



EMBODY A BOLD, AMBITIOUS AND INNOVATIVE VISION OF CONNECTED AND SUSTAINABLE CITIES AND TERRITORIES



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## PROMOTING FRENCH INNOVATION INTERNATIONALLY

**For France,** the Expo 2020 will be an opportunity to showcase a bold and positive vision of tomorrow's world. The French Pavilion will show how digital can offer new mobility models for all and foster the development of attractive cities and regions for their inhabitants.

It will serve as a concrete tool for French companies and all those who innovate; a platform for boosting the international development of all stakeholders, particularly in Africa, the Middle East and Asia where the Expo visitors are from. For this, the project led by COFREX, the designated operator for organizing and implementing France's participation in Expo 2020 Dubai, must represent all French people.

With this in mind, I wish to offer all stakeholders the means to promote all kinds of French innovation and create a link between them through this Pavilion.

This participation in the Expo 2020 Dubai and the French Pavilion should portray an image of an enthusiastic, bold and innovative France with the means to promote and become part of a digital revolution to which it has much to contribute.

Emmanuel Macron
President of the French Republic



## EMBODYING THE ECOLOGICAL AND INCLUSIVE TRANSITION

**Under the impetus of the President of the Republic** and the Prime Minister, the French government has been committed to building a model for energy and resource-efficient prosperity for the past 18 months. And this transformation of our economy presents major opportunities in terms of innovation, investment and job creation.

Our goal has been reflected daily in the decisions we have made and the policies we have implemented since 2017.

I am thinking of the Climate Plan in particular, which places emphasis on mobility issues. The development of clean and accessible solutions for all and even the commitment to end to the sale of greenhouse gas emitting vehicles between now and 2040 are just some of the measures put in place.

I am also thinking of the commitments we have made to make France part of the circular economy. A crucial step at a time when we need to make our cities sustainable and resilient.

Finally, I am thinking of the One Planet Summit initiative, which I am supporting alongside the President of the Republic. An unprecedented opportunity to involve state and non-governmental actors in the development of concrete solutions that can boost our transition towards a low carbon economy on a global scale.

The French Pavilion project for the Expo 2020 Dubai reflects these commitments - as well as many others. A symbol of France's ambition as well as a tool for demonstrating our public policies and private initiatives, we wanted it to be open to the world.

With remarkable offerings and responsible aspirations, our pavilion will be a platform for political, intellectual, economic and cultural exchange.

A place where we can build sustainable solutions together and make French know-how available to support people and progress.

#### **Brune Poirson**

Secretary of State to the Minister for the Ecological and Inclusive Transition



## EXPO 2020 DUBAI: A MAJOR ECONOMIC OPPORTUNITY

Connecting Minds, Building the Future. In 2020, the Expo has invited its participants to put into perspective the prodigious digital revolution which we have both witnessed and participated in for over 15 years. It also aims to create new opportunities to transform daily life as well as carve out a sustainable and desirable future.

It is an exceptional opportunity for France to put forward its bold and positive vision of tomorrow's world. Our goal is to demonstrate how our country uses the solutions we are developing to convert challenges into opportunities. It is with this in mind that the French Pavilion seeks to showcase our expertise and know-how, particularly in terms of the digital transformation of cities and regions. Digital technology that allows new, smart and livable cities to emerge as well as more connected regions and even improved knowledge sharing.

This expertise and know-how is based on a belief: that technology must be useful to citizens while helping to protect our planet at the same time.

France has chosen to explore the theme of mobility through its Pavilion based on this vision. Since to support any transition, whether technological, ecological or economic, the mobility of people, goods, regions, ideas and information is a key issue! In view of this, the French Pavilion will explore new modes of mobility for the common good. Our country is home to major players in these fields along with a pool of new start-ups that are helping to position us in many cutting edge sectors. This event must therefore also be seen as a catalyst for business and a genuine platform for international development.

For this, we must appeal to all audiences at the Expo 2020 Dubai, including the general public as well as professionals who have come to discover the latest global innovations. Inspired by light as a symbol of mobility, the French Pavilion has been designed as an unforgettable immersive and educational experience. It will be a true living space, a meeting point that is open to the world and punctuated by a constantly evolving program. In line with our country's ecological goals, this Pavilion will be the most sustainable ever built by France.

This World Expo will be groundbreaking. Because it is the first ever to be held in the Middle East, Africa and South Asia region, it will draw almost 25 million visits. To ensure our participation is a success, the Pavilion must represent all of France. An enthusiastic, ambitious and bold project based on an exceptional platform for promoting all of our talents!

#### **Erik Linquier**

**General Commissioner of the French Pavilion and President of COFREX** 



## FRENCH PAVILION: A TOOL FOR PROMOTION, DEVELOPMENT AND ATTRACTIVENESS

#### 1. A global event for progress

Introduced in the mid 19<sup>th</sup> century, the World Expos have fostered the emergence of solutions to major global challenges in each period. A global event, the World Expo is a place for international meetings positioned unusually at the crossroads between political forums, trade shows and also cultural and scientific events. It creates a synergy between driving forces: technology, science, urbanism, the arts, politics, culture and economy... Accessible to all, it is an opportunity to experience the latest innovations from participating countries, companies, multilateral organizations, educational institutions and even NGOs. This gives everyone the potential to become an agent of change and progress, to redesign models and imagine future solutions.

#### AN INTERNATIONAL HIGHLIGHT

The World Expos are ranked among the top international events along with the Olympic Games and the Football World Cup. They are also one of the oldest events, the first being the Great Exhibition of London in the United Kingdom in 1851.



→ The Expo 2020 Dubai site.

#### 2. Expo 2020 Dubai: theme, vision and ambitions

Each exhibition is structured around a specific theme and aims to have an impact on human progress in a sustainable way. The key theme of Expo 2020 Dubai is "Connecting Minds, Creating the Future".

During Expo 2020 Dubai, the 190 participating countries and organizations as well as the 25 million expected visits will explore the issues surrounding the problems of connections based on three key sub-themes:

- Opportunity: unlock the potential of individuals and communities to help build a better future.
- **Mobility:** foster a smarter and more efficient movement of people, goods and ideas, both physically as well as virtually.
- Sustainability: evolve in harmony with the world we live in and respect it in order to guarantee a sustainable future for all, at a time when humanity is facing a two-fold challenge: a growing population and shrinking natural resources.

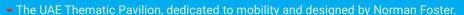
For the first time in over a century and a half, almost all the countries of the world (190) participate and present their innovations. They will be organized according to the Expo's sub-themes and there will be general pavilions dedicated to each – the one for Mobility in particular will be designed by the British architect Norman Foster.



#### **EXPO 2020 DUBALAT A GLANCE**

- Dubai received a record 16 million tourists in 2018, rising to the 4<sup>th</sup> most visited city in the world.
- Dubai is ranked second in the world after Paris for trade fairs and business shows.
- This edition follows Expo 2015 Milan. It will last
   6 months from 20 October 2020 to 10 April 2021.
- Expo 2020 Dubai is expected to attract over 25 million visits, including almost 70% from overseas, the largest proportion in the history of World Expos since they were created in 1851.
- 80% of visitors will be private individuals and 20% will be professionals (5% in Milan in 2015).
- Expo 2020 Dubai will welcome 190 participating countries.
- Around 80% of the structures built for the exhibition will breathe life into a new area: District 2020, a smart city with 100,000 inhabitants.

- Expo 2020 Dubai is a significant economic driver for the United Arab Emirates and companies all over the world. Construction contracts worth over 10.8 billion dirhams (2.9 billion dollars) and non-construction contracts worth 411 billion dirhams (111.9 billion dollars) were awarded in 2017.
- Over 26,000 companies based in 151 countries are currently registered to work with Expo 2020 Dubai. The exhibition has awarded 4,500 contracts to date, over half of which have been given to SMEs.







#### FRENCH PAVILION: A TOOL FOR PROMOTION, DEVELOPMENT AND ATTRACTIVENESS

Expo 2020 Dubai is a key opportunity for creating new perspectives for economic development, boosting France's attractiveness and officially launching new innovative and sustainable projects, which will enable France to uphold its vision of new modes of mobility that are kinder to the planet and meet citizens' needs. Its theme highlights and differentiates what France has to offer: the capacity to design and build connected regions and urban models that are adapted to meet the needs of emerging countries and the megacities created as a result.

Through its participation, France aims to make the mobility of people, goods, territories, ideas and information a key question for resolving the issues surrounding every transition, be it technological, ecological or economic. These are all areas in which France will draw from its strengths in the digital sector in particular, which is now making it possible for new, smart and livable cities to emerge, along with more connected regions and better sharing of knowledge and insights.

France offers a unique range of services and urban operators that are actively building tomorrow's cities and modernizing those left to us from the past. With innovative service offerings, large French companies as well as SMEs provide a global vision and comprehensive solutions. This vision is of an attractive city, not through the technologies deployed but through the new services that can be offered in a viable and sustainable way.

This "French offering" brings together industrial players who are starting to develop platform strategies, service operators that are simplifying and personalizing access to these services with increased effectiveness (including public transport) and technology companies that, having mastered the point-to-point logic, are turning multimodal mobility into a reality. It also has the power to involve private and public stakeholders in developing innovative economic models over the long term, notably by combining pure mobility with improved energy and environmental performance.

Available to French companies – major players and new start-ups alike – and all those who innovate, the French Pavilion is a concrete tool and an unparalleled showcase for the expertise and innovation of French businesses as well as a platform for helping to develop the French offering internationally. The French Pavilion thus represents the best France has to offer through its various partners: businesses, local authorities, academic institutions, research centers and general interest organizations.

With 1.59 billion euros in French exports to the United Arab Emirates, the Federation is France's second largest export destination in the Gulf. Mainland France already has very close ties with the United Arab Emirates, developed at institutional level (Alliance Française, Institut Français) as well as through business (French Business Council, French Business Group, Business France), education (Sorbonne Abu Dhabi) and culture (Louvre Abu Dhabi).



#### **MAJOR INDUSTRIAL, TECHNICAL AND SCIENTIFIC INNOVATIONS UNVEILED DURING THE WORLD EXPOS**

#### 2015 - Milan

Construction of a new generation Internet Protocol (IP) network and a capillary WiFi infrastructure with high speed internet access.

#### 1970 - Osaka

Introduction of the first cell phone and the first Imax cinema A high voltage electron microscope and a magnetic levitation train model were also presented.

#### 1962 - Seattle

Introduction of the first voice assistant by IBM, which recognized 16 words.

#### 1939 - New York

First live television broadcast from the Expo site.

1905 – Liège Introduction of the Chronophone designed by Léon Gaumont, one of the first devices that could synchronize image and sound.

#### 1900 - Paris

The first Paris Métro line as well as the first escalator were inaugurated and filmed by the Lumière brothers.

#### 1876 - Philadelphia

Alexander Graham Bell presented the world's first telephone.



#### FRENCH PAVILION: A TOOL FOR PROMOTION, DEVELOPMENT AND ATTRACTIVENESS

#### 4. The ecological and inclusive transition as a driver of progress

Through its theme and sub-themes, Expo 2020 Dubai offers France the opportunity to convey its vision of the ecological and inclusive transition by demonstrating how climatic and environmental solidarity at international level can also be a tool for business development through concrete and especially digitally-driven solutions.

Given its commitment to ensure greater consistency between national and international policies, Expo 2020 Dubai is a major forum for France.

As for sustainability, the French Pavilion conveys French public policy in terms of support for innovation and sustainable development. A model revealed during the French National Mobility Conference and which corresponds to six key objectives:

- Boost innovation
- Reduce our environmental footprint
- · Reduce social and territorial divides
- Ensure better coordination of transport services
- Revise our economic model and its governance
- · Control risks

France can provide a great many solutions to the major issues facing continents, demonstrating that a better connected region and a model city would be ever more welcoming and better placed to meet the challenges of the 21st century, including the development of collective wellbeing, optimization of resource allocation and risk prevention.



### THE SPIRIT OF THE ONE PLANET SUMMIT

Launched in December 2017 in Paris by President Emmanuel Macron, United Nations Secretary-General Antonio Guterres and World Bank President Jim Kim, the One Planet Summit is an international network dedicated to accelerating the global transition to a low-carbon economy. It aims to develop concrete solutions for the implementation of the Paris Agreement. The French Pavilion wants to contribute to the implementation of the objectives of the One Planet Summit.



#### 1. "Light, Lights" pavilion, the symbol of sharing ideas and know-how

The French Pavilion will be erected on a site covering almost 4.5 km² in south Dubai. More specifically, it will be located in the area dedicated to Mobility – the two other areas focusing on Sustainability and Opportunities respectively. All fundamental concepts for resolving the most pressing issues of our time.

An emblem of French participation in the Expo 2020 Dubai as well as a showcase, place for commercial development and experiential space for all visitors, the French Pavilion will convey France's unique vision by combining an ambitious architectural design with immersive installations.

A symbiotic association whose objective is two-fold: to celebrate the French model of innovation, which balances sustainable development with competitiveness for businesses at international level, while also boosting the attractiveness of our regions from an economic and tourist point of view.

The perfect embodiment of the type of mobility France is aiming for, this pavilion is based on a theme: Light, Lights. A strong reference to French humanism as well as an expression of movement – nothing is faster than light – across three dimensions:

- **Light like philosophy:** Light is a tool that illuminates and reveals, making it possible to see and make progress.
- Light as a source of heat and creativity: Light is palpable, heat-generating and a source of innovation.
- Light as a vehicle for connections: Light links, transports and transmits information.



▼ The French Pavilion, viewed from the front.



#### 2. An architectural and artistic facility between the sky and the earth

Light is one of the key inspirations behind the French Pavilion, designed as an oasis from which a true canopy of light literally emerges. A facility that goes beyond the limits of a regular building since it fuses materials and light in a single structure to showcase the content of permanent and temporary exhibitions.

A powerful idea lies at the heart of the project: to begin the visitor's journey outside the structure and continue the experience seamlessly inside, transforming waiting time into a moment of sharing and emotion – a concert of sensations that encourages reverie.

A feat made possible by extraordinary architecture. Designed as both a vertical and horizontal screen, the French Pavilion will feature a magnificent facade inside covering 1,800 m², surrounded by a lower level open to the public and an upper level dedicated to professionals. The gap between these two structures leaves a forecourt covering 1,000 m², entirely protected from the sun and punctuated by four French formal gardens planted with endemic species, olive trees, albizias, amboyants, cus, bottle trees, lemons, hibiscus, yucca or even oleanders, as well as a canopy ottering at an altitude of 20 m above the ground. This facade and canopy form a screen and an artificial sky that dematerializes by day and at night like an invitation and a preshow before the journey inside the Pavilion begins.

Inside, the play on light intensifies in a ballet of sensations. As visitors interact with sensors, waves and surges spread out as they approach. Synchronized with sound effects, they concentrate and spread out from room to room, accompanying the visitor's journey.

Directly linked to the flow of visitors as well as the surrounding environment (weather, temporality etc.), the French Pavilion's scenography offers as many visits as there are visitors.

Outside, the roof and rear facade of the building are covered in a layer of colorful solar panels based on an impressionist palette reminiscent of Monet's Water Lilies. An approach that forms part of the Materials/Light theme developed by the Pavilion. Each solar panel will evoke a stoke of paint reflecting the French sky in Dubai.

In recognition of its uniqueness and in line with Expo 2020 Dubai's innovative theme, the French La Poste will issue a dedicated stamp in honor of the French Pavilion's architecture as part of its official philatelic program for 2020. This stamp will be issued during the Paris Philex trade show in June 2020.

The French Pavilion in Dubai belongs to a tradition of great pavilions by acting out a sort of revenge by Geography on History. In fact, this architectural work becomes relevant in its construction by inventing its own shadow and light, fabricating its looks and its own iconography. Constantly renewed, this living structure can be visited multiple times and it will never be the same: from dawn until dusk, every hour and every season, its shape will evolve offering a brand new experience each time", architect Jean-Luc Perez from

Atelier du Prado explains.

- **What could be more universal** than light? Everyone can appreciate a sunset wherever they are in the world and regardless of their culture. We chose to use light as a common theme to bring the scenography together, using it as a starting point for all of the project's creative intentions. From there, we told ourselves the story of a journey through light, from the abstraction of sensation towards concrete images of our country and messages that must be conveyed", explains Jean-Marie Priol, Creative Director of the Immersive(s) group and responsible for the scenography.
  - A snapshot of an exemplary land that reflects France's values, the Pavilion will showcase the country's industrial expertise, economic dynamism and a form of French know-how",
     Jacob Celnikier from Celnikier and Grabli Architects explains.





#### 3. The 4 dimensions of the visitor experience

The French Pavilion will offer an experience with four dimensions, backed by a thematic program that will punctuate the Expo over 24 weeks:

- **Emotional**: through an immersive approach that creates a memorable visit and makes the Pavilion a popular attraction.
- **Educational**: through a fundamental content-based approach to express the vision and enlightenment of France and its businesses on the subject of mobility.
- **Technological:** through an experiential approach to present concrete solutions in terms of mobility offered by French players in an interactive way.
- **Territorial:** through a geographical approach based on regions to demonstrate how new modes of mobility shape user-friendly smart cities and connected spaces.

#### 4. The visitor journey

Arriving along the avenue that surrounds the pavilions in the Mobility area, visitors will discover the French Pavilion gradually. As they walk along the building, they will pass a French-style bistro with a terrace and even a store, evoking a fragment of French urbanity. Emerging onto the forecourt, they can then wander through the gardens and admire the light show before stepping inside the entrance hall and beginning their tour of the exhibition.

From then on, visitors are plunged into a space-time where sound, light, scents and materials mingle. Spread over 800 m², their journey is divided into three zones discovered one after another.

An immersive, dreamlike landscape made up of light, the first space, **Immersion(s)**, interacts with the public in quasi-organic way. Here, the visitor's presence is detected and triggers a light program that reveals imaginary landscapes and builds a new territory. Hundreds of sounds create a unique atmosphere, which contrasts with the outside world and heightens the impression of a parallel universe.

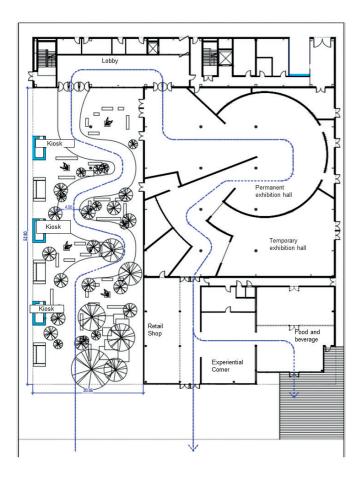
An exhibition space centered around a beacon of light, the second space, **Perception(s)**, displays the various aspects of the French vision of mobility. Entirely flexible, this demonstration space provides multiple scenarios as part of the exhibition: circular projections, a single stage or a modular layout aimed at exhibiting partners. Sound elements pervade the room, following the audience as they move.

The last room, **Reflection(s)**, transports visitors via French landscapes. Photographs, videos, contributions by artists and images are accompanied by an olfactory signature diffused throughout the space and, as for the French Pavilion's entrance hall, designed by the internationally renowned master perfumer Dominique Ropion. With the aim of stimulating all the senses, sound compositions in the third and final part of the scenographic journey capture the quintessence of France: the cries of market sellers, waiters in brasseries and fishermen... The audience therefore has the opportunity to listen to a wide range of soundscapes.

Temporary exhibitions are also available on the ground floor of the building, complemented by a cultural program based on 24 themes with a week dedicated to each.







Technical plan of the scenography.

#### THE FRENCH PAVILION IN FIGURES

- 55 meters wide, 20 meters tall and 63 meters deep.
- 5,100 m<sup>2</sup> of built up area
- 1,160 m² of gardens, organized into four formal French-style squares.
- 1,800 m² facade, 1,000 m² forecourt and 1,500 m² canopy.

- 2,700 m<sup>2</sup> facade and roofing covered in solar panels.
- 40 meter terrace.
- 1 French bistro, 1 store,1 agora and 1 auditorium.



▼ Cut-away view of indoor spaces and French formal gardens.



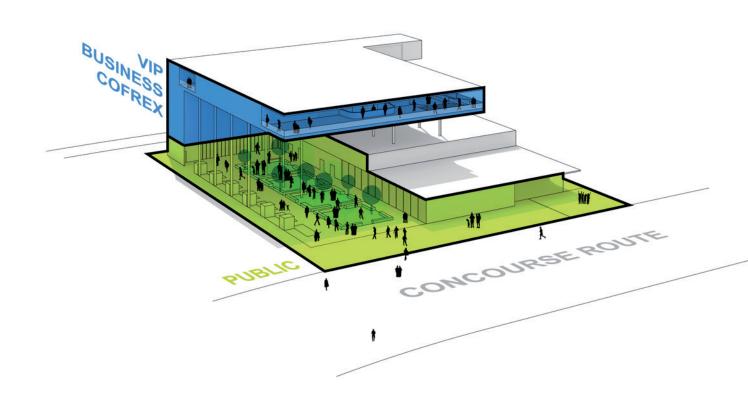




#### 5. A level dedicated to professionals

Upstairs, professional visitors can access places for work, demos, eating and socializing. Between two skies, this level is built around a showroom and an auditorium. These are surrounded by co-working spaces, an innovation lab, offices and meeting rooms. An auditorium with 100 seats and 200 spaces for standing will welcome professionals as well as the general public for dedicated events.

At the prow of the building, overlooking the forecourt, a lounge bar and agora open out onto a panoramic terrace, 40 meters long and 9 meters deep, offering a dreamlike vision of the World Expo skyline and a unique view of Norman Foster's Mobility Pavilion.





#### A VIRTUOUS DESIGN

The pavilion's design is based on the 3 pillars of bioclimatism: controlling light sources, offering a highly insulating and airtight building envelope and reducing the use of fossil fuels as much as possible.

The forecourt and queue will be protected from the sun's rays by a suspended canopy. Indoor and outdoor spaces on the ground floor will be protected from the hot climate and harness the potential of evapotranspiration of the planted spaces. This protective shell is covered in solar panels to make use of the light to produce photoelectricity. This dual function makes the structure semi-autonomous in terms of energy and also helps to drastically reduce energy loss. Over 80% of the energy consumed by the French Pavilion will be produced by the sun.

Beyond its use, the unique technical aspect of this project lies primarily in the aim to dismantle and reuse the building. A metal frame will make it possible to prefabricate some of the elements in a factory, reducing construction time and the waste generated. Bolt-on assembly will be used for the entire structure to make dismantling and rebuilding easier. The multi-skin cladding solution is also

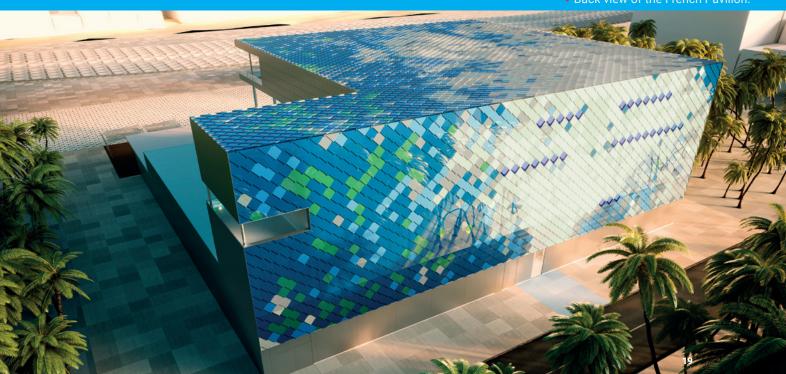
perfectly reusable and ensures highly effective thermal insulation. This comprehensive solution avoids excessive use of materials and gives the Pavilion an exemplary low carbon impact.

The building's intrinsic quality is reinforced by the deployment of innovative and highly effective technical features. This is particularly the case for a special installation that naturally refreshes the building's interior while reducing consumption by 20%.

Another ecosystem-protecting feature is a micro water treatment plant that will recycle used water to supply the irrigation system as well as toilet flushing. The pavilion's need for fresh water will therefore be reduced by 30%.

In addition to their high performance, these features are perfectly managed and adapted to the climate and local temperatures.

Significantly dematerialized, the scenography will use very few hard materials with a high environmental impact. Energy-saving equipment will be used for all lighting and projections.



▼ Back view of the French Pavilion



#### 6. The main stages of the life of the France Pavilion



#### 7. The companies involved in building the French Pavilion

From architects to scenographers, sound technicians and construction companies, the group of experts selected to create the French Pavilion brings together ten companies. Works will commence in May 2019 and the first stone will be laid in Dubai during the second quarter of 2019. Construction of the pavilion will take 17 months from May 2019 to September 2020.

#### **Design and production of the French Pavilion**

BESIX: Construction and layout

Atelier du Prado: Architecture and Urban Planning

Celnikier & Grabli Architects: Architecture

SNAIK: Lighting

O.T.E Ingénierie: Engineering

OTELIO: Sustainable development engineering

BEL ALTIA: Acoustics and Audiovisual

#### Design and production of the inside journey scenography – Immersive group(s)

Museum Manufactory / ANAMNESIA: Production

**SNAIK: Artistic Direction** 

DUCKS Scéno: Scenography

NUSSLÏ GROUP: Construction



#### FRENCH PAVILION PARTNERS

For companies that have already joined the French Pavilion in its ambition to promote France and its talents, Expo 2020 Dubai will be a superb showcase for demonstrating their expertise and sustainable innovations.

The tradition of excellence in French expertise is internationally recognized in many fields: aviation, space, energy, the environment, culture, science, agriculture, health and even luxury. Valued and sought after, these talents have shown over time that they can adapt to technological changes and offer increasingly innovative solutions.

As an economic and cosmopolitan hub in the Near and Middle East, Dubai is particularly well placed to promote them. With higher average growth than the OECD countries, countries in the region have some of the largest trade surpluses in the world. Beyond Dubai itself, Expo 2020 Dubai's catchment area (Middle East, China and India) is also generating a great many future projects, presenting multiple opportunities for French businesses and making it possible to develop an internationally recognized model for urban services development thanks to first class operators, who are world leaders in their fields. Over 600 French businesses are already based in Dubai and the diaspora there is booming.

With its diverse territories, France also offers a pool of young talent working every day on new solutions in relation to mobility. Sometimes lesser known internationally, these talents must be promoted in Dubai to show audiences from all over the world that France can be found where it is not always expected. France today boasts many leaders in the fields of artificial intelligence, data processing and environmental innovations.

Thanks to their expertise and knowledge, the Pavilion's partners will enrich its program and scenography (exhibition space, visitor journey etc.). They will illustrate how new modes of mobility can support the ecological, economic, social and demographic transitions currently underway. While new technologies are at the heart of challenges, the approach should be resolutely focused on the user and the ultimate goal of improving the way we live and safeguarding our planet.

France has the unique opportunity to showcase what it can contribute to 21st century issues, inspire hope for the future and reinforce its image internationally as well as in France.



#### **Partners supporting the French Pavilion**



































#### **Media partners**



















#### Institutional partners













#### **Associated partners**







La COFREX remercie Bic pour l'édition collector du 4 couleurs Pavillon France.



La COFREX remercie Bolloré Logistics pour le transport de la maquette du Pavillon France à l'occasion de la pose de la première pierre du pavillon par Elisabeth Borne, Ministre des Transports, le 2 mai 2019 à Dubaï (EAU).



# "CONNECTING MINDS": PLATFORM FOR REFLECTION, DEMONSTRATION AND EXCHANGE FOR KEY PLAYERS IN FRENCH INNOVATION

#### 1. A sustainable ambition

Created in November 2018, the "Connecting Minds" Think Tank is the first platform of its kind for a French Pavilion and marks an important milestone in the development of a tool for reflection, demonstration and exchange aimed at key players in French innovation.

Driven by the pavilion's Commissioner General and designed by COFREX as a lasting tool that will endure after Dubai 2020 for future French Pavilions, this Think Tank is expected to stimulate exchanges surrounding the policy of promoting French know-how and capabilities in terms of innovation.

#### 2. A pool for materials

More specifically, the "Connecting Minds" Think Tank will be involved in the production of materials designed to promote the French Pavilion during the Expo.

11 working groups have already been organized to work towards the common goal of promoting French best practices and/or innovations while making disruptive, ambitious and concrete proposals to ensure that these models are developed and/or made better use of in France as well as abroad.

- Sustainable Innovation, chaired by Isabelle Kocher, CEO of Engie, and the Think Tank's pilot group. This group will highlight the most exciting French initiatives in terms of green growth, combining economic performance and sustainability. In addition, it will propose better ways of organizing international finance to boost these transformations. This new capitalism which fosters sustainable and responsible investments will fall within a fair international regulatory framework.
- Connected Education, chaired by Marc Ventre, President of the French Society of Engineers and Scientists, and Marc Boissonet, Vice President of Bureau Veritas. This group will focus on identifying and promoting the excellence of the French higher edu-

cation system by highlighting its international attractiveness, rich academic offering and openness to the world. In addition, the group will explore the French vision of education in the future, revolutionized by technological transformations (Big Data, IOT, Al...) as well as the new challenges we will face as our societies evolve. Finally, the group will identify the transformation of this education system into a leading global platform for tomorrow's rare talents to meet the future needs of our businesses and public authorities.

- Education 4.0, chaired by Marie-Christine Levet, Founder and Partner of Educapital. This group will aim to highlight the major transformations affecting various educational systems through recent innovations in terms of learning, notably thanks to the use of gaming, virtual reality and Al. It will focus on the French response in terms of evolving teaching methods and modes of learning with the aim of preparing young talents for the new challenges facing our societies as well as providing them with skills for the 21st century.
- Regions, Businesses and Talents, chaired by Jérôme Miara, CEO of OBEA. This group will explore the challenges and opportunities for collaboration and cooperation between businesses and regions to attract talents from France and overseas.
- Multimodal Mobility Platform, co-chaired by Arnaud de Baynast, CEO of Digital Value, and Caroline Parot, CEO of Europear. This working group, dedicated to people's mobility in the future, will discuss the subject of multimodal platforms. It will address the question of cooperation between transport operators and platform developers in particular, as well as the economic and legal model for platforms, which must be in line with public interests (ecology, inclusiveness etc.).



- Connected and Autonomous Mobility, co-chaired by Christian Peugeot, President of the Committee of French Automobile Manufacturers (CCFA), and Jacques Moulin, CEO of IDATE. This group will help to highlight the excellence of France's technological offering in terms of connected and autonomous mobility. It will identify new areas for cooperation as well as best practices between all French players in this sector to continue to give them an edge in a competitive global market. In addition, it will also carry out a review of the state of the art of various connected mobility technologies. Finally, it will focus on identifying how connected and autonomous vehicles can be integrated into urban and regional ecosystems in the near future, notably outlining the necessary regulatory framework for such a change and its integration with new urban services within the ecosystem.
- Tomorrow's Store, chaired by François Videlaine, Partner of A.T. Kearney. This group will explore the future possibilities of distribution and make concrete proposals for redesigning commercial spaces for future generations. It will focus on five key points in response to the issue of how to connect brands and producers while deepening relationships with consumers. The five points addressed within the framework of this working group will be: an enhanced customer experience, diversification of formats, new forms of consumption, the store ecosystem and new players and new economic models.
- New Payment Methods as a Tool for Mobility, cochaired by Nicolas Lioliakis, President of A.T. Kearney France and Stéphane Richard, CEO of Orange. This working group will explore the future possibilities of payments and make concrete proposals based on four key points in response to this question: "How will new payment methods transform mobility and lifestyles in general in the medium and long term? ": new payment methods as a vehicle for repeat purchase experiences, new payment methods for urban and suburban mobility, new payment methods that boost mobility in Europe and new payment methods that serve as a catalyst for economic development.

- Circular Economy, chaired by Bertrand Camus, CEO of Suez. This group will focus on setting out a roadmap to help transform the French economy into an open circular economy, formalize the consequences of transforming this economic model and consider the reorganization and reconfiguration of cities and regions into sustainable and connected ecosystems. It will concentrate more specifically on the issue of managing waste, resources and new modes of mobility as well as the reconfiguration of urban spaces.
- Renewable Energies X.0 in the Regions of the Future chaired by Olivier Paquier, Institutional Sales Director, Amundi Private & Real Assets. This group is aimed at highlighting French innovation in the field of renewable energies in terms of their use by end customers, integration within existing networks and production, storage and optimization technologies.
- 360° View of Cities: Service Performance, chaired by Éric Falque, Regional Leader of BearingPoint France, Benelux and Africa. This group will reflect on the excellence of the French offering in terms of smart cities and regions, demonstrating French know-how and trends in the use of digital technologies. This group will also explore how digital technologies improve the performance of urban services, while respecting and protecting city users and building a sustainable lifestyle.

Youth lies at the heart of this Think Tank with a universal scope. A group of young people aged 20 to 25 from diverse backgrounds, regions and university and business environments will shed light on each of the themes submitted for discussion.

The "Dubai Notebooks", renditions in various forms (reports, publications, videos etc.) will enrich the French Pavilion's content and program during the World Expo.



## COFREX: A SUSTAINABLE VISION FOR FRANCE ON AN INTERNATIONAL SCALE



COFREX (French Exhibitions Company) is a State-owned SAS company that was created in January 2018. It is the first ever structure of expertise to promote the French brand at major international events.

Its purpose is to prepare, organize and implement France's participation in World and International Expos organized by the Bureau International des Expositions (BIE). It also implements all supporting events and, in general, all financial, commercial and industrial operations as well as real estate and other property activities that are directly or indirectly related to this purpose or that might facilitate its execution.

French participation in previous World and International Expos was supported by various bodies without providing any continuity. The creation of COFREX forms part of a long term plan to make it possible to rely on experiences from previous Expos in order to organize France's future participations in World and International Expos in the best and most cost effective way. It is rooted in the idea of partnerships between public and private stakeholders built on the image and attractiveness of France.

COFREX set up a subsidiary in Dubai at the end of 2018 to help organize its participation in Expo 2020 Dubai.

www.cofrex.fr





# BIOGRAPHY ERIK LINQUIER - GENERAL COMMISSIONER FRENCH PAVILION DUBAI 2020, PRESIDENT OF COFREX

Erik Linquier is the General Commissioner for France at Expo 2020 Dubai.

He is also the President of COFREX (Compagnie française des exposition), the French company responsible for France's participation in world and international expos.

Previously, Erik was a managing director at Accenture, the world's leading consulting firm. He managed relationships with clients in the fields of energy, the environment and utilities as well as the public sector in France and in Europe, developing consulting activities on innovation, digital and transformation projects.

He has 15 years of experience in these sectors. He has worked with top level management to drive projects that have

helped to transform companies and organizations in terms of strategy, operations and organization.



He is Chairman of Aquavesc, which produces and distributes water to 550,000 customers in the Paris region. He is a board member and member of the Strategy Committee of the Monnaie de Paris, the world's oldest company in this sector, which produces and sells coins, medals and luxury items all over the world.

Erik also worked for EDF, the first global energy group, where he was responsible for negotiating tariffs on regulated networks and concessions.

Erik Linquier began his career as an auditor at the French Court of Audit. He then joined the Ministry of Finance where he was an economic advisor at the French Embassy in Ottawa (Canada), a deputy permanent representative at the WTO in Geneva, chief French negotiator for European trade agreements and finally Secretary General of the Treasury.

Erik Linquier is a Sciences Po graduate and also studied at ENA.



## THE PUBLIC CONTRACT AWARD PROCEDURE – FRENCH PAVILION

#### The Bid phase took place in 3 stages:

#### From April to the end of June 2018:

- A Notice of a Competitive Public Tender was sent to the French Bulletin Officiel des Annonces de Marchés Publics and the Official Journal of the European Union on 10 April 2018.
- The closing date for receipt of tenders was 14 May 2018 at 12 p.m. Number of envelopes received: 13 including 0 after the deadline.
- The jury in charge of delivering an opinion on tenders met on 21 June 2018.

#### 2.From June to October 2018:

- The company consultation dossier was sent to candidates admitted to participate in the competitive dialog from 25 to 29 June 2018.
- An initial intermediate proposal preparation phase took place from 2 July to 20 August 2018.
- An initial competitive dialog phase took place from 3 to 7 September 2018.
- A second additional competitive dialog phase took place:
  - For the preparation of intermediate proposals for phase 2 from 7 to 28 September 2018.
  - A second competitive dialog phase took place from 8 to 12 October 2018.

#### 3. From October to December 2018:

- The final offers were agreed on 19 November 2018 at 4 p.m.
- The Jury in charge of delivering an opinion on the final offers met on 11 December 2018.
- The Executive Board responsible for awarding the public contract met on 19 December 2018.

#### Members of the Jury:

Guillaume LACROIX	Public Auditor at the French Court of Audit President of the COFREX Public Procurement Commission
Marina JESTIN	Real Estate Professional Member of the COFREX Public Procurement Commission Member of the Jury with voting rights
Michel PROM	Head of Procurement, Ministry for Europe and Foreign Affairs Member of the COFREX Public Procurement Commission Member of the Jury with voting rights
Marc STRAUSS	Director of Major International Projects, Ministry for the Ecological and Inclusive Transition Member of the COFREX Public Procurement Commission Member of the Jury with voting rights
Laurent SAILLARD	CEO of COFREX Member of the COFREX Public Procurement Commission Member of the Jury with voting rights
Hervé BARBARET	Secretary General of the Ministry of Culture Competent individual Member of the Jury with voting rights
Elisabeth GOIG	Building Engineer Qualified Individual Member of the Jury with voting rights
Christian ROMON	Secretary General of the Interdepartmental Mission for the Quality of Public Construction Projects Qualified Individual Member of the Jury with voting rights
Axel CORNET	Architect Qualified Individual Member of the Jury with voting rights
Jean-Philippe VINCENT	General economic and financial controller Member of the Jury with voting rights



## DESIGN AND PRODUCTION OF THE FRENCH PAVILION

#### **BESIX**

The BESIX group is one of the main groups in Belgium and one of the largest private construction companies in Europe. It operates in the construction, concessions and real estate development sectors.

It describes itself as a multiservice group that can handle projects of various sizes, often within the framework of highly complex contracts.

Founded in 1909, it has experienced steady and significant growth over the years. It is now established in 25 different countries across 5 continents and employs over 15,000 people. The group had a turnover of 2.3 billion euros in 2017.

#### Projects:

BESIX's most iconic work in France includes the new hospital and Santépôle in Melun, the Tours Dexia (CBX) and Carpe Diem in the La Défense district in Paris and EDF's new Research and Development Center at Paris-Saclay. Outside Europe, BESIX is particularly renowned for the construction of the Burj Khalifa in Dubai, the tallest skyscraper in the world, the Grand Egyptian Museum near the pyramids of Giza and the Al Wakrah Stadium being built for the 2022 FIFA World Cup in Qatar...

#### Atelier du Prado

Atelier du Prado is an architecture and urban planning practice founded by Jean-Luc Perez in Marseille in 1992 and Paris in 2008. Its business covers all areas of architecture, with a particular focus on health, education, accommodation and urban infrastructures. The studio's design work is based on a quest for modernity, while taking into account the history of places and communities.

Also concerned with the usefulness of its buildings, Atelier du Prado aims to improve quality of life in a well thought out way, whether for the users concerned, in housing, work places and educational establishments or public facilities.

For Atelier du Prado, the revolution caused by climate change forms part of the history of architecture in the same way as major human events. This is not about passively taking it into account like an administrative constraint, but of translating it into a new approach to create innovative forms.

#### Projects:

Atelier du Prado's projects include the Parc Relais SYTRAL in Saint-Genis Laval, the Initial Prado building with 120 apartments, the Gare Maritime de Croisières and the creation of the Trauma Center in Marseille.

#### Celnikier & Grabli Architectes

Founded in 2005, Celnikier & Grabli Architects brings together a team of architects around partners Jacob Celnikier and Pascal Grabli, driven by a shared and collective desire to combine rather than oppose the functionality and poetry of the spaces we live in.

Charged with a great many public and often complex projects – including a significant number dedicated to research, health and higher education – the two architects seek above all to transform complexity into vitality.

Celnikier & Grabli brings together 13 architects who, beyond the culture of the agency, share a culture of "crafting" projects by combining method and sensitivity.

#### **Projects:**

Celnikier & Grabli Architects' recent work includes the Institute for Climate and Environmental Research at the heart of the international cluster at Paris-Saclay University, the Lycée Alexandre Denis boarding school in Cerny for the Ile de France region and the extension of Créteil Medical School for biomedical research purposes. The agency has begun work on the Sainte Périne Hospital in Paris in partnership with Lazo-Mure and has just completed the Paris-Saclay Institute of Neuroscience in partnership with the architect Dietmar Feichtinger.

#### **OTE Ingénierie**

The OTEO Ingénierie group boasts 55 years of experience working with the French Pavilion. With 250 employees and a turnover of 40 million euros, the OTEO Ingénierie group, along with its sustainable development engineering subsidiary OTELIO, is continuing to expand nationally (opening agencies in Bordeaux and Toulouse in 2019) as well as internationally on some very specific projects.

Renowned for its expertise in highly technical and complex projects, the OTEO Ingénierie group belongs to a tradition of expertise in consulting and project management for ethical and sustainable buildings.

#### Projects:

OTE Ingénierie's recent activities in France include the Strasbourg Museum of Modern and Contemporary Art, the IPE 4 European Parliament building in Strasbourg and major component assembly halls and offices at Airbus Saint Nazaire. OTE Ingénierie also helped to construct the Haut-Rhine Department Country Hall, which offers high environmental quality.



#### **DESIGN AND PRODUCTION OF THE FRENCH PAVILION**

#### **BEL ALTIA**

Founded in 1996 by Richard Denayrou, BEL ALTIA is unique in bringing together complementary expertise in acoustics and scenography, while applying the most recent research results in various fields relating to listening space design. The company offers its acoustics expertise in the form of advice for contracting authorities as well as managing the entire process from design stages to final delivery. It integrates all aspects of listening space design in terms of acoustics: indoor sound propagation, insulation of noise and vibration from technical equipment and indoor (between rooms) and outdoor (from the surrounding area) sound insulation. In existence for over 20 years and specialized in listening space design, BEL ALTIA today benefits from a seasoned team of experts with experience working on highly complex projects, such as theaters and cultural spaces, as well as prestigious projects.

#### Projects:

BEL ALTIA's most notable work includes contracting authority support for the Philharmonie de Paris from the design stages to the completion of works; a great many acoustics projects for theaters, National Theaters, Zeniths, music academies, auditoriums, abbeys and churches; sound system improvement projects, including the sound systems in the hemicycle of the French National Assembly and the Grand Amphitheater at the Sorbonne...



## DESIGN AND PRODUCTION OF THE INSIDE JOURNEY SCENOGRAPHY – IMMERSIVE(S) GROUP:

#### **Museum Factory / Anamnesia**

Founded in Strasbourg, the French-German Museum Manufactory supports Alsace and Baden-Württemberg from Paris and helps contracting authorities to carry out innovative international cultural projects. Its team has over 25 years of experience in France and overseas. It also carries out cultural projects for bilateral cooperation programs, like the one currently between the German government and India. Museum Manufactory is coordinating and managing the teams working on the layout of the French Pavilion for Expo 2020 Dubai.

#### **Projects:**

Museum Manufactory's creations include the World Expo 2010 Shanghai and more recently, a Project Management Support contract for the Louvre Abu Dhabi. Museum Manufactory also designed and created the visitor spaces at the UN in Geneva as well as the European Parliament. Most recently, it was in charge of multimedia and audiovisual productions for the Royal Museum for Central Africa in Belgium...

#### **SNAIK**

SNAIK is a light design studio that produces exceptional light installations.

SNAIK produces architectural, urban and landscape lighting, scenography, street furniture, objects and light installations. From the initial sketch to completion, its architects, designers and graphic designers combine their poetic yet meticulous visions of light and regularly work with the conceptual artist Yann Kersalé.

#### Projects:

SNAIK's portfolio includes lighting for the Musée Du Quai Branly-Jacques Chirac in Paris, MUCEM in Marseille, the Old Port of Marseille, the Villa Medicis in Rome and the Airbus campus in Toulouse...

#### dUCKS scéno

Created in 1991, dUCKS has worked with talented architects on multiple projects. dUCKS scéno specializes in scenography design as well as set and audiovisual engineering on projects for all types of public space: theaters, operas, popular or symphonic music venues, exhibitions, museums, conference centers, auditoriums, public squares, gardens, libraries, educational establishments, campuses and foundations...

The dUCKS scéno team offers a range of skills and experience across professions related to scenography in a broader sense: architecture and design, set engineering, audiovisual and multimedia engineering, stage lighting etc. dUCKS scéno is a public limited company based in Villeurbanne and Paris, with a branch in Shanghai.

#### Projects:

dUCKS scéno's works include the Philharmonie de Paris, the Louvre Abu Dhabi, the National Museum of Qatar, the Lalique Museum, the Louis Vuitton Foundation, the Villa Carmignac on Porquerolles Island and Lafayette Anticipations in Paris...

#### **NUSSLÏ GROUP**

NUSSLI is one of the world's leading suppliers of temporary structures for sporting, cultural and business events. Founded in 1941, the Swiss company has developed proven highly technical construction systems. They provide the setting for all kinds of sporting, cultural and business events of all sizes. 450 specialists work every day on 22 sites worldwide bringing their comprehensive expertise, innovative ideas and a great deal of flexibility to a very diverse range of projects.

#### Projects:

The NUSSLÏ GROUP's projects include the Swiss, German and Egyptian Pavilions at Expo 2010 Shanghai, the Chinese and UK Pavilions in Milan in 2015 and the US, Spanish and German Pavilions at Expo 2017 Astana.











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