MILANO
FEEDING THE PLANET
ENERGY FOR LIFE

THEME GUIDE

THEME GUIDE

This Guide (the "Theme Guide") and the related
CD_Rom version are protected by Copyright
© Expo 2015 S.p.A. – Milano, September 2012
The republication, reproduction or commercial use
of any substantial part of the Guide in any manner whatsoever,
including electronically, without the prior written permission
of Expo 2015 S.p.A. is strictly prohibited.
This is a non – commercial document.

Edited by the TEG Tema working group
Editorial Coordination by Thematic Spaces Department
Contributions by Marco Amato and Stefano Karadjov
Images by Alberto Antoniazzi and YellowOffice
Renderings by Centro Sviluppo Realtà Virtuale S.r.l.
Cover page: woodcuts and engravings from
TATTI G., Della Agricoltura. In Venetia, Sansovino, 1560

CONTENTS

Reading guide 4

1 The Theme 8
1.1 Feeding the Planet, Energy for Life 8
1.2 The Concept 9
1.3 The Approach: Visitor Experience 13
1.4 Challenges Faced by Expo Milano 2015 13
1.5 The Intangible Legacy 17

2 Representing the Theme 20
2.1 "Everything is the Theme. The Theme is Everything" 20
2.2 Expressive Language 23

3 The Theme Becomes Reality 32
3.1 The Landscape of Expo Milano 2015 32
3.2 Thematic Areas 33
3.3 Participants' Exhibition Areas 48
3.4 Thematic Itineraries 56
3.5 Technological Framework 66

4 Theme Statement 67
4.1 Expressing the Theme Statement 67

5 Exhibition Project 71
5.1 The Showcase 71
5.2 Expressing the Exhibition Project 75

Forms 79

READING GUIDE

Expo Milano 2015 introduces a new model for Universal Expositions in the 21st century through an innovative thematic approach that pervades every aspect of Expo. Its success will depend on the committed engagement of all the Participants and their willingness to share their contributions to the Theme across a platform that gives a voice to all the players involved, and this idea forms the basis of the Theme Guide to Expo Milano 2015.

This document is designed to provide Participants in Expo Milano 2015 with guidance on the development of every aspect of the Theme they intend to present as part of their participation in the Milano 2015 Universal Exposition.

The first essential step in this process is the drafting of a Theme Statement by each Participant. This Statement represents an official document that will be submitted to the Organiser for review and approval and will then become a part of the Participation Contract. It will subsequently be supplemented with a more detailed Exhibition Project.

In the Theme Statement, each Participant is required to describe how it intends to interpret the Theme, 'Feeding the Planet, Energy for Life', in terms of content and approach, thereby maximising their participation in the Exposition as an opportunity to showcase their own particular points of excellence.

Chapter 1 of the Theme Guide describes the Expo Milano 2015 Theme, the Theme Concept and the challenges it poses for the Organiser and all Participants as regards scientific and cultural content and also in terms of legacy, i.e., the intangible assets that will remain after Expo Milano 2015 has closed its doors, as well as the central importance of the principle of Visitor Experience.

The second chapter offers a full description of how the Organiser has sought to face the challenges associated with the Theme in terms of architectural, cultural, scientific, environmental and technological planning and design.

The third chapter describes how the Theme will take concrete shape on the Exhibition Site through the development of the landscape, Thematic Areas, Participants' Exhibition Spaces and Thematic Itineraries.

The fourth chapter presents a guide to drawing up the Participant Theme Statement, specifying the detailed information that the Organiser will require from each Participant.

The fifth chapter contains information regarding the thematic development of the Exhibition Project that each Participant must draw up and submit to the Organiser after signing the Participation Contract.

Many of the topics presented and discussed in this Theme Guide will be the subject of specific presentations during the Second Edition of the International Participants Meeting in Milan on 10-12 October 2012, while other topics will be addressed in detail in specific Guidelines issued by the Organiser over the next few months.

Finally, we would like to draw Participants' attention to the "Strategy Document - Feeding the Planet, Energy for Life", recently issued by the Commissioner General for Expo Milano 2015, which offers some thoughts on the political and cultural implications of the theme. This document is a starting point for working together, to kick off debate and discussion amongst all the Participants who want to play an active role in the crucial decisions about food and sustainability: not only governments, institutions and international organisations, but also corporations, civil society and everyone who wants to make a positive contribution to finding new solutions for the common good. It is a platform for formulating ideas and proposals which will be the basis for future commitments and the Final declaration of the 2015 Universal Exposition.

1 THE THEME

1.1 Feeding the Planet, Energy for Life

"Is it possible to ensure sufficient, good, healthy and sustainable food for all mankind?" This is the question that underpins the challenge of the 2015 Milan Universal Exposition, as stated in the Registration Dossier and in the International Participants Guide. A question that only mankind – as the force behind an extraordinary transformation of the natural world - can answer.

Having nourished us across the millennia, it is now planet Earth that requires nurture, in the form of respect, sustainable behaviours, the application of advanced technologies and new political visions that will allow us to strike a new and better balance between our resources and our consumption.

Expo Milano 2015 can mark a key milestone in rethinking and recharting our path; a place where all countries of the world can come together around the same table and where concrete support can be given to the development and dissemination of a new, shared awareness of mankind's development and growth on our planet.

Events such as Rio +20 in Rio de Janeiro and the United Nations Millennium Declaration have set out a series of objectives and guidelines that Expo Milano 2015 seeks to take up and develop even further.

If nine hundred million people suffer from malnutrition while an equal number suffer the effects of overeating and a poorly-disciplined diet, it is clear that the theme of safe, healthy eating is a truly global issue that directly or indirectly involves most of the earth's population.

How can we ensure a healthy diet for all? How do food and health relate to lifestyles, physical activity and general wellbeing? How can we use resources in an environmentally sustainable way? How must our need for wholesome, healthy food influence our choices in energy production and the use of natural resources?

To provide responses to these increasingly pressing themes, the Organisers and Participants must work together to represent excellence in the methods, techniques and rules of food production, in strategies for achieving energy savings in food production and in the rational use of renewable energy resources and the conservation of natural resources; and first and foremost among these, water, the most basic source of nourishment for mankind and the earth itself.

Expo Milano 2015 thus seeks to be a 'collaborative' Expo, in the conviction that Universal Expositions in the 21st century should be occasions not only for dialogue between the various stakeholders in the international community,

but also for their active collaboration in addressing the main challenges facing humanity.

The application of best practices in agriculture, livestock farming, the adoption of genetically modified organisms (GMOs) and the conservation of biodiversity are all themes on which Expo Milano 2015 stands as a platform for discussion and collaboration; themes that not only involve the question of production but also the broader issue of the political and economic choices that face us.

Lastly, Expo Milano 2015 will also provide an opportunity for visitors to reflect on the history of mankind and food production, both in terms of the preservation and enhancement of time-honoured knowledge yet also seeking to discover new technological applications.

Notwithstanding the importance of the issues at stake and the urgent need to produce effective responses, Expo Milano 2015 also aims to uphold the positive spirit of faith in human progress that has characterized Universal Expositions throughout their history. By the same token it will enthusiastically represent the vital and positive energy that food has always brought to our civilization. Indeed, food has always represented the supreme gesture of hospitality and rituality, symbolizing and uniting our richly varied human communities. Expo Milano 2015 will thus be a celebration of life and a reaffirmation of human unity through a mutual exchange of knowledge and information.

1.2 The Concept

One of the most innovative elements of Expo Milano 2015 regards the conceptual approach to the Theme, rendered explicit in its title 'Feeding the Planet, Energy for Life'. This concept will be a vital leitmotif, cutting across all activities associated with the Event.

While the central theme is nutrition, and human nutrition first and foremost, the title chosen for Expo focuses not only on human nutrition but also on nurturing the environment in which we live, the place where the food we eat comes from.

It is a biological fact that our most fundamental challenge is to feed ourselves, ensuring our continued existence, whilst doing everything possible to ensure that our fellow humans also eat, thereby ensuring the survival of the species. And yet every forecast of the future availability of food resources for humans would seem to show that achieving these fundamental objectives is threatened by human behaviour and attitudes. To ensure the continuity of abundant food resources, we must try to understand how, in addition to feeding ourselves, we can also nurture the planet, our fundamental source of subsistence, and this is the challenge embodied by the Theme of Expo Milano 2015.

Expo Milano 2015 will be a stage where participants from all over the world can showcase the most innovative solutions to the problem of 'Feeding the Planet, Energy for Life'.

In order to provide a context and a yardstick for scientific progress in technology and agriculture, it is essential that visitors be provided with a

detailed representation of the theme of nutrition so that they understand the full ramifications and implications underlying the task ahead.

The starting point for any future project relating to food can be found by looking at what humans have produced and eaten to meet their food needs up to the present day; how we have transformed the natural landscape and the culture and rites associated with food. By examining the history of food we can identify and study the problems that existed and the solutions that were applied in the past. Above all we can come to understand and appreciate the role that food has played in shaping human history, thus enabling us to analyse our needs and to propose innovative solutions for the future.

The earliest recorded expressions of our ancestors focused on food, immortalising the fruits of their hunting experiences on the walls of their cave dwellings. One of the key traits that distinguishes humans from other mammals is our use of language; and our earliest stories were about food.

It was the procurement of food that spurred humanity along the long path of research and technological development. It was our early struggle for survival that spurred us to reshape our landscape, nature and the entire planet.

The history of humanity on the earth is the story of our relationship with the environment and with nature. We are both a part of nature and also its willing or unwitting transformer.

The elegant patterns of vineyards on hillsides, the mills driven by the flowing water of rivers and the boundless expanses of rice fields across the earth are all signs of humanity's attempts to make nature more bountiful and hospitable and have transformed the landscape, making it more amenable to our needs and productive for the continuation of our species. Deforestation, desertification and the countless barrels of crude oil spilled into the seas are likewise signs of the passing of humans that has transformed nature violently and at times irreversibly.

The survival of life on this planet depends on the future equilibrium between humans and nature, and Expo Milano 2015 will provide a benchmark in evaluating the progress we have made in this direction.

In order to formulate possible developmental scenarios for this relationship, it is essential that Participants and the Organiser represent as completely and exhaustively as possible the path that has led us to where we find ourselves today.

The transformation and change wrought by humans on nature can be thought of as a path made up of stages, moments, turning points: collecting fruit, cutting a path through tall grass, building a shelter and then planting seeds and burning wood were all part of an increasingly complex and collective process carried out by humans in their quest to modify their environment.

This path of progress embraces all of our food-related practices and habits, from the simplest and most archetypical to the most complex and innovative. Two distinct human activities characterise the transformation of nature: food consumption and food production, representing complementary pursuits.

Expo Milano 2015 asks Participants to reflect on this clear, understandable conceptual division when developing their projects for the Expo, thus facilitating and enhancing the visitor experience.

Food Consumption

By consumption, we mean any human activity relating to feeding an individual, from the most individual and spontaneous gestures, such as picking blackberries during a mountain walk, to the most complex and socially organized, such as dining in a city restaurant that can only be reserved online. All food consumed by people in various cultures, whether fresh from the fields or hunting grounds or in the many different forms in which it is prepared or stored, can be included here and illustrated and narrated at the Exhibition Site. This also applies to the various places where food is consumed: kiosks and stands for street food, the carts of itinerant vendors, or the domestic setting—whether a flat in a metropolis or a nomad's tent in the desert — with all its various associated customs and habits.

Every religion, culture or country has rituals associated with food consumption. This exhibition space provides an opportunity for them to be recounted, shared and experienced.

Participants are therefore encouraged to offer a broad array of food and beverages that represent their traditions and points of excellence.

From the eating habits of individuals to the typical characteristics of each country; from traditional crops to industrial mass production, as well as representations of food consumption on the imaginary landscapes of art, painting, the cinema, literature or photography, Expo Milano 2015 will embrace the full spectrum of varieties and expressions of food. They may be complementary or contrasting, indicating just how broad and complex the Expo Milano 2015 Theme is; a Theme that clearly lends itself to development and narration through a multidisciplinary approach.

Food Production

The other sphere of human activity regarding food is that of food production, i.e., all human activities geared to the creation of food, and it is this area of human activity that – even more so than more than consumption - has reshaped the landscape where we live. The concept of landscapes merits particular attention in this discussion. The existence of landscapes is implicit throughout and touches on all aspects of the Expo Theme. While not being a specific object of analysis, it is unquestionably an issue central to most proposals and issues that regard the planet.

Respect for the landscape invariably means ensuring a balanced ecosystem and a healthier life for animals and human beings. Landscape therefore plays a central role in food consumption and production.

The history of mankind is also the history of the evolution of our ability to produce food starting from our experience with untamed nature, when we had to distinguish between healthy seeds and poisonous fruits; between, animals that could be domesticated and raised and those to be feared, and gradually evolving to today's technological excellence in food production and conservation, as exemplified by industrial tinned, frozen and vacuum-packed foods. This spectrum embraces the arts of fishing,

livestock farming and hunting as well as the realm of expression and culture where we describe, narrate and represent these activities in artistic forms.

Expo Milano 2015 must also become an occasion for exploring the technology of entire food production chains, illustrating advanced technologies in the food processing industry and the associated infrastructures and logistical systems.

Reflection on these two sub-themes of consumption and production against the backdrop of nature provide an appropriate starting point for each Theme Statement as the quest for balance between mankind's need for food and the and the resources available to us.

This is, by nature, a shifting relationship that is hard to define and has to be invented on a case-by-case basis. It will be the challenge of each Expo Participant to find the best way of representing it.

1.3 The Approach: Visitor Experience

One of the innovative and distinctive elements of Expo Milano 2015 – as stated in the Participants Guide published in 2011 – relates to the concept of the Visitor Experience.

Expo Milano 2015 seeks to be both 'traditional' and 'innovative' at the same time. It will be a 'traditional' Expo because it will focus on the guiding principles of the BIE regarding the educational value of Universal Expositions, seeking to adhere closely to the theme of food and nutrition and ensuring a global, educational examination of the sustainability of good, healthy, sufficient and sustainable food for our planet.

It will be an 'innovative' Expo because in all of the forms in which it is represented it will make clear to visitors and the international community the essence of a new Expo concept: thematic, sustainable, technological and visitor-centred.

Tomorrow's Universal Expositions will probably not be remembered for the monumentality of their pavilions and other architectures, but rather for their contributions to themes central to the development of human civilization; themes that will be subject to close public scrutiny and universally broadcast during the event. It therefore becomes critical that the proper preconditions are established to ensure that the visitor experience will be transformed into interest, learning, knowledge and awareness. The Expo-visitor relationship will most surely underwrite the depth of this experience if each Participant stands as a paragon of this new vision of the role of Universal Expositions in the 21st century.

In practical terms, those who develop the Exhibition Site areas, the content of the Thematic Areas and Participant Exhibition Spaces, the architecture and visitor flows and dynamics must take into account the fact that the Milan Expo seeks to play a guiding role in the debate on issues relating to food, nutrition and resources and their clear ramifications at a planetary level. It will do so by creating an Expo that allows visitors access to dialogue with the Organisers and Participants, since dialogue is one of the fundamental premises for any process of learning and education.

The concept of visitor engagement thus becomes the starting point for shaping the design, structure and quality of Participant involvement. The contribution each Participant brings should be structured so as to ensure that this two-way information flow — from constructed elements to the visitor via thematic content and vice versa — becomes the model that shapes its presence at Expo Milano 2015.

1.4 Challenges Faced by Expo Milano 2015

The forthcoming Universal Exposition in Milan, dedicated to the manifold social, anthropological, scientific, environmental and economic aspects of food, has an overarching symbolic value that extends well beyond the individual technical and expositional aspects that are the vehicles for the content offered to visitors.

It is therefore opportune to analyse the broad scenarios encapsulated within the theme of good, wholesome, sufficient and sustainable food.

A number of questions may be posed to help contextualize the forthcoming Expo and to foster its recognition as a new model for Universal Expositions of the 21st century:

- Should the world demographic equilibrium be assured in this century by the continuation of current systems of food production and by the prevention of global food risks?
- Do we wish to ensure that the next generation will have the technological means and the natural resources that will allow them to do likewise with the generation that follows?
- Do we intend to conserve biodiversity as it continues to dwindle ever further?
- Do we deem it necessary to redefine the concept of nutrition, associating it not only with the attributes of a healthy and balanced diet but also with that of total wellbeing in which historical, cultural and ethno-social aspects are accorded value alongside purely nutritional aspects?

The responses to these types of question will shape the stage on which the challenge of Expo Milano 2015 will be played out.

Universal Expositions have never sought simply to propose 'regulatory' solutions: the spirit of the Expos has always championed the value of a multiplicity of responses, the opening of new paths and the encouragement of new questions. If anything, it is this very spirit that has implicitly invited Participants to choose "the road less travelled", as Robert Frost put it.

During the six months of Expo Milano 2015, it will be possible to see and hear how the Participating Countries, International Organisations, representatives of Civil Society and businesses have interpreted these challenges in exhibitions, debates, conferences, events, publications, essays and educational and thematic itineraries. Visitors will also have the chance to sample traditional dishes from all over the world and learn about the many alternative types of products, projects or customs on display.

When preparing their role in Expo Milano 2015, each Participant will be asked to keep in mind such keywords as 'genuineness', 'safety', 'security', 'innovation', 'research and development', 'education', 'women and nutrition', 'environmental sustainability', 'variety', 'diversity' and 'quality'.

The challenges presented by Expo to Participants are even more current given the proximity of Expo Milano 2015 to the United Nations' deadline for its Millennium Objectives[1].

One important challenge that Expo Milano 2015 will address in its Theme is that of gender, seeking to highlight the role of women in relation to such crucial aspects of the Expo Theme as nutrition and food safety/security, food production and preparation. In most countries, it is women who manage the household and are employed in the agro-foods sector, and when breastfeeding their children, women provide the initial source of nutrition for

[1] The Expo Organiser is already working closely with the United Nations on a shared action plan. See section 3.3 for more details.

virtually every human being. In rural societies, the role women play in ensuring the constant supply of sufficient food to meet people's daily calorie needs has been recognized by the United Nations as being of central importance, and for this reason the U.N. actively promotes enhanced access by women to resources, credit, education and training as part of sustainable development projects.

The central role of women will be recognized, promoted, discussed, and debated in the Women & Expo initiative. All Participants are invited to take part in this initiative, which will be illustrated during the International Participants Meeting to be held in October 2012.

Expo Milano 2015 and the United Nations Millennium Development Goals

The Expo Milano 2015 Theme is linked to certain objectives, including:

- The first: eradicate extreme poverty and hunger, and reduce by 50%, the proportion of people throughout the world who suffer from hunger;
- The fourth: reduce by two thirds the mortality rate for children under the age of five years;
- The fifth: improve maternal health and, in particular, reduce the maternal mortality rate by three quarters;
- The seventh: ensure environmental sustainability, in particular by supporting sustainable development policies and programmes in order to reverse the loss of environmental resources and reduce biodiversity loss;
- The eighth: develop a global partnership for development.

Expo Milano 2015 has chosen to interpret its Theme according to the scheme introduced in the Registration Dossier, broken down into three broad categories: 'scientific-technological'; 'social-cultural'; and 'cooperation for development'. The development of these areas will require maximum effort from all those involved, and for this reason a number of ideas are presented below to help Participants fully understand these three dimensions of the Expo Milano 2015 Theme.

Scientific-Technological Approach

The development of the Theme includes all scientific observations, production processes, public policies, rules regulating food safety and quality for the balanced and sustainable development of individuals, agricultural and silvicultural systems of production, livestock farming operations, marine resources and production chains.

The history of mankind is rich in examples of different ways that human beings have reshaped the natural world in their efforts to obtain food. Technology and engineering have modified our fishing and hunting methods,

livestock farming practices, crop cultivation, food processing and preservation, and food distribution and consumption methods. At Expo Milano 2015, the ability of human beings to transform the natural world to ensure a supply of food can become a central focus of the dramatization and narrative that the Participants will enact.

Participants who include the scientific-technological approach in their projects should guide visitors along a path of adventure to discover the hidden resources of nature, new ways of interacting with them and the processes that underlie the food production chain. Sustainability must be the guiding light when analysing all the segments of the agro-food chain.

The journey through the various segments and aspects of the food production chain to discover the wide variety of products, methods and processes must highlight the people involved in them. A food product not only communicates natural values but also human values linked to research and development, food processing and food distribution.

The different types of expressive language that can be used to illustrate these topics include debate and discussion on concrete case histories and good practices, exhibitions of projects and products and the production and staging of shows, plays, films and multimedia presentations.

Socio-Cultural Approach

The socio-cultural approach to the Theme embraces all scientific, educational, and illustrative programmes aimed at educating people in healthy and balanced diets that are implemented by countries, scholastic institutions, families, businesses and civil organisations. The purpose of these programmes is to harmonize respectful relations between individuals and their environment via fair and equal access to resources by all peoples and populations, without waste or unfairness, and to promote encounters and exchanges between people with different social and cultural identities and different food traditions, that are seen as a form of intangible cultural heritage linked to language, arts and traditional jobs and crafts.

Expo Milano 2015 also invites Participants to interpret the Theme through initiatives whose aim is to disseminate awareness of the need for proper and healthy diets in terms of both quantities and constituents, and the need to fully meet human nutritional needs while respecting the dignity of individuals and the natural system of which they are part. Against this backdrop, food education may be seen as way of gaining knowledge about ourselves, our physiology and our needs, while opening the mind to awareness of the social, economic, and cultural dimensions of the food experience—including the experience of want—and its meanings and traditions.

In keeping with BIE principles whereby Universal Expositions have a high-profile educational purpose, Expo Milano 2015 places food education among its primary objectives.

By placing the emphasis on agricultural systems and all types of food processing and distribution systems (particularly industrial systems), it is possible to focus visitors' attention on the specific professional skills required

to respond to the challenge represented by the fight against hunger and malnutrition, as well as overeating and poor diet.

But throughout history our need for food has also been a pleasure. The practice of sharing food with others or eating in company has done much to 'nurture' our culture, starting from the banquets described in Homer's Iliad. Expo Milano 2015 therefore offers a unique opportunity to link food and its nutritional meanings with the profound cultural, artistic, literary and even "poetic" connotations that shape the regional identities of the entire world. Expo Milano 2015 will also be a vast global table where people will gather to share stories, tales, legends, and myths. And this is why the best way of dramatizing these social-cultural symbols is through artistic performances, cooking demonstrations, discussions about educational good practices, interactive exhibits and really any form of narrative presented through any type of medium.

Cooperation for Development Approach

This approach to the Theme of 'Feeding the Planet, Energy for Life' can be described as any methods and tools of cooperation whose purpose is to reduce hunger, malnutrition and social imbalances linked to access to food, as well as any programme aimed at distributing investments in order to obtain effective results in developing poor rural areas and urban areas in Developing Countries.

Partnership agreements take on special relevance here because they seek to respect the roles and specific needs of the people directly involved.

This approach exhibits a more evident adherence to the themes of the Millennium Goals since food security, because universal access to healthy, good, and culturally appropriate food is its central theme. Expo Milano 2015 will invite Participants, and especially national and local governments, International Organisations, civil society and research institutions to illustrate and explain their cooperation and innovation projects.

Exhibition, audio-visual and multimedia projects, events, conferences and fundraising campaigns are the most appropriate way of conveying the results of these good practices.

1.5 Intangible Legacies

One of the most important challenges of Expo Milano 2015 will be the legacy that this planetary event will leave to the international community. The unstated ambition behind the principles expressed above is that this Universal Exposition will remain live on well beyond its 'natural' temporal durations.

'Feeding the Planet, Energy for Life' sums up the most important issues that human beings must address in an effective manner to safeguard life on the planet. A balance between natural resources and the production of food and energy is a fundamental condition for ensuring the survival of the system, with this balance being globally recognized in the concept of 'sustainable development'.

Environmental issues, including climate change, food security, preservation of biodiversity in both natural and agricultural systems and alternative energy sources, are central themes at the Milan Expo, while other central elements include technological innovation, a multidisciplinary outlook, the joining of experience and competencies, dietary education and information.

We generally think of the legacy of an event in material or physical terms. The great and daring examples of architecture erected in the past have communicated a strictly 'infrastructural' vision of the legacy of Universal Expositions, with the profiles of the buildings symbolizing the various events impressed in our memories.

On the other hand, all one has to do is to visit a metropolis that has recently hosted or is preparing to host a major world event (not just Universal Expositions but also, for example, the Olympics)—think of Barcelona, Shanghai, or London—to see the significant impact the event has had on transport infrastructures, urban design, and the transformation of certain areas of the city which, in the case of redevelopments of waterfronts or riverfronts, can change the whole perception of a city.

Expo Milano 2015 wants to develop the intangible legacies of an event such as a Universal Exposition. Unlike tangible legacies, intangible legacies are the product of the combined contributions of all Participants, because the nature of their participation—the content, the worldview—is that thing that can leave a message and a meaning that will endure over time and serve as a guiding light in the near future for the lasting development of the Expo Theme.

Education and Innovation

An important intangible legacy from Expo Milano 2015 will be widespread awareness of the Theme, as a result of the educational process that the Participants and the Organiser will be able to encourage by focussing their participation in Expo on educational and edutainment criteria. The importance of the educational aspects of the contents as a common denominator of Expo derives directly from the scientific-technological and socio-cultural approaches mentioned above and from development cooperation. This declaration of intent is, first and foremost, a strong suggestion to Participants to incorporate an educational element into each show, installation, event or performance they intend to organise in their exhibition spaces. With this in mind, the people responsible for planning each Participant's approach to Expo are encouraged to take into account the following questions:

- What healthy dietary models can be illustrated and promoted?
- Can healthy eating be a positive force in promoting sustainable development?
- How can ICT and new technologies be employed during Expo and especially after it has finished to promote an on-going exchange of information about food security and about the problem of access to food to solve malnutrition?

Awareness and Action

Expo Milano 2015 invites Participants to present solutions that can:

- promote reduction in wastage where it occurs (in the excessive production and consumption of wealthy societies, in the backwardness and resistance to innovation of more traditionalist societies, etc.);
- provide incentives for the adoption of 'green policies' specifically addressed to reclaiming land and biological assets in order to reduce the decrease of biodiversity, achieve stability and reverse this trend;
- educate young people about the links that man has established with his environment, wherever it may be, by developing models of coexistence between cities and the countryside which historically require a certain amount of hybridization of the two areas.

Thanks to these concepts, Expo Milano 2015 seeks to be the forerunner of a new approach to the theme of Universal Expositions.

Feeding Knowledge to "Feed the Planet"

'Feeding Knowledge' is a programme that lays the foundations for the Expo Milano 2015 legacy. Within a framework of international cooperation, its purpose is to generate and spread knowledge and information about the relationship between natural resources, food security, and biodiversity.
This programme was recently launched by the Expo Company in partnership with the Politecnico di Milano and the international Centre for Advanced Mediterranean Agronomic Studies (CIHEAM) and aims to promote the creation and coordination of 'Communities' around the Expo themes, uniting the interests and skills of different countries and testing a new strategy of international cooperation based on the awareness that sustainable development is not a theme for individual countries but is for all countries.
The programme will create an operational 'entity' that:

- generates knowledge flows in the main fields relating to Expo Milano 2015 via a systemic network;
- promotes innovation processes in the technological field and in terms of methodology;
- contributes to the development of human capital and professional skills, especially in applied research, through tools that promote the mutual involvement of science, institutions and end users;
- develops the tools and results of Italian and international cooperation, especially North-South and South-South solidarity initiatives;
- supports businesses that undertake internationalisation processes while embracing social responsibility, equity and environmental sustainability.

2 REPRESENTING THE THEME

Expo Milano 2015 will be a Universal Exposition that offers a unique learning experience. While paying careful attention to what's going on in the world today, it is draws upon and reflects key developments in the various fields of knowledge which influence the Theme, "Feeding the Planet, Energy for Life".

From the beginning, Expositions have always provided a privileged showcase for human creativity and intelligence by turning the spotlight on the best that each country can show the world at that particular moment of history. Whether this means scientific discovery, technological innovation, architectural design or artistic developments, Expositions have always presented the most ambitious and up-to-date achievements of mankind. This showcase has been the natural response to the need to identify a unique collective moment to promote and make available knowledge, patents and the most important innovations destined to play a role in the overall improvement of society in the near future.

Modern Expos continue to show what is new, and this role is still of primary importance, although the form and exposition methods adopted by the Organiser and the Participants have undergone significant changes. The progressive 'dematerialization' of the contents in favour of proposals of a more intangible nature is a tangible sign of how the very concept of the Exposition has been brought up-to-date. Greater attention is now given to an awareness of the great themes of humanity (water, quality of life and food, all of which were themes of the most recent Expos in Zaragoza, Yeosu and Shanghai and will of course be themes of the next one in Milan), together with the presentation of the most advanced examples of technology and techniques.

This does not mean that design and architectural creativity will in any way play a lesser role in the present and in future Expos, but rather that Expo Milano 2015 will propose a new way of doing things in which the physical and spatial dimensions of the Site and the Exposition Spaces will be in keeping with the chosen Theme.

2.1 "Everything is the Theme. The Theme is Everything"

In the Participants' Guide, Expo Milano 2015 declares that "Everything is the Theme. The Theme is Everything."

This statement encapsulates the spirit of an Expo that has little interest

in being remembered in history for new, vertical monuments or the unusual nature of its architecture. What Expo Milano 2015 is interested in is achieving the important (but absolutely tangible) goal expressed by the Theme of the Exposition, and here lies a further challenge that Expo confronts Participants with: develop the Theme in all its parts. This means that the Organiser is asking Participants to incorporate the Theme, "Feeding the Planet, Energy for Life" into every aspect of their contribution (including the physical structure of the Participant's Exhibition Space), so that in this way it can really be said that the Theme will be everywhere.

The Theme will therefore be present in many different spheres, from the architecture of the buildings to the cultural, scientific and technological aspects.

Morphological-Architectural Dimension

Expo Milano 2015 will incorporate the Theme into the exposition without having to depend on any artificial simulation or documentation that can today be accessed from any computer screen. It will be an Expo that will overturn the concept of monumentality. There will be no examples of monumental architecture (as happened with the Eiffel Tower in Paris in 1889), but rather the recreation in Milan of a hitherto unseen landscape of monumental lightness and natural beauty.

This declaration of intent is obviously intended to apply to the design of the Exposition Site, but it is also meant as a suggestion for Participants to ensure that the exposition structures themselves are designed in relation to their content and add to their significance.

Socio-Cultural Dimension

If the word that best describes the relationship visitors had in the past with previous Expos is 'see' (to 'see' the Expo, to 'see' the Italian Pavilion, etc.), Expo Milano will re-define this relationship with the word 'do', as in 'do the Expo'! The key point which the Organiser and the various Participants (the Countries, the International Organisations, Civil Society, etc.) should focus on is therefore no longer confined to what they can 'show' the international community. Every sphere of human activity in some way involves individuals in the consequences of a particular choice or decision, with each person taking some part in it. However, since nutrition is such an important and constant theme for the entire human race, each of us in every context has a more significant 'share' in the global responsibility and consequences of the individual choices we make. More than in any other aspect of our lives, this share can be determined by the decisions made to produce, share, transform and consume food and, in a wider sense, natural resources in general. In other words, we are dealing with a radical change in attitude in which the role of education plays the most important part, if not in the means adopted, then at least in the objective that Expo must put forward for that great global project, the aim of which is to leave an intangible legacy for future generations.

We are obviously dealing here with an ambitious mandate, to which the Organiser and each Participant can contribute: to guarantee the engagement of the visitors by educating them about the Theme, so that the growing social and spiritual awareness of individuals and communities can have a positive impact in the long term.

This means that choices will be made that guarantee, on the one hand, the objectivity of the contents proposed so that (even if they prove to be controversial) they will find a platform for dialogue guided by informed scientific criteria; while on the other hand, these choices will guarantee their ability to express and communicate ideas through exposition choices that combine entertainment and the spreading of knowledge.

Scientific-Environmental Dimension

Expo Milano 2015 not only presents a series of challenges to the present and immediate future of mankind, but its chosen Theme is also projected into the near and more distant future since the enormous and far-reaching consequences of the actions of human beings force communities to seriously examine the sustainability of the economic, social, production and scientific models that will be implemented in the long term. Therefore, we must reflect deeply on the consequences of our actions for future generations, which is something that directly concerns the contents of the Thematic Areas and of the Participants' Exhibition Spaces, and this must also become a tangible expression of a new approach to the management of big public events, of which Expos are probably the most well-developed example.

Sustainability in the construction of the buildings and their daily operation during the six months of Expo must represent the main source of inspiration for the architectural designs. The technologies needed to give voice to the contents of the different exposition environments, as well as the fittings and furnishings chosen, must express the immediate adherence to the new order that is being proposed: a harmonious relationship between humans and nature that is directed towards guaranteeing the conditions needed for environmental sustainability.

The concept of environmental sustainability will be central to participation in Expo Milano 2015 and will be seen:

- in the thematic content, i.e., in the exposition programme, and in the events and performances promoted by the Participant while expressing the Theme of "Feeding the Planet, Energy for Life";
- in the exposition venues and, more specifically, in the techniques and materials used to build the Pavilions and other structures on the assigned lots;
- in the way in which participation at Expo Milano 2015 is managed during the six months of the Event, from catering and food supplies to waste disposal, etc.

In particular, the Organiser wants to ensure that Participants will enjoy the best possible conditions in which to show all the ways to apply and spread

the use of sustainable building and management models. Expo Milano 2015 requires that the buildings used for the Exposition are authentic 'workshops' of sustainability.

The spreading of awareness in this area, together with the creation of environmental sustainability themes are indirectly related to the education objectives of Expo Milano 2015, and as such they should be considered to be part of the intangible legacy of the Exposition. Each Participant is invited to adopt the most appropriate exposition strategies to show members of the public who come to the Expo how it has optimized the use of resources and materials.

Therefore, the Organiser asks Participants to present design proposals that as far as possible aim to reuse and recycle components and materials once Expo has finished. The priority should be given to building solutions that use materials that have a low impact on the environment or that have a high percentage of materials that can be recycled and reused. The Organiser also asks Participants to choose solutions of high sustainability for all aspects of their participation at Expo Milano 2015, from catering management to the organisation of events. The Organiser will be responsible over the next few months for compiling and distributing specific Sustainability Guidelines that will illustrate in detail the choices made by the Organiser, while providing specific rules and regulations for Participants.

2.2 Expressive languages

Expo Milano 2015 aims to ensure that visitors will have an unforgettable experience in terms of culture, education and entertainment, and since food and nourishment has a strong sensory component, the Theme of Expo Milano 2015 is particularly suitable for achieving this. Visitors can experience this for themselves by tasting new food and by exploring what is on offer in the areas of food research and science.

To turn this into a memorable experience, a variety of tools and strategies must be used to rouse visitors emotionally and draw them into something that involves them personally as they tour the Exhibition Site. For this reason, the visit should be a game, a performance, an opportunity to try new food and drinks, since these are all essential elements for attracting the attention of members of the public who are already, thanks to their daily sensory experience, stimulated through the consumption and production of food. The visit should be all of this while also providing an ever more attractive combination of interactive experience and entertainment. The Exposition has to present a meaningful and engaging treatment of a theme that is a part of everyone's daily routine, so that once visitors go home, they should both want and be able to try out what they have learnt from the Exposition in their own domestic or urban environment. The Exposition should allow the public to take away with them a sense of having seen and experienced something new, something they will remember and enthusiastically transmit to other potential visitors.

Four main areas have been set out to represent the Theme:

- architecture;
- performance content;
- food services;
- technology.

The visitors' first contact with the Theme will be through the architecture presented by the Participants.

The Exhibition Space must become the expression of the contents it presents and not just a 'container', regardless of how outstanding the design. The architecture must blend into its landscape setting and become an expression of the food, drink and performance events that will be presented there, while at the same time evoking the idea of 'sharing' that is intrinsic to the theme of food.

Contents should be presented with such expressive dynamism as to engage visitors on a personal level and put them at the forefront of the cultural and formative experience that those contents themselves represent. This Exposition aims to concentrate on the performance aspects of its content, to 'be its content' rather than following the model of more traditional display-oriented expositions.

Any Expo that talks about food cannot exclude the experience of trying out new food and drink, and all it embodies as an expression of cultural excellence. Each Participant should aim to present the best their Country, Nation or Region has to offer, including aspects of sustainability alongside the obvious attention to quality in food and drink.

This attempt to represent the Theme must be based on an innovative use of the most advanced technological tools available to guarantee a winning interactive experience that is well tuned to the individual needs of each visitor.

The Theme is Architecture

The architecture is the first, physical contact the visitors have with the Theme. Expo Milano 2015 seeks to be remembered as an Exposition where the material intervention on the Site is kept to a minimum, so that it fits in completely with and appears almost to be a natural extension of the surrounding landscape.

To ensure this intangible legacy, the emblem of a sustainable approach to construction, the Participants' architectural designs must complement the surrounding landscape and the Site. The landscape should not be obstructed by the sight of vertically oriented buildings but should instead be developed with light, horizontal constructions that play on the contrast between alternating full and empty spaces. The architects should choose materials that reflect the Theme and the identity of the Participants, and these choices should be characterized by a quest for technological innovation. The ground floor of the buildings should be conceived as a fluid spatial exchange between external and internal spaces, where visitors can

maybe eat in the open air. The Site masterplan has been made as simple as possible with two perpendicular axes that are clear references to the ancient layout of Roman towns, while water surrounds the Site and decorates many of the areas open to the general public. The Site itself presents the greatest possible biodiversity in the many vegetation elements that represent the real Energy of the Planet.

Comparable to a large park, the landscape design of the Exposition Site expresses the close collaboration between Participants and the Organiser.

The attention of each individual architect must, therefore, be focussed on leaving spaces open and uncluttered so that visitors can move through them easily as they leave and re-join the pedestrian walkways of the two axes, the Cardo and the Decumanus. Visitors must be able to move around freely from one exposition space to another, and must be able to glimpse from within one area the landscape of another so that a continuous and cohesive visual narrative is created.

Participants are invited to consult the Organiser at all times in order to make sure that their design projects are in step with the designs of the other Participants and integrate as closely as possible with the Exposition Site infrastructure.

The architectural solutions adopted must explicitly express the contents they represent. The choice of building materials, the way in which the members of the public can use the building and the very concept on which the design project has been conceived must represent the contents and provide an example of the Good Practices illustrated within it. If, for example, an exhibition in a Pavilion describes the best ways to increase the sustainability of a certain type of food or farm product in

a specific ecosystem, this same language should be clearly reflected in the building or structure in which it is housed, in the materials chosen for its construction and in the vegetation that may be used both inside and outside the structure to show what the Participant's home environment is really like.

The architecture can also be provocative and bring out contrasts relating to the themes of sustainability presented inside the Pavilion. It can show in a very clear and physical manner the conflicts between the sought-after sustainable food production and consumption practices and the bad habits actually practiced. Finally, the architecture can become part of the content if it is conceived as an installation, something that can interact with members of the public, who can modify and transform it during the six months of the Exposition through either informed, responsible and sustainable behaviour or, on the contrary, by acting in such a way as to damage it[2].

The Theme is Both Content and Events

It is precisely the way in which the contents are to be presented that the challenge thrown down by Expo Milano 2015 presents its most decisive and enthusiastic face. While the architectural representation of the Theme indeed offers important opportunities for creativity and innovation, it is the way in which Participants represent the content that constitutes their most significant response to the theme of sustainability and the challenge of feeding the planet. Participants must endeavour to express their own content not only by seeking to educate visitors to the Site, but also by entertaining them. Visitors must be allowed to contribute to the contents and play a part in their presentation. The gap to be bridged in any presentation lies between a direct reading, where visitors are passively exposed to the content and pick out the elements and information they believe they need, and a more interactive and creative approach where, through a performance of some kind, visitors find themselves immersed in the object of analysis, experiencing the positive or negative consequences of a particular course of action on a personal level and being asked to intervene and modify it. From this experience visitors can reflect upon and enhance their awareness of the issues at hand, even if they are only given a small taste of the reality. The goal is that this awareness will endure and that they will take it with them when they leave the Exposition and apply it in their daily lives.

Participant will also be asked to contribute to a programme of events, performances, shows, food and drink tastings and demonstrations of their food culture, with the aim of involving members of the public as much as possible.

[2] For more details on building criteria please consult the "Guidelines for Construction and Installations"

By involving artists, thinkers, chefs and journalists to 'do', 'tell', 'recite' and 'cook', the Theme could be an excellent opportunity for Participants to present the best their Nation, Region and Culture offers in terms of arts, technical skills and theatre by offering comments and suggestions on the Theme 'Feeding the Planet, Energy for Life' and on how to address the challenges related to the Theme.

Participants can put on their own events inside their Exhibition Space, in the reserved areas in the Cluster zones or in the Site's public areas, such as the Lake Arena, the Expo Centre and the Open Air Theatre. Events such as shows and food and drink tastings can also be staged for visitors who are waiting to enter the Site, or itinerant performance events can start in the public areas and then move with the flow of visitors to the exposition areas. The content and events staged by all Participants and the Organiser will thus transform Expo Milano 2015 into a great occasion for education and spreading knowledge, and also a great occasion for entertainment and communication. For six months the Exposition Site will become a global theatre for the history of food and the future scenarios. Over the next few months, the Organiser will distribute specific Guidelines to the Participants regarding the Events that they can stage around the Site and in their specific Exhibition Spaces during the six months of Expo Milano 2015.

The Theme is Also Present in the Restaurants

Expo Milano 2015 provides a unique opportunity to make the Theme not only a theoretical experience but also a practical one, where visitors are able to fully experience the theme presented by each Participant and taste the best food products from all round the world. Embracing the theme of food within a Universal Exposition is an explicit invitation to all Participants to offer visitors examples of their gastronomic, culinary and catering excellence. Besides offering opportunities for discussion, research and a broadening of our understanding of the issues related to feeding the world, the Exposition must also maintain its identity as an opportunity for the different peoples and cultures of the world to meet and learn more about each other. In this context, food and nutrition have always played an important role in the history and culture of every people. Food shows people's habits, it is part of their rituals and often represents an element of excellence that is immediately identifiable. Therefore Expo Milano 2015 presents all Participants with a further challenge, a global challenge, whereby each Participant is invited to present the best, most exclusive and most unique products of its gastronomic culture.

The aim is to make sure each Participant also serves its food in the most original and spectacular way possible, just like the rest of the exposition content.

It is essential that what is on offer can, therefore, be interpreted according to criteria of excellence and sustainability. Food distribution and presentation should show the product in a visually interesting way, in keeping with the overall architecture of the Exhibition Space. Food producers, restaurant managers and product preparation and consumption should all be chosen and managed with care to ensure high standards and a rewarding food experience.

Ideally Participant should provide at least two types of catering services with one aimed at the wider public, offering good, standard catering to the thousands of visitors who will fill the exposition spaces each day, and the other aimed above all at providing a quality menu at the top end of the market, for those who would like to book dinner and enjoy the highest culinary excellence the Participant can offer. These two different approaches are obviously each aimed at a different type of clientele, therefore they should use different products and service solutions. Fast food could be one of the standard catering options since this is practical to eat even while standing and can be prepared for large numbers of visitors, while it also allows members of the public to move around while they eat, prevents the creation of bottlenecks and queues and promotes a freer flow of visitors around the Site. On the other hand, quality restaurant services could offer the opportunity for small groups of visitors to really evaluate the highest quality cuisine on offer and to compare the culinary innovation represented throughout the Exposition.

It is possible that Expo Milano 2015 will stay open until late at night for members of the public who wish to attend top cultural events and shows, and since this will encourage different types of people to use the refreshment areas at different times, it will be an ideal business opportunity for Participants. However, in order for this to happen it is essential that the planning and programming and the spaces themselves are open and flexible, in order to satisfy the requirements of these different types of customers and programmes.

Finally, just like every other part of the content offered by Participants, the catering must be in harmony with the general Theme of the Exposition. Every aspect of food service and consumption must be chosen in relation to the basic themes. Health, food security and safety, together with the paradox of simultaneous abundance and want, are not just subjects that we contemplate and then immediately discard as we return to our daily eating habits. At Expo Milano 2015, every opportunity for sampling or eating food must encourage both the provider and the consumer to think about the question of sustainability. This awareness must be explicitly declared by every Participant through communication and catering strategies developed through painstaking consideration of the issues involved.

For catering, just as for architecture and content, the Organiser will ask Participants to adopt all the procedures that are in line with the Sustainability Guidelines set out for the construction and management of the Exposition Spaces, as well as for all the production processes to be set up within the Exhibition Site.

The Theme is Technology

The universal significance of the Theme of Expo Milano 2015 will find a broad audience thanks to the innovative use of the latest technology. This technology will also be made available to Participants to help them fully communicate their content and represent the Theme both inside and outside their Exhibition Space.

Expo Milano 2015 will embody a vision of future cities based on the intelligent, innovative, sustainable and entertaining use of the most advanced Information and Communication Technology, and it will address the Theme,"Feeding the Planet, Energy for Life" by creating a prototype Smart City. Smart Cities are physical and mental places where intelligence networks are perfectly integrated into the technological networks that empower connections and relationships. In the case of Expo Milano, the concept of the Smart City will not only apply to the Exhibition Site but will also physically involve the entire metropolitan area. In this way, visitors to the Universal Exposition will be able to access the most advanced services and knowledge available. These will include:

- geolocation, with personalised content proposals and suggestions;
- smart ticketing for purchases, secure proof of identity, support strategies for visits;
- smart SIM-cards for identification, data registration, data and identity checks and mobile phone applications;

- virtual visitor identification on entrance to the Site, and personalization of the thematic itineraries and experience of the exhibits in each Exhibition Space (with Smart RFID systems);
- interactive signs and signals suggesting alternative routes around the Site to avoid possible bottlenecks and queues.

In addition to the construction of the Smart City, the Organiser also aims to develop a digital multi-platform event, Cyber Expo, that will allow hundreds of thousands of people not visiting the Site in Milan to enjoy a virtual Expo that full reproduces its content. Another advantage of Cyber Expo is that the Exposition can be enjoyed even after the Event closes, resulting in a highly enriching experience for Expo visitors. As a result of this, the Organiser and each Participant will be required to be presents not only on the Exhibition Site but also in the Cyber Expo system.

Expo Milano 2015 aims to allow every visitor, both real and virtual, to experience its content through an efficient strategy based on digital infrastructure that uses well-known tools and an open online forum. In other words, the traditional function of collecting 'official' news from the Organiser and the Participants will be complemented by a platform from which the Theme, "Feeding the Planet, Energy for Life" will be communicated and shared.

During the next International Participants' Meeting, the Organiser will present details of the innovative technological solutions that will be adopted in setting up the Event, and a special catalogue of technology services that the Participant can use will also be drawn up.

3 THE THEME BECOMES REALITY

3.1 The Landscape of Expo Milano 2015

The Exhibition Site has been planned around the concept of a 'landscape', in order to fit in with the intention of the Organiser to ensure that the entire area to be used for the Event will be designed, or rather created with the aim of constructing a space that meets human needs but is still in total harmony with nature. Participants are invited to pay careful attention to this aspect of the relationship with nature when planning their architectural approach to their Exhibition Space.

In this way, the Organiser hopes to involve each visitor in both an emotional and educational experience. Shared care for an open space requires a community ethos and an awareness that the consequences of any action will be shared by the entire group and that, for better or worse, every decision taken and every choice made affects the equilibrium of the system.

Those responsible for the design and planning of the Participants' structures and their content must take this vision of an ecosystem into consideration. In this way, a single, all-embracing design can be identified and carried forward. The great care and attention given to this open space will ensure that an immediate positive relationship between humanity and nature is engendered by the simple act of strolling through the Exhibition Site.

Within this natural setting, the project has been simplified as much as possible in order to give Participants the greatest freedom of expression The rectangular grid on which the Site design is based is a direct reference to the urban layout of ancient Roman towns; a structure that can still be seen in many places today.

The system, based on two axes, will very simply and naturally give the visitor a sense of direction and will separate the different participating countries. All the Self-Built Exhibition Spaces will face onto the World Avenue (corresponding to the Site's Decumanus), while Italian Participants will occupy the Cardo.

The Decumanus, where the various countries' National Exhibition Spaces will be located, will be one long narrative of architectural and visual experience and heritage from every part of the globe. Here visitors can sample the widest range of food and wine from different traditions, and directly experience worldwide culture for themselves. The Expo Centre, a roofed venue for indoor events, will be at one end of the Decumanus while the Mediterranean Hill will be at the other.

To the north of the Cardo is the amphitheatre on the Lake Arena, and to

the south there is the large Open Air Theatre. The Exhibition Spaces dedicated to Italy will be situated along the Cardo, interspersed with areas where characteristic Regional products from all over Italy can be sampled. These areas will be characterised by the high quality of the products and the ingredients used, and will serve to highlight the best food traditions of the host Country.

Piazza Italia, the central square of the Expo, lies at the intersection of the Cardo and the Decumanus, and during Expo the nearby Palazzo Italia will host meetings between the host Country and Participants.

The Canal is one of the main characteristics of the landscape and encircles the Expo Site. The Site itself is a simple rectangular shape that allows the architectural structures to blend in with the natural elements, creating a highly pleasurable venue for visitors to enjoy.

All the structural elements, including the service area with refreshments and business, security, toilet and visitor facilities (postal services, cashpoints, etc.), will be designed with the aim of creating a sense of overall harmony. These buildings are designed to be welcoming to the visitor and, together with the open spaces, to help create a soft, gentle landscape.

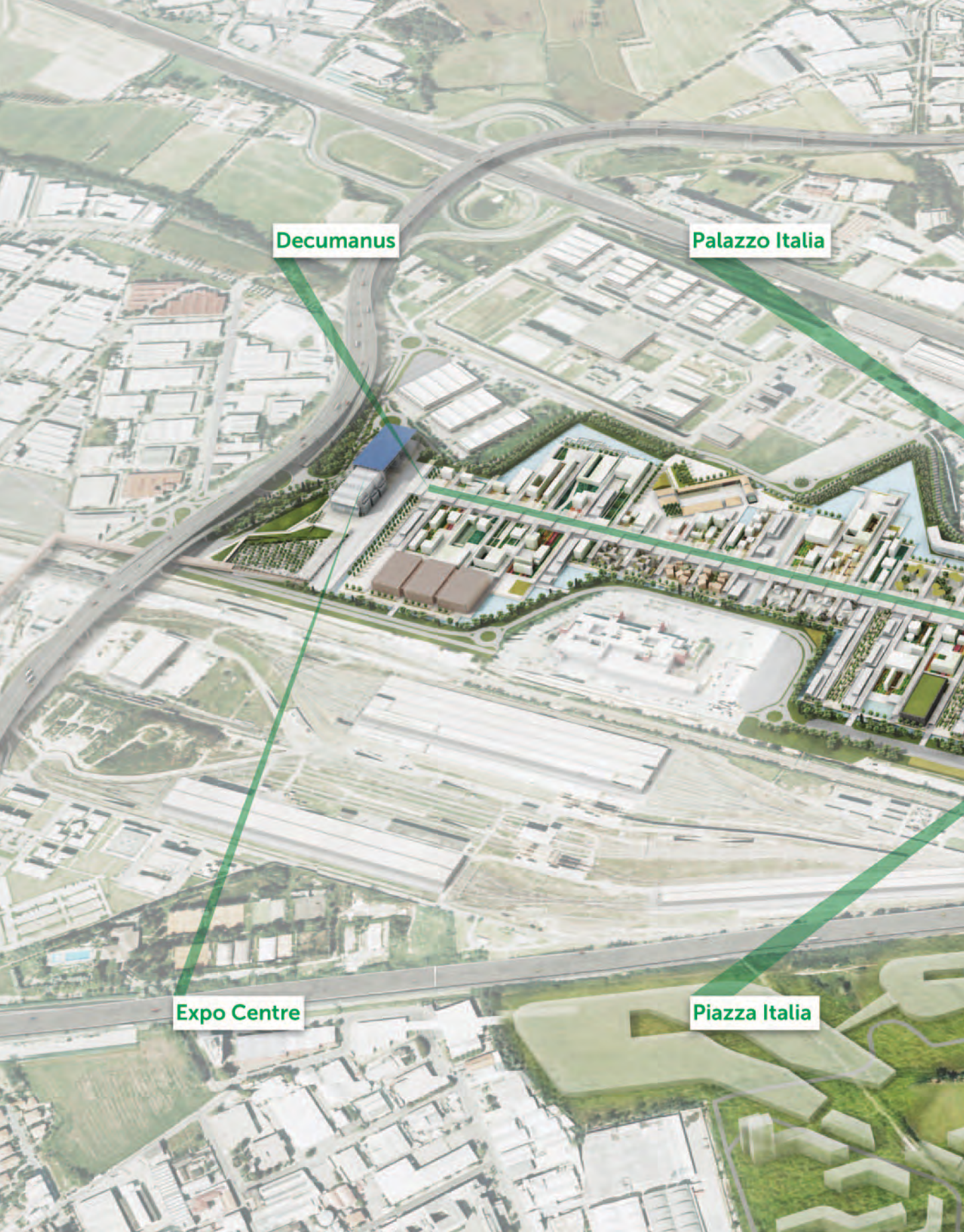
A series of highly theatrical installations by Dante Ferretti, winner of three Oscars, will be set up along the two main Site axes to create a continuous urban design performance inspired by the themes of the Exposition that will stimulate and engage visitors' senses, inviting them to continue on their way through all the Exhibition Spaces while also acting as a connective tissue linking the different participating Nations.

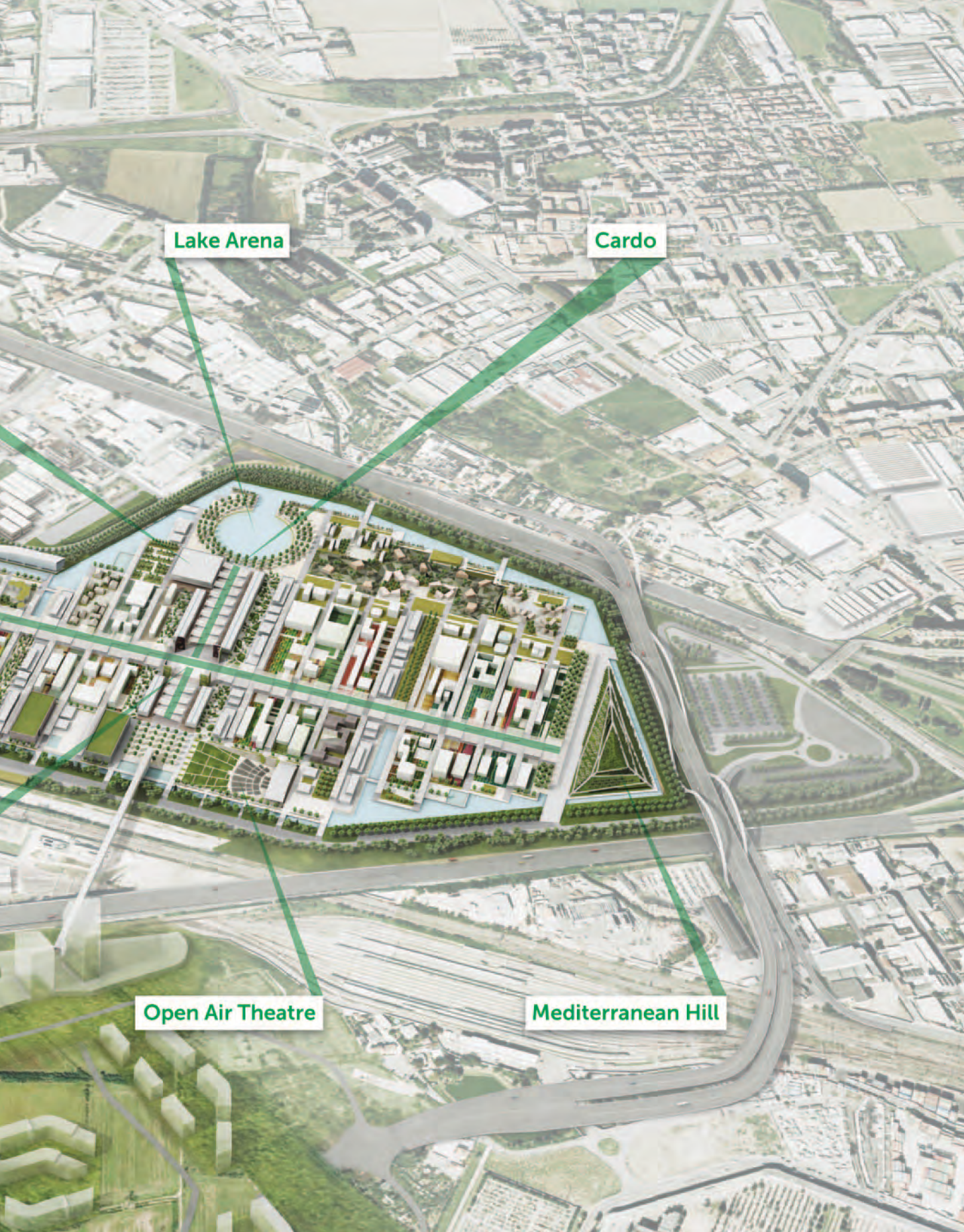
Every detail of the design, including the public areas for the big events (live music, theatre, dancing, etc.), the Exhibition service structures (Services Areas), the exhibition buildings (Exhibition Areas) and the leisure areas (the Biodiversity Park) must be conceived as a scenographic-architectural continuum that carries forward the Theme of Expo[3].

3.2 Thematic Areas

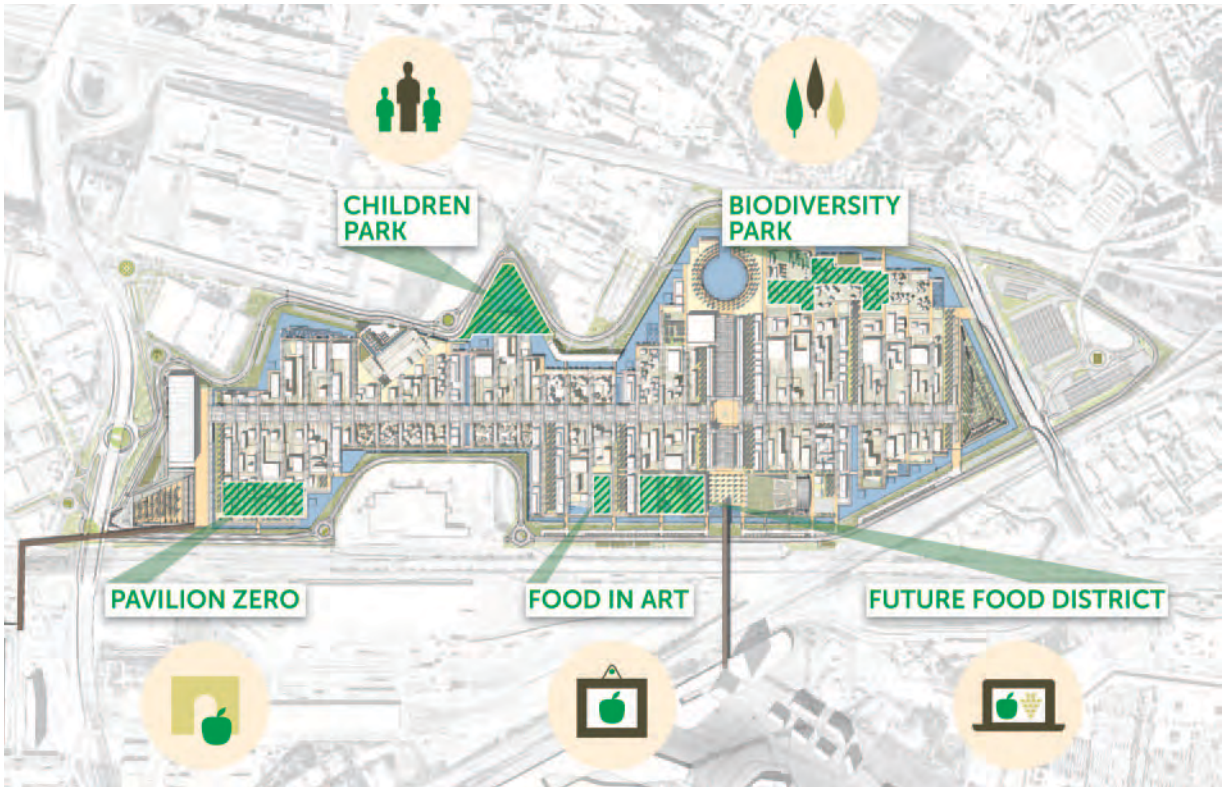
The Organiser of Expo Milano 2015 aims to ensure internal coherence between the many different types of scientific, cultural, recreational and emotional opportunities that will be available on the Exhibition Site. In this way, the content presented by the Organiser and the Participants will promote a 'constellation' of homogeneous significance around the Theme of the Exhibition for the visitor to enjoy, with 'homogeneous' meaning the ability to speak the same language or, even better, to adopt a code of communication to 'harmonise' (or 'link') the different proposals on offer. The aim is to create an internal linguistic coherence between the themes addressed by Expo and the different ways the Participants choose to make their presentation. The expected end result of this will be that visitors will not be aware of any technical solution that may have been adopted to maintain this continuity from one section of the Exhibition to another.

[3] Details of the Masterplan are available in the International Participants Guide.


Decumanus
Palazzo Italia
Expo Centre
Piazza Italia


Lake Arena
Cardo
Open Air Theatre
Mediterranean Hill

This is one of the necessary conditions for a constructive dialogue between the proposals made by the different Participants, since Expo is not just a 'display' but also a 'discussion'. In order to ensure that the different proposals, ideas and experiences of the various Participants develop in relation to the Theme and also to promote discussion, some kind of common 'code' of communication needs to be established. This will lead to a democratic dialogue that while it is free will at the same time be potentially dissonant and creative, all in keeping with the values of Expo.



In order to achieve this, the Organiser has decided to invest in planning and resources in the Thematic Areas, which is where the unifying narrative thread of the Event will be developed. These Areas will serve as a link between the visitors' experience and that of the Participants themselves so as to clearly define the different boundaries within which a deeper understanding of the Theme can be achieved. These spaces will be physically 'glued' together by the overall landscape, which is the nerve centre of Expo, the great thematic motif of Expo that presents visitors, as soon as they come onto the Site, with the issues addressed by Expo. The Organiser will explain the concept of the individual Thematic Areas in detail at the second International Participants' Meeting.

Pavilion Zero

The first area that most of the public will come to as they visit Expo is Pavilion Zero, which is being developed in collaboration with the United Nations and provides a springboard for the themes and languages to be found at Expo.

The Pavilion itself highlights the main issues raised by the Theme, "Feeding the Planet, Energy for Life", which are presented in a dynamic, theatrical stage setting that will impress and stimulate the curiosity of visitors and immediately arouse their curiosity (the real driving force behind the knowledge presented in the rest of the visit).

The aims of Pavilion Zero are:

- to teach a highly emotional representative code that the Organiser hopes to see applied in the Participants' Exhibition Spaces;
- to create a 'mental' space for the Theme, "Feeding the Planet, Energy for Life", that can be filled during the course of the visit;
- to give expression to certain problems that question traditional opinions and that open up a new awareness that can be developed through personalised visitors' programmes that start from Pavilion Zero;

- to present a selected panel of Best Practices that illustrate the best way to seek solutions to the great issues that concern the life of the planet and its inhabitants, such as the use of natural resources, ecosystems and their services, the importance of biodiversity and the impact of climate change on food production, the economy, and society.

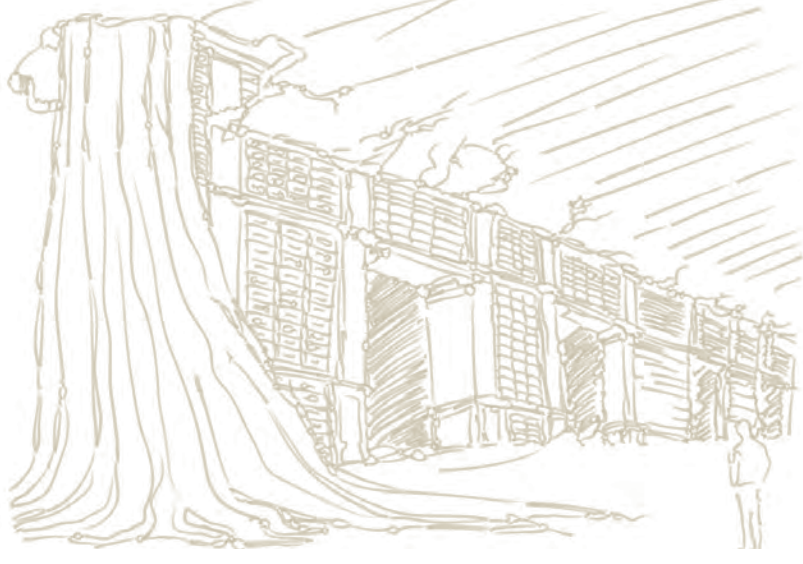
As an 'overture' to Expo Milano 2015, a portal that gives access to knowledge, the different social, cultural, environmental and technological aspects of the Theme will be developed in a multidisciplinary approach inside Pavilion Zero. Pavilion Zero is not a summary of Expo, nor does it aim to define the main theme, but it is an opportunity to suggest to visitors what is to follow.

The approach is essentially narrative: Pavilion Zero is the opening page of the story of the themes that will be represented in the Exposition.

Pavilion Zero will only provide a clue to the methods used to present the themes and not a means to interpret them. It will only show the lay of the land, the rules of the game, the possible journey each individual visitor can take.

Located at the West entrance to the Exhibition Site, Pavilion Zero is an excellent starting point for a visit to the Exhibition as it focuses on some of the basic questions raised by the Theme of "Feeding the Planet, Energy for Life" and looks at the history of mankind through food, in a setting that refuses to be confined to the closed space of the Pavilion but instead extends across the entire Exhibition Site.

Pavilion Zero is quite simply a path that leads visitors on to the greater show: Expo Milano 2015. It is the area that will fire their emotions, provoking ideas and questions and, at the same time, will point the way towards the answers that each individual visitor can find as they plot their own individual journey around the site.



It goes without saying that crossing Pavilion Zero will require physical movement on the part of each visitor; but the real aim of the path is to spark a "movement in the soul" of each visitor. It is a path designed to embrace and accompany the rhythm of each individual while inspiring a varying array of emotions and thoughts. This will be a path full of emotion, that dazzles the senses through the impressive visual and audio impact of grand installations and stage sets that burst out of the physical boundaries of the walls, making the landscape an event and the architecture an experience.

Best Practices

Pavilion Zero will also be the first contact the visitor has with the Best Practices, which are the most innovative solutions to the problem of feeding the planet.
The Best Practices are a product of excellence representing the best solutions developed in a specific context to promote change, to help overcome difficulties and to contribute to the work of other agents and sectors. Above all, the Best Practices can be reproduced in other situations. Expo will be a world marketplace for a global process of putting new ideas into action, fulfilment and learning.

The Best Practices are not concerned with reinventing themselves but are a way of learning from the experience of other people's success. The Best Practices of Expo 2015 offer opportunities for comparison with proven success and aim to promote sustainable development, hence the name 'Best Sustainable Development Practices' or BSDP[4]. "Feeding the Planet, Energy for Life" is a call for a worldwide commitment to fair and balanced development that will allow future generations to live on Earth, and the BSDP are concerned with the many themes that express this call for wisdom and responsibility.

The general approach to this interaction between visitors and the whole Exhibition Area is one of 'play'. The element of 'play' will open up an imaginary labyrinth of proposals and memories connected with food. The challenge thrown down to visitors is to question everything, and this is a challenge that will prepare them for the rest of Expo because it is essential that everyone really gets involved in what is going on. What better metaphor could there be for actively getting involved than the concept of 'play'? This type of interaction and multi-layered stimulus will invite visitors to create their own journey round the Exhibition Site in keeping with their own instincts and the things that arouse their personal curiosity. So 'play' is a key word when designing Pavilion Zero.

However, before presenting the most innovative technology, before

[4] Details of the International Competition for the Best Practices will be announced over the next few months.

examining all the best sustainability projects and before providing a vision of possible futures, we need to remind mankind of what went before and of everything that has been invented to bring us to where we are today. From a narrative point of view, Pavilion Zero aims to be the place where the collective memory of humanity—our food, our histories, our cultures—constitute the 'plot' and make each of us, once again, a key player in the story of life on our planet.

Pavilion Zero is based on two main concepts: the 'Natura Naturans' and the 'Natura Naturata'.

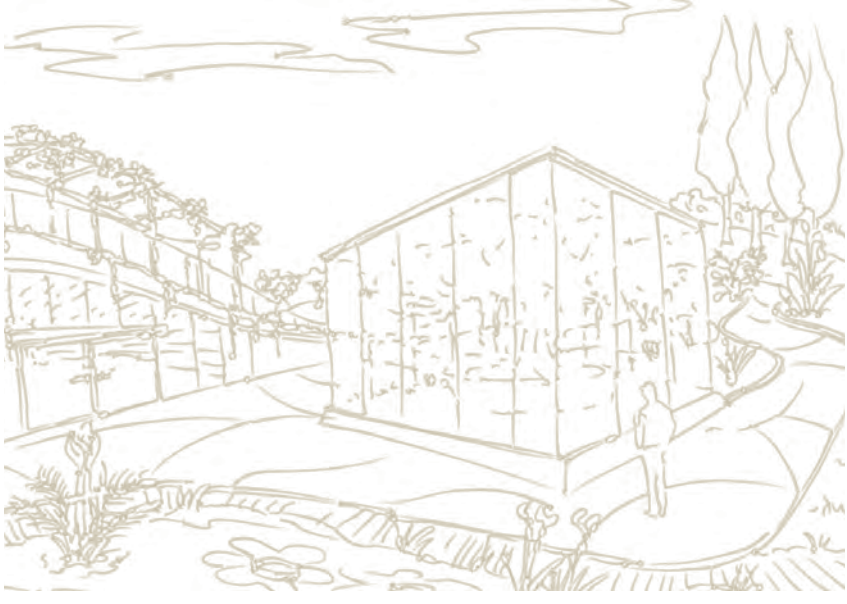
'Natura Naturans' means Nature in its primordial state, without any dependence on or interaction with the actions or desires of humans. This is the continuous regeneration of life through natural biological mechanisms, a continuum that regenerates itself in any ecosystem and which covers every living organism from microorganisms, plant photosynthesis and the birth of new exemples of every animal species to the decomposition of living beings.

This is what Nature would be like without Humans. Without Humans there would be no landscape, since this in itself is a definition of the workings of the imagination, even before Human intervention. When Human civilization first appeared on the Earth, we altered this peace and tranquillity and took the first step towards 'Natura Naturata'.

Biodiversity Park

The Biodiversity Park will be a huge garden spread over 14,000 square metres in the north-eastern corner of the Exhibition Site. This will reproduce the variety of life in a highly attractive multi-form landscape that will emotionally involve visitors and stimulate their intellectual curiosity as they move freely around this highly scenic landscape. Internationally famous designers will be

responsible for creating the project where visitors can discover a wide range of habitats, each a testimony to the many processes of natural selection that have taken place over thousands and thousands of years. The aim of the park is to show the different forms of life on all levels, from genetic diversity to various types of ecosystems. The design of this great park will be inspired by an attempt to classify the seemingly never-ending forms of nature that exist in every corner of the planet. Many attempts to do this have been made in the past, although none have been very successful, and this has in itself provides a strong incentive to know more about everything related to mankind, including the texts of the great monotheistic religions, Greek mythology and both oriental and western culture and painting from the Renaissance to the Scientific Revolution, the Age of Enlightenment and the Age of Reason. In all these fields, Humans have always tried to describe what they see around them in order to amaze and astonish their fellow humans.



The theme of biodiversity refers to the variety of living organisms and, according to the United Nations Convention on Biological Diversity, means "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems".

This concept includes the idea that the ecological systems and species that are part of these ecosystems are the object of a continuous evolution that determines their diversity. A park is a 'container' in the same way as a museum is a 'container' for artistic creativity, so one could ask, why build a park for something so dynamic that touches every nook and cranny of our planet, something that by its very definition 'naturally' concerns

all ecosystems? The response might be that we are now aware that there has been an acceleration in the 'natural' speed at which systems change, according to factors inherent in the organisms themselves. This acceleration has been conditioned by external factors that have been introduced by Humans so, in other words, diversity is no longer purely the consequence of the laws of nature as it adapts to evolution and change but is influenced by the mechanical intervention of Humans in the environment.

The progressive increase within a species of the frequency with which subjects are found to have the ideal characteristics for the environment in which they live is the basic mechanism of evolution. The variation in hereditary characteristics that those subjects have evolved from increases the number of subjects that can live in that environment, which is the basic principle of natural selection that guarantees the survival of a species and the preservation of biodiversity.

The concept of biodiversity is rather abstract and it is difficult for the non-expert to perceive or understand it. However, it relates closely to a concept with which we are all fairly familiar: variation, the variety that comes from the presence of so many different 'forms' within a given system. This is a very down-to-earth metaphor that anyone can understand. The beauty of an open-air market, the shape of a landscape or a sumptuously laid table all demonstrate the differences in shape, colour and smells that lead us to say something is more 'beautiful' because it is made up of so many different elements.

Quality as a definition, or rather as a 'narrative' of diversity, and beauty as a synonym of difference are the guiding principles of the Biodiversity Park.

Following this approach, the expression of biodiversity in the Park will partly take the form of a natural rebuilding of particularly stunning landscapes, and partly by the use of virtual illustrations and descriptions inspired by the same regulatory and systematic criteria that have been used over the centuries to develop our understanding of the cosmos. The Cluster Areas listed below will also be part of the Biodiversity Park and will be dedicated to broadening our understanding of three themes:

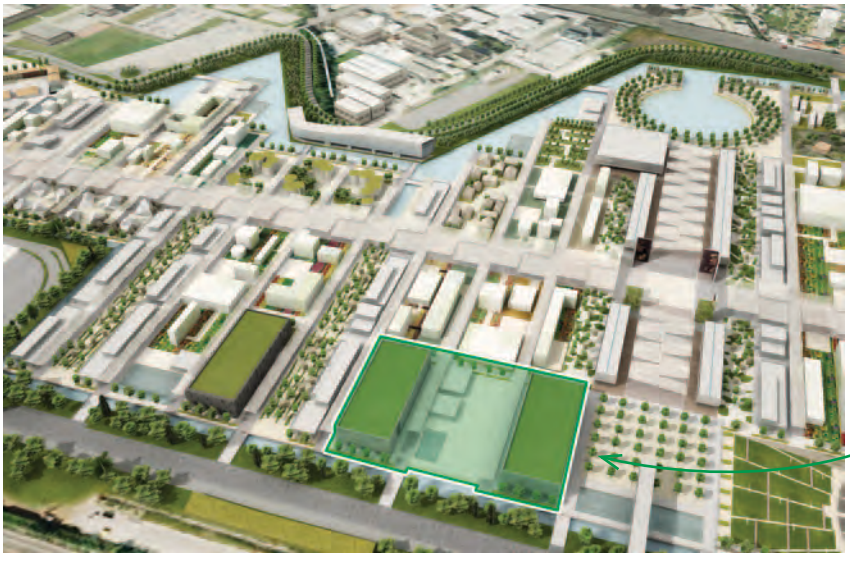
- Agriculture and Nutrition in Arid Zones – the Challenge of Water Scarcity and Climate Change;
- Islands, Sea and Food;
- Bio-Mediterraneum: Health, Beauty and Harmony.

The highly attractive landscape of the Biodiversity Park will not, therefore, only be an area for playing in different landscapes, but will provide the backdrop for a better understanding of the structural themes and some of the crucial issues of Expo.

The Biodiversity Park will be under the auspices of the Thematic Spaces Management of Expo 2015 S.p.A. and the Faculty of Agriculture at the Università Statale di Milano, and internationally renowned architects, landscape designers and land artists will compete to take part in its creation.

Future Food District

The Future Food District, which will be located inside two identical Exhibition Areas (2,500 square metres) and in the square that will be created between them (approx. 4,400 square metres), will provide visitor services and refreshment areas.



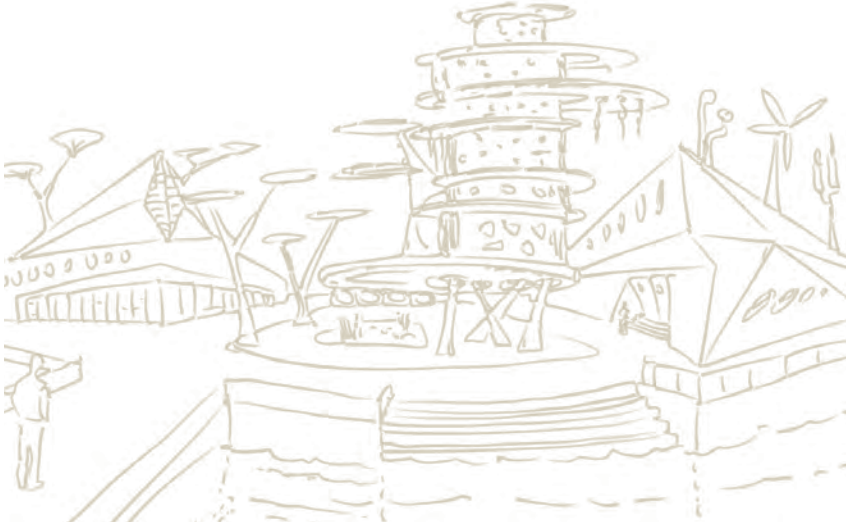
The idea of this 'district' of the food of the future is to allow visitors, and in particular young people and those more technologically aware, to understand how the food chain will work in the future. A wide range of Information Technology will be used to explore food preservation, distribution, purchase and consumption, with particular attention paid to the individual choices of each consumer and how these will impact on commercial and private food provision.

Within the Future Food District, not only the traditional exhibition areas (a total of approximately 7,100 square metres), but also the buildings themselves, including the materials on the façades, will be part of this multimedia 'narrative' experience. This will be achieved by the use of a selection of vegetal materials that are capable of producing bio-diesel. This theatrical staging will be a key characteristic of the project and visitors will be able to see and took at the food of the future in interactive hands-on exhibits. In this way, they will be able to explore how the food chain will be managed, how food will be produced in the future, the evolution of traditional cuisine and its progressive hybridization through science and the related development of people's tastes.

There will also be some symbolic structures such as a Vertical Farm, an Algae Urban Farm, a restaurant, supermarket prototypes and a house of the future.

The supermarket of the future will place an emphasis on digital

information available about every single product and on the consumer's own digital equipment. This exchange of information means that the layout of the supermarket and the location of each product can change according to how the customers move through the store, and this information flow will also help vendors tell customers where products come from, how they were produced and how they can be used. Inside Expo Milano 2015, all food products will be traceable and the supermarket will help visitors to order what they want not only inside the store but also from anywhere on the entire Site.



Meanwhile, in the house of the future, visitors can consult and add to a huge database of international recipes, representing a global kitchen where everyone cooks and eats dishes from all over the world and shares information about food.

The architecture will, therefore, be that of a small town where we can find information about:

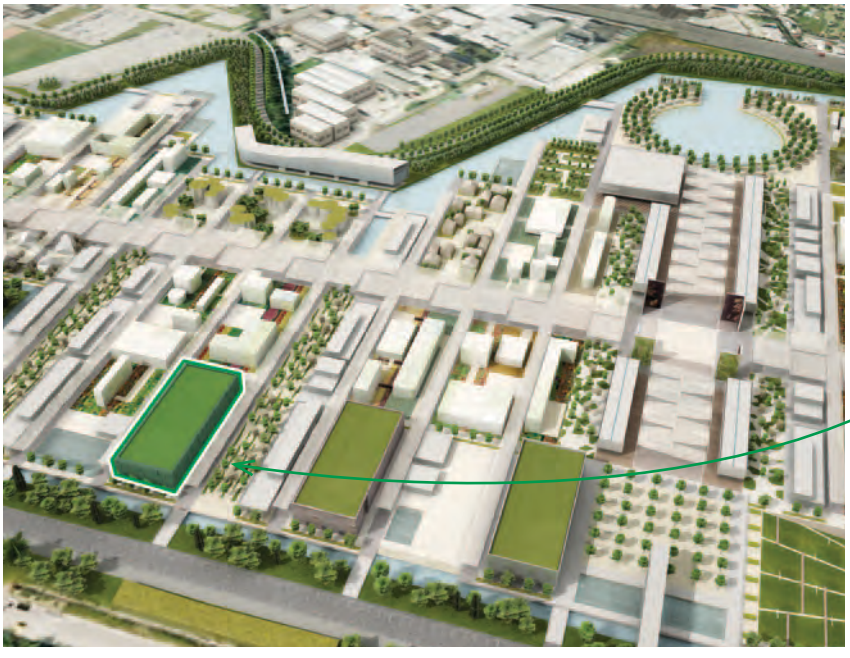
- new ways of producing food without land and resources;
- trends in the purchase of goods;
- ways in which existing food and biological varieties can be safeguarded;
- the most up-to-date picture of food preservation and preparation;
- best practices on moderation, and solutions to some of the unresolved critical issues related to malnutrition, land management and respect of local identity;
- prototypes of refuse collection and recycling systems, and 'zero kilometre' energy production aimed at guaranteeing self-sufficiency from clean energy sources (e.g. biomass).

As a result of this, the District will also function as a showcase for projects developed by food sector companies.

Food in Art

This Thematic Area explores the relationship humans have had throughout history with food as an object of symbolic reflections.

The story of food and the way in which it is obtained and then transformed has formed the basis for building our imaginary and artistic creativity and spirituality – just think of how bead is shared as a symbol of hospitality in Mediterranean cultures or of the symbolic value given to food in all religions.



This Thematic Area will present an artistic and cultural experience to illustrate this relationship by showing and reproducing great works of art in a digital and real-life Aladdin's Cave.

Alongside this, visitors will find an exhibition of original works of modern art specially commissioned for the Exposition on the Theme, "Feeding the Planet, Energy for Life", and all around the Site visitors will be able to enjoy some of the works of the greatest contemporary artists. Once the event has finished, these works could become part of the city's artistic heritage.

The biggest question raised by Food in Art is whether the story of mankind can be examined in terms of food by looking at how it is presented in our cultural heritage. How can contemporary artists show the great concern we have about those important themes that are presented through symbolism and allegory at Expo? These are just some of the questions to which each of us can suggest our own personal answers.

As for content, Food in Art will feature the following conceptual macro areas:

- still-life – representations of food;
- banquets – the ritual of food;
- where food is located – kitchen / table / equipment;
- feasting and eating together.

These conceptual areas will be developed in nine diachronic sections:

- food: symbolic and ritual representations;
- how to look at things;
- totality of factors and elements;
- designing where food is prepared;
- food as a metaphor, imaginative food, objectivity of different foods;
- food as a work of art;
- conceptual Arte Povera, art that 'needs to be fed';
- contemporary art;
- relational art.

Children's' Park

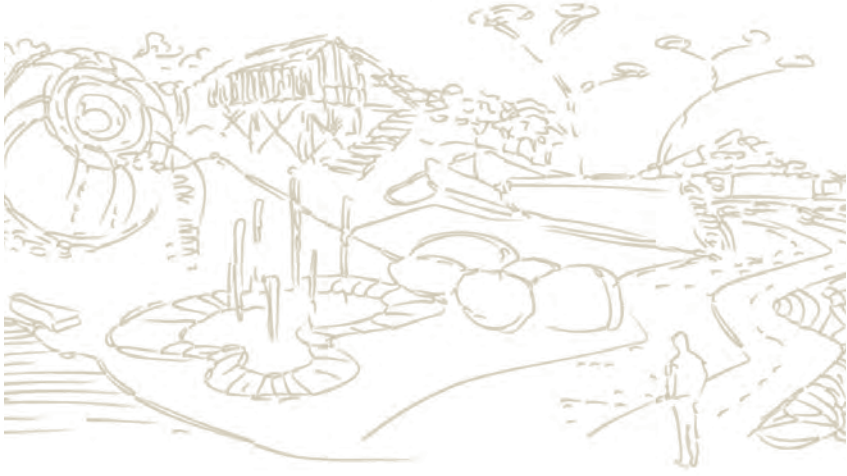
The Children's' Park is an area entirely dedicated to children and families. These very special visitors should not only have adequate facilities and structures, but also opportunities to play and learn: a clear invitation to our youngest guests.

This area will be the real Expo testing ground for food producers and consumers of the future, and this is where we will see the intangible legacy become reality. Food resources and their distribution around the planet is the theme running through the entire Event. With its universal profile, Expo Milano 2015 will give children an opportunity to see what role they can play in the big issues of the day.

Younger visitors will understand that their presence at Expo Milano 2015 means that they are at the centre of the world and that Expo is dealing with questions that concern all of us. It is for children more than any other type of visitor that exhibitions must be transformed into performance, theories into workshops and formulas into games. The concept of this Thematic Area looks to the interpersonal relationships between grown ups and children for ways to make them all understand and experience the fact that each one of us has a responsibility for the future of the planet. This will involve a structure or game that symbolizes 'the centre of the earth' and a series of itineraries that, starting from the central square, are scattered around the garden and are made up of installations dealing with relations between people, interdependence and collective action.

Food is something people share, so all the proposed activities will revolve around food and eating 'together'.

The Children Park is where children and their families will receive the message loud and clear, a message with strong symbolic and emotional significance. But it will also be a place where people can relax in pleasing surroundings made more attractive by the use of natural and organic elements.



3.3 Participants' Exhibition Areas

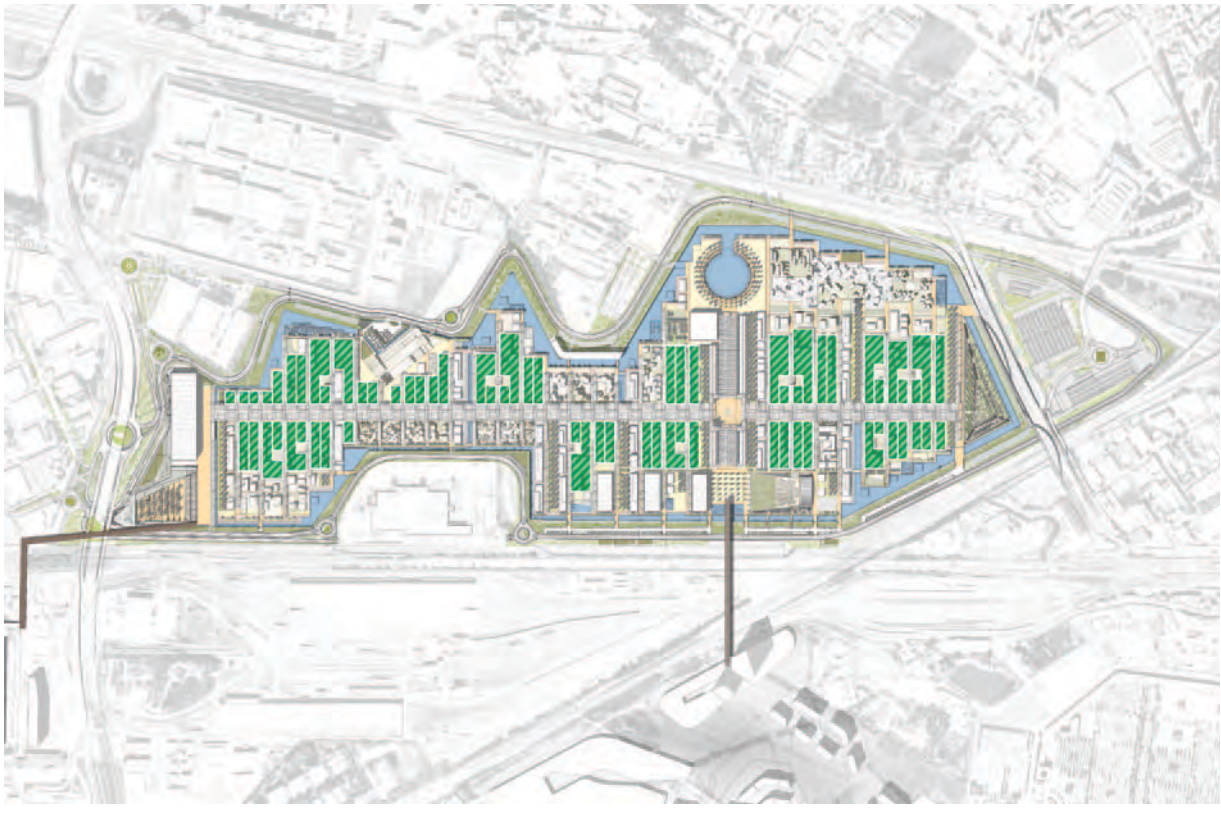
In order to deal in the best possible way with the issues raised by Expo Milano 2015 and to define the Theme itself inside the Exposition Site, it is essential that the largest possible number of the planet's key figures on the subject of food must be at the Event, and a general idea about how Participants can take part has already been given in the Participants' Guide. Right from the start, all the usual categories of potential Participants were contacted, such as Countries and International Organisations, while contacts were also immediately established with Non-Official Participants such as Civil Societies, International Regions, Italian Institutions and Companies.

Participants will develop the Theme within their own exhibition spaces on the Site, and as already in the Participants' Guide, Countries can choose from two types of exhibition space: Self Built or Cluster.

Self-built Exhibition Spaces

Participants who opt for the Self Built solution will be allocated a lot along World Avenue, the main artery of the Exhibition Site.

In the first edition of the Guidelines for Building and Mounting Exhibitions, the Organiser set out a series of rules and regulations that Participants must observe when building their exhibition structures.



These include:

- at least 50% of the lot must be in the open air and the Exhibition Space may be developed up to a maximum height of 17 metres;
- priority must be given to solutions that demonstrate energy efficiency and that use the exhibition target resources both in the building itself (by the use of materials that can be recycled and that have a low energy consumption) and during the Event (with strategies for the recovery and recycling of materials and refuse);
- queues must be avoided at all costs so solutions that ensure an efficient flow of people through the Site must be designed and put in place. To help this, the possibility of using the open-air spaces should be explored, and any waiting time the visitor may have should be exploited;
- technology should be used to create efficient systems of info-mobility in order to co-ordinate management of the individual Exhibition Spaces with the overall Exposition Site.

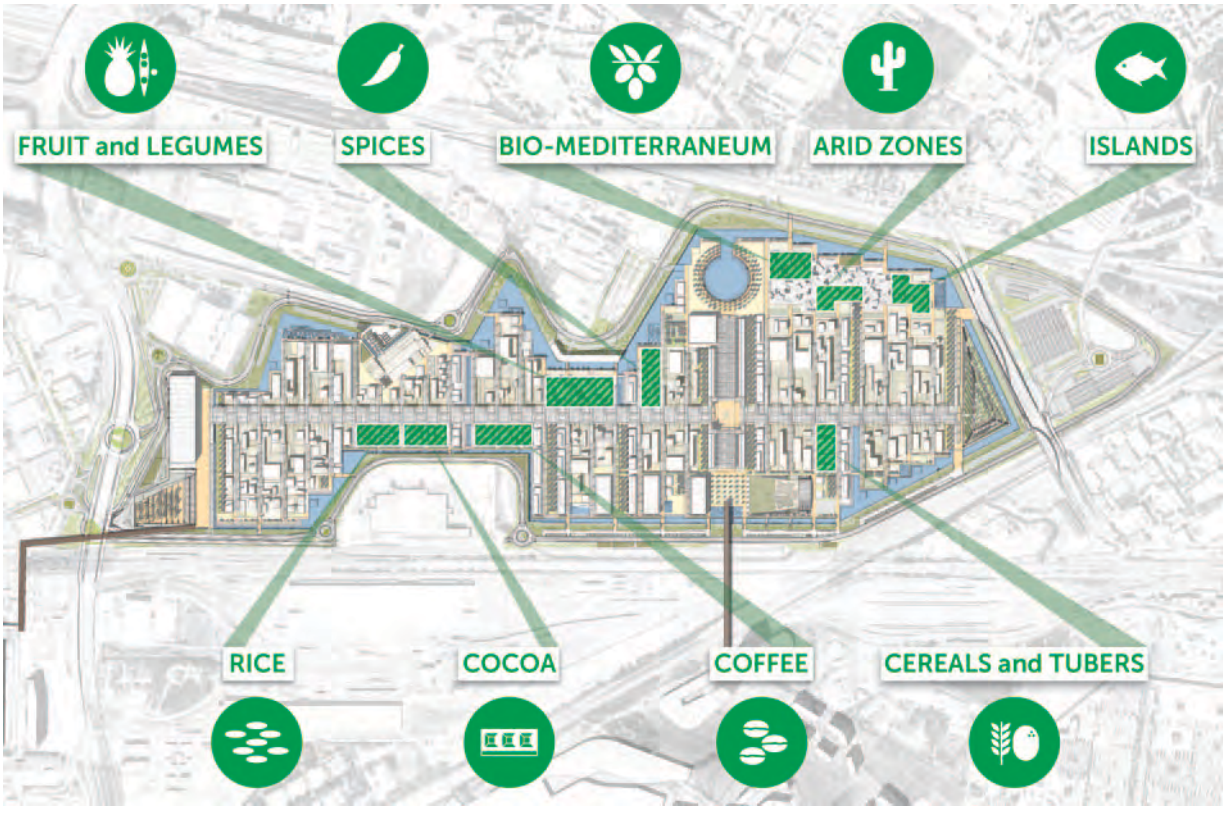
In addition to the Special Regulations that have already been issued, the Organiser is currently up-dating the Guidelines for Building and Mounting Exhibitions and details will be given during the second International Participants Meeting that will be held in Milan on 10-12 October 2012.

Clusters

The idea for Expo Milano 2015 is to create an Expo in which every project, every exhibit, every element of the programming will be developed with the aim of putting visitors and their experience of the event on centre stage. The aim is also to make sure that the Theme can be seen everywhere, so visitors will be immersed in it as soon as he or she enters the Expo Site thanks to the various interaction activities with the landscape and with everything else on offer.

This is the basis for the completely new concept of the Clusters that was first presented during the first International Participants Meeting. The Clusters will be the symbol of the maximum cooperation between the Organiser and the Participants in developing the Theme of Expo and the symbol of how it is to be represented within the Expo Site.

Traditionally, the Organiser will group together those Countries taking part in the Exposition who do not intend or desire to participate with a stand-alone Self-Built Exhibition Space in common exhibition areas or Joint Pavilions. However, since the idea of the Expo Milano 2015 project is to look at the Theme from every point of view, the Organiser has decided to apply this idea to the Countries as well, so that Countries will not be grouped according to



geographical region but according to the themes they have chosen. Once again, Expo Milano 2015 will make the Theme, "Feeding the Planet, Energy for Life", central to everything.

While retaining some of the strategic elements of previous Expositions, thanks to which Countries were able to make their very personal contribution and make people more aware of their particular circumstances, Expo Milano 2015 introduces a new approach with respect to the type and quality of the exhibition areas and to their positioning inside the Expo Site.

The Organiser has decided to organize the Clusters according to two basic criteria, on the basis of which the Countries will be distributed around the Site:

- Thematic Identity: in these Clusters, Countries will be grouped according to the particular aspect or interpretation of the Expo Theme that they want to develop;
- Food chains: Countries in these Clusters will be grouped according to the role they play in a particular food chain.

The themes of the Clusters have been decided through close discussion with the participating Countries themselves and with the Faculty of Agriculture at the Università degli Studi di Milano in order to develop exhibition content. The Organiser has, therefore, chosen to adopt a collaborative approach to the development of each Cluster. The Countries themselves have been directly involved in working out the themes and they have been invited to make new proposals, something which has proved itself to be an excellent working model that has guaranteed a fruitful exchange of ideas.

This approach has led to the active participation of all Countries involved. Thanks to this, nine Cluster themes have been established and these have been divided into two groups on the basis of the two criteria, Thematic Identity and Food Chains:

- Thematic Identity: 'Agriculture and Nutrition in Arid Zones - The Challenge of Water Scarcity and Climate Change'; 'Islands, Sea and Food'; 'Bio-Mediterraneum: Health, Beauty and Harmony'.
- Food Chains: 'Rice: Abundance and Security'; 'Coffee: the Engine of Ideas'; 'Cocoa: the Food of Gods'; 'Cereals and Tubers: Old and New Crops'; 'Fruit and Legumes'; 'The World of Spices'.

The Clusters represent one of the most characteristic elements of Expo Milano 2015 and add weight to the development of the Theme. These exhibition areas have never been seen before and will, above all, involve many Countries in one architectural project developed around a shared central theme to which each Country will make its own personal contribution.

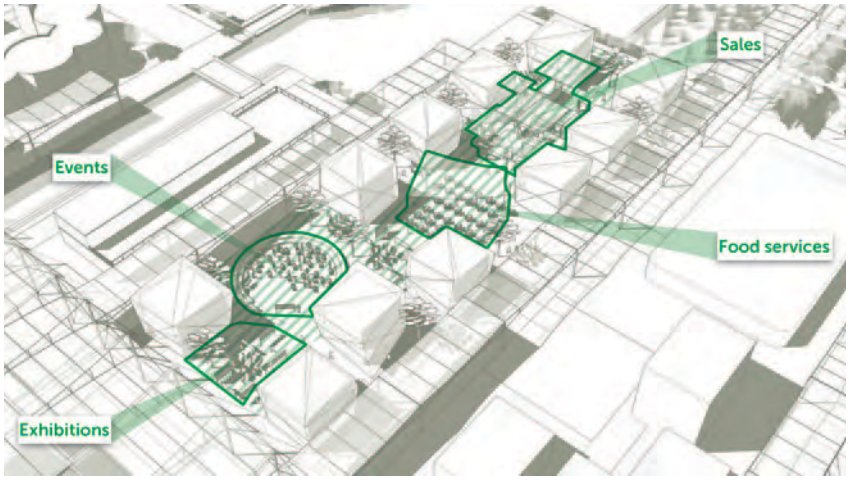
The architectural model of the Clusters[5] provides each Country with its own individual exhibition space around a common area. Countries interested

[5] For technical details, consult the Cluster Guidelines that will be presented during the second International Participants Meeting.

in becoming part of a Cluster will consult with the Organiser as to how the common area should be developed, and this space will be used for joint initiatives with the Countries who make up the rest of the Cluster. At the same time, the personal identity of every Country will be respected, while they can each choose how this should be best represented within the exhibition space allocated to them. So every Country that becomes part of a Cluster can show the particular aspects of the Theme in which they excel:

- showing how each country interprets the Theme;
- developing their own contribution to the Cluster;
- bringing their identity to the fore in their own exhibition space.

While respecting the collective input, each Cluster will be characterized by a distinctive architectural design. The multi-purpose common area will be



integrated into this to fulfil a wide range of functions: refreshments, sales, events and exhibitions, while the common area will represent the heart of the Cluster. This common area will make up the most innovative element of this particular project in that it will promote the Theme as a narrative thread running right through Expo, exemplify the participation of the various Countries and encourage them to work together.

Each of the Clusters will be located in a prime site. The Clusters that belong to the group of Thematic Identity are the only ones to be put inside the big Biodiversity Park, since this is a Thematic Area which has a strong profile within the Expo programme, with the Clusters addressing Food Chains located along the Decumanus, where they will alternate with the Self-Built Exhibition Spaces.

Finally, every Cluster will represent the start of a thematic Itinerary, so other Countries that have chosen to participate with a Self-Built Exhibition Space but who are interested in the Cluster concept can contribute to it and help develop its theme. This also means that these Countries can become part of the itinerary, thus adding extra weight to the interpretation of the Theme within the Cluster.

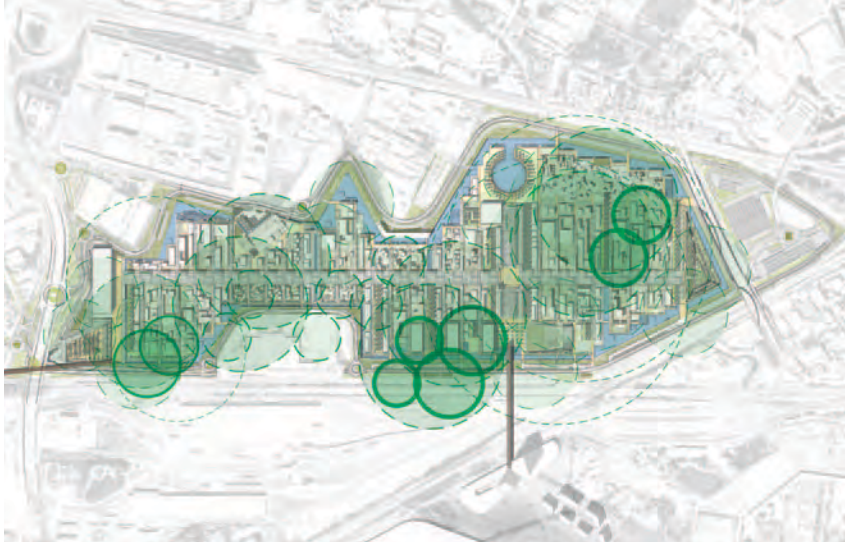
So the positioning of the Countries within the Exhibition Site will be decided according to the interpretation of the theme that each Participant wants to develop, bearing in mind the way in which the thematic Itineraries are going to be created and the emphasis on collaboration with the Clusters.

Thanks to continuous dialogue between the numerous elements of the Exhibition Site, from the Itineraries to the Self-Built Exhibition Spaces, the Thematic Areas and the Best Practices, the Cluster project is the key element of this Exposition. Intended to provide a platform for comparison

and discussion, the Cluster model invites Countries to establish a dialogue between different cultures and traditions that in many cases are worlds apart. All this means that the Countries can share possible solutions as to how to meet the common challenges concerning agriculture, nutrition, wellbeing and sustainable development, and this is precisely the great strength of the Theme, "Feeding the Planet, Energy for Life", a theme which no one can ignore. Every single person, every family, every cultural group and every Nation has its own contribution to make.

International Organisations

This Exposition is dedicated to a theme that is of primary importance: food is fundamental to Humanity's development. For such an important event it is essential that International Organisations take part so that the aims of Expo can be achieved. Food security and access to food resources are central to the work of some of the most important Agencies of the United Nations, the Food and Agriculture Organisation, the International Fund for Agriculture Development Fund and the World Food Programme. The United Nations officially confirmed in April 2011 that it would take part in Expo Milano 2015, and the fact that the deadline to meet the objectives of the UN Millennium Development Goals falls in the same year as Expo is of added significance.



Since large International Organisations have such a central role in the theme of nutrition, Expo Milano 2015 asked these organisations not to participate at the Universal Exposition with a traditional Exhibition Space with an institutional profile but rather to work with the Organiser to develop the Theme across the Site. It is hoped that, at the same time, International Organisations will make

their contributions available in the various Thematic Areas developed by the Organiser.

The Organiser and the United Nations have already started working together and it is expected that a common approach, full of different activities, will be developed. These activities could range from working together to develop content to collaborating on some aspects of the Best Practices project and organizing events, all of which means working together on all aspects of the Theme. This will be evident both during the planning stages, in which the thematic content of Expo will be decided, and in the activities proposed by the Organiser or by the Participating Countries over the six months of the Exposition.

Civil Society Organisations

It would not be possible to deal with a theme that is so important for the future of Humanity without the involvement and contribution of Civil Society organisations. Civil Society will, therefore, be in the front line of Expo Milano 2015 to stimulate dialogue between the various Participants and to contribute to spreading and developing the Theme, with special events and initiatives that they will create together with the Organiser both in the run up to 2015 and over the six months of the Exposition. Civil Society will be an essential element in the Visitor Experience.

Inside the Exhibition Site Cascina Triulza will be the headquarters for Civil Society, although its events and activities will be spread across the whole Site. The Cascina will be part of the Thematic Itineraries of Expo and everything possible will be done to underscore its links with the Thematic

Areas and the Participants' Exhibition Spaces. More details about the way in which Civil Society organisations will take part in Expo and how the Cascina Triulza facility will be managed will be presented at the second International Participants' Meeting.

Corporate Sector

Expo Milano 2015 represents a huge opportunity for those Companies sensitive to the quality of life on Earth to show, through their own Good Practices, what they themselves do about these issues.

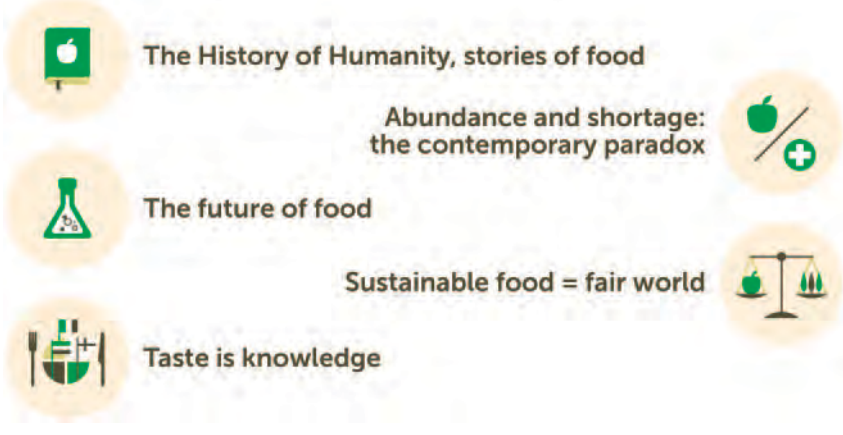
The direct involvement of companies in the Event is a great occasion for them to try out and test the policies, ideas, designs and research they present at the Event in a real production context over a short period of time.

It should also be remembered that all the companies involved in the production and setting up of the Exposition will follow a protocol of intent that clearly defines the methods applied in carrying out their work at Expo Milano 2015. This is to guarantee the greatest possible sustainability of the initiatives themselves while ensuring the least possible impact on the environment.

3.4. Thematic Itineraries

The Thematic Itineraries are another of the innovations of Expo Milano 2015 and one of the most characteristic aspects of the Visitor Experience within the Expo Site.

The Thematic Itineraries allow visitors to connect the many areas and different types of space in the Expo to a cohesive programme on the basis of specific idea established by some of the principal themes chosen by the Organiser and suggested by the Participants. All Participants are invited to take part.



Metaphorically, Expo can be seen as a big city with many different identities, each aimed at explaining its own 'version' of the Theme of Expo:

- the Organiser is in charge, amongst other things, of Pavilion Zero with the Best Practices, the Biodiversity Park, the Future Food District, the Food in Art Pavilion and the Children Park;
- Participants: Countries, International Organisations, Civil Society Organisations, International Regions, the Corporate presence.

As we have said before, the entire Site will be a type of landscape made up of imposing stage settings situated on the Cardo and Decumanus and of functional structures such as the Expo Centre and the Lake Arena, and overall it will be as much an 'exhibit' as those proposed in the exhibition areas themselves.

Over 140,000 visitors will have access to the Site each day and each of them will bring their own 'baggage' of knowledge, expectations and habits. This mass of people will have all the time they need to see just a small part of what's on offer in the exhibitions and the various performance events.

The Thematic Itineraries are the first means for guiding visitors around the Site and helping them make the most of what's on offer, from both the point of view of the Organiser and Participants, and of allowing visitors to live the experience to the full. The Thematic Itineraries will also be a means of preparing in the months before the Event for a visit to Expo, in that they also throw light on all there is to be learnt at the Expo Site.

In designing the style and content of the Thematic Itineraries, it is essential that visitors have at their disposal all the tools necessary to make their visit a physical, virtual and social experience. The layout of Expo will be characterized by easily recognizable visual signs and directions (physical and digital) that will help visitors to:

- avoid queues;
- see whether events are in progress or about to start;
- collect information pertinent to their own profile and to the interests they have manifested before and during the visit.

In addition, the Thematic Itineraries experience on the Site will be strongly reinforced by the 'preparation' for the visit that each visitor can choose to do online in the form of games and other dynamic interactive activities before arriving at the Exhibition Site. In this way, visitors can be introduced to the themes and sub-themes of the Itineraries and at the same time interact with the Itinerary on the Site or on the shared Cyber Expo platform.

From a conceptual point of view, every thematic itinerary should be thought of as:

- an open system: the theme of the itinerary will be clearly defined, but there could be an infinite number of ways of interpreting it

depending on the physical and intangible contents proposed by the Participants. These will have to be 'catalogued' in as much detail as possible as soon as the Theme Statement is conceived and presented;
- a modular system: it must be possible to progressively modify and develop the overall vastness of the itineraries and the quality of the elements it is made up of while Expo is taking place.

There will be three dimensions to the way the itineraries will be set up:

- Physical: visitors will be guided by physical and digital support throughout the itinerary. They will be able to consult traditional maps or use digital equipment provided on the totem on the itinerary route and in the Exhibition Spaces. They can also use the digital equipment to interact with the integrated Cyber Expo system using their own smartphones or tablets by uploading photos and videos, tagging contents and in this way improving their own experience by answering questions or expressing preferences.
- Increased: as soon as visitors enter the Expo Site they will be given visual enhancement glasses integrated with info-mobility systems that allow them to keep updated on transport services, waiting times and the content of the Exhibition Areas. Standard content will be personalised according to the level of integration the visitor has with the information systems.
- Virtual: it will be possible in some areas to integrate physical and digital content through virtual applications (holographic telepresence, smart walls, etc.).

As far as Visitor Experience is concerned, the Thematic Itineraries are the main road along which the 'story of the Exposition and of the Theme, "Feeding the Planet, Energy for Life", will be told. This will be made possible by the way in which they are modulated according to the visitor's interests in a concrete example of the idea of a 'personalised visit'. The personal dimension will be established between the Theme and the visitor thanks to at least 4 levels of investigation. Each Participant will be asked to contribute from the very beginning, when the Theme Statement is drawn up, to describing its own contents and exposition space, which should be capable of generating active engagement with visitors at each of the following levels:

- Passive experience: a traditional visit to Expo with integrated exhibits and architecture; at Expo Milano, the main principle on which the exhibits will be based must be food in all its forms; international and regional dishes, opportunities to sample new cuisine and showcases dedicated to food preparation and service.
- Participation: visitors will be invited to give feedback, fill in questionnaires and choose between different ways to visit a particular Exhibition Area. Participants will be asked to provide different ways of collecting

information on Site in order to improve the visit as much as possible for other users, and also to provide details in real time that can be accessed by Cyber Expo.

- Interactive: thanks to the use of portable devices, and through the multimedia systems in the Exhibition Areas, visitors will have an interactive hands-on experience with the exhibits. Various tools will be made available on site by the Participant to help visitors to generate content. This type of participation can also be developed once the Event is over since visitors will be able to continue their experience of the Event and broaden their understanding of the Theme once Expo is over by a virtual 'second visit' to the Site through the Cyber Expo system.
- Social: visitors will be invited to interact with each other both during Expo and once it is over. The social experience is the most pertinent to the theme of food and nutrition and it will therefore be essential that, from the start, those responsible for the design of the thematic content should think about how to promote this social aspect of the visit.

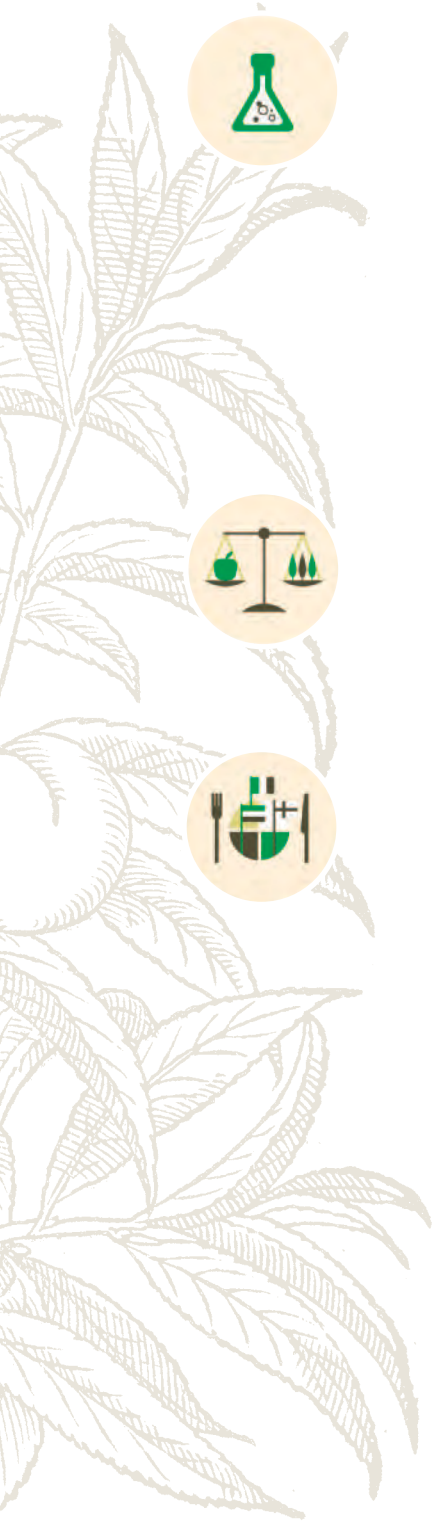
A more detailed analysis of the Thematic Itineraries can serve to clarify the structure and terminology used:

- Thematic Itinerary: a Thematic route that covers all aspects of the Theme of Expo, each with its own developmental sequence (see below).

- Theme of the Thematic Itinerary: this is the focus of the theme that has been chosen for a particular Thematic Itinerary (this must be confirmed at each stopping off point on the Itinerary route). Expo Milano 2015 currently intends to propose the following general Thematic Itineraries, although these can be re-examined and developed through discussions with the relevant United Nations Agencies and through interaction with the Participating Countries during the International Participants Meeting:

  'The History of Humanity, stories of food'. We will look at the history of Human progress (in art, crafts, settlement building and commerce, but also in terms of colonialism and exploitation) through food, cultivation techniques, livestock farming and the transformation and change in the attitude Humans have toward the food that makes up their diet;

  'Abundance and shortage: the contemporary paradox'. The contradictions inherent in food and in its availability: the world is characterized by equal numbers of people who live in conditions of malnutrition and inadequate supply of drinking water and who suffer from physical and psychological illnesses associated with undisciplined, wasteful, and excessive food consumption. Can science, education, prevention, international cooperation and social and political engineering help to overcome this painful paradox?



'The future of food': science and technology for food safety and quality. An illustration of the technologies, scientific discoveries and achievements of research represents the first step toward an effective transfer of knowledge that will form our storehouse of knowledge and skills for the future, exercising as much care in making the best use of the food chains as we do ensuring the quality of the products we put on our tables. We will discover what we will be eating tomorrow, what our children will be eating, how it differs from our own diet today and what the most promising avenues for international research are. And, finally, how education has an integrating role in a subject that transcends techniques of stimulating our knowledge in such a way as to relate it more closely to local traditions and languages. One only has to think of how every type of vegetable and every transformation technique that is lost also means the immediate loss of a word and its meaning.

'Sustainable food = fair world'. How can we make people more responsible so that they maintain a balanced development between producing food and exploiting resources? The theme of food and nutrition adopted by Expo Milano 2015 will provide a platform for discussion in which new objectives for a sustainable future will be launched, where biodiversity is safeguarded while knowledge, traditions and entire cultures are also protected.

'Taste is knowledge'. Feeding ourselves is obviously something we have to do. But it can also be one of the pleasures of life. And above all, the pleasures of the palate become a way to learn: the flavours and smells of international cuisines illustrate the history and cultures of the different societies that live on the planet. An itinerary can bridge the gap between cultural events and the opportunities to try out different foods, where besides the final dish we can also see the ways in which food is preserved and cooked and other actions used to enhance or preserve flavour.
Another nine vertical thematic itineraries from the Clusters will be added to these five horizontal ones. They will develop the different themes and link them to other elements in the exhibition: Self-Built Exhibition Spaces, Thematic Areas, events, etc. These itineraries will develop the food chains and the thematic identities of the different Clusters: rice, coffee, cereals and tubers, fruit and legumes, cocoa, spices, Bio-Mediterraneum, agriculture and food in arid zones, islands, seas and food.
Visitors thus have a vast selection of itineraries at their disposal to guide them on their own personal tour over the entire Site, itineraries that may often cross over each other, pulling together a rich variety of elements.

- Start of the itinerary: the basic idea of the Thematic Itineraries is that they combine a physical component (the route around the Site) and an intangible component (the facts and information that can already be accessed before visiting Expo), while the start of the itinerary refers to the physical point on the map at which a specific itinerary within the Site begins. The general

starting points of the Thematic Itineraries will be located in two places: Pavilion Zero and Biodiversity Park, because these two areas correspond to the two main entrances to the Site (in the west and in the east). However, visitors will be able to start thematic Itineraries at a different point from these designated starting points, such as from the Hub (see below). The Thematic Itineraries connected to the Cluster themes, however, will begin at the Cluster and will then be developed across the Site and, in particular, in those Participants Exhibition Spaces that, even though they have a Self-Built Space, are part of the Thematic Cluster.

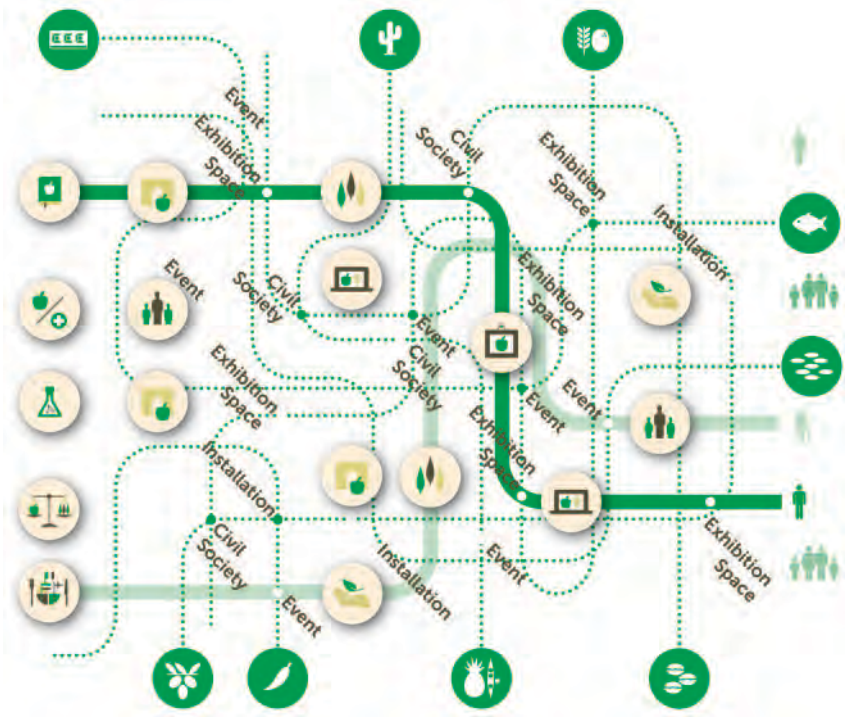
- Itinerary stopping points: Thematic Itinerary develops along a line and although this will not be the only way to follow the route (every Thematic Itinerary can develop and branch off along different routes, see below), every Itinerary has stopping points. These could be a particular structure, such as an art installation, a building or an Exhibition Area, it could be a plant, a tree, a greenhouse, it could be an exhibit displayed inside an Exhibition Area, such as an object, a piece of technology, a machine or something organic, or indeed anything that constitutes a definite occasion or appointment, such as a conference scheduled for a certain day in one of the Exhibition Areas or the inauguration of an exhibition. These all represent stopping points along an Itinerary, even though they may only be operative on that particular day.

- Itinerary Routes: each is the linear development of a thematic Itinerary, characterised by a stopping point (every stopping point can have an endless number of Routes and Thematic Itineraries). The Itinerary Routes will be set up once Participants have finalized the contents of their Exhibition Spaces and finished their tagging (see below).

- Signs and indications along the Itinerary: Itineraries will be accessible to all visitors thanks to the use of a system of signs (physical and digital) all over the Site. The guiding principle of the sign system is not that it 'explains' anything but that it just 'confirms' the visitors' choice. At those locations where visitors are required to contribute to the exhibition content, the sign system will be operated by the visitors and by his or her interaction with the system itself. In other words, the sign system will not render the content available at that particular stopping point redundant (see below) but it will guarantee its visibility and usability and either provide an alternative or support the use of a Digital Device (see below).

- Itinerary Logos: every Itinerary will have its own Logo to identify it, which will be displayed at every stopping point and will represent the Itinerary theme. Each Logo will also have a Route Number (see below).

- Route Numbers: these are part of a progressive number system that specifies the Route on that particular Itinerary (identifiable from the Logo). The Number is linked to the Logo to confirm the different stopping points along the itinerary.



- Itinerary Tags: each Itinerary is characterized by a certain number of key words (Tags) that define the particular characteristics of each stopping point along the Itinerary. These are essential because the stopping points along the Itinerary are described by their content (material and intangible). Since this content has been chosen by a large number of different Participants, the main elements making up the exhibition at that particular point all need to be linked. This needs to be done right from the conception of the contents and linked in turn to a certain number of Tags, which means that the Organiser can establish the Routes of the Itinerary according to the needs of the Participants and the contents that will actually be presented at Expo. The location of the Tags along the various Itinerary Routes will be chosen by the Organiser and will be based on the proposed contents and the corresponding Tags of the Participants.

- Digital Devices: these are the most useful tools to take around the Site and have with you while following a Thematic Itinerary. They refer to either are the visitors' own hand-held devices (smartphone, tablet PC, consoles, etc.), or devices that can be hired on the Site. A special interface will be developed for Expo Milano 2015, the Expo Mobile App, which will give visitors a geo-reference, tell them about the stopping points of interest that they are looking for, help them change Route or Itinerary near the Hubs (see below), update the contents of the Itineraries previously downloaded with all the events and initiatives connected to the various themes, etc.

- Itinerary Hubs: these will be situated all over the Expo Site at points where the greatest visitor flow is expected and also along the Routes. The Hubs are data collection and distribution points, physical areas where, if visitors are using a device to guide their visit, it will be aligned with other devices and information can be exchanged. The devices will also be aligned with the Itinerary itself. Data can be exchanged at the Hub in order to update the Itinerary in real time, but above all visitors can also change Itinerary. In other words, at specific physical junctions, anyone who is following an Itinerary Route can switch to another Route or change Itinerary. This makes the whole experience extremely dynamic and allows visitors to follow different formulas for the visit.

Personalised Itineraries

Universal Expositions are amazing educational occasions because they bring together in one location, for a suitable length of time, all the best opportunities for developing a theme that is of interest to the whole of humanity.

Of the many elements that have changed how knowledge is managed and transferred, two of them are of particular interest since they have radically influenced the relationship between individuals and their ability to learn. Because of this they are also central to planning any Expo, particularly one like Milano 2015 that will focus a great deal of attention on educating visitors:

- Personalised contents: the 'physical' identity of each of us is increasingly associated with a 'digital' identity through which we can connect to any source of information anywhere in the world.
- Collaborative knowledge: the 2015 Event will be a global stage on which exhibits will be shared rather than exploited.

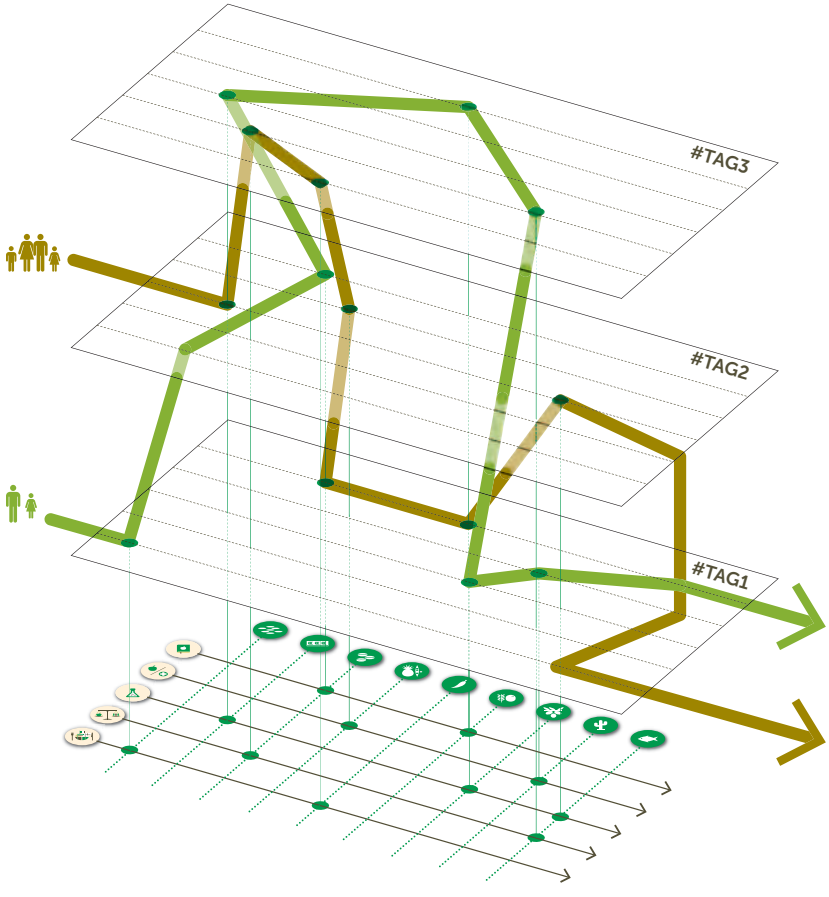
This leads us to another timely consideration, given the objectives of Expo Milano 2015: the possibility of presenting ideas, projects and models in a social context and sharing them, above all, on a digital platform.

Besides offering all the space and services usually found in a traditional Exposition, Expo Milano 2015 will also offer an opportunity to generate personalised knowledge for each visitor. Potentially, the outcome of the visit for each person who comes to Expo will be different from that of the next person, something which is possible when users have access to interactive tools that involve them in the planning and management, and in remembering the knowledge they have gained and what they have experienced at Expo. In other words, every exhibit and every way it is represented must be designed by the Participants while paying careful attention to the needs of a heterogeneous and international audience, an audience that is capable of immersing themselves in the main environments in which they seek to broaden their understanding and the way in which this can be achieved.

The way in which each visit is personalised depends on the visitors and

on the opportunities they may have to interact before visiting the Exposition, including through the creation of a digital identity: MyExpo 2015.

MyExpo 2015 replaces the traditional functions of digital identity by providing visitors with an identity card they can prepare before the visit and which can be used for purchasing entrance tickets, booking tickets for shows, managing the related contacts and communications and so on. For the Organiser this is a powerful profiling tool and a way to manage crowd flow, adjust what is on offer according to expected attendance figures (e.g., increasing or reducing availability) and generally provide an ideal interface with visitors.

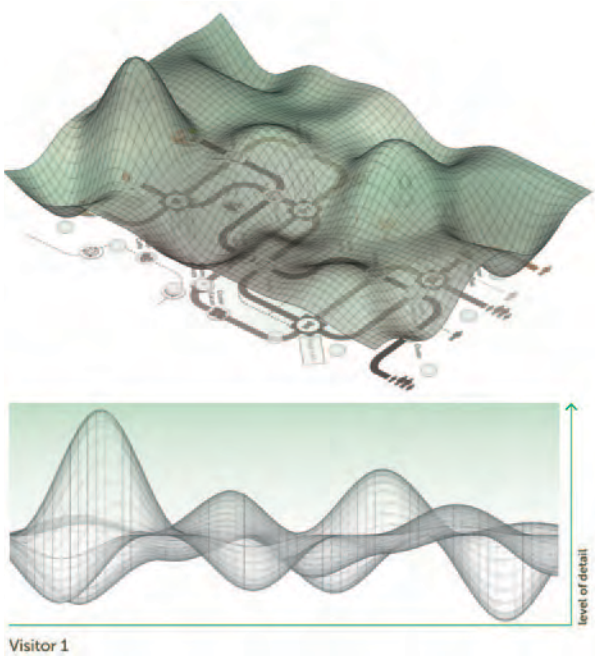


Visitor's identity cards will contain everything necessary to enrich the theme of food, including details of the exhibits presented by Participants that can possibly be of interest to users. In addition, thanks to the mobile interface that will be created for each main consumer device on the market, each exhibit already available in the months preceding Expo will migrate to the digital device when Expo starts.

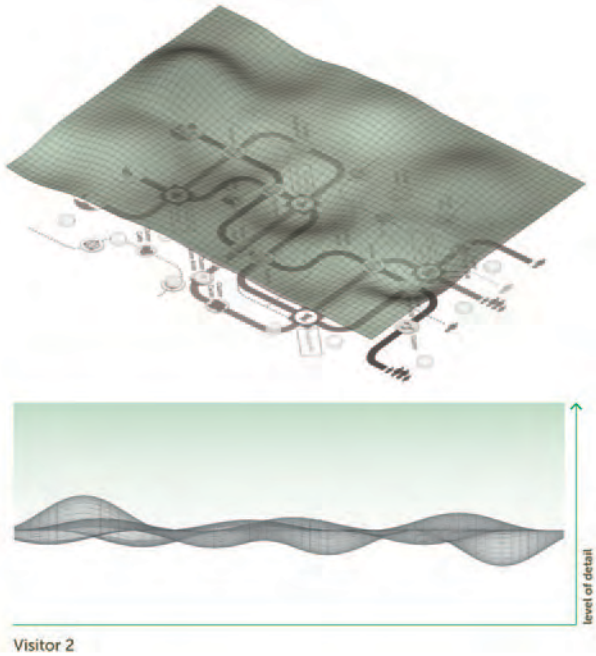
Itineraries, analyses, digital repositories with tens of thousands of audio, photographic and video footage produced by the Organiser and by the Participants, pod-casts, e-books and web-casts will be made available to visitors, and recommendations regarding suitable content will be made on the basis of the personal interests, language and expressed preferences of the individual users.

The Organiser will present a digital framework to which every Participant at Expo will be invited to contribute by offering their own preparatory materials for the visit. Anything that could possibly help the visitor prepare for their visit and could stimulate discussion about the project (conference proceedings, teaching videos, trailers, interviews, cartoons, online video games, etc.) will be made available.

This means that expanded reality tools will be widely used since they are highly appropriate for broadening our detailed understanding, and it would not make much sense to develop special didactic or information systems for all the visitors. Naturally, any type of 'personalised' contribution by the visitor will serve to refine the user's profile in relation to the exhibits presented at Expo and the subjects of the Theme. The huge amount of knowledge and personal interest that is invested in preparation for the visit and, above all, during the visit to Expo itself, can also be enhanced thanks to the presentation of elements that can broaden understanding, develop and update the exhibition material and add to the visitors' digital profile over the following weeks and months. In this way, a large bank of experience of Expo is developed, and this is enough to guarantee that, above all, the intangible themes that require more time to be elaborated and absorbed will continue to have mental space even if they are no longer physically present in the visitors.



Visitor 1



Visitor 2

3.5 Technological Framework

The engagement of the visitor is the inspiration for a real change in the approach to visiting Expo, and it can take advantage of two tools that are new to the Expo experience, Thematic Itineraries and Personalised Itineraries, both of which made possible by an innovative technological framework that benefits from all the resources of Expo Milano 2015.

The design and structure of these tools cannot depend only on the Organiser, even though it is the Organiser who will determine their final form, but depend on all the Participants, who will be required to develop them by adding ad hoc content.

From a practical point of view, Expo Milano 2015 will use some of the most sophisticated technology available in order to make the experience truly special by personally engaging visitors.

Technologies for Participants

In order to achieve this, the Organiser will provide Participants with some of the latest technology[6] that will radically change the visitors' experience as far as content (in-depth analysis, personalization, interaction with user generated contents, sharing the experience through social networks, etc.) and 'usability' of the Expo Site is concerned. All this will make the visit a more enjoyable educational and entertainment experience, with particular attention paid to visitors with physical, visual and hearing problems.

The possibility presented by Social Media to establish contact with supporters and critics, in order to show them the content and explain why it was chosen, will allow the public (and above all the much more numerous virtual audience) to decide to what extent the Event has been successful. Online social networks will be used to stimulate the interest of the more active visitors who may want to get involved in some of the more physical activities that make up part of Expo. In this way online participation will be transferred onto the Expo Site, creating large collective events on the themes of Expo.

From a user's point of view, the technology will be developed in three stages: before Expo, to attract and inform visitors; during Expo, to promote intense participation in the Event; after Expo, to review the overall experience.

Specific guidelines on technology will be issued by the Organiser in the next few months.

[6] For more details, consult the Technologies Guidelines that will be presented in the next few months.

4 THEME STATEMENT

4.1 Expressing the Theme Statement

The Theme Statement is the first conceptualization of the exhibition space in written form that each Participant produces and shares with the Organiser. As the first step along the long path leading to the final creation of the Pavilions (executive design and production will follow much later), the Theme Statement should summarize all the most significant elements, the educational and communicational objectives, the strategy for achieving them and of course the basic underlying idea, which is the heart of the project.

The Theme Statement for an Exposition Pavilion is akin to a treatment for a film. In just a few pages, it has to condense the entire imaginative world that will be represented, the people who will move through it and especially the emotions that the project will arouse in visitors if it is properly developed, implemented, and communicated.

Precisely because it represents the first step, the Theme Statement will be a document to be discussed between the Participant and the Organiser. The Organiser will decide whether or not the theme presented by each Participant strictly adheres to the contents of this Guide.

The Theme Statement, an official document submitted to the Organiser for approval, will be an integral part of the Participation Contract[7], a formal document signed by Participant and Organiser that defines and regulates all aspects of the Participant's contribution to Expo Milano 2015.

The Theme Statement will also represent an important tool for Participants in moving their project forward in line with the Theme of Expo Milano 2015. As a working tool, it is by nature subject to on-going and progressive updates. Hence, in the initial version that formalizes the participation proposal, Participants may limit themselves to an initial level of detail which, should the proposal be approved by the Organiser, will be followed by progressive updates.

The Organiser's objective is to ensure harmony among the architectural structures, the design of the external exhibition spaces and the internal content of the Pavilions in every area of the Site. The Organiser's efforts to obtain a precise Theme Statement from each Participant is one part of its commitment to this purpose.

Milan Expo expects to go beyond the concept whereby content is expressed exclusively in exhibits installed in the interior spaces of the buildings.

[7] See the Participants' Guide for various contract options for Non-Official Participants.

On the contrary, the use of the buildings and especially of the open space around them should prepare the way for an optimal tour of the interiors and in general arouse a feeling of completeness and fluidity in visitors, who should not in any way come away with the idea of physical or mental barriers to the overall development of the Expo Theme. For this reason, the design of the architecture and the design of the landscape around it should be engaged in a continuous dialogue, and Participants must consider the open spaces around the Pavilions as fully fledged exhibition spaces in their own right.

To optimize their experience at and contribution to Expo, each Participant should undertake to share with the Organiser a Theme Statement that develops the overall project guidelines in four separate directions:

- concept and educational plan;
- architecture and technology;
- exhibits and active content;
- commercial activities and food services.

The Theme Statement application form both for Official and Non Official Participants will be made available on the Participants Digital Management System Platform. Each Participant will then send to the Organiser the completed application form which will be evaluated by the Theme Executive Group. Official Participants will then receive the results of the evaluation within ninety days of receipt, while Non – Official Participants will receive a reply within fifty days.

Concept and Educational Plan

The basic element in the Theme Statement is the definition of the concept.

The concept represents an exhaustive description of the guiding philosophy behind the participation project, elucidating how this approach will be infused into all the content, both static or active, prepared by Participants and briefly highlighting the most novel elements in the participation project.

The concept is the basic objective that Participants intend to express and communicate. It will clearly identify the educational objective, the promotional objective and the strategic planning objective for the participating Country or Organisation. It represents a consistent inner core from which derive all cultural activities and offerings, as well as the reference setting in which Good Practices and scientific research relating to the Theme are analysed. In brief, the concept is the heart of the theme that the Participants have chosen to develop and bring into focus in their exposition proposals.

Whether it addresses sustainable agriculture, innovative industrial food production techniques or strategies, or new ways of consuming traditional products, it is important that, even though changes and updates can and will be made to it over time, this central element remains consistent up until the start of Expo. The reason for this is that this concept will determine how the Organiser chooses a possible location for the Exhibition Space, how it will be incorporated into thematic itineraries and what possible synergy can be developed with other Participants.

It is important that the concept is a clear description of the general educational purposes of the Exhibition, that it make clear reference to its overall relevance to the Theme and obviously encourages people to study and reflect on it and lastly that it describe as clearly as possible how it will establish a dialogue with visitors, both those physically present at the Site and those virtually present via Cyber Expo.

The following items should be discussed in the concept:

- **Theme of Participation.** Indicate the official title of the Participant's contribution to Expo Milano 2015.
  The title should be brief yet also narrative, capable of immediately conveying the approach chosen by the Participant to develop the Expo Theme, "Feeding the Planet, Energy for Life".
- **Focus.** Indicate the principal message that Participants intend to communicate through their contribution to Expo. Indicate through which elements (see paragraph 1.3 of this Guide) Participants intend to interpret the Theme of Expo Milano 2015.
- **Target.** Briefly summarise the general objectives of the participation. This may include general introductory elements associated with the specific qualities of the Participants and the reasons why these elements will shape the Participant's interpretation of the Expo Theme. Indicate the target audience for the Participant's message.
- **Thematic Itineraries.** Indicate which thematic itineraries proposed by the Organiser might be most appropriate for the Exhibition Space, justifying each choice by the exhibits and the cultural, gastronomic or scientific activities proposed by the Participant.
- **Clusters.** If the Participant chooses to be part of a Cluster, please indicate which Cluster and why. Provide details of what Participant activities and exhibitions justify inclusion within a given Cluster.

Architecture and Technology

Participants must include in the Theme Statement a brief preliminary description of the design approach that will be adopted for its Exhibition Space. The fundamental objective here is to show the way this approach engages in dialogue with the themes of the Exposition and the principal sub-themes chosen by the Participants, and also with the Participants' specific traditions and cultural identity.

This outline (on the level of 'architectural concept') of the Exhibition Space can be expressed in the Theme Statement, by visual means using sketches, photomontages and renderings or in a text that describes the spaces, general structural lines and the intention to use sustainable materials. The role of the architecture in serving the purposes of the content of the Participants' contribution should be highlighted in this phase. It has already been made clear that it is extremely important for the Organiser that every element in this Exposition be an expression of the Theme, "Feeding the Planet, Energy for Life", and this must also be reflected in the architectural design of the Exhibition Space. One objective of the Theme Statement is to allow the Organiser to understand

how Participants intend to develop and bring out the potential of the spaces available to them, and how they intend to use these spaces to construct a way of interacting with visitors, on the one hand, and an element for communicating food-related content and experience, on the other. The architecture can be part of the experience by being active (events, performances, entertainment, conferences, etc.) and interactive, or it can represent the Participants' vision regarding issues of food production and contemporary consumption patterns, becoming a metaphor for daily relations with food.

Similarly, Participants are requested to immediately outline how they intend to utilize technology, relating it especially to the Expo virtual infrastructure. The 'virtual' architecture of Cyber Expo is part of the exposition project and it is important that Participants express the potential applications that will allow people not present on the Expo Site to be involved in the Network, and people who are present on the Site to interact and access content via mobile devices.

Exhibits and Active Content

The Theme Statement must express the strategic guidelines for the expositional content that Participants plan to feature in its Exhibition Space. In addition to the traditional form of representing content in static exhibits, Expo Milano 2015 also seeks to feature 'active' content in the form of shows, entertainment, discussions and debates, while food service activities (restaurants, catering, etc.), which should involve food producers, chefs and food experts who best represent the identity of the Participants, are among the highest forms of representational performance.

Commercial and Food Service Activities

The strategic guidelines regarding the sale of products that Participants plan to promote during Expo should be described in the Theme Statement. The distribution of food products and served food is particularly important in this regard. While the Theme lends itself well to scientific discussion of the new challenges of food production and consumption, Expo is also an excellent opportunity for visitors to come into direct contact with and experience the rich range of gastronomic delights from all over the world. The Theme Statement must also contain a description of the strategy Participants plan to employ in presenting their food products to visitors, both in the form of street food (eaten 'on the go') served to people attracted by the content offered by the Pavilions, and in more fixed restaurant or café settings.

The inescapable condition is that every offer has to reflect excellence. Expo Milano 2015 must be an occasion for each Participant to display the best that its culture has created throughout its history and that it envisions producing in the future in terms of food and food-related traditions.

The representation of each Participant's current food situation must aim to show the best of this production, both in terms of product quality and in terms of presentation and interaction with the visitors. The Participants' partners in this experience have to be highly qualified and must be selected on the basis of their ability and determination to take part in the challenge implicit in the Theme.

5. EXHIBITION PROJECT

In the lead-up to 2015, after the Theme Statement has been submitted and approved by the Organiser of Expo Milano 2015, Participants must prepare a Pavilion Exhibition Project. This document will fully illustrate the architectural and venue design as well as the content and event programme, and it will be binding[8]. Suggestions are provided below that may be of help in optimizing the Exhibition Project.

5.1 Showcase

The world stage par excellence offered by a Universal Exposition offers extraordinary and unique opportunities. Over the six months of the Event, each Participant will have every conceivable opportunity to express its particular 'take' on the Expo Theme to an international audience and the global media using the means, methods and formulas that best illustrate its position. This of course will be accompanied by the presentation of ideas, projects, technologies, people, organisations, products and art objects that interpret the Theme in the most opportune way.

It should be noted, however, that this great opportunity comes with equally clear risks since every message must be carefully calibrated and in line with the hundreds of events offered every day across the Expo Site, made comprehensible to a multicultural international audience and delivered via the tools made available by the Organiser (Thematic Itineraries and Cyber Expo, just to name a few), so that it reaches those visitors who are most interested in the specific type of content that will be exhibited or performed.

For this reason, a number of ideas are presented below to help Participants formulate their Exhibition Projects, with the aim of ensuring that the resources invested by Participants meet with an appropriate return in terms of audience interest and attention, awareness and education.

International audience: visitors to Universal Expositions represent an international audience, and over 30% of visitors to Expo Milano 2015 are expected to come from outside Italy. This involves a series of factors that must be kept in mind, with one of the most important being the need to make

[8] As stated in Special Regulation no.1, Participants must submit an "Exhibition Project" document to the Organiser, which represents a further stage in the development of the Theme Statement. The Exhibition Project will contain information regarding the participation of the Country in question and will be continuously updated.

content and messages intelligible to the majority of people in the audience by overcoming linguistic barriers and conceptual/cultural barriers rooted in language. Nothing should be taken for granted in designing exhibitions or installations, in presenting products or concepts and in displaying techniques or equipment, and where possible, relatively complex concepts or those that will be unfamiliar to certain segments of the audience should be accompanied by explanations. Where this cannot be accomplished by printed graphic or textual means, it would be opportune to offer these explanations in digital format that may be accessed via mobile devices or presented in totems, thereby taking advantage of the possibilities offered by the Cyber Expo system.

As for languages, all Participants are invited to present their textual and graphic content (static or digital) in three languages (Italian, French and English).

An audience of non-specialists: most visitors to Expo are by definition non-specialists, therefore every exhibit and every concept within each exhibit must be developed on at least two levels: the first of these is on an immediate level, useful for the majority of visitors, while the second level is more suitable for a small number of visitors as it involves going into more possible scientific, technological, and methodological developments to complement and augment the content of the exhibit. In cases where concepts and projects of an intangible nature are presented, Participants are always asked to provide an explanatory text (printed and/or digital), and in particular to accompany them, where possible, with live speakers or presentations.

It is very important that graphic material should be available inside and outside the Pavilions and in every area occupied by Participants, while all Participants should implement a strongly individual visual identity that will also be comprehensible to a non-specialist audience. The Organiser discourages excessively metaphorical graphics that prevent relatively unschooled visitors from grasping at least the key concepts of the content presented by Participants, and another decisive factor in this regard is also the dimension of graphics and their optimal placement with respect to the objects of attention and visitor flows. In any case, points of attraction should not be set up near doors, corridors, bottlenecks, entrances or exits since they can potentially create crowds that would obstruct the free flow of visitors through the Exhibition Space. Internal Exhibition Space signs should be carefully designed and pre-tested, in order to ensure that there is an effective and immediately comprehensible system of icons and symbols available.

Flow management: successful events and communication of the concepts and ideas proposed in Exhibition Spaces depends to a significant extent on the physical-spatial relationship between visitors and exhibits. In designing their Exhibition spaces, Participants should bear in mind that tens of thousands of people may visit every day and that the Organiser is very keen on preventing long queues and long waiting times at the entrances to the

exhibition facilities. Participants are also required to focus on specific queue management measures, such as providing entertainment activities and setting up pre – reservation systems.

The Pavilion circulation plan should therefore embrace a number of important guidelines:

- there must be more than one entrance and one exit to exhibition spaces. There must be separate exits and entrances to all Pavilions;
- there should be separate exits and entrances to food & beverage areas, especially for restaurants, so that visitors may use them without necessarily having to walk along the entire exhibition path through the Exhibition Spaces to get to them;
- there should be separate entrances/exits for VIPs, service employees, the disabled, suppliers and waste disposal personnel;
- limited use should be made of corridors, areas near entrances/exits, passageways between rooms and more generally any areas that may cause bottlenecks as exhibition areas.

One Pavilion, many highlights: it is extremely important to bear in mind the fact that from the visitors' point of view, each exhibition space is physically composed of a complex system of scientific, artistic and cultural content based on:

- an architectural setting and an exhibition itinerary;
- a collection of highlights, discrete units of exhibition content (not necessarily objects but maybe videos, multimedia installation or even an event);
- a programme of entertainment and experiences (especially gastronomic) that could be of a 'hands-on' nature and part of a larger cultural programme;
- a digital interface where all the above elements are present in the Cyber Expo system.

In planning the exhibition spaces and their usage, Exhibition Spaces designers and curators must ensure that visitors have an orderly, harmonious perception of content that complements the natural inclination of visitors to establish their own priorities and hierarchies and to assimilate information depending on whether or not they find it relevant. With this in mind, the curators of thematic content should identify the highlights of the exhibition in advance, choosing those that are most important and representative so as to limit their number and enhance their focus. An exhibition itinerary can be created around these highlights, which should help to impress the key concepts on the minds of visitors It might therefore be useful to distribute the main highlights around all the Pavilion areas, including the external walls and above all the areas outside the structure in order to stimulate the natural tendency of visitors to gather in clusters around the main points of attraction, which must be suitably marked.

If cyclical audio-visual presentations in a projection space or multimedia

installation are planned for groups of visitors, areas for those awaiting the next show must be planned so that queues do not constitute an obstacle to people visiting other parts of the Exhibition Space.

Pavilions pulsating with events and initiatives: Expo Milano 2015 will be an Exposition strongly based on the promotion and diffusion of knowledge through intangible means. This calls for the content proposed by Participants to be transformed so that it does not comprise only static objects and traditional exhibits but also live presentations, conferences dedicated to Good Practices, cooking demonstrations, art and cinema shows, theatre and music performances and other forms of edutainment that touch on the theme of food and nutrition in the various Expo settings. The result of this is that it is possible to modify in a rather radical way the concept of Expo Pavilions which will no longer be just a place/container for objects, products and goods, but also theatre/performance arenas that reflect the Theme of the Expo with cultural events, live shows and presentations of the artistic culture that represents part of the Participants' intangible heritage. In this way they will become vital spaces that change day by day, encouraging visitors to return over and over again.

The creation of a programme of activities will therefore be one of the starting points when planning the contribution of Participants to Expo. Consequently, Pavilions should be designed with interior spaces for small- or medium-sized events, while Participants can use the Expo Centre, the Lake Arena and the Open-Air Theatre for larger events.

Interaction design and Expo Milano 2015: a key element of the new idea for Universal Expositions that Milan will launch is the participation of visitors in the construction of exhibition content. There are a number of reasons for this change of perspective:

- the educational objectives of Expo are to have maximum visitor engagement, including their collaboration not only in attributing meaning to the Expo content, but also in the actual design of the output of at least some of the exhibits;
- active participation is complementary to the discussion that Expo seeks to promote and stimulate through a large number of events and scientific and educational initiatives and conferences where audience participation is crucial;
- the general principles underlying Universal Expositions are greatly strengthened by the awareness that the theme of nutrition, access to food resources and the sustainability of agricultural and animal husbandry practices require action by everyone through responsible and informed choices in order to make a real difference for the future of our planet.

The Organiser suggests that one of the tools that could be more usefully used to emphasise the dialogue element in exhibitions and presentations is interactive exhibits. These exhibits refer to everything that involves the

application of museum and exhibition technology (physical, multimedia, audio-visual and digital), in order to enhance the experience by allowing the audience to take part in it and thereby stimulating the generation of user generated content.

5.2 Exhibition Project

The Exhibition Project must illustrate in as much detail as possible the architectural elements, installations, content and event programmes that Participants will bring to Expo. In other words, Participants are asked to develop as part of the Exhibition Project a comprehensive participation proposal that addresses the objectives laid out in it, and which uses every possible option offered to them by the physical and spatial conditions available at Expo.

Architectural Project

The Exhibition Project must first and foremost provide a complete description of the basic Exhibition Space design, including the use of particular materials that best suit the planned content, the presence of new technologies and in general an emphasis on the removal of barriers (both physical and psychological) that might prevent visitors from fully experiencing the content of the Pavilions and the surrounding countryside.

Flow management is particularly critical: the Organiser expects Participants to provide an overview of how they plan to manage visitor flows within their Exhibition Spaces, given the forecast of some 140,000 visitors per day to the Expo Site, with peaks of up to 250,000. It is also important to detail the architectural design and planning aspects that will be implemented to ensure that the structure can absorb queues of waiting visitors and indicate the queue overflow areas and the crucial junctions represented by the commercial areas (a maximum 20% of the total area of the exhibition space).

Participant should also describe the daily management plan for replenishing supplies and dealing with waste products, consisting of a brief preliminary analysis of how they intend to manage food and supply deliveries during the hours the Exhibition Space is open to visitors and deal with waste disposal when it is closed.

Participants are also asked to submit a graphic illustration of the structure or structures that they plan to occupy. This may be in the form of pictograms, renderings, sketches or any other form that conveys how the spaces will be developed. It is especially important that Participants provide a detailed plan, both graphic and textual, of the planned architectural structure of the façade that gives onto the World Avenue (the Decumanus of the Expo Site).

If Participants plan to construct more than one building on their Exhibition Space, the plan should specify the functional distinctions between the various buildings and describe the specifics of each one. Participants opting for a multi-building solution should be aware that it is the Organiser's objective to ensure that visitors enjoy a continuous, unbroken experience without gates,

barriers or structural bottlenecks that prevent the natural flow of visitors from one Exhibition Space to another. Participants can refer to Special Regulation Number 4 for additional guidelines.

Technology Plan

In this part of the Exhibition Project, Participants must provide an analysis of a tour of the Exhibition Space by a typical visitor in relation to the technological instruments either planned for the Pavilions or available for visitors to use in exploring their content.

For example, Participants should analyse the various possible types of interaction, indicating how technology will enhance the experience of each:

- traditional exhibitions;
- interactive experience;
- augmented reality exhibits;
- active events (entertainment, conferences, shows);
- culinary and gastronomic experience.

Sustainability

The Exhibition Project must contain a detailed account of the principal structural and management elements developed by Participants to minimize the environmental impact of their project.

The preliminary assessment of project sustainability calls for a description of the elements that characterize the sustainability of the projects:

- use of recycled or re-usable materials;
- structure of the Pavilion;
- renewable resource assessment system;
- optimization techniques;
- passive strategies (shade areas, natural ventilation, etc.);
- consumption and recycling of water;
- materials for minimizing heat absorption and increasing heat reflection;
- strategies for communicating the implemented sustainability measures to visitors during their visit, one of the fundamental elements of the Theme and a key objective of Expo.

Open Spaces

This part of the Exhibition Project should contain a brief description of the planned design of the open space around the Pavilion. Participants who have chosen to be part of a Cluster should describe the content that they propose for the common area.

On the basis of the roles established in the Guidelines for Construction and Installations (see Guidelines for details), the ratio between open and roofed space on the Exhibition Space lot offers opportunities for the

development of the Expo Theme. The construction of the overall Site area is an integral part of the Expo objectives, and each Participant will contribute to this in designing and managing the space entrusted to it. All structures to be installed in the open areas must therefore be described, as well as any landscape design project. Furthermore, greenhouses, pergolas, green façades, pools, gazebos and anything else that will enrich the landscape can already be designed and described graphically at this stage. Participants are requested to pay special attention to the need for a disabled – friendly Expo.

Description of Exhibition Content

In addition to a detailed description of the content of the Pavilions, the Exhibition Project must also describe the way the content will be represented.

With regard to exhibition installations, a detailed description must be given of how the content will be presented and how the public will make use of it.

With regard to technology, the Exhibition Project should also describe the interactive and presentational applications that will be used to display the content and engage visitors.

The planned exhibition design must also be described.

Works of art, exclusive goods or craftwork that will be exhibited as part of the content should also be included, together with their function in contributing to exploring the Expo Theme.

Food & Beverages

This part of the Exhibition Project will describe the overall thematic approach in terms of food services. It is recommended that a detailed description is provided of the main types of foods and beverages offered, especially those typical products that will be available for sale and/or sampling, the way they will be offered (table service, self service, street food, product sampling during events, etc.), how they represent points of excellence and so on.

Participants can refer to Special Regulation Number 9 for additional guidelines.

Event Programme

Participants must describe the activities, shows and events that they plan to stage, clearly specifying the category (concert, fashion show, food or wine tasting, scientific conference, etc.), those involved (people, scientific or cultural organisations, etc.), and the objectives in terms of the Expo Theme and the sub-themes chosen by the individual Participants.

Participants must pay great attention to how space is used for events, culinary and cultural shows, performances and so on. It is important that the Organiser knows well in advance exactly what functions Participants plan to offer both indoors and outdoors, therefore it will also be important to know what type of activities are planned for rooftop gardens, greenhouses and

open spaces, which generally exploit the architectural structure (projections on walls, etc.).

Queues at the Exhibition Space entrance represent a critical factor in ensuring an enjoyable Visitor Experience. The Organiser will ensure that all situations involving a wait are managed in the best possible way, and this will entail both the identification of specific queuing areas (see the Guidelines for Construction and Installations) and also the management of content so that visitors waiting to enter a facility or show may either enjoy an enriching experience based on animations or preliminary instructions, or experience the pleasant and relaxing setting such as a garden.

The Organiser is currently working on producing specific guidelines and procedures for the organisation of events, and these will be issued in the coming months.

Special Requests

In this final chapter of the Exhibition Project Participants are given the opportunity to address any specific requests to the Organiser such as, for example, permission to use Expo service spaces on days that have a particular relevance for their countries, or the need for specific supplies linked to individual projects.

FORMS

The following pages contain examples of the Theme Statement and Exhibition
Project forms which Participants can download from the Participants Digital Management System (PDMS).
While compiling the forms, Participants are kindly requested to provide as many details as possible. For more information on the PDMS, please refer to the Participants Guide.

Theme Statement Application Form for Official Participants

Name of Official Participant	
Date of Participation Notification	
Date of Application (submission)	
Theme of Participation	
Concept and Educational Plan	
Focus	
Target	
Thematic Itineraries	
Cluster	
Architecture and Technology	
Exhibits and Active Content	
Commercial and Food Service Activities	
Applicant's Contacts	
Name	
Address	
Telephone	
E-mail address	
Fax	
Commissioner General of Section (signature)	

fac-simile

Theme Statement Application Form for Non-Official Participants

Name of Non-Official Participant	
Date of Application (submission)	
Theme of Participation	
Concept and Educational Plan	
Focus	
Target	
Thematic itineraries	
Architecture and Technology	
Exhibits and Active Content	
Commercial Activities and Food Services	
Applicant's Contacts	
Name	
Address	
Telephone	
e-mail address	
Fax	
Representative (signature)	

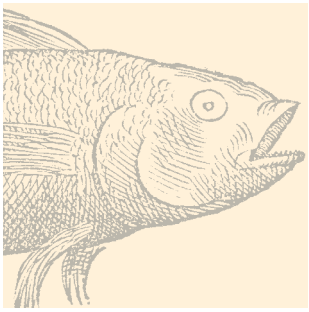
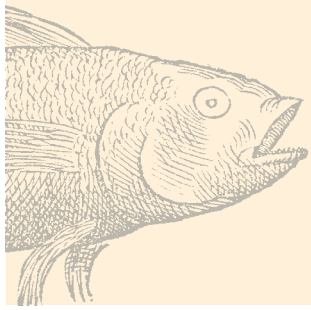
fac-simile

Exhibition Project Application Form for Official Participants

Name of Official Participant	
Date of submission of the Theme Statement	
Date of Application (submission)	
Theme of Participation	
Exhibition Plan	
Architectural Project	
Technology Plan	
Sustainability	
Open Spaces	
Exhibition Content	
Description of Exhibition Content	
Food & Beverages	
Event Programme	
Special Requests	
Commissioner General of Section (signature)	

fac-simile

Exhibition Project Application Form for Non-Official Participants

Name of Non-Official Participant	
Date of submission of the Theme Statement	
Date of Application (submission)	
Theme of Participation	
Exhibition Plan	
Architectural Project	
Technology Plan	
Sustainability	
Open Spaces	
Exhibition Content	
Description of Exhibition Content	
Food & Beverages	
Event Programme	
Special Requests	
Representative (signature)	

fac-simile