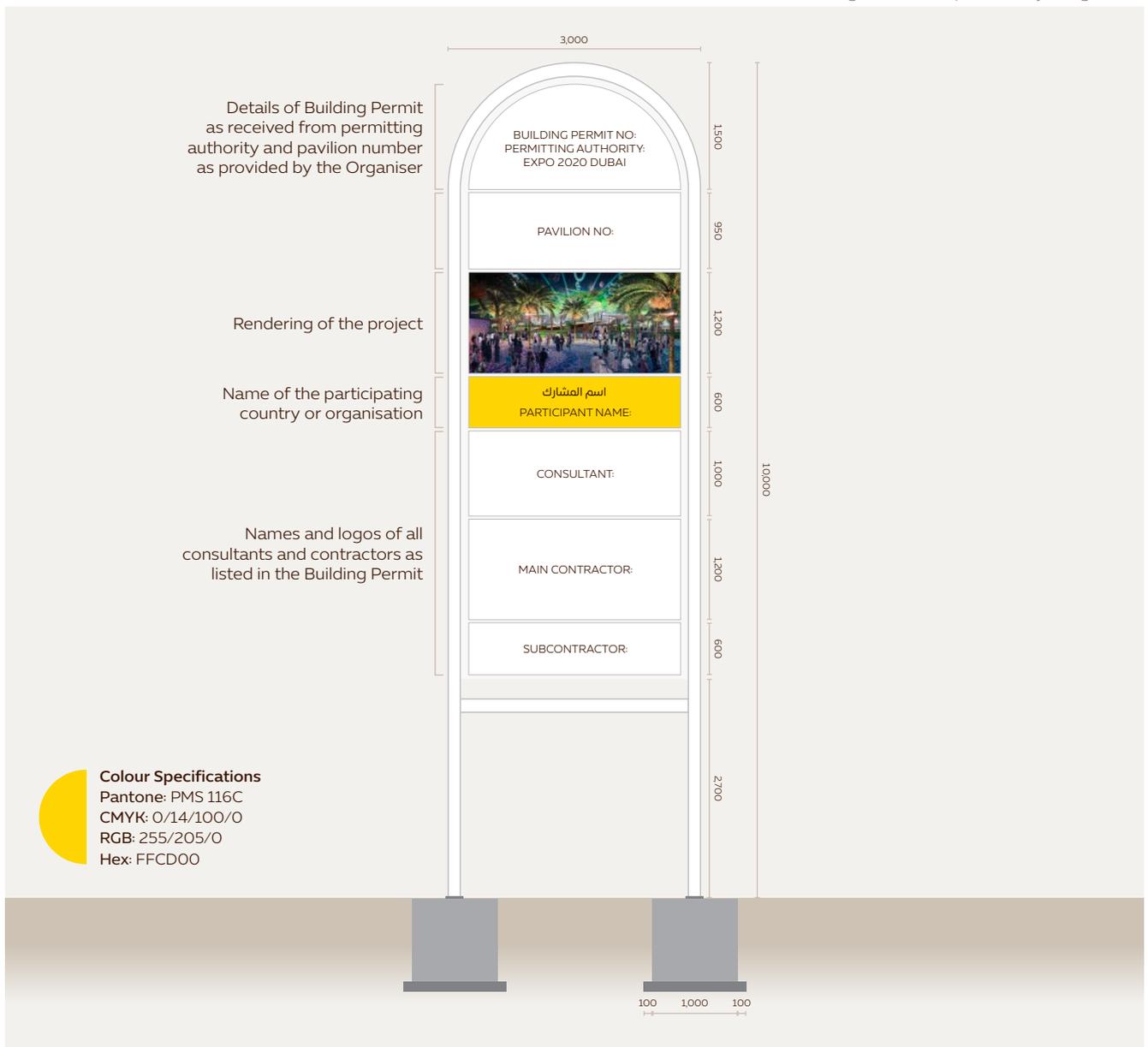
C-150 Sewage disposal must be in accordance with the requirements of the statutory authorities. Sewage must be collected at night to reduce daytime congestion on the site.

C-151 Construction water must be provisioned using road tankers until permanent infrastructure is available, and must be delivered at night to reduce daytime congestion on the site.

C-152 Participants must arrange for an internal power distribution network within their own plot. The generator must be located along the perimeter of their plot to allow for fuel deliveries and storage. Due consideration must be given to fire and life safety.

C-153 Participants must adopt their own temporary telecommunications arrangements until a permanent connection is completed.

Figure 2.3 Example of a Project Signboard



2.1.5 Plant and Materials Delivery, Handling, and Storage

- C-154** Participants must comply with the local regulations on the delivery, handling, and storage of construction materials and equipment.
- C-155** Participants must take responsibility for the movement of their goods from outside of the Expo site to their plot.
- C-156** Participants must provide their own mechanical handling equipment to handle materials.
- C-157** All requests for vehicle access to the Expo site must be booked using the Delivery Management System which is accessed via the Participant Portal. Time slots for vehicle access will be allocated to regulate the flow of vehicles to the site.

- G-91** Delivery vehicles may be subject to security inspection on arrival and on departure. Participants should factor this time into their delivery schedule. Inspection duration is dependent on the type and content of the goods in a vehicle.
- C-158** Participants must offload their plant and materials within their plot. Where there is no space available within their plot, participants must offload their goods directly outside of the plot in areas approved by the Organiser. See Section 2.3.

2.1.6 Housekeeping and Waste Management

The Organiser will appoint a site-wide waste management contractor to collect waste from plots. Details on the availability and operations of the contractor will be communicated to the participants through the Participant Portal.

During construction, decommissioning, and removal, participants may choose an alternative waste management contractor if they wish to do so.

- C-159** Participants and their contractors must achieve at least 85 percent segregation of waste (by weight). See Section 5.7.
- C-160** Waste must be contained within the participants' plots before disposal. Regular waste collection must be arranged to reduce fire risk.
- G-92** Participants' Construction Logistics Plans should present the best housekeeping practices and the most efficient use of space available on the plot.
- G-93** Where space permits, participants should segregate waste within their plot before collection.
- C-161** Areas immediately outside of plots must be clear of waste at all times.
- C-162** Waste and any loose materials must be properly secured to prevent it from being blown around or out of the participants' plots.
- C-163** Participants must bear the costs of waste collection and disposal even if they use the services of the site-wide waste management contractor.

2.1.7 Use of Cranes

- C-164** Participants must request facilitation for crane coordination with other parties working on the site from the Organiser (through the One-Stop Shop), where required.
- C-165** Crane jibs, equipment, or suspended loads must not operate above (over sail) adjoining plots or work zones of others without prior approval from the Organiser. See Section 2.3.

C-166 Participants must obtain approval from the Organiser (One-Stop Shop) before erecting any cranes taller than the approved maximum crane height. Details will be published on the Participant Portal.

G-94 Due to space constraints and construction works in adjoining areas, participants should erect the superstructure of their building working from the front of their plot (usually the concourse area) towards the rear (usually the service area). This sequence should be reversed during decommissioning and removal.

2.1.8 Expo Site Construction Operations Hours

During construction, the Expo site will be accessible 24 hours a day, 7 days a week; however, the Organiser has the right to close or limit access to the Expo site or evacuate the site for operational or emergency reasons.

2.2 Access and Security Management

As works progress on the Expo site, access control and security management will evolve to adapt to the requirements of the site. Updates to access control and security management will be communicated to the participants.

The Organiser will develop a site-wide Construction Emergency Plan. All parties onsite will be required to comply with the requirements of this plan in their construction logistics planning.

2.2.1 Security Responsibility

The Organiser will manage access to and traffic within the Expo site, and issue accreditation, vehicle passes, and visitor passes during construction.

Participants are responsible for any losses or damages to their assets. The Organiser will not indemnify any losses or damages.

C-167 Participants must provide security arrangements, such as manned guarding, to safeguard their plant, equipment, and other assets on the plot.

Figure 2.4 Emergency Services Contact Numbers

The graphic displays three emergency services: Fire (997), Ambulance (998/999), and Police (999). It also lists service details: 24/7 working hours, services available in English, Arabic, and other languages, and smart applications available on the App Store and Google Play.

- C-168** Participants must ensure that a procedure is in place to facilitate the Organiser's access to their plot in the event of serious incidents such as fire outbreak. The Organiser must have full access to the plot to ensure timely response to emergencies.
- C-169** If an incident requires attention from emergency services, participants must do the following:
- › Directly call the emergency services and provide full information of the nature and location of the incident. Toll-free telephone numbers are shown in Figure 2.4.
 - › Inform the Organiser's security team of the incident in accordance with the serious incident notification process (see Section 9.1.2). Provide the Organiser with the name and contact details of the person making the call, and the exact location and nature of the incident. The contact number of the Organiser's security team will be provided to participants. This team is available 24 hours for assistance.
 - › Where possible, immediately dispatch a representative in a vehicle to the agreed site entrance to meet the emergency services response team and guide them to the incident.

2.2.2 Security Locations

The Organiser has round the clock security presence at all site access points. Access and egress control will be implemented at each site entrance. Further access and egress locations may be added in accordance with operational requirements.

The Organiser's security teams will frequently patrol the common areas of the Expo site.

2.2.3 Vehicle Pass (Excluding for Deliveries)

- C-170** All vehicles accessing the site will need to have a valid pass issued by the Organiser and appropriate insurances. Vehicle passes must be displayed on the windscreen at all times. Applications for single- or multi-trip vehicle passes must be submitted to the Organiser through the Participant Portal at least 3 working days in advance of the intended arrival. Vehicle passes will be issued at the discretion of the Organiser.
- C-171** Participants and their consultants and contractors must strictly adhere to site rules and regulations printed on the vehicle pass. The Organiser will withdraw vehicle passes and implement further restrictions for traffic violations such as speeding.

Speed bumps may be used across the site, hence vehicles with very low ground clearance will be unsuitable for use on the site.

2.2.4 Accreditation

- C-172** Workforce entering the site must have valid accreditation issued by the Organiser (One-Stop Shop). All members of the workforce must carry the accreditation at all times.
- C-173** For the workforce to be issued with access accreditation, participants must provide the Organiser with a dataset of their workforce information on a Microsoft Excel spreadsheet through the Participant Portal. The spreadsheet must be accompanied with the following documents:
- › Scanned copy of passport
 - › Electronic copy of passport-compliant photograph
 - › Valid UAE work visa
 - › Emirates ID (if available)
- C-174** Original Emirates ID or original passport with a valid UAE work visa must be presented to collect accreditation.
- C-175** Request for a single accreditation pass must be submitted to the Organiser through the Participant Portal at least 1 working day in advance of the intended arrival on site. To allow efficient processing of 10 or more accreditations, participants must submit their workforce information dataset to the Organiser through the Participant Portal at least 3 working days in advance of the intended arrival.

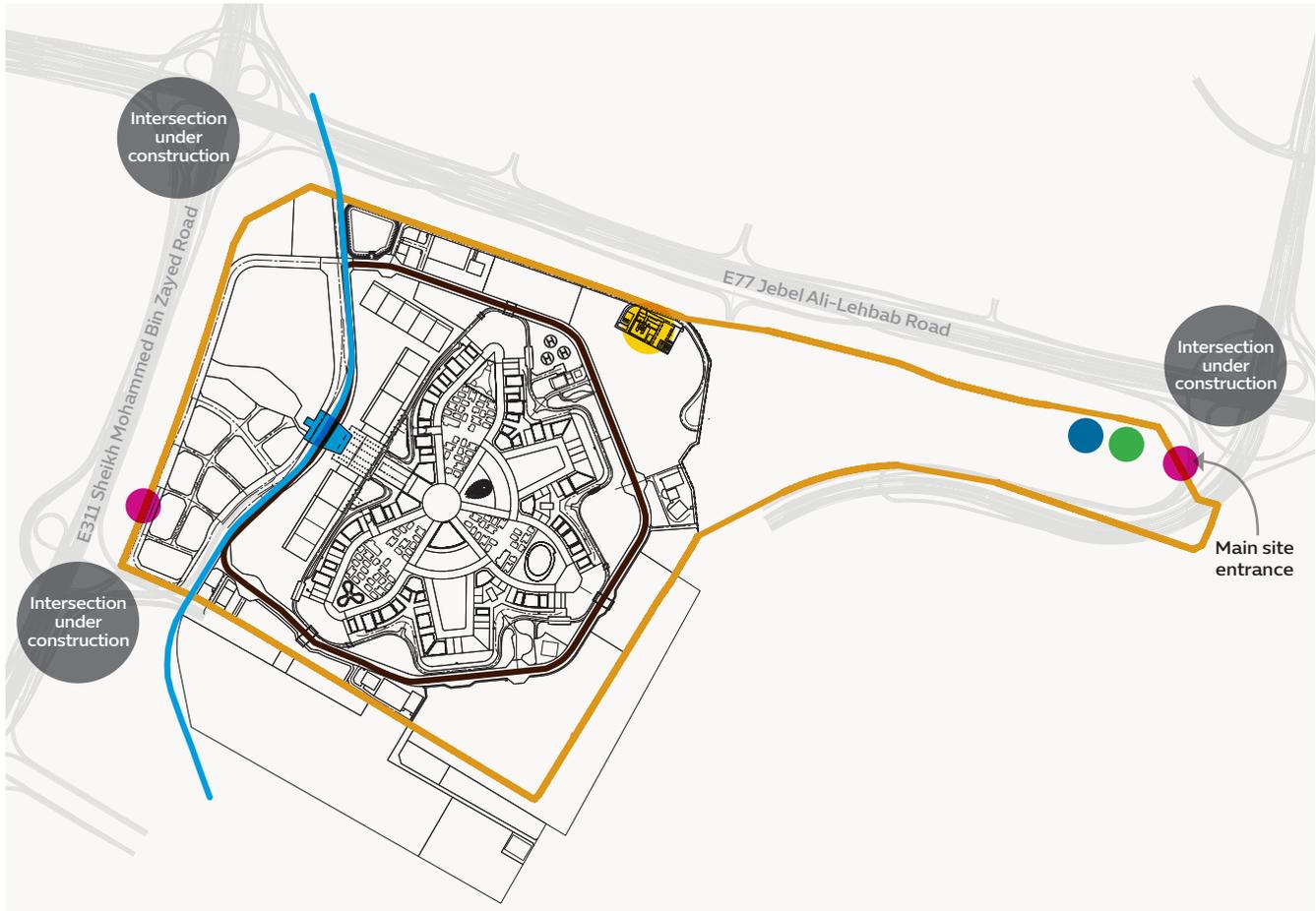
2.2.5 Visitor Pass

- C-176** All visitors must obtain a visitor pass to enter the Expo site. Request for a visitor pass must be submitted to the Organiser through the Participant Portal at least 1 working day in advance of the intended arrival on site.
- C-177** Visitors must be picked up in a vehicle from the main site entrance by a host who holds valid accreditation. The host must escort the visitors for the duration of their visit and escort them back to the main site entrance on conclusion of the visit.

2.3 Authority to Proceed

- C-178** In exceptional circumstances, participants may need to conduct temporary construction logistics activity from space outside their plot. In such cases, participants must obtain approval from the Organiser by submitting an Authority to Proceed (ATP) form through the Participant Portal at least 20 working days in advance of the intended activity.
- C-179** Applications for ATP will be reviewed taking into account planned activities outside of the participants' plots to avoid any clashes. Works must only proceed with formal written ATP approval from the Organiser.

Figure 2.5 Site Entrances and Location of Key Facilities



KEY	
●	Expo 2020 Main Office
●	Site Entrances
●	Hire Centres/Shops (indicative location)
●	Site-Wide Waste Management Compound (indicative location)
	Security Fence
	Site Perimeter Fence
	Metro Line and Station
	Self-Build Pavilions

2.4 Roads and Traffic Management

The Organiser will oversee and manage access to all areas of the Expo site to ensure safe and prompt movement of people and goods. For an overview of the general site, including indicative site perimeter fence, security fence, and site entrances, see Figure 2.5.

As part of the preparations for Expo 2020 Dubai, extensive external highway construction works are planned around the Expo site which may increase congestion in the area.

G-95 Participants should account for local traffic conditions when planning movement of people and goods to the Expo site. The Organiser will periodically update the participants with information about the conditions of roads around the site through the Participant Portal.

C-180 Abnormal loads routing to the Expo site must comply with the local and national highway regulations.

2.4.1 Access to the Expo Site

C-181 Workforce and visitors must use vehicles to access the Expo site. Due to the location of the site, pedestrians cannot walk to the site from the highway. Walking between work locations on the site is currently prohibited except on designated pedestrian walkways.

C-182 To transport the workforce from the site entrance to their own plots, participants must arrange their own transportation that connects with external pickup locations and satellite car parks during construction as may be provisioned within the Expo site.

C-183 Vehicles accessing the Expo site, including private vehicles, must be equipped with appropriate lights as stated in the Health and Safety Assurance Standards. See Section 6.3.

C-184 Motorcycles, taxis, and ad hoc catering and food deliveries are permitted up to the Expo site entrance only. Participants must make arrangements to collect such deliveries from the site entrance.

- C-185** Participants must pre-book all their deliveries via the Delivery Management System on the Participant Portal. Couriers will not be admitted to site unless pre-booked. Alternatively, participants may use the Organiser's Official Logistics Partner for courier shipments from home country to the participant's plot – at the participant's expense. See Section 12.4.
- C-186** Bookings of vehicles entering the site must identify all passengers.
- C-187** Participants must note that security checks may take place on persons and vehicles at the site entrances, and further checks will be required on entry and exit from the security fence.
- C-188** Vehicles entering the site must not bring any kind of animals or contraband such as alcohol, non-prescription drugs, explosives, firearms, or any other weapons.

2.4.2 Site Entrances

For operational reasons, entrances to the Expo site from the external highway may change location from time to time. Updates will be communicated via the Participant Portal as soon as they are available. An up-to-date Site Entrances Plan will be maintained on the portal.

Based on the positions of individual plots and the requirements of the Expo site, the Organiser may identify one or more specific site entrances for use by the participants. See Figure 2.5.

2.4.3 Site Roads

The primary access for vehicles across the development will be initially via the temporary site roads and later by permanent infrastructure when it becomes available. Vehicular access will be provided to the boundary of the participants' plots or as near as is practical. Temporary site road layouts are subject to constant review or alteration, and will be developed further as works progress.

- C-189** Site roads must always be clear of obstacles. Materials cannot be stored and vehicles cannot be parked on or adjacent to the site roads.
- C-190** In the event that a participant temporarily needs to partially block a site road for an essential construction activity, an approved Authority to Proceed must be obtained from the Organiser. See Section 2.3.
- C-191** Vehicles must not stop or wait on site roads or back-of-house service aprons. Parking areas will not be provided within the Expo site except for any clearly marked satellite car parks during construction as may be provisioned by the Organiser.

2.4.4 Site Road Signage and Lighting

The Expo site is a 24-hour work site, hence, access lighting and safety/directional signage will be installed, as appropriate, on all site roads.

- C-192** Signage and access lighting inside the participants' plots and any allocated laydown areas onsite are the responsibility of the participants. Participants must comply with the legal requirements and the Health and Safety Assurance Standards (see Chapter 6) on signage and lighting necessary for a safe working environment.

2.4.5 Traffic Management

Directional signage will be installed along the external highways and other nearby roads to guide vehicles and personnel to the site entrances.

- C-193** Drivers must comply with the speed limits on the site and the UAE traffic law such as wearing seatbelts and not using mobile devices while driving. Maximum speed limit on site roads is generally 30 km/h, but may differ in certain locations. Such locations will have appropriate signs specifying the speed limits. Site road signage, speed control measures, and traffic controls will be installed for safe operation of the site.
- C-194** If directed by traffic marshals or the Organiser's staff, all vehicles, including heavy goods vehicles, must exit the site only after routing via a wheel washing facility to prevent debris deposit on public roads.

2.5 Inaccessible Voids

- C-195** Participants must obtain approval from the Organiser (One-Stop Shop) before bringing equipment or materials with inaccessible voids on to the site. The Organiser will provide information on the inspection requirements through the Participant Portal. The void may need to be inspected onsite or at the fabrication plant by a qualified void inspector before closure. Inspection will be as directed by the Organiser and at the expense of the participant.

2.6 Deliverables

Table 2.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 2.1 Deliverables

Deliverable Name	Reason for Issue	Time of Issue	Reference
Construction Logistics Plan (including manpower and delivery vehicle forecasts)	For information	At least 20 working days before the planned date for possession and mobilisation	C-133

2.7 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. Accreditation, Vehicle Pass, and Visitor Pass Application Forms
2. Authority to Proceed Application Form
3. Contractor Site-Wide Logistics Obligations
4. Hoarding Removal Request Form
5. Laydown Area Access Request Form
6. Project Signboard Specification
<https://www.dm.gov.ae/wps/wcm/connect/bd0022804410d638ad8aafd6bee7af10/dm-dsi-SPEC01.pdf?MOD=AJPERES>
7. Site Entrances Plan
8. Site-Wide Construction Emergency Plan



3 Designing for Fire and Life Safety





Safety is the #1 priority on the Expo site. To ensure safety for all during the event, the entire Expo site will be connected to a Central Command Centre.

This chapter provides controls and guides that need to be built into the design of the pavilions. Construction-related fire and life safety is discussed in Chapter 6. Although the controls and guides in this chapter are extracts from the existing UAE Fire and Life Safety Code of Practice, participants are required to adhere to the full content of that document in addition to the information in this Self-Build Pavilions Delivery Guide.

- C-196** Participants must adhere to the latest UAE Fire and Life Safety Code of Practice as a minimum (see Section 3.6). This includes specifications in relation to occupancy loads, fire service access requirements, emergency egress, fire detection and alarm systems, and control rooms. Where the UAE Fire and Life Safety Code of Practice does not address specific fire protection features, the design must comply with the requirements of the National Fire Protection Association's Life Safety Code® (NFPA 101 [2015]) and Building Construction and Safety Code® (NFPA 5000 [2015]).
- C-197** The design and construction of pavilions must adhere to the UAE building codes as well as other relevant local and national standards. See Section 3.6.
- C-198** The fire and life safety strategy, including evacuation plans, of the Self-Build Pavilions must be aligned with the Site-Wide Fire and Life Safety Strategy.

3.1 Fire and Life Safety Design and Approvals

- C-199** Participants must ensure that their consultants are fully aware of the fire and life safety design requirements, and are registered (see Section 10.1) and qualified to complete the design as per the relevant codes. The Final Design must be submitted to the Dubai Civil Defence and other relevant authorities for approval through the One-Stop Shop.
- C-200** Participants must ensure that their design submissions follow the requirements of the Dubai Civil Defence such as layout, legend, and scale. Further details on the submission requirements are provided in the UAE Fire and Life Safety Code of Practice.
- C-201** Participants must ensure that their contractors submit all necessary documentation to the One-Stop Shop (Dubai Civil Defence) to obtain approval for final inspection before occupying the pavilion. See Section 10.7.
- C-202** Participants must submit as-built information to the One-Stop Shop as part of their request for final inspection.



Figure 3.1 Examples of Fire and Life Safety Equipment and Signage (clockwise from top left): Assembly Point Sign, Fire Extinguisher inside Hose Reel Cabinet, Automatic Fire Sprinkler, Fire Alarm Control Panel, Exit Sign, Fire Alarm Call Point

3.2 Fire Safety Management

- C-203** Pavilions must have specific emergency and evacuation plans and procedures covering construction, event, and decommissioning and removal as required in the UAE Fire and Life Safety Code of Practice.
- C-204** Participants must identify dedicated emergency response staff who have appropriate training to act as fire wardens in case of an emergency.
- C-205** Fire safety management during construction must comply with the Organiser's Health and Safety Assurance Standards (see Section 6.3).

3.2.1 Emergency Egress and Assembly Points and Signage

- C-206** In the event of fire, everyone must be evacuated to a designated place of safety or an assembly point within the plot. If necessary, participants may evacuate to the nearest site-wide assembly point.
- G-96** In selecting the assembly point, NFPA 5000 (2015) should be used for spatial requirements, and AS 3745 (2010) is recommended. See Section 3.6.
- C-207** Evacuation routes and exits must be easily accessible and relevant signage must be clearly displayed within the pavilion. Exit signs must be compliant with the UAE Fire and Life Safety Code of Practice. An example of exit sign is shown in Figure 3.1.
- C-208** Assembly points within plots must be clearly identified. An example of a signage for assembly point is shown in Figure 3.1.

C-209 Pavilions must include signage at all storage areas to clearly identify the products stored and the hazard ratings.

C-210 Adequate management procedures must be in place to ensure the safety of everyone in the assembly points and those evacuating the pavilion. Evacuation plans showing exit routes must be clearly displayed within the pavilion.

C-211 Assembly points must be aligned with the site-wide evacuation plan. The evacuation process needs to consider the following:

- › Evacuation from within a pavilion to an exit leading directly to the outside
- › Evacuation from outside of the pavilion to a designated place of safety within the plot boundary (assembly point on each plot)

3.2.2 Emergency Refuge Points

C-212 Emergency refuge points are safe areas designed to hold people, including those with limited mobility, during a fire or other emergency, when evacuation may not be safe or possible. Participants must provide emergency refuge points with emergency two-way communication connected to the Central Command Centre.

3.2.3 Emergency Lighting

C-213 Pavilions must have emergency lighting throughout all evacuation routes and emergency exits as required in the UAE Fire and Life Safety Code of Practice. Illumination level must be compliant with the legal requirements and the Health and Safety Assurance Standards (see Section 6.3).

C-214 Emergency lighting must be provided for at least 3 hours in the event of failure of normal lighting. Emergency lighting must be powered from either a monitored central battery system or a self-contained fitting.

3.2.4 Liquefied Petroleum Gas

A centralised liquefied petroleum gas (LPG) distribution system will serve each pavilion during the Expo event.

C-215 Participants must not use LPG cylinders anywhere in their pavilion.

C-216 All kitchens must have silicon-coated fire blankets.

3.3 External Facades

C-217 The design of external facades must ensure that the external cladding, external insulation and finish systems, curtain wall system, roofing, glazing, and fire stopping comply with Annexure A.1.21 Rev2, Fire Stopping_Cladding_Roofing document of the UAE Fire and Life Safety Code of Practice.

3.4 Fire Protection Systems

To mitigate the effects of potentially destructive fires, participants are required to adhere to the following criteria while designing their pavilions.

C-218 Pavilions must be equipped with automatic sprinkler protection and wet riser systems in accordance with the UAE Fire and Life Safety Code of Practice. See Figure 3.1.

C-219 Participants must manage open flames in accordance with the UAE Fire and Life Safety Code of Practice.

C-220 Fire and smoke detection and alarm systems must be installed throughout the pavilion and the public realm in accordance with the UAE Fire and Life Safety Code of Practice. All alarms must be linked to the Organiser's Fire Command Centre located within the Central Command Centre.

C-221 Pavilions must include manual call points and a localised fire alarm control panel (see Figure 3.1) in accordance with the UAE Fire and Life Safety Code of Practice. The panel will send a signal to the Central Command Centre in case of a fire. The panel must include the facility to manually remove the detection device, activate or deactivate the alarm notification system, or detect faults.

C-222 Pavilions must have fire extinguishers in accordance with the UAE Fire and Life Safety Code of Practice. See Figure 3.1.

3.5 Pavilion Security

The Organiser aims to provide a safe and secure environment for all participants and visitors without inhibiting the Expo 2020 Dubai experience.

3.5.1 Closed-Circuit Television

C-223 For compliance with the security requirements, pavilions must have 100 percent closed-circuit television (CCTV) coverage throughout the public space, exhibition space, and food and beverage space. CCTV coverage must be compliant with the latest Dubai Law (24). The CCTV network must be linked to the Central Command Centre.

C-224 Participants' CCTV cameras must provide full high-definition (1,920 x 1,080 pixels) quality colour images and must have the ability to capture images in low light. All camera images must be recorded at not less than 25 frames per second and stored for at least 45 calendar days. The system may be designed to allow images to be stored only when movement is detected by the video management system.

C-225 Security equipment storage and CCTV review workstations must be located in a secure room within the pavilion to prevent unauthorised access.

3.5.2 Other Security Requirements

- C-226** All security equipment must have a backup power supply for at least 2 hours in the event of a power failure.
- C-227** Participants must consider an intruder detection system in areas where high-value items are stored or displayed. The intruder detection system must be linked to the Organiser's security system at the participant's request. The responsibility for the insurance and security of any assets remains with the participants.
- C-228** For security reasons, participants must design out all inaccessible voids within the interior design. Where this is not possible, participants must highlight any inaccessible voids to the Organiser in the design submission for approval. See Section 2.5.

3.6 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. AS 3745 (2010)
<https://infostore.saiglobal.com/store/PreviewDoc.aspx?saleItemID=2182780>
2. Dubai Civil Defence
<http://www.dcd.gov.ae>
3. Dubai Law (24)
<https://portal.dps.ae/laws.html>
4. Health and Safety Assurance Standards
5. NFPA 101 (2015)
<http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards?mode=code&code=101>
6. NFPA 5000 (2015)
<http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards?mode=code&code=5000>
7. Site-Wide Fire and Life Safety Strategy
8. UAE Fire and Life Safety Code of Practice
http://www.dcd.gov.ae/portal/eng/UAEFIRECODE_ENG.pdf



4 Connecting to Utility Services





All pavilions will be provided with utility services before the Expo event. The Organiser will build utility connections from the infrastructure networks up to 2 m within the participants' plot boundaries. Participants will connect to and activate the services within their plots after receiving the relevant approvals from the One-Stop Shop.

4.1 Infrastructure Network Readiness

The Organiser has planned to complete the infrastructure networks and service connections to plots before the participants require active connections.

C-229 In the event that infrastructure networks are not yet ready by the time the participants need the service connections activated, participants must arrange for temporary utility supply until the networks are operational. The Organiser may provide such services on a rate card basis.

The One-Stop Shop will provide the participants with a plot sheet which contains the utility demand allocation details and the utility connection details such as location, size, level, materials and others. An example showing utility connection points is provided in Figure 4.1.

C-230 Participants must obtain approval from the Organiser (One-Stop Shop) before undertaking any modifications to their utility service connections as discussed in the following section.

4.2 Utility Service Connection Requirements

Participants will obtain appropriate approvals and permits from the One-Stop Shop before connecting to and activating the utility services in their plot.

Connection fees, settlement of accounts, and other commitments with the utility service providers will be done by the participants through the One-Stop Shop.

C-231 Participants must ensure that their contractors complete the building construction before they apply for connection to permanent utilities. On receipt of the approvals, utility service connection works will commence.

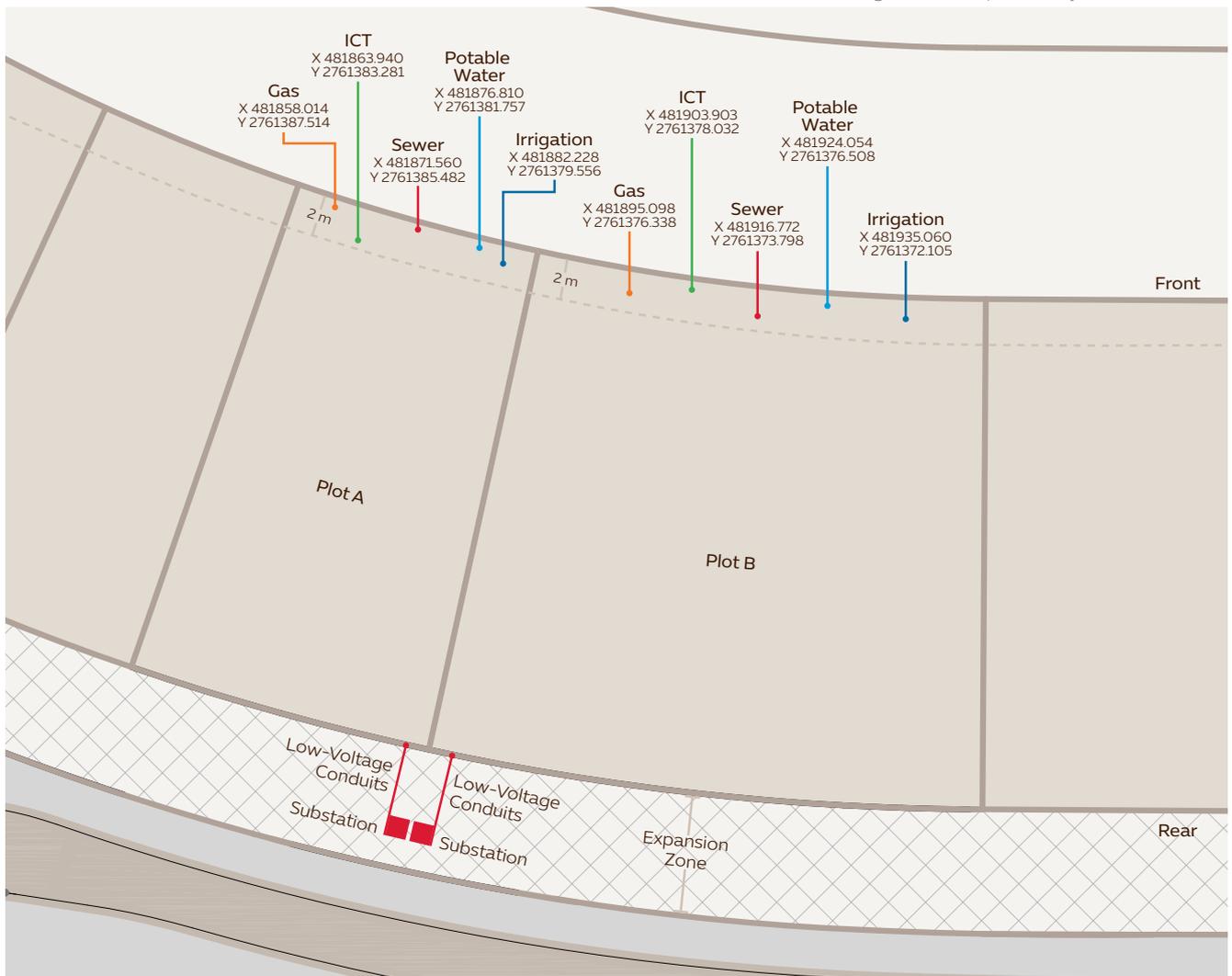
C-232 Participants must bear the cost of rectifications of any damages done to the external infrastructure or public realm in case of modification to their utility service connections. See Section 2.1.

C-233 Participants must ensure that their contractors coordinate their connection to permanent utilities with the One-Stop Shop.

C-234 Connection to permanent utilities must be completed as per the relevant local regulations and standards.

The permitting and approval process is discussed in Chapter 10.

Figure 4.1 Example of Utility Connection Points



4.2.1 Potable Water Connection

The Organiser will install the potable water network in the utility right of way and build connection to the participant's plot up to 2 m from within the plot boundary.

C-235 Participants must request to connect their own metered potable water connection from the potable water termination point to the potable water/firefighting storage tank. The service provider will build the connection at the participant's cost.

DEWA will provide the relevant regulations on potable water connection.

4.2.2 Power Connection

The Organiser will build an electrical substation (11/0.4 kV) for each participant's plot. The electrical substation will be located within the expansion zone at the rear side of the plot, where applicable, with conduits running to the plot boundary.

This arrangement will provide the participants with flexibility to expand their plots where possible and if needed without the need to relocate or redesign the location of the electrical substation.

The Organiser will install the 11 kV cables and transformers to and in the electrical substation.

C-236 Participants must request to connect the low-voltage cables from the electrical substation to the low-voltage room in their pavilion. The service provider will install the cables.

DEWA will provide the relevant regulations on power connection.

4.2.3 Irrigation

The Organiser will install the main irrigation network in the utility right of way and build a connection to the participant's plot up to 2 m from within the plot boundary.

C-237 Participants must connect their internal irrigation network within their plot.

The Drainage and Irrigation Department of the Dubai Municipality will provide the relevant regulations on irrigation connection.

4.2.4 Sewer

The Organiser will build sewer house connection chambers in the utility right of way with connections extended up to the participant's plot. The connection will be capped and marked on the plot.

C-238 Participants must connect their sewer line from the final inspection chamber within their plot to the sewer connection point.

The Drainage and Irrigation Department of the Dubai Municipality will provide the relevant regulations on sewer connection.

4.2.5 Storm Water

G-97 Participants should design storm water discharge to drain as free flow towards the storm water gullies in the public realm. Participants should also design their plots to drain in accordance with the proposed finish ground levels shown in the plot sheet.

C-239 If participants choose to build storm water collection network within their plots, they must allow for storage period as per the regulations and must obtain the necessary approvals from the One-Stop Shop. Connection will be made to the nearest storm water manhole in the utility right of way after obtaining the necessary approvals.

4.2.6 Gas

The Organiser will build the main gas network in the utility right of way and build connection to the participant's plot up to 2 m from within the plot boundary.

C-240 Participants must request to connect their own metered gas connection from the gas termination point to the building through the One-Stop Shop. The gas operator will build the connection at the participant's cost.

The gas operator will provide the relevant regulations on gas connection.

4.2.7 Information and Communications Technology

The Organiser will build the information and communications technology (ICT) network in the utility right of way. Duct provisions will be built up to 2 m from within the plot boundary to cover services such as CCTV connection, telecommunications, and fire alarm.

C-241 Participants must build their own ducts from the connection point to the final ICT and CCTV rooms within their pavilions.

The site-wide telecommunications service provider, Etisalat, will install fibre-optic connections to pavilions after the completion of construction. Other telecommunications service providers may inspect and install additional equipment to pavilions to enhance service quality. Relevant regulations on telecommunications will be available on the Participant Portal.

4.3 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. DEWA
<https://www.dewa.gov.ae/en>
2. Dubai Municipality – Drainage and Irrigation Department
<https://www.dm.gov.ae/wps/portal/home>
3. Etisalat
<http://www.etisalat.ae/nrd/en/index.jsp>

5 | Achieving Sustainability





Sustainability is one of the three subthemes of Expo 2020 Dubai and will be a highlight of the event. In addition to providing content for exhibitions and programming during the event, sustainability considerations are a fundamental pillar of the design and delivery of the Expo site.

Through its sustainability efforts, the Organiser aims to make Expo 2020 Dubai a benchmark for future World Expo events. To achieve this goal, participants are encouraged to contribute to the site-wide sustainability commitments by complying with sustainability controls and guides presented in this chapter.

In line with the sustainability approach of Expo 2020 Dubai, all pavilions need to consider sustainability as an integral component of their pavilion construction, interior construction, and exhibit installation.

5.1 Sustainability Drivers

Expo 2020 Dubai's vision for sustainability draws its influence from a number of key initiatives in the UAE which establish the roadmap for the future. Expo 2020 Dubai aims to make a substantive contribution to support these national efforts.

- › **UAE Vision 2021:** The vision outlines the challenges that the UAE will face in the future and provides an overarching perspective on mitigation over the coming years. The strategy focuses on economic, social, and environmental factors.
- › **UAE Green Growth Strategy:** This strategy was launched in January 2012 by His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai.

It is a long-term initiative that aims to promote sustainability in the economy and the public and private sectors to help the UAE become a global hub and a successful model of the new economy.

- › **United Nations Environment Programme's (UNEP) Sustainable Public Procurement Programme:** The UAE's Green Economy push aligns with UNEP's Sustainable Public Procurement Programme, of which the Ministry of Climate Change and Environment is a member. The Sustainable Public Procurement Programme supports the implementation of sustainable public procurement around the world under the mandate of UNEP's 10-year framework of programmes, with a vision of embedding environmental, economic, and social aspects of sustainability into public procurement and associated supply chains.
- › **Dubai Green Economy Partnership:** Launched in May 2012 by His Highness Sheikh Hamdan Bin Mohammed Bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of Dubai Executive Council, the Dubai Green Economy Partnership is inspired by the UAE Green Growth Strategy. The Dubai Green Economy Partnership is a multi-stakeholder and cross-sector partnership to promote green growth in the Middle East and position Dubai as a global gateway for green investment and trade.

- › **Dubai Integrated Energy Strategy 2030:** Outlined by the Dubai Supreme Council of Energy, this strategy sets an ambitious target of a 30 percent reduction in energy consumption by 2030. Renewable energy will be tapped to satisfy 7 percent of Dubai's energy requirements by 2020, increasing to 15 percent by 2030.
- › **Green Building Regulations and Specifications in Dubai:** The Green Building Regulations and Specifications administered by the Dubai Municipality covers the standard elements of green building design such as energy, water, healthy buildings, ecology, materials, and waste.

Where relevant, alignment with these strategies will also provide the participants with an opportunity to demonstrate their country's broader vision through the pavilion.

5.2 Sustainability Key Areas

Expo 2020 Dubai has identified a number of sustainability key areas (see Figure 5.1) which will contribute to enhance the standards for the event while also providing opportunities for showcasing innovations, breakthrough developments, and new solutions.

5.3 Sustainability Policy

The Organiser has developed a Sustainability Policy that is aligned with and fully committed to complying with the laws of the UAE and Dubai. The Sustainability Policy is available on the Participant Portal.

Figure 5.1 Key Areas of Sustainability



5.4 Sustainability Certification

G-98 Participants are not required to achieve sustainability certification, however, they should target certification. Due to the international nature of the Expo event, participants may choose to use recognised certification systems of their own choice that align with LEED® Gold New Construction Version 4.

5.5 Materials

C-242 Participants' contractors must incorporate sustainability assessment into the procurement process for all materials and products, and include this assessment with all material approval requests.

C-243 Changes to materials or products must align with the overall sustainability goals for the participants' pavilions. Participants must approve such changes.

C-244 Procurement of materials must be based on optimised packaging solutions with recycled packaging and/or taken-back/stewardship schemes.

5.6 Air Quality

C-245 Diesel fuel used during construction must include at least 20 percent biodiesel, where technically feasible. If the equipment or vehicle is under warranty, then the manufacturer's fuel type recommendation must be followed.

G-99 Construction vehicles should use alternative fuel sources such as electricity, fuel cells, or hybrid technology, where possible.

C-246 The biodiesel component of any fuel suppliers' mix must meet EN 14214 or ASTM D6751 as tested by a laboratory approved to test to this standard. Visual spot checks of fuel may be carried out onsite during construction.

G-100 To ensure minimal vehicular journeys, participants should optimise trips and schedules related to delivery of goods and removal of packaging by ordering the right amounts of materials.

5.7 Waste

C-247 Participants must ensure that their contractors implement the Construction Waste Management Plan (CWMP), which is embedded in the Construction Environmental Management Plan (CEMP), to segregate at least 85 percent of waste (by weight).

5.8 Soil

C-248 Soil sedimentation and stabilisation must be controlled in line with the site-wide CEMP. See Section 8.5.

5.9 Sustainability Performance Reporting

C-249 Participants must record and maintain information of all their sustainability activities. Records must be updated monthly or when the latest data is available (see Section 8.6.1 and Section 9.3). This information will contribute to the assessment of their performance against sustainability targets and to the site-wide integrated sustainability reporting.

C-250 Participants must ensure that their contractors maintain the performance of the design at all times to ensure compliance with Expo 2020 Dubai's sustainability requirements. Changes recommended by the contractor must align with the overall sustainability goals for the participants' pavilions. Evidence confirming this must be provided by the contractor where such recommendations occur. Participants must approve such changes.

5.10 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. ASTM D6751
<https://www.astm.org/Standards/D6751.htm>
2. Construction Environmental Management Plan (including Construction Waste Management Plan)
3. Dubai Green Economy Partnership
<http://greeneconomy.ae/>
4. Dubai Integrated Energy Strategy 2030
<http://taqati.ae/dies-2030/>
5. EN 14214
<https://www.cenelec.eu/standardsdevelopment/ourproducts/europeanstandards.html>
6. Green Building Regulations and Specifications in Dubai
<https://www.dm.gov.ae/wps/wcm/connect/662c2fc7-03b4-41a5-aad0-c9d1959773a3/Green+Building+Regulations+and+Speci.pdf?MOD=AJPERES>
7. LEED® Gold New Construction Version 4
<http://www.usgbc.org/leed-v4>
8. Sustainability Policy
9. UAE Green Growth Strategy
<http://www.moccae.gov.ae/default.aspx>
10. UAE Vision 2021
<https://www.vision2021.ae/en>
11. UNEP's Sustainable Public Procurement Programme
<http://www.unep.org/>

6 Complying with Health and Safety Standards





Expo 2020 Dubai puts 'Health and Safety First' to deliver 'Target Zero.' At the core of this Target Zero objective is ensuring that no one gets hurt or suffers ill health as a result of working on Expo 2020 Dubai.

6.1 Legal and Other Health and Safety Requirements

- C-251** All participants, consultants, and contractors must adhere to the following:
- › Relevant laws of the UAE and Dubai, including decrees, regulations, orders, guidelines, decisions, or directives issued by the relevant authorities
 - › International standards, codes of practices, and other requirements as identified in the Health and Safety Assurance Standards (see Section 6.3)
 - › Relevant manufacturer's instructions and guidelines

6.2 Health and Safety Policy

The Organiser has developed a Health and Safety Policy that is aligned with and fully committed to complying with the laws of the UAE and Dubai. The Health and Safety Policy is available on the Participant Portal.

6.3 Health and Safety Assurance Standards

The Health and Safety Assurance Standards is a document that describes the operational practices and health and safety standards that need to be adopted by the participants' consultants and contractors to ensure the successful implementation and management of the Organiser's health and safety policies and goals.

The Health and Safety Assurance Standards is available on the Participant Portal.

- C-252** Participants must ensure that their consultants and contractors cascade the Health and Safety Assurance Standards to their supply chain.

The criteria for prequalification of contractors are included in the Health and Safety Assurance Standards.

6.4 Health and Safety Plans

- C-253** Participants must ensure that their consultants prepare a Health and Safety Management Plan which includes arrangements for monitoring, auditing, and reporting on their contractors' implementation of the Health and Safety Assurance Standards. Consultants must submit this plan to the Organiser through the Participant Portal for information at least 20 working days before plot possession and mobilisation.

C-254 Participants must ensure that their contractors submit a Construction Health and Safety Plan to their consultants for approval. Consultants must submit this plan to the Organiser through the Participant Portal for information no later than 10 working days after plot possession and mobilisation.

G-101 Health and Safety Plans should be relevant, sufficiently detailed, clear, concise, and proportional to the scale and complexity of the project and the risks involved.

Health and Safety Plan Checklists outlining the requirements for the plans are available on the Participant Portal.

6.5 Health and Safety Performance Monitoring

Participants are required to support the consultants and contractors, monitor their performance, and drive compliance to achieve the overall aims and objectives of the Health and Safety Assurance Standards.

C-255 Participants must ensure that their contractors prepare a Health and Safety Monthly Report (see Section 9.3) that measures and reports against the requirements presented in the Health and Safety Assurance Standards. A report template is available on the Participant Portal.

C-256 Participants must ensure that their consultants monitor health and safety performance by reviewing the reports of their contractors and inspecting and auditing their contractor's arrangements (see Section 9.4). An inspection and audit schedule must be developed by the consultant and issued to the Organiser for information no later than 10 working days after plot possession and mobilisation.

6.6 Work Management Measures

The Organiser, stakeholders, and statutory authorities will periodically review the construction activities on the Expo site.

C-257 Risk assessments, method statements, and additional control measures for high-risk works must be developed to manage health and safety hazards.

C-258 Risk assessments must consider work activities and the work environment.

C-259 Key control measures from risk assessments must be built into method statements. Task briefings must be given to the workforce to ensure that methods are known and understood by all.

6.7 Health and Safety Competence

Participants' consultants and contractors are required to have the appropriate knowledge, skills, and experience to safely undertake tasks. Further details are provided in the Health and Safety Assurance Standards.

C-260 Participants must submit the CV of their consultant's health and safety lead to the Organiser through the Participant Portal for information at least 20 working days before plot possession and mobilisation. Participants must also submit the CV of their contractor's approved health and safety lead to the Organiser through the Participant Portal for information no later than 10 working days after plot possession and mobilisation.

C-261 Participants must ensure that their contractors develop a plot-specific induction presentation and deliver it to all personnel entering the plot. The induction must include Organiser-specific induction material which will be available on the Participant Portal.

6.8 Mobilisation Requirements

C-262 At least 20 working days before plot possession and mobilisation, participants must submit a Health and Safety and Worker Welfare Commitment Statement, from their chosen contractor, to the Organiser through the Participant Portal. The Commitment Statement must confirm the contractor's intention to comply with and uphold the Health and Safety Assurance Standards and the Worker Welfare Assurance Standards (see Section 7.3). The Commitment Statement must be signed by the selected contractor's most senior executive, submitted to the participant, and then issued to the Organiser through the Participant Portal for information. A Commitment Statement template is available on the portal.

Consultants are required to submit their Health and Safety Management Plan to the Organiser through the Participant Portal before mobilisation as identified in Section 6.4.

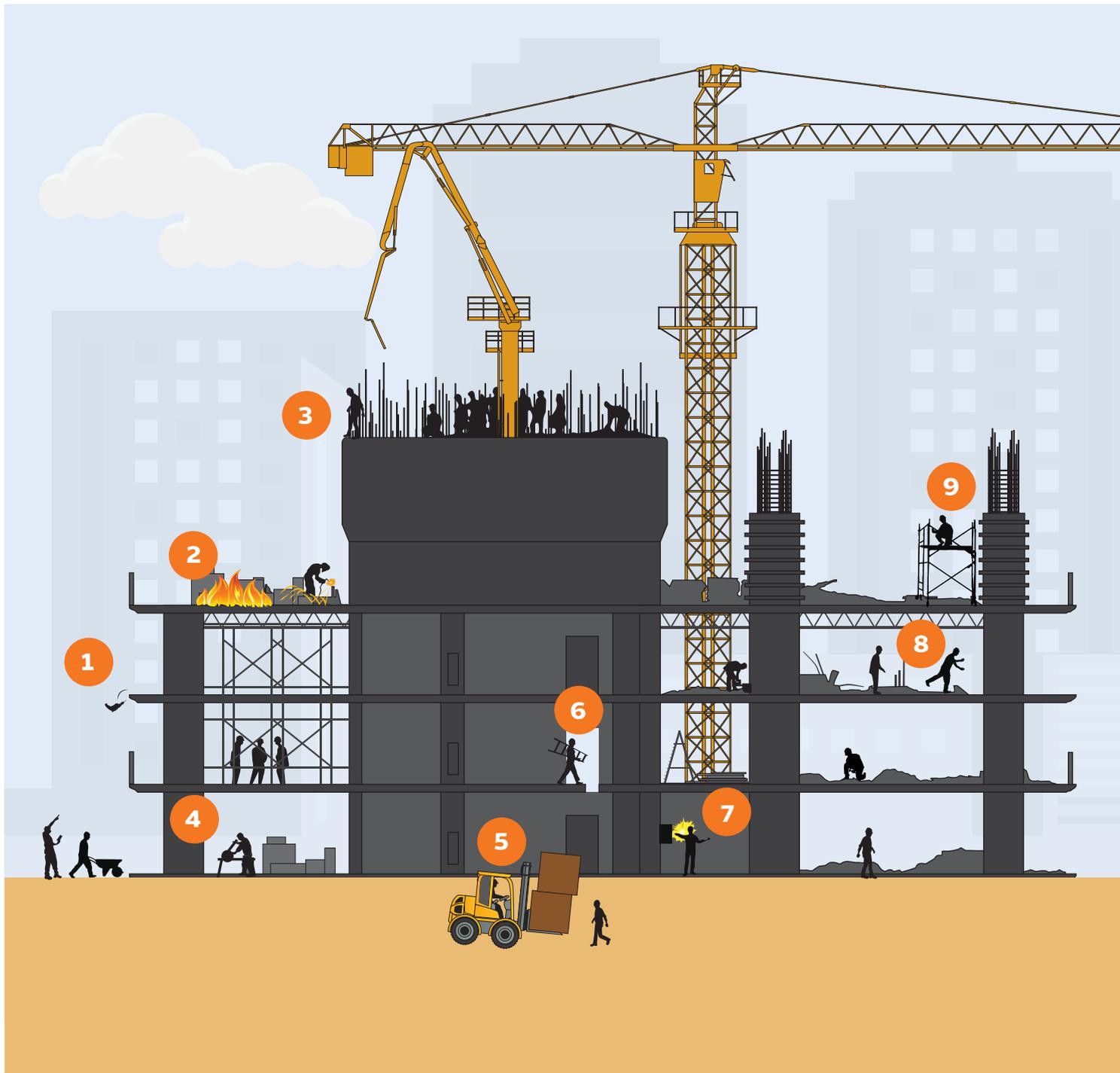
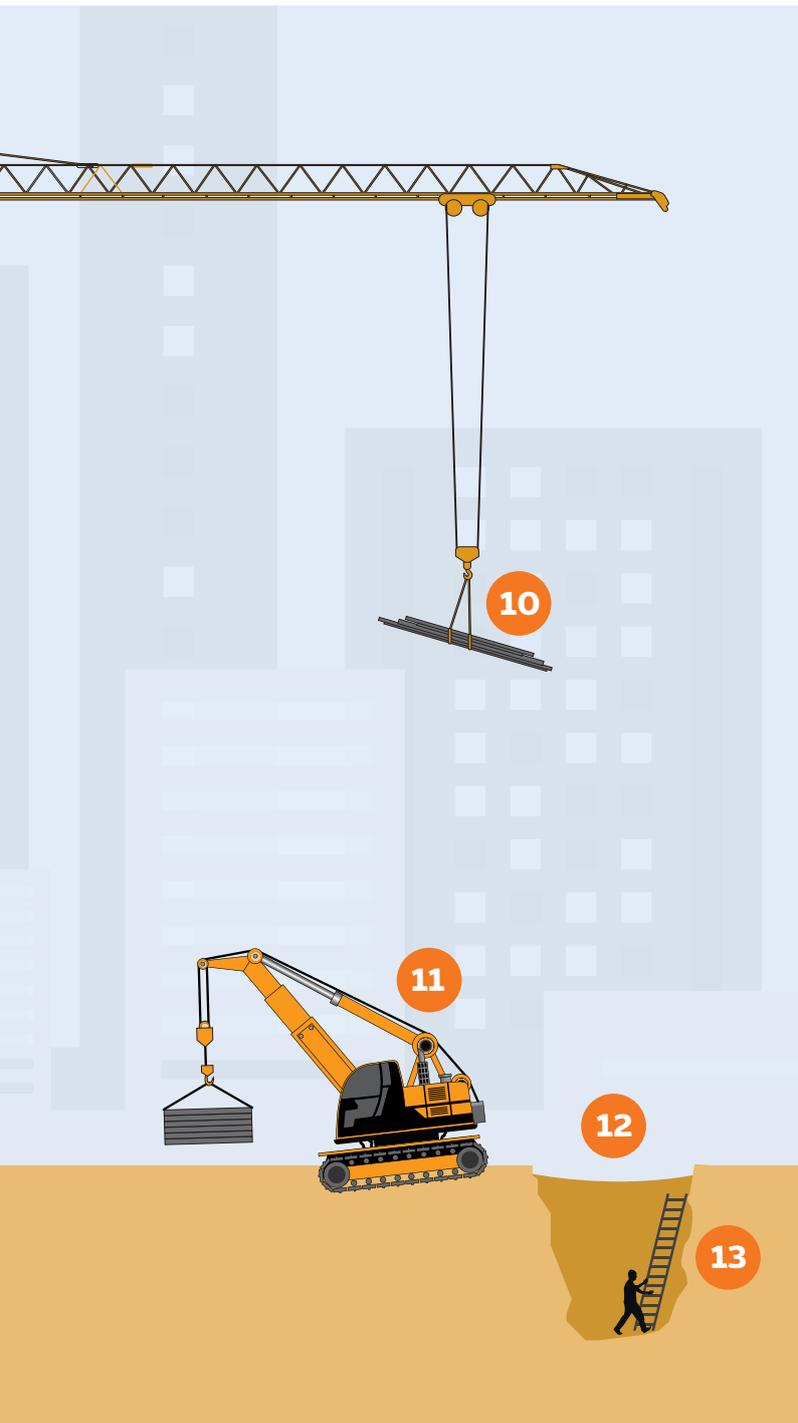


Figure 6.1 Construction Site Hazards

- 1 Falling Objects
- 2 Fire
- 3 Unsafe Working at Height
- 4 Unguarded Machinery
- 5 Plant and Pedestrian Interfaces
- 6 Open Shafts and Edges
- 7 Unsafe Electrical Equipment
- 8 Slips, Trips, and Falls
- 9 Unsafe Working Platforms
- 10 Unsafe Lifting Operations
- 11 Unsafe Construction Equipment
- 12 Unsafe Excavations
- 13 Unsafe Access and Egress

6.9 Health and Safety Site Operational Standards

C-263 The Health and Safety Assurance Standards includes specific requirements to manage known hazards associated with construction. Participants must ensure that they review the Health and Safety Assurance Standards against their own scope and that appropriate controls are cascaded to their consultants and contractors. Figure 6.1 illustrates the typical hazards on a construction site.



C-264 Participants must ensure that their contractor's health and safety plans include plot-specific arrangements to manage the following hazards as a minimum:

- › Lifting
- › Fall prevention
- › Temporary works including electrical works
- › Extreme or inclement weather
- › Traffic management

6.10 Site Welfare

- C-265** Participants must ensure that their contractors provide and maintain welfare facilities on the plot from the start of mobilisation to the end of construction. Welfare facilities must include drinking water stations, washing and ablution areas, prayer rooms, toilets, and resting areas.
- G-102** Welfare facilities on plot should be as close as is practical to work locations. Participants should ensure that their contractors develop specific temporary facilities and welfare plans detailing arrangements.
- C-266** Welfare facilities must be constructed of suitable materials and must be fitted with fire detection and alarm systems and fire extinguishers, where applicable. Facilities must also be compliant with the requirements of the Dubai Civil Defence in line with the UAE Fire and Life Safety Code of Practice.

6.11 Emergency Plans

- C-267** Contractors must establish Emergency Plans that consider all potential scenarios, including fire, security, and medical incidents as well as task-specific emergencies such as tower crane or confined space rescues. Contractors must regularly review, update, and test their Emergency Plans.
- C-268** Participants must ensure that their consultants and contractors are aware of the UAE Fire and Life Safety Code of Practice as well as the Fire Safety section of the Health and Safety Assurance Standards. Specific controls require:
- › A Fire Risk Assessment and Fire Management Plan to be included in the Emergency Plan
 - › Fire safety management arrangements to be in line with Section 3.2
 - › Ignition sources to be tightly controlled including smoking only in designated areas and controlling any hot works such as welding and cutting
 - › Flammable materials to be stored in designated storage areas, use of fuel-consuming tools to be minimised or replaced with electrical tools (where possible), and flammable materials to be removed from buildings to designated storage areas at the end of each day, where possible
 - › Flammable and combustible materials to be covered with flame-retardant material
 - › Materials brought to site to be in a 'just in time' manner to reduce fire risk
 - › Temporary protection of completed works to be made of non-flammable or non-combustible materials

G-103 Emergency incidents should be investigated to maximise learning. Investigations should be proportional to the severity or potential severity of an incident.

C-269 All serious incidents must be notified to the Organiser as defined in Section 9.1.2.

6.12 Key Health and Safety Rules

C-270 The Organiser’s induction material contains guidance and requirements for all personnel entering the Expo site. Participants must ensure that this induction material is cascaded by their contractors to all personnel.

C-271 While on the site, participants and their consultants and contractors must observe the health and safety rules listed in Figure 6.2.

6.13 Protection of the Public and Third Parties

C-272 Participants must ensure that their contractors implement adequate precautionary measures for the protection of the public and third parties who may be affected by their construction works. Participants must keep the pedestrian walkways and site roads clean and free of construction-related hazards or materials. See Section 2.4.3.

Figure 6.2 Key Health and Safety Rules

Health and Safety Rules on the Expo Site

 <p>Access to Site</p> <ul style="list-style-type: none"> - Attend a site-specific induction course before entering the site. - Always accompany visitors. - Always wear an identification pass. 	 <p>Pedestrian</p> <ul style="list-style-type: none"> - Always keep to the designated walkways. - Hold the handrail while using stairs. 	 <p>Personal Protective Equipment</p> <ul style="list-style-type: none"> - Always wear a hard hat, high-visibility vest, gloves, protective eyewear, and protective footwear in the construction site. 	 <p>Emergency</p> <ul style="list-style-type: none"> - Know what to do in an emergency. - Report all accidents, incidents, and near misses.
 <p>Vehicle/Driver</p> <ul style="list-style-type: none"> - Park in designated areas. - Always keep to the designated vehicle access routes. - Wear seatbelts, where fitted. - Observe and follow all health and safety signs and notices displayed onsite. - Do not use any handheld devices while driving. - Do not stop or overspeed on site roads. - Overtake only if safe to do so. 	 <p>Construction Equipment</p> <ul style="list-style-type: none"> - Use construction equipment that is fit for purpose. - Use construction equipment only if trained to do so. 	 <p>Fire</p> <ul style="list-style-type: none"> - Do not smoke onsite except within designated areas. - Do not burn materials onsite. - Do not undertake hot works without a permit. 	 <p>Behaviour</p> <ul style="list-style-type: none"> - Rest only in designated areas. - Consume food only in designated areas. - Do not use radios, MP3 players, or similar devices onsite. - Use mobile phones only in safe areas. - Do not remove or interfere with anything provided in the interest of health and safety.

6.14 Deliverables

Table 6.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 6.1 Deliverables

Deliverable Name	Reason for Issue	Time of Issue	Reference
Health and Safety Management Plan – Consultant	For information	At least 20 working days before plot possession and mobilisation	C-253
Construction Health and Safety Plan – Contractor (Approved by Consultant)	For information	No later than 10 working days after plot possession and mobilisation	C-254
Inspection and Audit Schedule – Consultant	For information	No later than 10 working days after plot possession and mobilisation	C-256
CV of Health and Safety Lead – Consultant	For information	At least 20 working days before plot possession and mobilisation	C-260
CV of Health and Safety Lead – Contractor (Approved by Consultant)	For information	No later than 10 working days after plot possession and mobilisation	C-260

6.15 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. Dubai Civil Defence
<http://www.dcd.gov.ae>
2. Health and Safety Assurance Standards
3. Health and Safety Plan Checklists
4. Health and Safety Policy
5. UAE Fire and Life Safety Code of Practice
http://www.dcd.gov.ae/portal/eng/UAEFIRECODE_ENG.pdf

7 Complying with Worker Welfare Standards





The Organiser is committed to providing conditions that protect and support the health, safety, welfare, security, rights, and dignity of construction workers on the Expo site.

To achieve this commitment, the Organiser has developed the Worker Welfare Assurance Standards document to ensure fair and ethical treatment of all construction workers on the site. The requirements listed in this chapter and in the Worker Welfare Assurance Standards are applicable to all participants and their contractors working to deliver Expo 2020 Dubai.

Compliance with the Worker Welfare Assurance Standards is achievable through collaboration and proactive worker welfare management.

- › Dubai Municipality, Public Health and Safety Department, Health Requirements for Permanent Labour Accommodation (2011)
- › Dubai Municipality, Health Requirements for the Services Provided Inside Labour Accommodations (2011)
- › UAE Federal Law No. (8) of 1980
- › Ministerial Decrees 764, 765, and 766 of 2015
- › Any relevant amendments or additions to the aforementioned laws and any relevant new laws promulgated during the run up to the Expo event

7.1 Legal and Other Worker Welfare Requirements

C-273 All contractors must adhere to the relevant laws of the UAE and Dubai as well as decrees, regulations, orders, guidelines, decisions, or directives issued by the relevant authorities including:

- › Cabinet Decision No. (13) of 2009 Approving the General Standards Manual for Group Labour Accommodation and Related Services
- › Ministerial Resolution No. 212 of 2014 Adopting General Criteria for Collective Labour Accommodation Designated to Accommodate Less Than Five Hundred Labourers

Where provisions in the Organiser’s Worker Welfare Assurance Standards differ from the laws of the UAE and Dubai, or where different standards are provided by the law, the more stringent standards will apply.

7.2 Worker Welfare Policy

The Organiser has developed a Worker Welfare Policy that is aligned with and fully committed to complying with the laws of the UAE and Dubai. The Worker Welfare Policy is available on the Participant Portal.

7.3 Worker Welfare Assurance Standards

The Worker Welfare Assurance Standards is a document that describes the operational practices and welfare standards that need to be adopted by the participants' contractors to ensure the successful implementation and management of the Organiser's worker welfare policies and goals.

This document is available on the Participant Portal and includes specific requirements for employment practices and accommodation facilities.

C-274 Participants must ensure that their contractors cascade the Worker Welfare Assurance Standards to their supply chain.

7.4 Worker Welfare Management Plans

C-275 Participants must ensure that their consultants prepare a Worker Welfare Management Plan which includes arrangements for monitoring, auditing, and reporting on their contractors' implementation of the Worker Welfare Assurance Standards. Consultants must submit this plan to the Organiser through the Participant Portal for information at least 20 working days before plot possession and mobilisation.

C-276 Participants must ensure that their contractors submit a Worker Welfare Management Plan to their consultants for approval. Consultants must submit this plan to the Organiser through the Participant Portal for information no later than 10 working days after plot possession and mobilisation.

A Worker Welfare Management Plan Checklist outlining the requirements for the plans is available on the Participant Portal.

7.5 Worker Welfare Performance Monitoring

Participants are required to support the contractors, monitor their performance, and drive compliance to achieve the overall aims and objectives of the Worker Welfare Assurance Standards.

C-277 Participants must ensure that their contractors prepare a Worker Welfare Monthly Report (see Section 9.3) that measures and reports against the requirements presented in the Worker Welfare Assurance Standards. A report template is available on the Participant Portal.

C-278 Participants must ensure that their consultants monitor worker welfare performance by reviewing the reports of their contractors and inspecting and auditing their contractors' arrangements (see Section 9.4). An inspection and audit schedule must be developed by the consultant and issued to the Organiser for information no later than 10 working days after plot possession and mobilisation.

7.6 Contractor Prequalification and Tendering

G-104 Participants should prequalify their potential contractors for compliance with the worker welfare requirements. Prequalification questions are available on request.

G-105 Participants should validate the prequalified contractors through inspection of their accommodation facilities and employment practices. A worker welfare inspection checklist is available on request.

G-106 Contractors that do not meet the Worker Welfare Assurance Standards should be disqualified unless they are able to commit to resolving all serious issues (as defined in the inspection checklist) by submitting a Worker Welfare Improvement Action Plan. A plan template is available on the Participant Portal.

G-107 During the tender stage, participants should evaluate their prequalified contractors' progress on their Worker Welfare Improvement Action Plan. In the event that the selected contractor is unable to close out serious issues before award, the participant should validate the reasons and ensure that the issues are closed out before plot possession and mobilisation.

Participants may use the contractors that have already been selected by the Organiser or, if required by the participants, the Organiser may arrange support to manage the prequalification process on behalf of the participants.

7.7 Mobilisation Requirements

C-279 At least 20 working days before plot possession and mobilisation, participants must submit the following documents, from their chosen contractor, to the Organiser through the Participant Portal:

- › A completed contractor self-assessment checklist, including an updated Worker Welfare Improvement Action Plan (if applicable).
- › A Health and Safety and Worker Welfare Commitment Statement confirming the contractor's intention to comply with and uphold the Health and Safety Assurance Standards (see Section 6.3) and the Worker Welfare Assurance Standards. The Commitment Statement must be signed by the selected contractor's most senior executive, submitted to the participant, and then issued to the Organiser through the Participant Portal for information.

Consultants are required to submit their Worker Welfare Management Plan to the Organiser through the Participant Portal before mobilisation as identified in Section 7.4.

A template for the contractor self-assessment checklist is available on the Participant Portal.

If the requirements in this section are not met, the Organiser will notify the participant and may request additional information for review.

C-280 Participants must ensure that their contractors satisfy the requirements of the Organiser. The Organiser has the right to assess the selected contractor's accommodation facilities and employment practices. The Plot Possession and Mobilisation Request may be placed on hold until the Organiser's requirements are satisfied.

7.8 Deliverables

Table 7.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 7.1 Deliverables

Deliverable Name	Reason for Issue	Time of Issue	Reference
Worker Welfare Management Plan – Consultant	For information	At least 20 working days before plot possession and mobilisation	C-275
Worker Welfare Management Plan – Contractor (Approved by Consultant)	For information	No later than 10 working days after plot possession and mobilisation	C-276
Inspection and Audit Schedule – Consultant	For information	No later than 10 working days after plot possession and mobilisation	C-278
Contractor Self-Assessment Checklist, including Worker Welfare Improvement Action Plan (if applicable), and Health and Safety and Worker Welfare Commitment Statement	For approval	At least 20 working days before plot possession and mobilisation	C-279

7.9 Supporting Information

The following resources can be accessed either from the Participant Portal or using the website address provided.

1. Contractor Self-Assessment Checklist Template
2. Health and Safety and Worker Welfare Commitment Statement Template
3. UAE Labour Law
<http://www.mohre.gov.ae/en/labour-law/labour-law.aspx>
4. Worker Welfare Assurance Standards
5. Worker Welfare Improvement Action Plan Template
6. Worker Welfare Inspection Checklist
7. Worker Welfare Management Plan Checklist
8. Worker Welfare Policy
9. Worker Welfare Prequalification Questions

8 Complying with Environmental Standards





Expo 2020 Dubai is committed to developing and implementing innovative solutions to protect and sustain the environment.

The Organiser’s strategic goal is to promote environmental excellence in all aspects of delivery through a proactive and collaborative Target Zero culture. Target Zero focuses on zero environmental incidents and applies a continuous improvement approach in case an incident occurs.

The Environment Impact Assessment (EIA) report outlines the environmental legislation framework in the UAE and Dubai (see Section 8.4). Specifically, it includes the international conventions and treaties that were ratified by the UAE and integrated into the federal law. The environmental legislation focuses on the prevailing environmental laws relevant to Expo 2020 Dubai.

8.1 Legal and Other Environmental Requirements

Participants are required to comply with the requirements presented in this chapter and in the Environment Assurance Standards document.

Figure 8.1 shows an overview of the relationship between the legal, Organiser, and participant requirements. Applicable environmental laws and regulations (together with a legal register) will be included in the CEMP. See Section 8.5.

Figure 8.1 Relationship between Legal, Organiser, and Participant Requirements



C-281 Participants must ensure that their consultants and contractors comply with the applicable environmental laws, regulations, and requirements listed in the EIA report and the CEMP.

G-108 Participants should maintain the legal register (included in the CEMP) that lists the laws, regulations, and other requirements relevant to the environmental aspects of their activities. This register should be reviewed as part of the participants' management review processes to ensure that it remains updated with current requirements.

G-109 Participants should ensure that their consultants and contractors cascade all environment-related legal requirements within their organisations.

8.2 Environment Policy

The Organiser has developed an Environment Policy that is aligned with and fully committed to complying with the laws of the UAE and Dubai. The Environment Policy is available on the Participant Portal.

8.3 Environment Assurance Standards

The Environment Assurance Standards is a document that describes the operational practices and environmental standards that need to be adopted by the participants' consultants and contractors to ensure the successful implementation and management of the Organiser's environmental policies and goals.

The Environment Assurance Standards is available on the Participant Portal.

C-282 Participants must ensure that their consultants and contractors cascade the Environment Assurance Standards to their supply chain.

8.4 Environmental Impact Assessment

An EIA report for the Master Plan of Expo 2020 Dubai was prepared in November 2014. The EIA aids the development of site-wide CEMP, the environmental aspects and impacts register, and a suite of Environmental Control Procedures.

In December 2014, the Environmental Clearance was received from the Environmental Planning and Studies Section of the Dubai Municipality (EPSS-DM). The Environmental Clearance is renewed yearly subject to the following conditions:

- › A site-wide CEMP being developed before commencing construction activities
- › Conducting site monitoring (sampling and analysis)
- › Submitting a quarterly environment performance report to EPSS-DM

The Organiser has contracted a third-party environment consultant to gather environmental data from consultants and contractors working on the Expo site. This environment consultant will also provide the services mentioned previously.

C-283 Participants must ensure that their consultants and contractors consider and integrate all findings of the EIA report into the design and construction of their pavilion.

8.5 Construction Environmental Management Plan

A third-party environment consultant has developed the site-wide CEMP (including a CWMP) for Expo 2020 Dubai. The focus of the CEMP is for Expo 2020 Dubai to achieve exceptional performance against the environmental key performance indicators, and to regularly check compliance with the EIA, relevant legislation, and best practices.

C-284 During design, participants must ensure that their consultants and contractors provide the required design inputs and information to assist the environment consultant in updating the CEMP.

C-285 Participants must ensure that their consultants and contractors regularly monitor the implementation of the CEMP (inspections and audits). An audit and inspection schedule for construction activities must be developed to monitor compliance with the CEMP.

C-286 Participants must ensure that their consultants review and approve all environment-related data reports and submittals of their contractors.

8.5.1 Contractor Environmental Plan

Each plot within the Expo site boundary will require an Environmental Plan to be developed by the contractor. The plan needs to outline plot-specific environmental aspects, controls, and monitoring measures as well as define the environmental roles and responsibilities of different parties involved in a project. The Contractor Environmental Plan will ensure awareness of, implementation of, and compliance with the site-wide CEMP.

C-287 Participants must ensure that their contractors submit an Environmental Plan to their consultants for approval. Consultants must submit this plan to the Organiser through the Participant Portal for information no later than 10 working days after plot possession and mobilisation.

C-288 Participants must ensure that their consultants review and assess the contractors' Environmental Plans for compliance with the CEMP.

A Contractor Environmental Plan Checklist outlining the requirements for the plan is available on the Participant Portal.

8.5.2 Resources and Competency

Qualified and competent environmental resources are key to successfully implementing the site-wide CEMP. Review and assessment of environmental staff for competency against requirements will be detailed in the CEMP.

C-289 Participants must allocate adequate resources to ensure effective environmental management and effective implementation of the CEMP by the consultants and contractors.

C-290 Participants must ensure that their consultants nominate an environmental point of contact for all environmental matters. This person must be competent and must have sufficient and adequate experience in construction environmental management.

C-291 Participants, their consultants, or both, must review and approve the contractors' environmental staff against the criteria given in the CEMP.

8.5.3 Environmental Approvals

As part of Dubai Municipality's requirements, applicable construction activities or areas of work may require environmental pre-approvals (before commencing work) from the Environment Department of Dubai Municipality. This service will be available through the One-Stop Shop.

C-292 Participants must ensure that their consultants and contractors obtain all environmental approvals, permits, and licences required for their activities, if needed. These must be maintained and tracked in a register. An indicative list of environmental approvals needed during a typical construction project or activity is included in the CEMP.

8.6 Environmental Monitoring

Environmental monitoring aims to assess progress made to achieve Expo 2020 Dubai's environmental objectives and to help identify environmental issues.

8.6.1 Data Monitoring and Reporting

The third-party environment consultant contracted by the Organiser will undertake site-wide environmental data monitoring (sampling and analysis) and reporting during construction. The environment consultant will monitor the quality of air, noise, and water across the Expo site and will gather environmental data from the participants' consultants and contractors.

C-293 As required by EPSS-DM, participants must ensure that their contractors monitor and report on the following environmental metrics every month:

- › Sewage and wastewater
- › Solid waste (non-hazardous)
- › Hazardous waste
- › Dangerous goods and hazardous materials
- › Energy and fuel consumption
- › Water consumption
- › Water quality (where applicable)
- › Emissions

C-294 Participants must ensure that their consultants collect monitoring data from the contractors on a monthly basis, review the results, highlight any issues, and submit the final monitoring data/ records to the Organiser through the Participant Portal. The Organiser will then forward the data to the environment consultant who will develop the quarterly site-wide environment performance report as required by EPSS-DM. The data reporting template and other details will be included in the CEMP.

8.6.2 Environmental Performance Monitoring

Participants are required to support the contractors, monitor their performance, and drive compliance to achieve the overall aims and objectives of the Environment Assurance Standards.

C-295 Participants must ensure that their contractors prepare an Environment Monthly Report (see Section 9.3) that measures and reports against the requirements presented in the Environment Assurance Standards. A report template is available on the Participant Portal.

C-296 Participants must ensure that their consultants monitor environmental performance by reviewing the reports of their contractors and inspecting and auditing their contractors' arrangements (see Section 9.4). An inspection and audit schedule must be developed by the consultant and issued to the Organiser for information no later than 10 working days after plot possession and mobilisation.

8.7 Key Environmental Guidelines

Figure 8.2 provides participants with key guidelines on how to implement sound practices that minimise environmental impact. Further details on these guidelines are included in the CEMP.

Figure 8.2 Key Environmental Guidelines

Environmental Guidelines on the Expo Site



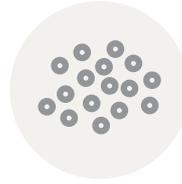
Litter

- Do not litter.
- Put all domestic litter in designated bins with lids.
- Place bins in appropriate locations to achieve adequate site coverage.



Waste

- Sort waste into material that can be salvaged, recycled, or composted, and place in a designated waste area or facility as per the CEMP requirements.



Dust

- Implement dust suppression measures.



Noise

- Where possible, reduce noise nuisance from sources such as fixed machinery, general construction, and vehicle movement.



Equipment

- Service and maintain equipment in accordance with the manufacturer's specifications.
- Retain a maintenance record for all equipment.



Ground Contamination

- Undertake all routine servicing such as on-the-job addition of oil, lubrication, and refuelling, only at a workshop.
- Observe adequate precautions to avoid ground contamination.



Chemicals

- Store minimum quantities of diesel, oil, paint, thinners, and other chemicals.
- Store chemicals to prevent any potential environmental/safety risks listed on the relevant Material Safety Data Sheets.



Secondary Containment

- Install bunds around fuel and chemical storage areas.
- Protect storage areas with an impervious surface coating.
- Design a bund to have minimum capacity equivalent to 110 percent of the volume of the liquid that it contains.



Concrete Washout Area

- Provide a designated washout area for washing out all concrete mixing plants or ready-mix concrete trucks.



Dewatering

- Control dewatering discharge to avoid soil erosion or sediment accumulation.

8.8 Deliverables

Table 8.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 8.1 Deliverables

Deliverable Name	Reason for Issue	Time of Issue	Reference
Environmental Plan – Contractor (Approved by Consultant)	For information	No later than 10 working days after plot possession and mobilisation	C-287
Monthly Environmental Monitoring Data Logs	For information	Monthly	C-294
Inspection and Audit Schedule – Consultant	For Information	No later than 10 working days after plot possession and mobilisation	C-296

8.9 Supporting Information

The following resources can be accessed from the Participant Portal.

1. Construction Environmental Management Plan (including Construction Waste Management Plan)
2. Contractor Environmental Plan Checklist
3. Environment Assurance Standards
4. Environment Policy
5. Environmental Clearance
6. Environmental Impact Assessment Report



9 Understanding Governance and Quality Assurance





This chapter outlines the communication protocols, non-conformance procedures, reporting requirements, and quality assurance standards to provide direction to and monitor compliance of participants with requirements.

The Organiser has established a structure to manage and coordinate the delivery of pavilions as discussed in Section 1.2 and shown here in Figure 9.1.

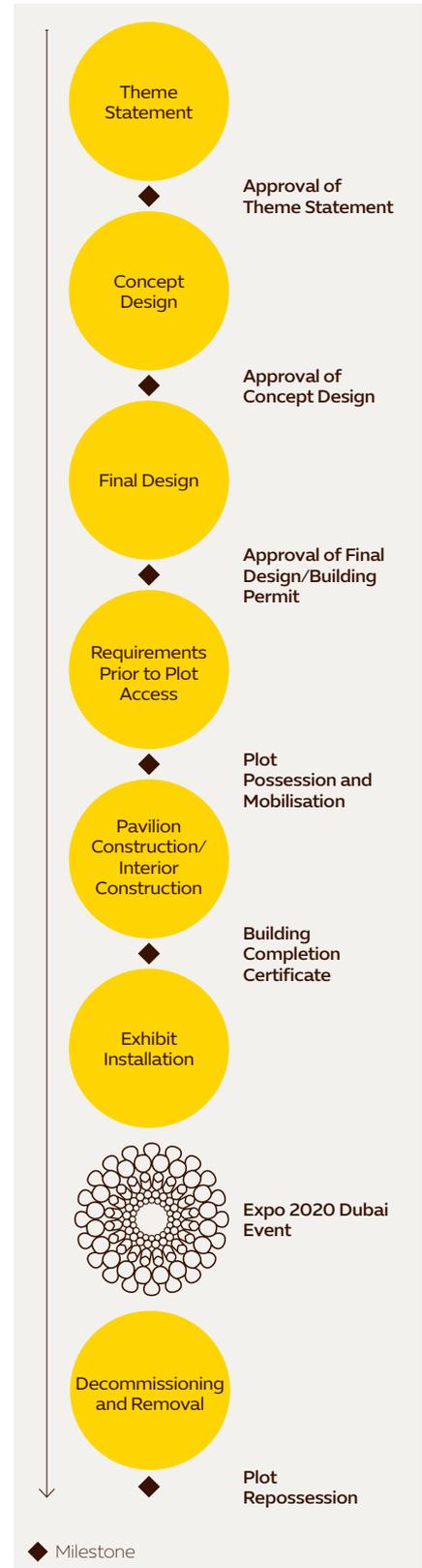
Participants will complete each stage and satisfy the Organiser’s requirements at the end of a stage by obtaining the necessary approvals before moving to the next stage.

9.1 Communication Protocols

C-297 Participants must formally communicate their queries, submissions, and requests to the Organiser through the appointed Country Manager (Participant Portal). Communications during construction may include:

- › General technical queries
- › Queries and requests related to construction logistics
- › Health and safety, worker welfare, environment, and quality assurance requirements
- › Facilitation of inspections and approvals from statutory authorities
- › Site access requests and security matters
- › Assistance on procurement of consultant and contractor

Figure 9.1 Pavilion Delivery Structure



9.1.1 Interface Protocols

Participants are responsible for managing the design and construction interfaces with other participants on adjacent plots and with the Organiser (One-Stop Shop) for matters concerning the entire site.

C-298 Participants must obtain the Organiser's approval for any interface matters that have an impact outside of their plots.

G-110 Participants should maintain a coordination register, for records and reference, if needed by the Organiser to resolve any interface issues.

G-111 Participants should contact the Organiser for any concerns related to interface protocol.

9.1.2 Incident Notification and Reporting Protocols

The Organiser will publish a process for reporting all accidents and incidents on the Participant Portal, including contact details for notification of emergency incidents on the Expo site to the Organiser.

C-299 Participants must record all incidents on their plot and report to the Organiser via their monthly report (see Section 9.3). Incident reporting requirements are outlined in the Health and Safety Assurance Standards.

C-300 Participants must immediately notify the Organiser of any serious incidents while simultaneously invoking the emergency procedures. A list of serious incidents that require notification to the Organiser is available on the Participant Portal. Figure 9.2 shows the notification process when a serious incident occurs. Serious incidents may include:

- › Any reportable events such as a fatality, a lost-time injury, or a major environmental spill
- › Any injuries requiring hospitalisation or medical treatment
- › Any events with significant impact on the participant, the Organiser and their activities/assets, or other participants

- › Any events with significant impact on a member of the public
- › Any actions by enforcing authorities such as the Dubai Police, or the Dubai Civil Defence
- › Any serious near-miss
- › Any serious breach of site security
- › Any Expo-related adverse media coverage or potential reputation risk to the Organiser

C-301 Participants must establish their own incident notification and escalation procedures, inform the Organiser of these procedures through the Participant Portal, and provide the Organiser with the name and contact details of their personnel responsible for owning and executing the procedures.

9.2 Non-conformances

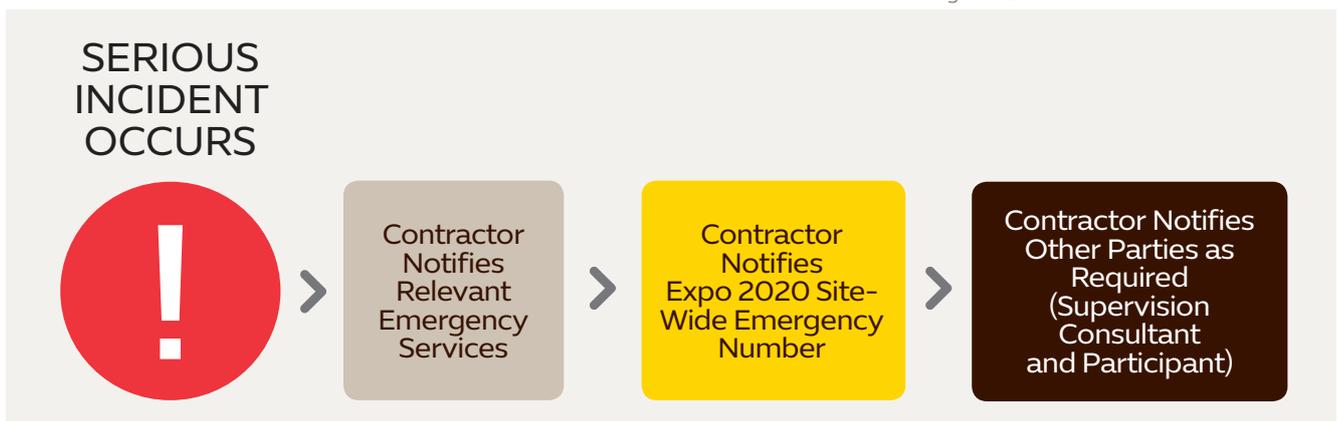
If the Organiser identifies a breach in contractual requirements specified in the Participation Contract or the Participant Guides, a non-conformance report (NCR) will be issued to the participants after formal notification.

On issuance of the NCR, the participant will be required to rectify the breach, complete their section of the NCR form, and return it to the Organiser. This section of the form needs to show the corrective action that the participant intends to take to conform to their obligations, and the time it will take to complete the action.

The Organiser has the right to reject the proposed corrective action and the proposed completion time if it does not appropriately address the breach. The participant will be required to resubmit the NCR until such time that it is acceptable to the Organiser. The Organiser will monitor the completion of the corrective action and determine if the action has been completed.

Where NCRs are issued by the Organiser and the agreed action has not been completed within the agreed time, the Organiser has the right to follow the agreed escalation process to reach an amicable resolution.

Figure 9.2 Serious Incident Notification Process



9.3 Reporting

- C-302** Participants must submit a monthly Pavilion Progress Report to the Organiser through the Participant Portal. The report must include the following information:
- › Executive summary including:
 - Progress summary
 - Key issues related to the Organiser and third parties
 - Known interfaces with works outside of the plot (shown in the delivery schedule)
 - Status of non-conformances
 - › Schedule including:
 - Schedule summary
 - Baseline schedule and monthly progress updates
 - Updated resource loaded schedule in P6 format
 - › Health and safety performance including:
 - Health and safety summary
 - Monthly statistics table
 - › Worker welfare performance including:
 - Worker welfare summary
 - Monthly statistics table
 - › Environmental performance including:
 - Environmental summary
 - CEMP/CWMP audits and findings
 - › Sustainability performance including:
 - Sustainability summary
 - Monthly statistics table
- C-303** Reports must be submitted from the Concept Design stage on an agreed monthly date through the Participant Portal. Participants must refer to the portal's reporting calendar for the submission dates.

A report template is available on the Participant Portal.

- G-112** Participants should ensure that their consultants provide weekly progress updates tracked against their delivery schedule.

9.4 Audits and Inspections

To comply with the construction requirements, the Organiser will conduct audits and inspections of the participants' consultants and contractors to ascertain the degree of their compliance with the Assurance Standards and the applicable sections of the Participant Guides. Audit and inspection reports may include findings, observations, and non-conformances that need to be closed out by the recipient.

- C-304** Participants' consultants must maintain a register of audits conducted.

9.5 Quality Assurance

The Organiser recognises that, to deliver on the commitments of Expo 2020 Dubai, everyone has to aim to achieve the highest standards of quality in all aspects of their work activities. ISO 9001: 2015 (Quality Management Systems – Requirements) has been adopted as the best practice standard for managing and delivering Expo and its component parts.

9.5.1 Quality Policy

The Organiser has developed a Quality Policy that is aligned with and fully committed to complying with the laws of the UAE and Dubai. The Quality Policy is available on the Participant Portal.

9.5.2 Quality Assurance Standards

The Quality Assurance Standards is a document that describes the operational practices and quality standards that need to be adopted by the participants' consultants and contractors to ensure the successful implementation and management of the Organiser's quality policies and goals.

The Quality Assurance Standards is available on the Participant Portal.

- C-305** Participants must ensure that their consultants and contractors cascade the Quality Assurance Standards to their supply chain.

9.5.3 Quality Plans

- C-306** Participants must ensure that their consultants prepare a Quality Management Plan which includes arrangements for monitoring, auditing, and reporting on their contractors' implementation of the Quality Assurance Standards. Consultants must submit this plan to the Organiser through the Participant Portal for information at least 20 working days before plot possession and mobilisation.

- G-113** Participants should ensure that their contractors submit a Project Quality Plan to their consultants for approval. Consultants should submit this plan to the Organiser through the Participant Portal for information no later than 10 working days after plot possession and mobilisation.

Quality Plan Checklists outlining the requirements for the plans are available on the Participant Portal.

9.5.4 Quality Performance Monitoring

Participants are encouraged to support their consultants and contractors, monitor their performance, and drive compliance to achieve the overall aims and objectives of the Quality Assurance Standards.

- G-114** Participants should ensure that their consultants monitor quality performance by reviewing the reports and inspecting and auditing their contractors' arrangements (see Section 9.4).

9.6 Deliverables

Table 9.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 9.1 Deliverables

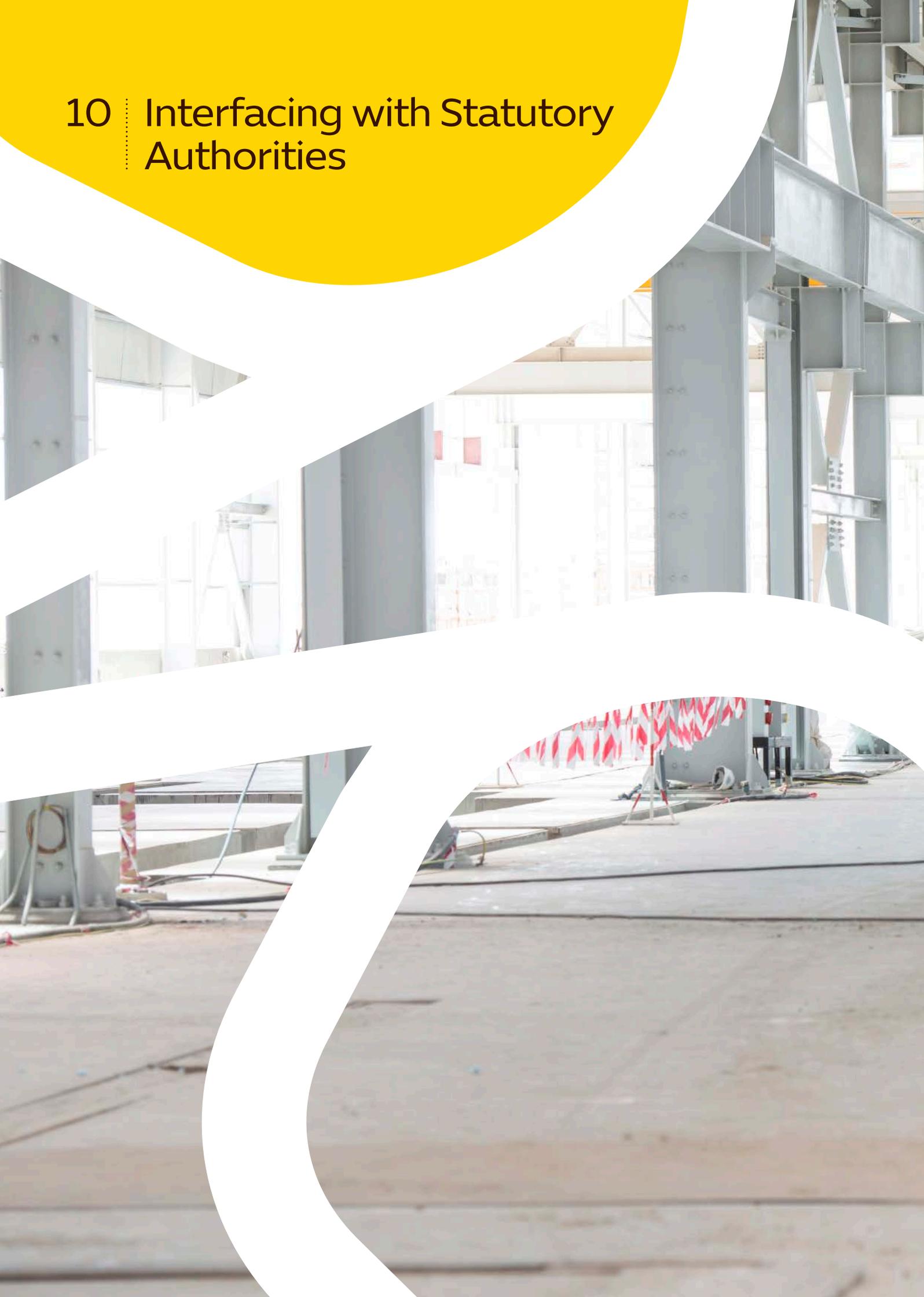
Deliverable Name	Reason for Issue	Time of Issue	Reference
Non-conformances Issued and Closed	For information	Monthly	Section 9.2
Pavilion Progress Report	For information	Monthly after plot possession and mobilisation	C-302
Quality Management Plan – Consultant	For information	At least 20 working days before plot possession and mobilisation	C-306

9.7 Supporting Information

The following resources can be accessed either on the Participant Portal or on the website address provided.

1. Health and Safety Assurance Standards
2. ISO 9001: 2015
http://www.iso.org/iso/iso_9000
3. Pavilion Progress Report Template
4. Quality Assurance Standards
5. Quality Plan Checklists
6. Quality Policy
7. Serious Incident Notification Process

10 Interfacing with Statutory Authorities





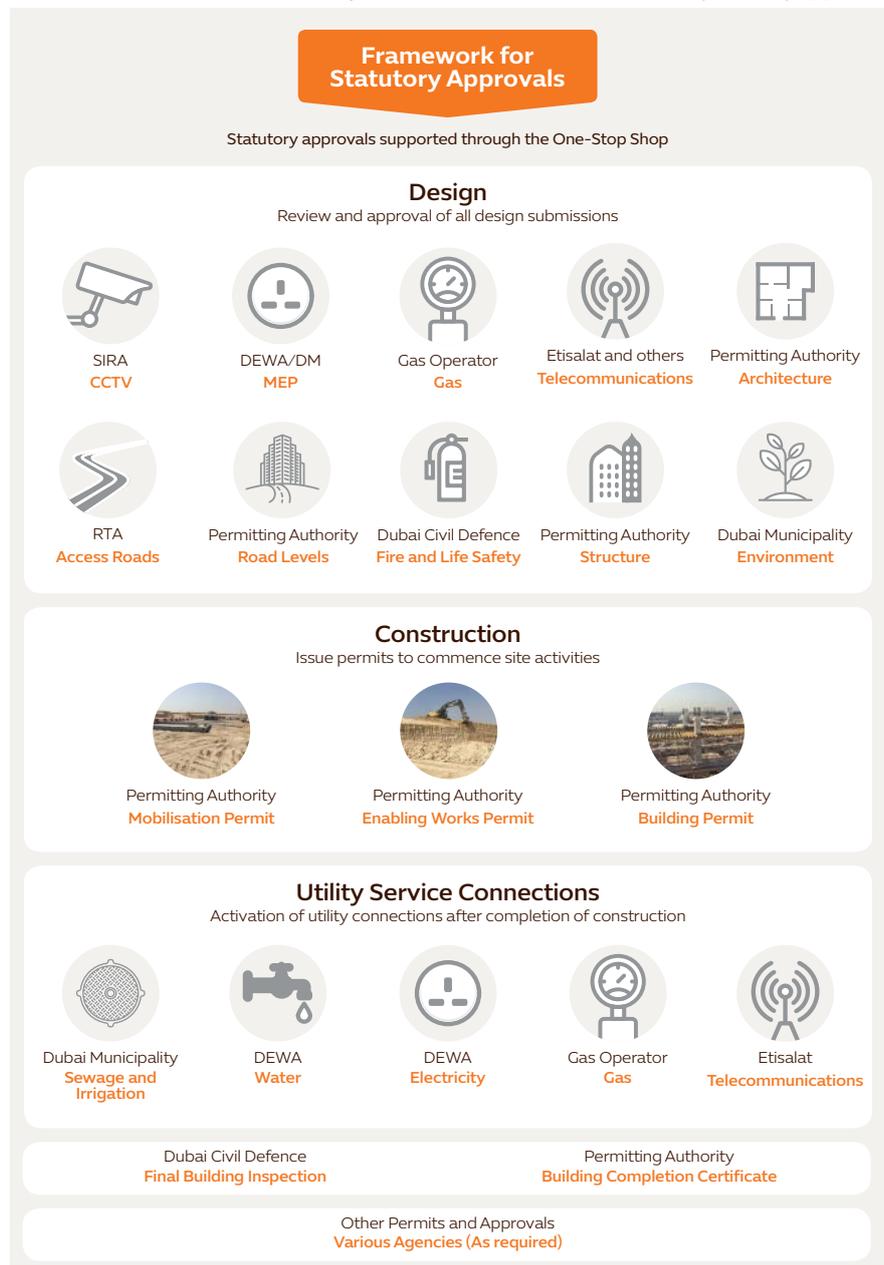
Statutory authorities are local government and semi-government entities which ensure that all organisations follow and adhere to the rules and regulations of Dubai and the UAE.

Participants will interface with statutory authorities through the One-Stop Shop for services such as submitting designs, applying for permits, and requesting utility connections. The One-Stop Shop will also provide a platform for

participants to interact with statutory authorities and get feedback on technical queries during design, construction, and decommissioning and removal.

Figure 10.1 shows the general framework for statutory authority as part of the One-Stop Shop approvals.

Figure 10.1 General Framework for Statutory Authority Approvals



10.1 Consultant and Contractor Registration

- C-307** Consultants and contractors must have the right qualifications that enable them to submit to and communicate with the statutory authorities. These qualifications include:
- › **Commercial Licence:** Consultants and contractors must hold valid commercial licences issued by Dubai's Department of Economic Development (DED). The licences must clearly state the activities that the consultant or contractor is permitted to undertake.
 - › **Professional Licence:** Consultants and contractors must hold valid professional licences from the DED that identify their professional services. DED issues this licence only after the relevant service provider has approved the specified scope, for example, fire systems licence will require the approval of the Dubai Civil Defence.
 - › **Prequalification:** Consultants and contractors must be prequalified by the permitting authority and service providers to carry out works within the scope and scale of their activities for the purpose of appointment by the participants.
- C-308** Participants must ensure that the licences of their consultants and contractors are valid and active throughout the contractual period.
- C-309** Participants must appoint a qualified supervision consultant to take full responsibility of the construction activities and ensure compliance of works with the rules and regulations of the Organiser and the statutory authorities. The supervision consultant must manage the assurance and technical functions as well as the schedule to ensure timely delivery of the pavilion.
- C-310** In the event where a participant appoints an international consultant with no registration or qualification to carry out design work in Dubai, the participant must appoint another consultant to act as the Architect of Record to take responsibility for the design and obtain the necessary permits and approvals from the One-Stop Shop. The appointed Architect of Record must fully comply with local laws and must have all the necessary registrations and prequalification as specified.
- C-311** In the event where a participant appoints an international contractor with no registration or qualification to carry out construction work in Dubai, the participant must appoint a locally qualified and registered contractor to take responsibility for construction and obtain the necessary permits and approvals from the One-Stop Shop.

10.2 Submission and Approval Considerations

- C-312** All submissions must be compliant with the standards and regulations of the statutory authorities in Dubai and the UAE. For further details on the design submission requirements and the review and approval processes, see this Guide and Chapter I, Section 5 of the Self-Build Pavilions Guide.
- C-313** All submissions must follow the processes and procedures of the One-Stop Shop.
- C-314** The software used in developing the designs must be compatible with the ones used by the statutory authorities.
- C-315** Building materials that are not listed with statutory authority but used in the design of the pavilions must be approved by the permitting authority and the Dubai Civil Defence before the design is finalised.
- C-316** Participants must bear all fees for approvals and permits.
- G-115** Participants' qualified consultants and contractors can organise meetings with statutory authorities through the One-Stop Shop to facilitate discussions and address comments in a timely manner.

A high-level summary of key delivery dates, milestones, and associated approval durations is shown in Figure 10.3.

10.3 Information Package

The One-Stop Shop will provide a plot affection plan and a plot sheet to participants, on request. See Section 1.4.

10.4 Design Approvals

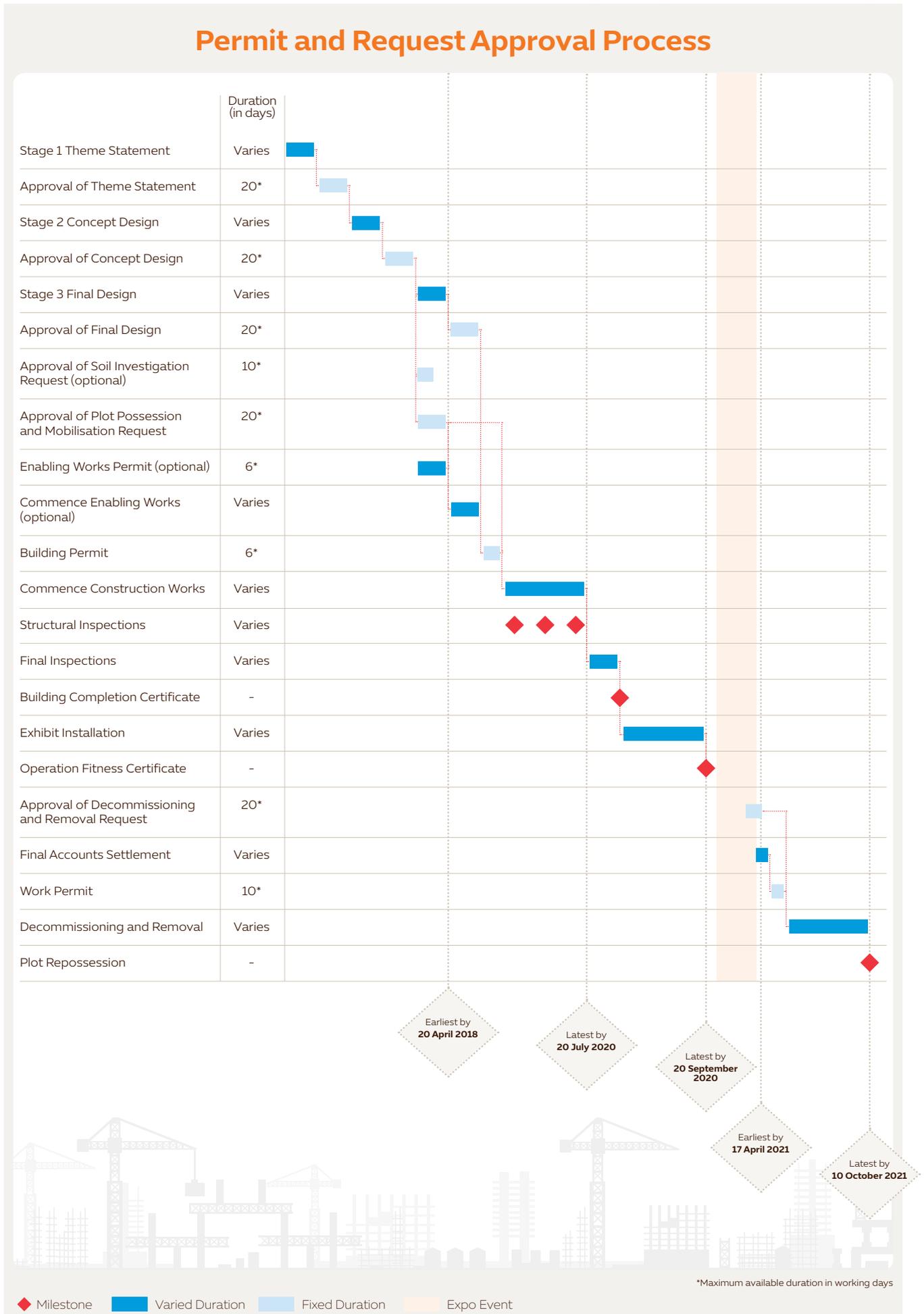
The One-Stop Shop will review the design and provide comments or approval to the participants through the Participant Portal. Figure 10.2 shows the three stages of the design approval process.



Figure 10.2 Stages of the Design Approval Process

The Theme Statement submission will be approved by the Organiser. For further details, see the Self-Build Pavilions Guide and the Theme Guide.

Figure 10.3 Approval Process for Permits and Requests



10.4.1 Concept Design Submission

The One-Stop Shop will review the Concept Design submissions and provide comments or initial approval to the participants through the Participant Portal within 20 working days of submission.

Once the Concept Design submission is approved, participants may proceed to Stage 3 Final Design.

On receiving the Concept Design approval from the One-Stop Shop, participants may request for an Enabling Works Permit (see Section 10.5.2). The One-Stop Shop will evaluate the permit request and approve based on the Concept Design comments.

10.4.2 Final Design Submission

Statutory authorities will access all Final Design submissions through the One-Stop Shop and provide comments, or final approval and No Objection Certificate (NOC) to the participants within 20 working days of the submission.

C-317 Participants must ensure that all comments raised by the One-Stop Shop are addressed and closed out before requesting for approval of the Final Design.

On approval of the Final Design, including the relevant NOCs, participants may request for Building Permit from the One-Stop Shop.

10.5 Construction Permits

All applications for permits will be submitted to the One-Stop Shop for approval through the Participant Portal.

C-318 Participants must ensure that their contractors pay the relevant permit application fees, and submit the relevant documents to ensure timely approval of their application.

C-319 If a submission is not accepted by the One-Stop Shop, the consultant or contractor must address the comments received, resubmit the application, mitigate the delays caused by the resubmission, and provide an updated schedule to reflect their plans.

10.5.1 Mobilisation Permit

The Mobilisation Permit allows participants to access their plots to prepare for construction work. This permit will be issued to participants by the One-Stop Shop as part of the approval of the Plot Possession and Mobilisation Request (see Section 1.5.3) or as part of the approval of the Decommissioning and Removal Request (see Section 13.1).

10.5.2 Enabling Works Permit

The Enabling Works Permit allows participants to commence early activities such as excavation, shoring, or foundation after receiving approval for the Concept Design from the One-Stop Shop. See Figure 10.4.

Figure 10.4 Permit and Request Approvals



C-320 To obtain an Enabling Works Permit, participants must submit the following documents to the One-Stop Shop at least 6 working days in advance of the intended activity:

- › Delivery schedule
- › Detailed design calculations, where applicable
- › Detailed drawings

On receipt of the Enabling Works Permit and approval of the Plot Possession and Mobilisation Request, participants' contractors may proceed with enabling works.

10.5.3 Building Permit

The Building Permit allows participants to commence construction works on their plot after receiving the Final Design NOC from the One-Stop Shop. See Figure 10.4.

C-321 To obtain a Building Permit, participants' consultants must submit the following documents to the One-Stop Shop at least 6 working days in advance of the intended activity:

- › Updated delivery schedule including details of construction and decommissioning and removal
- › Contractor's Project Quality Plan, Construction Health and Safety Plan, and Environmental Plan
- › CV of contractor's health, safety, and environment personnel

On receipt of the Building Permit and on approval of the Plot Possession and Mobilisation Request (see Section 1.5.3), contractors may proceed with the main construction works.

10.6 Site Inspections

The contractor will submit an inspection request to the supervision consultant. Once the request is approved, it will be submitted to the One-Stop Shop at least 1 working day before the date of inspection. All inspection request requirements will be available on the Participant Portal.

C-322 Participants must ensure that their supervision consultant conducts regular site inspections and monitors progress of work on site.

The One-Stop Shop may conduct planned and ad hoc inspections of the plot at select stages of the work progress to ensure that the construction is in line with the approved drawings.

The service providers (One-Stop Shop) will conduct inspections on the contractor's request to connect to utility services. The contractor is required to submit all supporting documents to the One-Stop Shop for approval to activate the services on time.

10.7 Building Completion Certificate

On completion of work, the contractor will request the Dubai Civil Defence through the One-Stop Shop to conduct a final inspection on the pavilion and issue a Completion Certificate before participants are allowed to occupy their pavilion.

C-323 On receipt of the Dubai Civil Defence's Completion Certificate and the approval for final connections, the contractor must request for a Building Completion Certificate from the One-Stop Shop. The request must be approved by the supervision consultant confirming that the work on site is complete and compliant with the approved drawings. All required supporting documents, including as-built drawings and the supervision consultant's 100% Fire Safety Devices Test Report, must be submitted to the One-Stop Shop at least 8 working days in advance to ensure timely receipt of the Building Completion Certificate.

A representative of the One-Stop Shop will visit the plot to evaluate the completed work. If the work complies with the approved drawing, then the One-Stop Shop will issue the Building Completion Certificate. If the work or part of it does not comply with the approved drawings, then the One-Stop Shop may require revisions to the work before issuing the Building Completion Certificate.

10.8 Operation Fitness Certificate

After installing their exhibits, participants will request the Organiser to inspect their pavilion and check for readiness for the event. On satisfactory completion of the inspection, the Organiser will provide participants with an Operation Fitness Certificate. On receipt of the certificate, participants may commence their pavilion operations.

Participants are responsible for their own pavilion operations.

10.9 Work Permit for Decommissioning and Removal

Participants are responsible for the decommissioning and removal of their pavilions. Final bills from the service providers need to be settled first before requesting for a Work Permit for decommissioning and removal from the One-Stop Shop.

A Work Permit is required after obtaining approval for Decommissioning and Removal Request and before commencing the decommissioning and removal activities (see Figure 10.4). A date to commence decommissioning and removal activities needs to be agreed with the Organiser. Contractors need to remove all meters and cables before commencing the decommissioning and removal activities.

C-324 To obtain a Work Permit, participants must submit the following documents to the One-Stop Shop at least 10 working days in advance of the intended activity:

- › Evidence of final settlement of all utility bills and deactivation of connection NOCs
- › Updated decommissioning and removal schedule
- › Contractor's Project Quality Plan, Construction Health and Safety Plan, and Environmental Plan
- › CV of contractor's health, safety, and environment personnel

After receiving the Work Permit and the approval for Decommissioning and Removal Request, participants may commence decommissioning and removal activities. See Section 13.1.

The One-Stop Shop will conduct planned and ad hoc inspections of the plot at chosen stages of the work progress to ensure that the decommissioning and removal activities are in line with the approved drawings.

On completion of the decommissioning and removal activities, the contractor needs to submit a Plot Repossession Request asking for final inspection from the One-Stop Shop for site clearance before handing over the plot to the participant.

On confirmation of the site clearance, participant may hand over the plot to the Organiser. For further details on plot repossession, see Section 13.6.

10.10 Supporting Information

The following resources can be accessed either on the Participant Portal or on the website address provided.

1. Department of Economic Development - Dubai
https://eservices.dubaided.gov.ae/Pages/Anon/RLAForm.aspx?1=1&PID=10122&LID=&sname=Fill_Registration_&Licensing_Application_Form&srp=-1&sfn=-1&ifn=303467818&pn=173956&pn2=
2. DEWA
<https://www.dewa.gov.ae/en>
3. Dubai Civil Defence
<http://www.dcd.gov.ae>
4. Dubai Municipality
<https://www.dm.gov.ae/wps/portal/home>
5. Dubai Police (SIRA)
<https://dubaipolice.gov.ae/>
6. Dubai South
<https://www.dubaisouth.ae/>
7. Etisalat
<http://www.etisalat.ae/nrd/en/index.jsph>
8. Roads and Transport Authority
<https://www.rta.ae/wps/portal/rta/ae/home/>
9. Self-Build Pavilions Guide
10. Theme Guide



11 :: Customs and Import





The Organiser will work with the UAE Government to develop and adopt special legislatives and organisational measures to comply with the customs regulations (Customs Annex) under the BIE Convention of 22 November 1928 regarding the import of materials by the participants. The Organiser will also collaborate with the UAE Government to develop special tax exemption arrangements for the participants.

The following materials will be imported under a temporary importation procedure that is exempted from customs duties in compliance with the Customs Annex to the BIE Convention:

- › Materials necessary for building and maintaining the pavilions
- › Promotional and advertising materials
- › Any other materials to be used during the Expo event

The maximum duration of the temporary importation will be established in compliance with the applicable regulations for the types of materials imported.

Customs declarations are required for any goods entering or leaving the country; the goods are then presented to the customs authorities at the nearest customs office.

Duty rates vary from 0 to 100 percent. In the UAE, customs duty is calculated at 5 percent of the CIF (cost, insurance, and freight) value of the goods. Some goods may be imported free of duty such as the goods entering the Duty Free Storage Area at Port Rashid in Dubai and the goods imported to the free zones. Customs duty at 5 percent is applicable to all dutiable goods except tobacco (which has 100 percent duty rate) and alcohol (which has 70 percent duty rate). For tobacco, the duty is collected either on the value or on the quantity, whichever is higher.

Some of the goods that are prohibited and restricted for import to the UAE are listed in Figure 11.1.

Figure 11.1 Prohibited and Restricted Goods



If the participants choose to use the Organiser's Official Logistics Partner, then the latter will work with the former to ensure compliance with the procedures for import of goods as well as with the customs regulations of the UAE and relevant emirate.

Further details on the UAE's customs and taxation procedures will be discussed in a separate Guide and in the Special Regulation Number 7.

12 Optional Supply Chain Services





The Organiser will facilitate support services to help the participants during the construction, decommissioning, and removal of their pavilions. Services such as hire centres/shops will be located within the Expo site to provide convenience to participants and to reduce supply chain challenges.

The Organiser will engage with selected suppliers for providing construction support services. Participants may take advantage of the construction support services which will be delivered directly by the supply chain (not by the Organiser). The latest list of suppliers will be available on request from the Organiser.

Participants are free to seek other alternatives through the open market. If contractors from the open market are chosen, participants need to ensure that these contractors comply with the Organiser's standards as specified in this Guide.

Irrespective of the choice of supplier, participants will bear the cost of the services and will engage in a direct contract with the supplier at their own responsibility. Therefore, participants need to ensure that the contract terms satisfy their requirements.

12.1 Hire Centres/ Shops

The Organiser will arrange for specialist construction hire centres/shops to operate rental and sales outlets within the Expo site. These outlets are provided for the convenience of the participants, and may offer services such as:

- › Rental of a comprehensive range of construction plant, machinery, and powered equipment such as forklifts, mobile elevating work platforms, small mobile cranes, temporary lighting, and power tools
- › Rental or sale of standard construction equipment such as scaffolding and barriers
- › Sale of consumables such as personal protective equipment, hand tools, tape, and cutting blades/discs

Participants' contractors may opt to use other suppliers for their construction plant, machinery, equipment, and consumable needs.

12.2 Supply Chain Directory

Participants who wish to use the services of the selected suppliers need to engage with them at the earliest opportunity to ensure availability of resources and to allow onsite fulfilment of services to be completed to an agreed schedule. The supplier and the participant need to agree on the commercial arrangements including costs and delivery of the instructed works.

The supplier support services offered are expected to include:

- › Transportation of site personnel
- › Site water including potable water, builder's water, and sewage containment and removal
- › Site offices and other welfare facilities
- › Security services (manned guarding)

12.3 Waste Management

As discussed in Chapter 2, the Organiser will appoint a site-wide waste management contractor who will have facilities in proximity to the Expo site.

A schedule of rates for the site-wide waste management contractor to collect and dispose construction waste will be made available to the participants on request.

Participants may choose an alternative waste management contractor during construction, decommissioning, and removal of pavilions.

12.4 Warehousing and Freight Forwarding

Participants are encouraged to use the Organiser's Official Logistics Partner for warehousing and freight forwarding requirements throughout the life cycle of the Expo event. The Official Logistics Partner will offer several services to participants on a rate card basis. Further details on the Official Logistics Partner's offered services, contact details, and rate card will be made available to participants on request.

Participants may choose an alternative logistics contractor during construction, decommissioning, and removal of pavilions.

13 Decommissioning, Removal, and Repossession





This chapter provides the framework for the decommissioning and removal of pavilions, and details the logistical constraints and support provided by the Organiser and the One-Stop Shop.

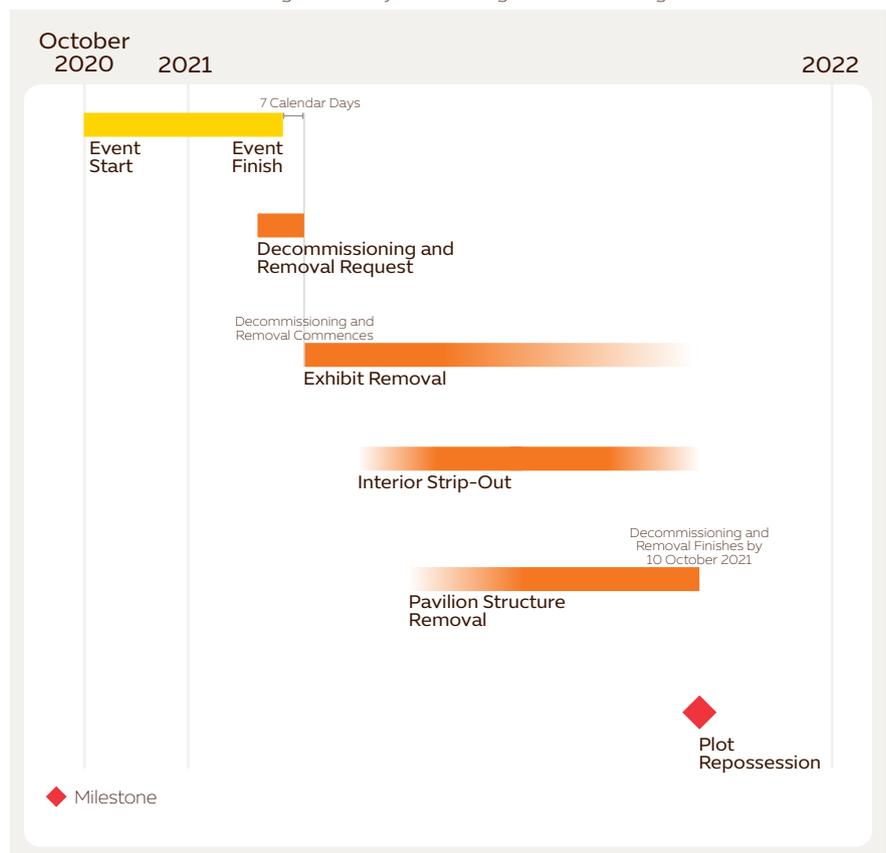
Participants are required to follow the Organiser’s processes starting with obtaining the necessary approvals before commencing any decommissioning and removal activities.

Participants will remove their exhibits, then strip out the interior of their pavilion, and finally, remove their pavilion structure. See Figure 13.1.

- C-325** Decommissioning and removal activities must only commence 7 calendar days after the conclusion of the Expo event.
- C-326** Decommissioning and removal activities must be completed as per the Organiser’s Master Schedule. Plots must be cleared and ready for repossession by the Organiser no later than 10 October 2021.

- C-327** Participants must erect plot hoarding for demarcation and control of access to their plot during decommissioning and removal. Hoarding must be removed before plot repossession by the Organiser.
- C-328** Participants must take responsibility for the security of their own assets as well as the assets of their contractors during decommissioning and removal of their pavilion.
- C-329** During decommissioning and removal of pavilions, participants must conform to all requirements detailed in Chapter 2.
- C-330** Participants must return their plot to the Organiser in the same condition as it was received. See Section 13.6.

Figure 13.1 Key Dates during Decommissioning and Removal of Pavilions



13.1 Requirements Prior to Decommissioning and Removal

- C-331** Participants must submit a Decommissioning and Removal Request to the Organiser for approval at least 20 working days before commencing work. The request must be supported by the following documents (see Figure 13.2):
- › Updated plan and strategy to decommission and remove the pavilion (as identified in the Self-Build Pavilions Guide, Chapter I, Section 3.7)
 - › Contractor Self-Assessment Checklist, including Worker Welfare Improvement Action Plan (if applicable), and Health and Safety and Worker Welfare Commitment Statement (see Section 6.8 and Section 7.7)
 - › Updated decommissioning and removal schedule aligned with the Organiser’s Master Schedule
 - › Supervision consultant’s Health and Safety Management Plan, including the CV of their health and safety lead (see Section 6.4 and Section 6.7)
 - › Supervision consultant’s Worker Welfare Management Plan (see Section 7.4)
 - › Supervision consultant’s Quality Management Plan (see Section 9.5.3)

On receipt of approval of the request, participants may access the plot to commence their decommissioning and removal activities.

- C-332** Participants must obtain a Work Permit before commencing any decommissioning and removal activities (see Section 10.9).

13.2 Decommissioning and Removal Logistics

The Organiser will develop a site-wide strategy to manage the decommissioning and removal logistics activities. This strategy will be shared with the participants through the Participant Portal.

- C-333** Participants must coordinate their decommissioning and removal activities with their neighbouring pavilions, especially in regard to crane and vehicle movement. The Organiser will support the participants where necessary.

- C-334** Participants must ensure that their contractors complete the decommissioning and removal activities while satisfying all contractor requirements stipulated in Chapter 2.

- G-116** Due to space constraints and construction works in adjoining areas, participants should remove the superstructure of their building working from the rear of their plot (usually the service area) towards the front (usually the concourse area).

Figure 13.2 Requirements Prior to Decommissioning and Removal



The provision of a site-wide waste management contractor after the Expo event is yet to be confirmed. Updates will be communicated on the Participant Portal.

13.3 Sustainability Considerations

C-335 Participants must ensure that their contractors complete the decommissioning and removal activities while satisfying all contractor requirements stipulated in Chapter 5 of this document, and in Chapter I, Section 3.7 of the Self-Build Pavilions Guide.

13.4 Health and Safety, Worker Welfare, Environment, and Quality Assurance Considerations

C-336 Participants must ensure that their contractors complete the decommissioning and removal activities while satisfying all contractor requirements stipulated in Chapter 6 to Chapter 9.

13.5 Optional Supply Chain Services

The support services facilitated by the Organiser will include:

- › Erection of plot hoarding
- › Restoration of plots by removing foundation and concrete floor slabs, and backfilling to existing ground level

Other services are presented in Section 12.2.

Participants will bear the cost of the services and will engage in a direct contract with the respective contractor at their own responsibility. Therefore, participants need to ensure that the contract terms satisfy their requirements.

Participants may appoint a decommissioning and removal contractor of their choice.

13.6 Plot Repossession

C-337 To formally hand back their plot, participants must request an onsite repossession inspection and repossession meeting from the Organiser through the Participant Portal at least 10 working days in advance of the planned date for repossession.

C-338 Participants must ensure that the following activities are completed before handing the plot back to the Organiser:

- › Foundations and all other subsurface structures are removed
- › Underground drainage or foul water pipes are removed
- › Utility services are disconnected (and capped), as appropriate, and final accounts are settled
- › Concrete floor slab and any paving or other floor coverings are removed
- › Level plot is returned clear of any structure, landscaping, site establishment, materials, and equipment
- › Plot is clear of any waste, oil spills, or other contaminants
- › Site clearance is obtained from the One-Stop Shop

Participants must provide the Organiser with appropriate evidence of completion of each of these activities.

The One-Stop Shop will conduct the necessary inspection of the plot and, if deemed satisfactory, will provide the participant with a signed Plot Repossession Certificate confirming that the process has been successfully completed.

13.7 Deliverables

Table 13.1 lists the deliverables that the participants are required to submit to the Organiser in relation to this chapter.

Table 13.1 Deliverables

Deliverable Name	Reason for Issue	Time of Issue	Reference
Decommissioning and Removal Request	For approval	At least 20 working days before commencing work	C-331
Request for Repossession Inspection and Repossession Meeting	For information	At least 10 working days in advance of the planned date for repossession	C-337

13.8 Supporting Information

The following resources can be accessed from the Participant Portal.

1. Decommissioning and Removal Request Form
2. Self-Build Pavilions Guide
3. Site-Wide Decommissioning and Removal Logistics Strategy

Summary of Requirements and Supporting Information





 Steps/Processes/ Services Required	 Type	 Form/ Template Available	 Approval Duration	 When	 By Whom	
1 Data Collection						
Plot affection plan and plot sheet	Request process	✓	5 working days	During Stage 2 Concept Design	One-Stop Shop to Participant	
2 Participants' Set-up						
Participants' designated functions	Letter	N/A	N/A	At start of the project	Participant to Organiser	
Details of participants' appointed consultants and contractors including licences, prequalification, and insurance	Documents	N/A	N/A	On appointment	Participant to Organiser	
3 Design						
Stage 1: Theme Statement		Submission and approval process		20 working days	End of Stage 1 Theme Statement	Participant to Organiser
Theme Statement submission	Checklist	✓				
Stage 2: Concept Design		Submission and approval process		20 working days	End of Stage 2 Concept Design	Participant to Organiser
Statement of design compliance	Checklist	✓				
Architecture submission		N/A				
Exhibit design submission		N/A				
Retail and Food & Beverage submission		N/A				
Technology Plan		N/A				
Preliminary material specifications		N/A				
Preliminary engineering proposal (structure)		N/A				
Preliminary engineering proposal (MEP/fire prevention)		N/A				
Preliminary Sustainability Report		N/A				
Delivery schedule	Template	✓		Monthly		
Building Information Modelling (BIM)		N/A		End of Stage 2 Concept Design		
Stage 3: Final Design		Submission and approval process		20 working days	End of Stage 3 Final Design	Participant to Organiser
Statement of design compliance	Checklist	✓				
Architecture submission		N/A				
Exhibit design submission		N/A				
Final material specifications		N/A				
Final engineering proposal (structure)		N/A				
Final engineering proposal (MEP/fire prevention)		N/A				
Final Sustainability Report		N/A				
Retail and Food & Beverage submission		N/A				
Accessibility Report		N/A				

 Steps/Processes/ Services Required	 Type	 Form/ Template Available	 Approval Duration	 When	 By Whom
Decommissioning and Removal Plan		N/A			
Final delivery schedule	Template	✓		Monthly	
BIM		N/A		End of Stage 3 Final Design	
Others Services during Design					Participant to Organiser
Technical queries	Request for Information and distribution process	N/A	3 working days	Anytime	
Monthly report	Template	✓	N/A	Monthly/end of month	
Design revisions as per Final Design review criteria	Resubmission process checklist	✓	5-10 working days	Anytime when design changes	
4 Requirements Prior to Plot Access					
Soil Investigation Request			10 working days	After approval of Concept Design	Participant to Organiser
Site plan with borehole locations	Submission and approval process	✓			
Worker welfare validation	Approval process	✓			
Commitment statement validation	Approval process	✓			
Health and Safety Management Plan (supervision consultant)	Checklist	✓			
Worker Welfare Management Plan	Checklist	✓			
Contractor Self-Assessment Checklist	Checklist	✓			
Delivery schedule	Template	✓			
Permits					Organiser to Participant
Enabling Works Permit	Request process		6 working days	After approval of Concept Design	
Building Permit	Request process	✓	6 working days	After approval of Final Design	
Plot Possession and Mobilisation Request			20 working days	After approval of Concept Design or Final Design	Participant to Organiser
Plot Possession and Mobilisation Request Approval	Submission and approval process	✓	20 working days		Organiser to Participant
Worker welfare validation of selected contractors	Checklist	✓			Organiser
Plot Demarcation	Demarcation process	N/A			Organiser
Plot Hoarding	Hoarding erection process	N/A			Organiser
Commitment statement validation	Approval process	✓			

					
Steps/Processes/ Services Required	Type	Form/ Template Available	Approval Duration	When	By Whom
Contractor Self-Assessment Checklist	Checklist	✓			Participant
Delivery schedule	Template	✓			Participant
Construction Logistics Plan	Checklist	✓			Participant
Health and Safety Management Plan (supervision consultant)	Checklist	✓			Participant
Worker Welfare Management Plan (supervision consultant)	Checklist	✓			Participant
Quality Management Plan (supervision consultant)	Checklist	✓			Participant
Project construction signboard		N/A			Participant
Onboarding meeting	Meeting agenda	✓	1 working day	5 working days after submission of Plot Possession and Mobilisation Request	Organiser and Participant
Plot possession and mobilisation review meeting	Meeting agenda	✓	1 working day	Before plot handover to participants	Organiser and Participant
5 Construction					
Construction Health and Safety Plan	Checklist	✓	N/A	10 working days after plot possession and mobilisation	Participant
Contractor's Worker Welfare Management Plan	Checklist	✓	N/A	10 working days after plot possession and mobilisation	Participant
Contractor's Environmental Plan	Checklist	✓	N/A	10 working days after plot possession and mobilisation	Participant
Contractor's Project Quality Plan	Checklist	✓	N/A	10 working days after plot possession and mobilisation	Participant
Inspection and audit schedule	Template	✓	N/A	10 working days after plot possession and mobilisation	Participant
Laydown Area Access Request approval	Request process	✓	20 working days	During main construction works	Organiser and Participant
Deliveries	Booking process	N/A	N/A	Anytime	Participant
Access management and accreditation	Access request process	✓	3 working days for vehicles and workforce, and 1 working day for visitors	Prior to access of vehicles, workforce, and visitors to site	Organiser
Authority to Proceed Application Form approval	Request and approval process	✓	20 working days	Before conducting activities outside the plot	Organiser
Inaccessible void inspection request	Request and inspection process	N/A	TBC	During construction and exhibit installation	Participant to Organiser
Monthly reporting	Reporting process	✓	N/A	Monthly/end of month	Participant
Waste management contractor support	Booking process	N/A	N/A	Anytime	Participant
New contractor approval	Review and approval process	✓	20 working days	On appointment of new contractor after plot possession and mobilisation	Organiser

 Steps/Processes/ Services Required	 Type	 Form/ Template Available	 Approval Duration	 When	 By Whom
Serious incident response	Emergency response process	N/A	N/A	Anytime	Participant
Delivery schedule	Template	✓	N/A	Monthly	Participant
Non-conformance notification	Letter and report	✓	N/A	Anytime	Organiser and Participant
Sustainability/environment monitoring data logs	Template	✓	N/A	Monthly	Participant
Hoarding removal	Request process	✓	10 working days	Completion of construction works	Organiser
Site queries		N/A	N/A	Anytime	Participant
Statutory Inspection Requests	Inspection process				
Structural inspection	Follow One-Stop Shop process	N/A	TBC	During construction works	One-Stop Shop
DEWA inspection	Follow One-Stop Shop process	N/A	TBC	After completion of construction	One-Stop Shop
Dubai Civil Defence inspection	Follow One-Stop Shop process	N/A	TBC	After completion of construction	One-Stop Shop
Dubai Police inspection (CCTV)	Follow One-Stop Shop process	N/A	TBC	After completion of construction	One-Stop Shop
Health, Safety, Environment, and Quality inspection	Follow One-Stop Shop process	N/A	TBC	During construction works	One-Stop Shop
Final connections	Follow One-Stop Shop process	N/A	TBC	After completion of construction	One-Stop Shop
Building Completion Certificate	Follow One-Stop Shop process	N/A	TBC	After the final inspection of the pavilion	One-Stop Shop
Operation Fitness Certificate	Follow One-Stop Shop process	N/A	TBC	After exhibit installation	Organiser
6 Decommissioning and Removal					
Decommissioning and Removal Request	Request		20 working days	Prior to decommissioning and removal activities	Participant to Organiser
Decommissioning and Removal Request approval	Approval process	✓	20 working days	7 calendar days after the conclusion of the Expo event	Organiser
Decommissioning and Removal Plan and Strategy					Participant
Contractor Self-Assessment Checklist	Checklist	✓			Participant
Decommissioning and removal schedule	Template	✓			Participant
Health and Safety Management Plan (supervision consultant)	Checklist	✓			Participant
Worker Welfare Management Plan (supervision consultant)	Checklist	✓			Participant
Quality Management Plan (supervision consultant)	Checklist	✓			Participant
Work Permit	Request process	✓	10 working days	Prior to decommissioning and removal activities	One-Stop Shop
Plot repossession	Repossession meeting	N/A	10 working days	Completion of decommissioning and removal activities	Organiser and Participant

Information Provided by the Organiser to Support the Participants

The following is a summary of the resources that are presented in this document and will be available on the Participant Portal.

- › Construction Environmental Management Plan (including Construction Waste Management Plan)
- › Contractor Site-Wide Logistics Obligations
- › Environment Assurance Standards
- › Environment Policy
- › Environmental Clearance
- › Environmental Impact Assessment Report
- › Health and Safety Assurance Standards
- › Health and Safety Policy
- › Insurance Guide
- › Plot Affection Plan
- › Plot Sheet
- › Quality Assurance Standards
- › Quality Policy
- › Self-Build Pavilions Guide
- › Serious Incident Notification Process
- › Site Entrances Plan
- › Site-Wide Construction Emergency Plan
- › Site-Wide Decommissioning and Removal Logistics Strategy
- › Site-Wide Fire and Life Safety Strategy
- › Site-Wide Soil Investigation Results
- › Sustainability Policy
- › Theme Guide
- › Worker Welfare Assurance Standards
- › Worker Welfare Policy

External Links

The following is a summary of links to external websites that are presented in this document.

› **AS 3745 (2010)**

<https://infostore.saiglobal.com/store/PreviewDoc.aspx?saleItemID=2182780>

› **ASTM D6751**

<https://www.astm.org/Standards/D6751.htm>

› **Department of Economic Development - Dubai**

https://eservices.dubaied.gov.ae/Pages/Anon/RLAForm.aspx?1=1&PID=10122&LID=&sname=Fill_Registration_&Licensing_Application_Form&srp=-1&sf=-1&ifn=303467818&pn=173956&pn2=

› **DEWA**

<https://www.dewa.gov.ae/en>

› **Dubai Civil Defence**

<http://www.dcd.gov.ae>

› **Dubai Green Economy Partnership**

<http://greeneconomy.ae/>

› **Dubai Integrated Energy Strategy 2030**

<http://taqati.ae/dies-2030/>

› **Dubai Law (24)**

<https://portal.dps.ae/laws.html>

› **Dubai Municipality**

<https://www.dm.gov.ae/wps/portal/home>

› **Dubai Police (SIRA)**

<https://dubaipolice.gov.ae/>

› **Dubai South**

<https://www.dubaisouth.ae/>

› **EN 14214**

<https://www.cenelec.eu/standardsdevelopment/ourproducts/europeanstandards.html>

› **Etisalat**

<http://www.etisalat.ae/nrd/en/index.jsph>

› **Green Building Regulations and Specifications in Dubai**

<https://www.dm.gov.ae/wps/wcm/connect/662c2fc7-03b4-41a5-aad0-c9d1959773a3/Green+Building+Regulations+and+Speci.pdf?MOD=AJPERES>

› **ISO 9001: 2015**

http://www.iso.org/iso/iso_9000

› **LEED® Gold New Construction Version 4**

<http://www.usgbc.org/leed-v4>

› **NFPA 101 (2015)**

<http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards?mode=code&code=101>

› **NFPA 5000 (2015)**

<http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards?mode=code&code=5000>

› **Project Signboard Specification**

<https://www.dm.gov.ae/wps/wcm/connect/bd0022804410d638ad8aafd6bee7af10/dm-dsi-SPEC01.pdf?MOD=AJPERES>

› **Roads and Transport Authority**

<https://www.rta.ae/wps/portal/rta/ae/home/>

› **UAE Fire and Life Safety Code of Practice**

http://www.dcd.gov.ae/portal/eng/UAEFIRECODE_ENG.pdf

› **UAE Green Growth Strategy**

<http://www.moccae.gov.ae/default.aspx>

› **UAE Labour Law**

<http://www.mohre.gov.ae/en/labour-law/labour-law.aspx>

› **UAE Vision 2021**

<https://www.vision2021.ae/en>

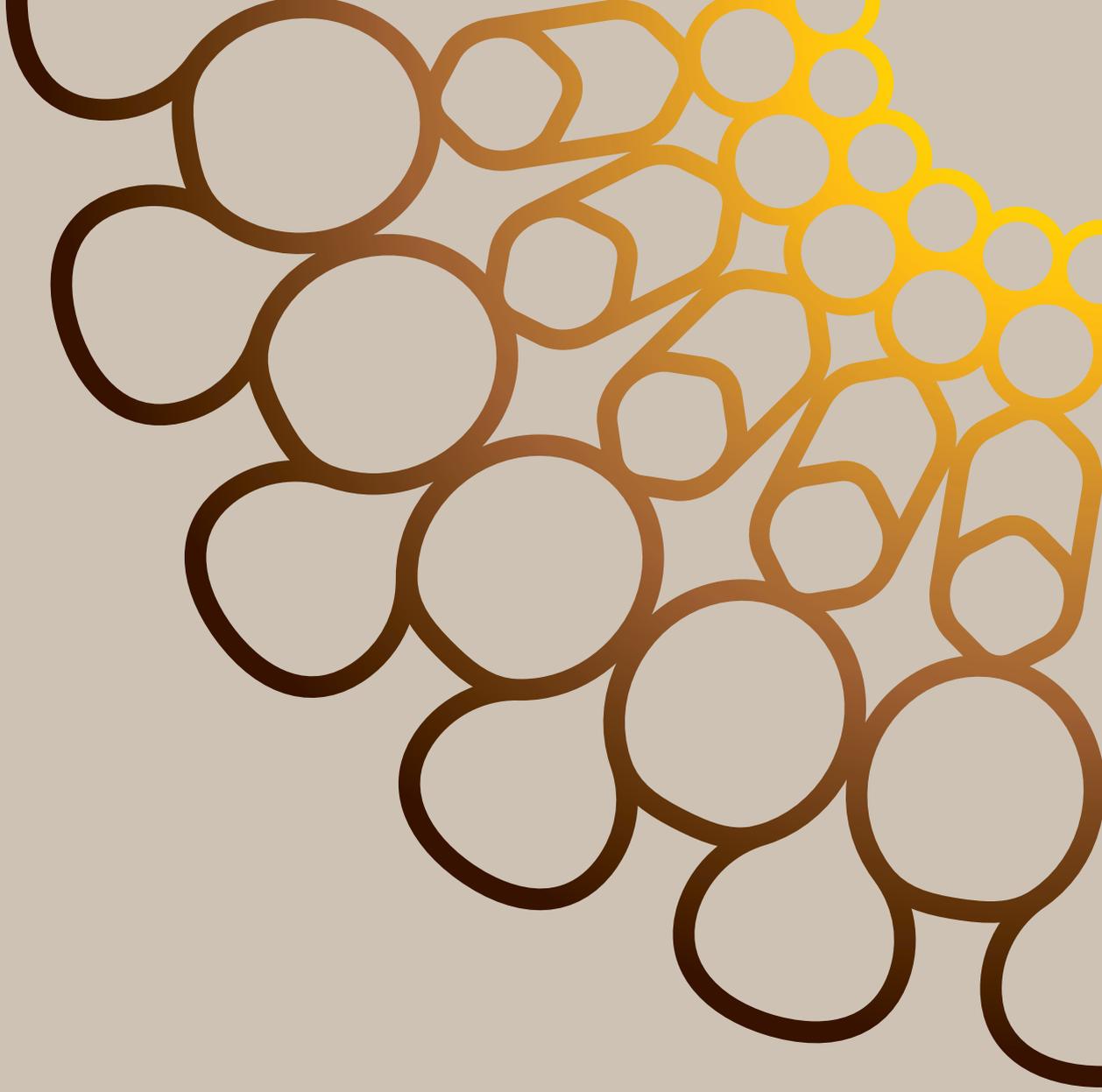
› **UNEP's Sustainable Public Procurement Programme**

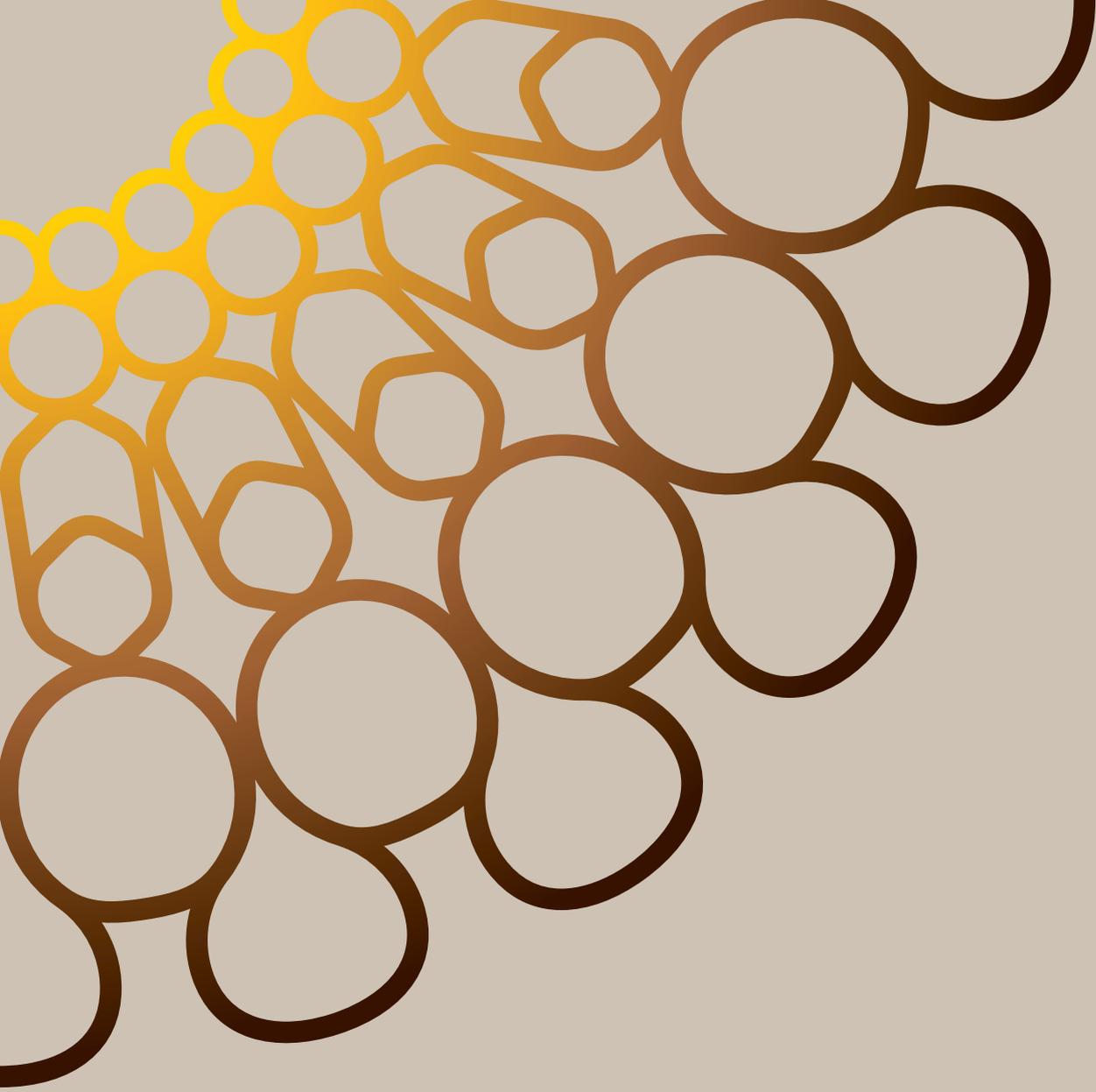
<http://www.unep.org/>

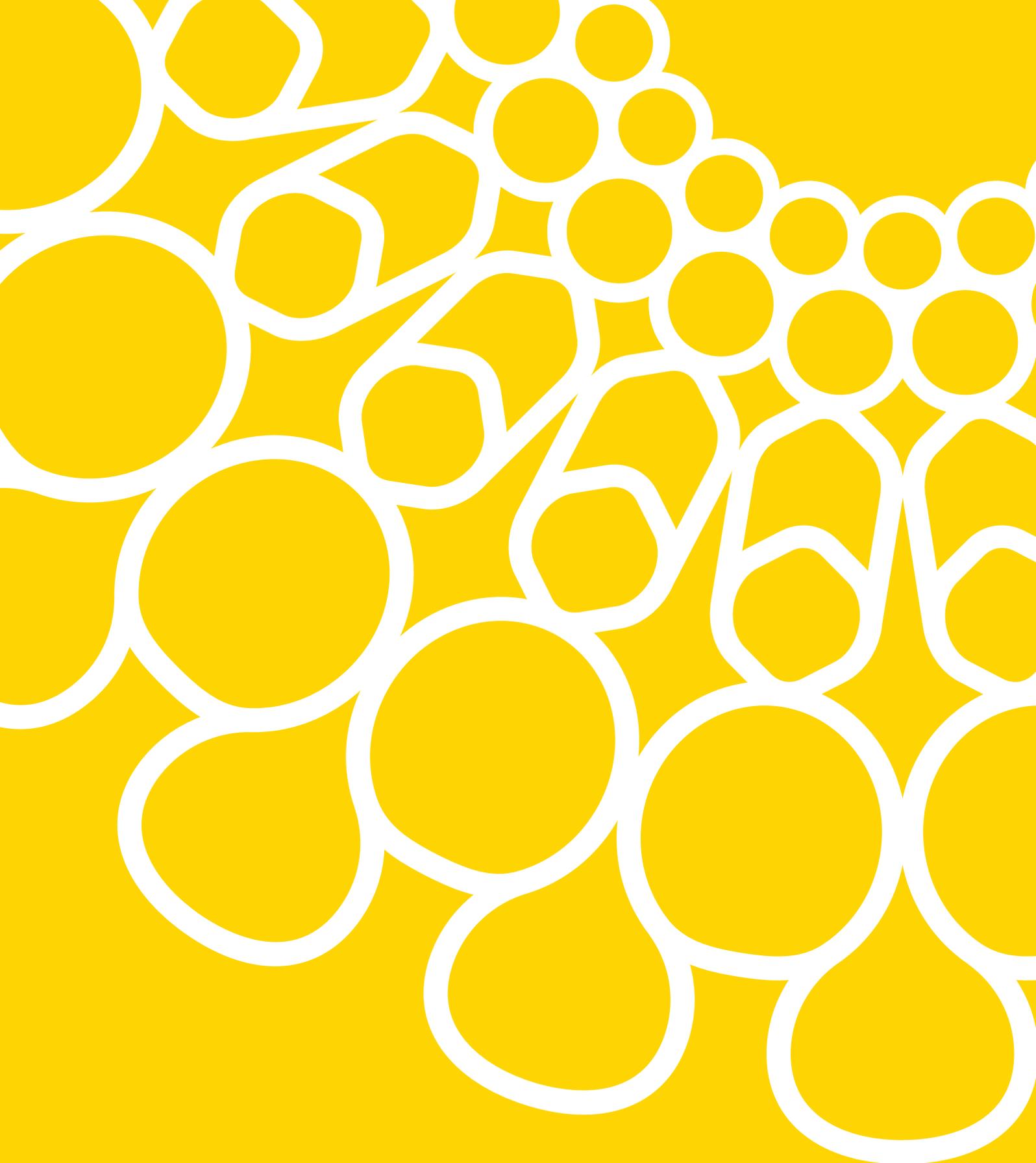
File Formats for Design Submission

Design Submission	PDF	BIM	DWG	DWF
Architectural and Structural	✓	✓	✓	
Electrical	✓	✓	✓	✓
Water	✓	✓	✓	
Drainage and Irrigation	✓	✓	✓	
Telecommunications	✓	✓	✓	✓
Firefighting	✓	✓	✓	✓









Contact info:

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