

# SUMMARY OF PROFESSIONAL ACCOMPLISHMENTS

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I

**THE COURSE OF ACADEMIC  
AND ARTISTIC CAREER**



## EDUCATION

**2013**

The Eugeniusz Geppert Academy of Fine Arts and Design in Wrocław  
Department of Interior Design

**Doctorate degree in Fine Arts** in the discipline of design art

Topic: *Interactive space in art and design*

**2005**

The Eugeniusz Geppert Academy of Fine Arts and Design in Wrocław  
Department of Interior Design

**Master's degree in Art**

Thesis topic: *Experimental-visual space for children*

## INFORMATION ABOUT EMPLOYMENT

### Current employment

Since 2006 academic teacher, head of the Laboratory of Interactive Space Design and Multimedia Objects at the Department of Interior Design at the Innovation Center of the Eugeniusz Geppert Academy of Fine Arts and Design in Wrocław

### Experience gained during my work at the Academy of Fine Arts in Wrocław

**01.09.2006–01.09.2012**

Assistant in the Interior Design Laboratory led by Prof. Krzysztof Wołowski

**01.09.2006–01.09.2012**

Coordinator for foreign cooperation under the Socrates-Erasmus Program

**01.09.2008–31.09.2009**

Assistant in the Studio of Painting and Drawing led by Prof. Marek Jakubek

### Other professional experience

**01.06.2013–01.02.2015**

A member of the research group at the Thematic Department of Expo 2015 under the supervision of Politecnico di Milano. Work on the exhibitory declination of 9 thematic pavilions (the so-called *Clusters*) at Expo 2015.

Tutor at the Interior Architecture Design course conducted by Prof. Alessandro Biamonti and Silvia Gramegna and then at the Laboratory of the Sintesi Finale in Design degli Interni led by the following lecturers: Agnese Rebaglio, Luigi Brenna, Barbara Camocini, Elena Giunta, Alessandro Colombo

**06–10.2015**

Artistic consultant and designer of exhibition space *RESONANCES. Science-Art-Politics*, realized at SUPERSTUDIO PIU on Via Tortona in Milan organized by the Joint Research Centre of the European Commission

**11.2012–09.2013**

Designer of interactive exhibition space *Naturum* in cooperation with the OM-Lab design team

**10.2012–01.2013**

Designer of interactive exhibition space *Łódź City Museum* in cooperation with the OM-Lab design team

**01.10.2012–31.12.2012**

Designer of interactive exhibition space *Humanitarium* in collaboration with the OM-Lab design team

**01.02.2008–31.12.2011**

Interior designer at the design company Walas LLC in Wrocław

**01.09.2007–31.12.2011**

Freelancer, artist-designer (Cooperation with Fameg, WRO Art Center)

**12.10.2007, 30.06.2008, 10.10.2008, 30.06.2009, 16.10.2009**

Lecturer at Postgraduate Studies of Contemporary Methods of Documentation and Promotion of Cultural Heritage at the Wrocław University, Topics: *Contemporary cognitive means as medium in shaping the attitudes of the future recipient and art creator.*

**01.09.2007–31.07.2008**

Instructor at the *Presentation Techniques* Course in the Higher School of Artistic Crafts and Management

## DIDACTIC EXPERIENCES

### 29.11–1.12.2016

Participation in workshop *To wam zniszcza / This they will destroy* for artists and officials of Wrocław cultural institutions within the framework of the summation of the project *Entrance from the Backyard – Wrocław Capital of European Culture 2016* (PL)

### 08–09.2016

Participation in SciArt Summer School organized in Joint Research Center in Ispra (IT) with the involvement of personalities such as: Peter Weibel (director of ZKM – Center for Art and Media in Karlsruhe) and Michael John Gorman (founder of NaMu Bayern – a new museum combining science, design and art, emerging in the Nymphenburg palace in Munich, Professor at the Faculty of Life Sciences in Society at the Ludwig-Maximilians University in Munich, founder of Science Gallery in Trinity College Dublin)

### 06.2016

Participation in the training entitled *Application of Design Methods on the Visualisation of Scientific Information* run by Sonia Massari (director of Gustolab International Institute for Food Studies of Illinois University and Urbana-Champaign Food Studies programs in Rome) organized in Joint Research Centre, Ispra, (IT)

### 09–27.07.2012

Tutor in the workshop *Confrontations on the Table* with student's group from Kyung Hee University – Seoul (KOR) organized in Wrocław Academy of Art and Design

### 26–30.03.2012

Tutor in the workshop *Stage in a 100 century* organized together with Prof. Michal Jedrzejewski in collaboration with Prof. Tomas Navratil with students from Wrocław Academy of Fine Arts and Design (PL) and HOGESCHOOL GENT (BE)

### 10.2011

Participation in the episode of TVP Kultura program entitled *Mindware. Technologies of Dialogue / Mindware. Technologie dialogu*

### 10.2011

Participation in the artistic initiative entitled *Mindware* within the framework of the National Cultural Program of the Polish Presidency of the Council of the European Union 2011 in Lublin (PL). Realisation of the installation *Seeing Place*

### 15.08–15.10 2011

Artistic residency in Bains Connective Foundation in Brussels (BE)

### 02–03.07.2011

Tutor of the family workshop in the *World of colour and line* organised in Arsenal Gallery in Bialystok (PL)

### 09–18.05.2011

Participation in the international artistic workshop AIAS in Between organised in Kaywon School of Art & Design in Soeul (KOR), completed with presentation of interactive installation *미스카 / MISKA* realised together with Jakub Jernajczyk

### 01.01.2010–30.06.2011

Research internship at the Faculty of Psychology and Education at the Vrije Universiteit Brussel (BE) under the direction of Prof. Willem Elias. Preparation of materials for installation *Look at Yourself*

### 19.05.2010

Artistic work presentation and participation in the discussion within the framework of the meeting cycle titled *Nowe Pietro / New Level*, organized by Architektura Murator magazine and the Warsaw Modern Art Center (PL)

### 22–24.03.2010

Presentation of the achievements of the master courses of the Department of Interior Architecture of the Wrocław Academy of Fine Arts in Hogeschool Gent and in Ecole Superieure des Arts Saint-Luc de Liège (BE) within the framework of *Teaching Staff Mobility* programme

### 12.07.2007 – 30.06.2007; 10.05.08 – 29.06.08; 30.05.09 – 28.06.09

Lectures and classes at Postgraduate Study of Contemporary Methods of Documentation and Promotion of Cultural Heritage, The University of Wrocław (PL). *Contemporary cognitive measures as a medium in shaping the future attitudes of a recipient and a creator of art*



#### **06.02–27.03.2007**

Implementation of the interactive project *Identity of Wrocław Citizens*, accompanying the exhibition *Identity*, organised in Wrocław Museum of Architecture (PL) under the tutelage of Sylwia Swislocka as part of the presentation of Zacheta's contemporary art collection.

Tutor of the workshops for children and teenagers related to the identity issue organised parallel to the duration of the exhibition

#### **01.03.2007**

*Ołbin – Noise Action / Ołbin – Akcja Szum*. Organisation of a site-specific project in the Ołbin district in Wrocław (PL) in collaboration with Dawid Załęski, Karina Antończak and Patrycja Mastej

#### **09.2002–09.2003**

Studies within the Erasmus / Socrates Program at the Accademia di Belle Arti di Brera, Milan (IT)

## SCHOLARSHIPS AND AWARDS

#### **2013**

Scholarship of the Minister of Science and Higher Education for Outstanding Young Scientists

#### **12.2009**

Nominee for the New Media Award of the Liedts-Meesen Foundation. Selected to participate the simultaneous presentation during *UPDATE III – Body Sound* exhibition organized by the Centre Pompidou in April 2010 in Zebrstraat, Gent (BE)

#### **02.2009**

Prize-winner of wARTo 2009, a prize awarded by Gazeta Wyborcza (PL) in a category of fine arts

#### **10.2008**

Award of the Rector of the Eugeniusz Geppert Academy of Art and Design in Wrocław for organizational achievements in the academic year 2007/08

#### **04. 2008**

Finalist of the XXII History of Art Contest finalist organized by the National Museum and the Ministry of Education in Warsaw (PL)

#### **05.09.2007**

Second place in the contest for Permanent Exhibition for Children in the Copernicus Science Centre in Warsaw organised by Warsaw Copernicus Science Centre (PL)

#### **05.2006**

Prize-winner of the competition: *Diplomas of the year 2005* organised by The Academy of Fine Arts in Wrocław under the patronage of the Marshal of the Lower Silesia Province (PL)

#### **2004**

Scholarship of the Polish Minister of Culture for artistic work

#### **2002**

Scholarship of the Mayor of the city of Wrocław for artistic achievements

## EXHIBITIONS

#### **2008–2016**

*Interactive Playground* (in collaboration with Patrycja Mastej and Pawet Janicki), founded by WRO ART Center, Wrocław, PL. The set of installations oriented to the immersive experiences of the visitors by use of hidden electronics and real physical elements

#### **Exhibitions in Poland**

Zacheta National Gallery of Art (Warszawa); BWA (Olsztyn and Jelenia Góra); National Museum of Szczecin; Centre of Contemporary Art Signs of the Times (Toruń); Gdansk Science and Technology Park; XIII and XIV Media Art Biennale organized by WRO Art Center (Wrocław); XVII Biennale of Art for Children (Poznan); European Center of Fable (Pacanów); Warsztaty Kultury (Lublin); Muzeum Regionalne (Stalowa Wola)

## Foreign exhibitions

Garage Center for Contemporary Culture (Moscow, RUS), within the framework of the exhibition Art Experiment, Pilsen (CZ) within DEPO 2016, Lviv Palace of Art (UA), Tarnopol within eastculture.eu (UKR), Kunsthal Aarhus (DK), Edynburg (GB)

### 11.2015–11.2016

*Ziggurat* within the project *Wrocław – entrance from the backyard* for the occasion of Wrocław Capital of Culture 2016. Spatial installation situated on the backyard between Weigla and Slezna street in Wrocław

### 13–14.10.2015

*RGB* within the framework of the *Resonances. Art-Sciences-Politics* exhibition organized by Joint Research Centre in SUPERSTUDIO PIU Gallery, via Tortona Milan (IT)

### 03.03.2012

*Look at Yourself* founded by the Cultural Service of the City of Brussels and Wallonia Minister. Interactive large-format installation dedicated to the minorities living in Brussels.

Exposure locations:

Public Space: Square / METRO ST.CATHERINE, Brussels, (BE) within the framework of Nuit Blanche Brussels 2012;

BOZAR – Centre for Fine Arts of Brussels, (BE) within the framework of Museum Night Fever 2012;

TEN WEYNGAERT, Brussels, (BE) within the framework of ART RESIDENCY in Bains Connective;

### 10.2011 & 02.2012

*Seeing Place* founded by Warsztaty Kultury, Lublin (PL). Interactive installation in public space based on wireless network. Project realized within the framework of National Cultural Programme of the Polish Presidency in the committee of European Union.

### 01–20.06.2011

*Interactive Platform* founded by WRO ART Center, Wrocław, PL. Interactive large-format public space installation, promoting the city of Wrocław as a capital of culture 2016 (PL)

### 05. 2011

미스카/ *MISKA* (in collaboration with Jakub Jernajczyk within the framework of the workshop AIAS in Between, in Seoul, Korea). Interactive installation realised in Kaywon School of Art & Design, Seul (KOR)

### 04. 2010

*RGB* simultaneous presentation during *UPDATE III* – exhibition organised by Centre Pompidou within the framework of the Award New Media Foundation Liedts-Meesen nominee. Small architectural structure open to visitors, presented on Zebrastraat, Gent (BE)

### 11.2009

*Peep Holes* (within the framework of *Three women...Three generations...Three points of view* initiative). Exhibition in collaboration with Sonia Rolak and Wanda Casaril in EX CANTIERI NAVALI gallery, Giudecca, Venice (IT)

### 06.2008

*Walk on the Sky* (within the Framework of Summer Season 2008, City Space Wrocław Non Stop Festival, PL) founded by The Contemporary Art Foundation ART TRANSPARENT. Spatial installation open to visitors on Slodowa Island, Wrocław (PL)

### 06.2008

*Asylum* (within the framework of *Survival* 6<sup>th</sup> Edition, Wrocław, PL) founded by Art Transparent Foundation. Small architectural structure open to visitors located in Four Temples District in Wrocław (PL)

### 10.2007

*The Land of Young Creators*. Participation in the post-competition exhibition at the Copernicus Science Center in Warsaw (PL)

### 25–27.05.2007

*Birth of Venus* (within the framework of *Survival* 5<sup>th</sup> Edition, Wrocław, PL) founded by Art Transparent Foundation. Multimedia spatial installation presented in Teatralny Square in Wrocław (PL)

### 18.05.07–07.06. 2007

*Experiencing Art* in SZEWSKA 36 gallery, Wrocław (PL) in collaboration with Patrycja Mastej

**14.02–14.04.2007**

*Identity – Wrocław.* Interactive installation – interactive large-format board accompanying the exhibition *Identity* organised in Wrocław Museum of Architecture (PL) under the tutelage of Sylwia Swislocka as part of the presentation of Zacheta's contemporary art collection

**30.11.2006–21.12.2006**

Presentation of the diploma project at the exhibition *Friendly world with design* organised in Warsaw Institute of Design (PL)

**23.06.2006–15.07.2006**

*Diplomas of the year 2005* organised within the competition organised by The Academy of Fine Arts in Wrocław under the patronage of the Marshal of the Lower Silesia Province (PL) in the NA SOLNYM GALLERY in Wrocław (PL)

**30.05–02.06.2006**

Participation in the students' of Wrocław Academy exhibition *Archimibel – visions of the young designers* (Poznan Design Fair 2006, PL)

**12.05–04.06.2006**

Participation in the exhibition entitled *60 years of Design and Interior Architecture Department of Wrocław Academy of Fine Arts and Design* organized at the Museum of Architecture in Wrocław (PL)

**12–19.05.2006**

*Toy for human* (within the framework of Survival 4th Edition, Wrocław, PL)  
Installation presented in the building of the Main Railway Station in Wrocław

**10.05.2006**

*Humanic garden* as part of the artistic activities titled *Grand Canyon of Art. Landscape of Mine*, organized on the site of lignite mines BOT KWB Betchatów S.A. by Wrocław Academy of Arts and Design and Warsaw University of Life Sciences (PL)

**17.02.2006–12.03.2006**

*Experimental & Visual Spaces* at BWA Design Gallery in Wrocław, PL (in cooperation with Patrycja Mastej)

## PRESS REVIEWS AND PUBLICATIONS IN CATALOGUES

- *Cluster pavilions Expo Milano 2015*, Mondadori 2014, Włochy;
- *Mindware. Technologie dialogu*; edited by Piotr Celiński, Warsztaty Kultury & Wyzsza Szkoła Przedsiębiorczosci i Administracji w Lublinie; Lublin 2012; Poland p. 265–266; p. 292–295
- *AIAS In-Between Workshop 2011*: Bibim 2011 05 09 ----- 05 18 @ Kaywon School of Art & Design; Association of Independent Art Schools; Seoul 2011; South Korea; p.128–133;
- *Update\_3 / body sound*; Zebrstraat Gent, 17 April–20 June 2010; Deckers Snoek NV-SA; Antwerp, Belgium; 2010; p. 112–113;
- *Finnegans – percorsi culturali quadrimestrale*; Tre donne, tre generazioni, congetture sul contemporaneo di Giorgio Nonveiller; num.18 04.2010; Giacomo Noventa; Italy; p. 44;
- *Parcours d'Artiste*; 07–23.05.2010; Service de la Culture de St-Gilles; Brussels, Belgium, 2010; p. 55;
- *Polityka; Zachęta dzieci zachęca, Interaktywny Plac Zabaw*; №.9 (2694); 28.02. 2009; Poland; p. 52;
- *Gazeta Wyborcza, Wrocław; Widzowie są dla sztuki niezbędni*; 27.02.2009; Wrocław; Poland; p. 4;
- *Gazeta Wyborcza, Wrocław; Nagroda wARTo. Plastyka, towar eksportowy*; 10.02.2009; Wrocław; Poland; p. 6;
- *WRO 09 13<sup>th</sup> Biennale Sztuki Mediow – Expanded City; Male WRO. Interaktywny Plac Zabaw*; Publikacje WRO 09; Wrocław 2009; Poland; p.164–169;
- *17 Biennale Sztuki dla Dziecka, Centrum Sztuki Dziecka w Poznaniu; Poznan 2009; Poland; p. 38;*
- *Pomiedzy Wyspami*; Fundacja Sztuki Wspolczesnej Art Transparent; Wrocław; 29.06–28.07.2008; Poland; p. 6–11;
- *Survival 5*; Przegląd Młodej Sztuki w Ekstremalnych Warunkach; Fundacja Sztuki Współczesnej Art Transparent; Wrocław 2007; Poland; p. 25;
- *Survival 4*; Przegląd Młodej Sztuki w Ekstremalnych Warunkach; edited by Michał Bieniek, Przemysław Pintał; Wrocław 2006; Poland; p. 56;
- *Architektura & Biznes*; Miesięcznik ogólnopolski; *Przedsiomek sztuki*; 10.2006; 351008; Poland; p. 16;



## **II GENERAL CHARACTERISTICS OF ARTISTIC AND DIDACTIC ACTIVITIES**



## What is design to me?

Speaking of design, it is difficult for me to perceive it as unambiguous phenomenon, stable in its dimension. Although it has its own history and unquestionable semantic core, based on values such as durability, usefulness or beauty, it is certainly impossible to ignore its continuous reinterpretations, which were the result of the great socio-cultural changes at the turn of the XX and XXI centuries

Present reality, full of new technologies and innovative tools poses new challenges to the broadly understood design. The increasing popularity of innovative forms of communication has created new types of space, time, identity, duration and availability. This state of affairs forces us to rethink the obligations of design itself, concentrating its efforts on blazing new communication trails in the human-environment relation.

Today's design is nothing else than building a multidimensional language between society and the surrounding reality (which is appreciated not only in the field of design but also in other sectors of human activity). As it is mentioned in one of the articles on the Zamek Cieszyński (Cieszyński Castle) "Design is a bridge between science, technology and its users." Design has become a tool not only for modeling the space we live in, but also as a mechanism for simulating the actions taking place in it. Being capable of shaping thought patterns, behaviors and even arranging all kinds of services and political systems, design becomes the most important factor of the cultural and economic exchange of the 21st century, which has been described in the European Commission's 2009 Report on *Design as a driver of user centered innovation*.<sup>1</sup>

Believing in the far-reaching design mission, having regard to its remarkable part in the innovative processes, as a designer I feel obliged not slack off on close observation of the environment and, as far as it is possible, to assimilate the impulses determined by the socio-cultural transformation. Following the

dynamics of the ever-changing demands of the present day, I strive to engage in such initiatives, which bear the hallmarks of a far-reaching experiment, and above all, address the human community more or less directly. By adopting a researcher's position, I am ready for multidirectional research. I particularly like the unconventional challenges of design, often on the edge of traditional design and the socially engaged art using the most diverse media of today's reality. These tendencies are evident especially in subsequent artistic projects, among which the most important ones are: *Interactive Playground*, *Look at Yourself*, *Seeing Place* or *Ziggurat*.

As a designer and inhabitant of the planet Earth I feel more and more responsible not only for the form of the projected objects, but also for the message that they convey. I am particularly interested in initiatives addressing, in a more or less direct way, the current problems of today's contemporary world (as evidenced by the *Resonances* exhibit or research conducted on the global issues of Expo 2015) or those that require exploring phenomena that stem from other areas than art or design. (Examples of the latter are such projects as *Humanitarium*, *Łódź City Museum* or *the Naturum*). In both cases, design confronts me with the need to change the point of view of perceiving a given phenomenon, which is the main and quite often emerging thread in this habilitation paper. This is the so-called *Intellectual digestion*, which will be more closely discussed later in the dissertation.

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1 [http://www.zamekcieszyn.pl/baza\\_w\\_files/design-to-jakosc-oparta-na-wiedzy.doc](http://www.zamekcieszyn.pl/baza_w_files/design-to-jakosc-oparta-na-wiedzy.doc).

## Inspirations

I am inspired by works from the world of design, art and science, mostly those, which involve all of the fields mentioned. I like artifacts, encompassing deep narrative and movement, engaging in an animated dialogue with the receiver. To illustrate the direction of my creative passions, I will allow myself to cite a few selected works and names, which derive both from the area of contemporary art and from architecture. I believe that their unique character will help to present the shape of my interests.

I will start with *The Lucid Camera* by Evelyn Domnitch and Dmitry Gelfand. The large format structure as a spatial interpretation of the sonoluminescence phenomenon, also known as the brightness chamber, directly transforms the sound waves into the emission of light. It allows visitors to gradually adapt to darkness surrounding the installation, to observe the configuration of the glowing sound fields<sup>2</sup>. This installation, as a result of creative processes on the borderline of art and design, is rooted in physical phenomena.

Another, more revolutionary project concerning general human issues is *Edunia* by Eduardo Kac. *Edunia* is a flower of the Petunia strain, which does not genuinely occur in nature. Generated by the artist on the basis of molecular biology it contains his own genes, which is visible especially in the veins of the petals and in the unusual color of the flower<sup>3</sup>.

This highly controversial artistic and scientific initiative of Kac, certainly has invaluable worth as regards the power of transmitted content. The artist teaches us about the limits of our interference with the environment. He asks how natural man is due to his nature and how his natural aspirations can affect the natural world.

Another scientific and artistic experiment, in a somewhat similar spirit, is *Cockulus Rift* by the artist, programmer of microcontrollers and designer of circuits Austin Stewart. *The Coclulus Rift*, also known as *Second Livestock*<sup>4</sup>, is an experimental project in which hens from industrial breeding are equipped with glasses for virtual reality. The overriding idea of the project is to offer a "second life" to birds living in locked cages. A life, in which they see themselves in the wild, in the context of a rural backyard or roadside meadow.

In my opinion the last two of these projects are one of the strangest artistic and scientific hybrids, which exceptionally vividly highlight the problems of today's reality.

Their eccentricity, which does not relate in this case to the form of objects but to the processes of their creation, arises powerful existential questions, making them tools of manipulative nature. Not all of my favorite projects, however, ask us about something. Some of them, and I mean here mainly the initiatives of design-scientific character, try to give solutions to some problems of mankind.

These are i.a *Silent Barrage* described more broadly in my doctoral dissertation.

The project developed by a group of Australian scientists and artists (such as Philip Gamblen, Guy Ben-Ary, Peter Gee, Nathan Scott, Brett Murray, under the supervision of Steve Potter's Georgia Institute of Technology) is the result of seven years of research into the issue of neuronal activity and the phenomenon of epilepsy. The architectural arrangement of bar sound robots in addition to the original spatial form, is a medium of significant scientific content.

This object analyzes the nature of mental processes, free will, and nervous dysfunction and is focused on the explosion of uncontrolled neuronal activity characteristic for epilepsy. The bar-field using the movements of the public, corresponds to the architectural space with enhanced neuronal activity. Its main task is to silence the wave of electrical impulses with the feedback generated by the users' activity. Scientists believe that observations made during the presentation of the project may be helpful in developing a strategy to suppress sudden excitability of the nervous tissue, which can ultimately help in the treatment of epilepsy.

*Silent Barrage* is a highly complex project, both from a substantive point of view, as well as in the terms of multi-disciplinary processes accompanying its production. Certainly it is in the forefront of the initiatives of the so-called New Renaissance, as it has been described in my doctoral dissertation. As I mentioned before, the world of designers-explorers is the main source of inspiration for my own creative activities.

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2 [http://www.portablepalace.com/camera\\_lucida.html](http://www.portablepalace.com/camera_lucida.html)

3 <http://www.ekac.org/nat.hist.enig.html>

4 <http://newatlas.com/second-livestock-virtual-reality-for-chickens/32280/>



An example of this kind of formation is the *Ear Studio's* founded in 1993 by American new media artist Ben Rubin. It is a platform bringing together representatives from various disciplines, dealing with innovative design, art and sound design projects, as well as conducting innovative scientific research. The projects are characterized by a large interdisciplinary span. Among the concepts they carry out, there are both multimedia-oriented pieces of art, public installations and projects in the field of interiors and design. Other notable research groups performing creative activities in the field of participative-scientific spaces include:

- NOX (Netherlands), passionate about interactive architecture
- new-media studio Roosegaarde (Netherlands), focused on social-oriented projects
- Small Design Firm (USA) specializing in information design, dynamic typography and interactive art
- Interactive Institute (Sweden), focused on building high-quality user experience
- the duo Philippe Rahm & Jean-Gilles Décosterd (Switzerland) concentrating on the physiological aspects of the architecture
- DILLER SCOFIDIO + RENFRO (USA), the architectural and visual and performance art project formation

Scott Snibbe and his Sona Research, Christian Moeller<sup>5</sup>, Rafael Lozano-Hemmer<sup>6</sup>, Jason Bruges<sup>7</sup>, Usman Haque and Adam Somlai-Fischer<sup>8</sup> are among the top individual creators active in this field.

I also admire the work of Tristan d'Estrée Sterk, one of the co-founders of the Office for Robotic Architectural Media & Bureau for Responsive Architecture (ORAMBRA) actively participating in the contemporary architecture, the author of a specific architectural model equipped with immense number of sensors, processors and rams supported by hybrid supervision networks.

Inspired by these technologically advanced and multi-disciplinary initiatives, referring to Marchall McLuhan's words, I believe in the power of art and design as a means of dealing with the psychological and social consequences of the technological development of today's reality<sup>9</sup>.

## Brief description of my own artistic and research activity until 2013

Much of my creative endeavor, and I am referring here mainly to the projects carried out before and after the survey period for Expo 2015, focuses on non-commercial artistic experiments (initiatives not as ambitious as those I draw inspiration from, mainly for financial reasons but also because of lack of appropriate scientific background). For long time, my professional activity has been based on fundamental research, focusing on the experimental aspect of projects. It is connected with the profile of my interests oriented, for several years now, towards broadly understood interaction. The goal of current activities, as well as of future creative experiments, is to verify the potential of new information technologies in art and design. The main research strategies focus on the use of the achievements of IT science to strengthen the relationship between the user and the projected artifact. Design, as well as contemporary art, plays an important part as a tool for humanizing the new media.

The research projects I create are mostly educational and artistic installations, which affect the viewer in a smaller or bigger impact – independent, mobile, easily adaptable to various spatial conditions small architectural forms.

Examples include the following projects: *Asylum*, *Walk in the Sky*, *RGB*, *Interactive Platform*, *Look at Yourself or Ziggurat*. Implementing such concepts and presenting them to a wider audience in exhibitory units in Poland and abroad is a pretext for successively performed observations. (Some of them, as a result of my doctoral research were presented in my doctoral dissertation entitled *Interactive Space as a phenomenon in art and design*).

The necessity to seek knowledge from other disciplines faces me with the need of the cooperation with all sorts of specialists, which also has positive impact on other areas of my activity. I believe, that the practice of multi-directional co-operation, successively developed during subsequent artistic activities was a good training preparing me for new creative challenges, especially those carried out on commercial grounds and in popular science. It encouraged me to start the research at Expo 2015, at the same time stimulating my passion for discovering new and more complex ways of cooperation.

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5 See: <http://www.christian-moeller.com>, [access: 2 VI 2012 r.].

6 See: <http://www.lozano-hemmer.com>, [access: 2 VI 2012 r.].

7 See: <http://www.jasonbruges.com>, [access: 2 VI 2012 r.].

8 See: <http://www.aether.hu>, [access: 2 VI 2012 r.].

9 Marchall McLuhan, *Understanding Media: Extensions Man*, p.66, 1966

## In the direction of collaborative design. Designing activity preparing me for work as a designer-researcher at Expo 2015

By taking on the role of intermediary between science, technology and its users, the contemporary designer must be equipped with skills that will make him not only a creator but also a director of processes taking place in this structure. While elaborating a scenario for individual actions, he must take into account the expectations of the users and therefore some of the formal decisions that he makes he puts into their hands. It is mentioned by **meta-design**<sup>10</sup> – a new paradigm of design, focusing on the participatory character of the artifacts produced. The notion of meta-design founded on the basis of the contemporary theory, can be identified with the designing of design and refers both to the research conducted in this field as well as to multidirectional design strategies. It focuses on creating conditions and infrastructure for network, multidimensional and dynamic co-operation and collective development of broadly understood design products. Such criteria are very close to my own ideology of creation. As a designer I appreciate and believe in the potential of multi-disciplinary cooperation. This conviction has attended me during my studies at the Department of Interior Design at the Academy of Fine Arts in Wrocław, which can be proved by my award winning project *The Visual-Experimental Space for Children* honoured in 2005 with the Diploma of the Year, developed in close collaboration with Patrycja Mastej, who was studying at the Industrial Design Institute at that time. I would like to point out that such hybrid diploma presentations, based on an alliance of two different project areas, were a precedent at that time.

Already at that time I thought and still believe that putting the same design problem into the hands of one or more specialists gives invaluable results not only at the level of project actions or artifacts produced, but also in enhancing the level of skills of individual project team members. Among the precious profits, apart from the free flow of thought and exchange of experience, the most important is the stimulation resulting from the resonance of several

different perspectives. From my own experience I know, that there is nothing more encouraging than to act by mutual inspiration. I remember, that, when in the moments of doubts during the preparation of the diploma project I was confronted with extremely different graphic proposals of Patrycja Mastej, I experienced a kind of a creative brainstorm very often. Paradoxically, another point of view has evidently activated my imagination. This phenomenon is called *intellectual digestion*, and to illustrate its presence on the ground of modern scientific research, I will allow myself to cite the Krebs Cycle theory, which in turn is the cornerstone of the concept of Krebs Cycle of Creativity<sup>11</sup>.

The Krebs Cycle is a series of biochemical reactions that are the final step in the metabolism of aerobes, oxygen-breathing organisms. Without it, these organisms would not be able to function. Within the Cycle through the oxidation of nutrients, chemical energy is produced, carried by the cell in the form of adenosine triphosphate (ATP). ATP can therefore be treated as a molecular currency unit for energy transfer. The Krebs Cycle is a type of metabolic clock that first generates, then consumes, and eventually (additionally) regenerates the ATP currency. Putting it shortly, the better the metabolism, the better the results.

However, following this trail, moving on to the plane of widely understood multi-disciplinary design, I can firmly state that the aforementioned so-called *intellectual digestion*, often requiring a total change of point of view, carries an invaluable potential for creation. As proof of the validity of this claim may serve the work of Buckminster Fuller, a “versatile anticipating scientist and designer”, whose “geodesic” dome (developed in 1967 for the American Expo pavilion in Montreal) has played an important part in identifying the third carbon molecule<sup>12</sup>.

At this point it is worth to mention the character of Maurits Cornelis Escher, a Dutch graphic artist, whose intuitive way of treating geometric optics became a kind of inspiration to Roger Penrose’s mathematical studies. The opportunities arising from the dialogue on art and design on the one hand, and science and technology on the other, are increasingly tempting for contemporary artists. I am myself eager to join this trend, which is shown by my successive experimental design tasks, especially *Interactive Playground*, a project which contains selected elements presented in the framework of my doctoral dissertation. I believe, that this is the best example to illustrate

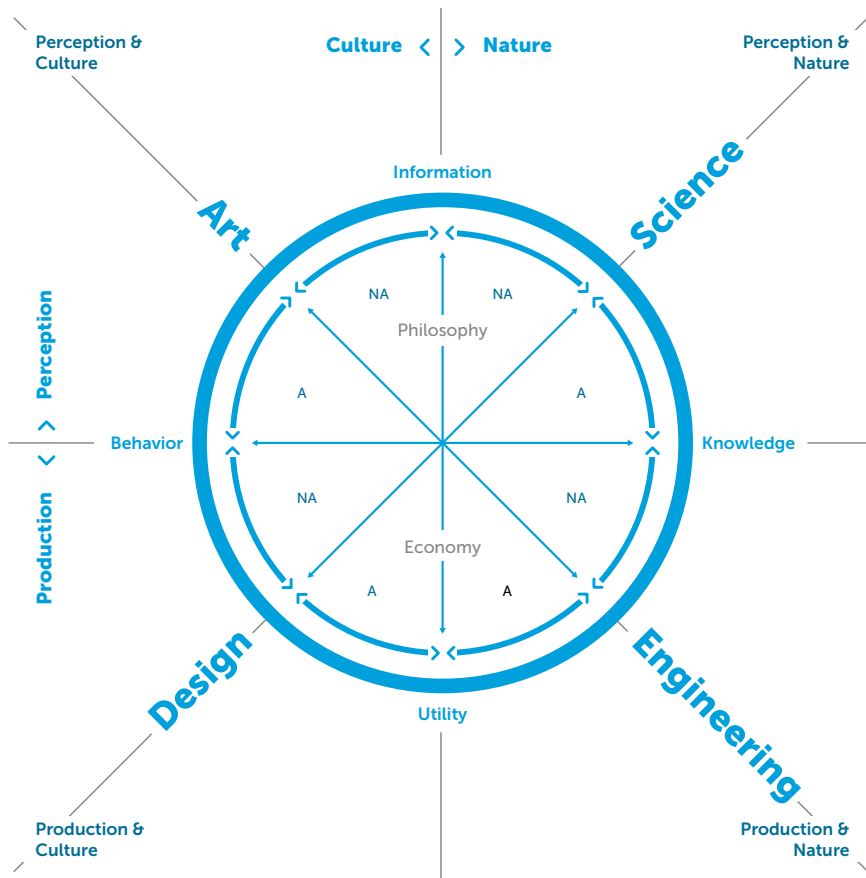
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10 M. Składanek, *Meta-design. Strategie, narzędzia i wspólnoty kreatywne na przykładzie Processing*, in: *Kody McLuhana...*, op.cit, p. 251–252

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11 <http://jods.mitpress.mit.edu/pub/AgeOfEntanglement>

12 K. Pakuło, *Interaktywne przestrzenie – pomiędzy sztuką, technologią i nauką*, in: *Arteon*, 2011, no 5, p. 13



Krebs Cycle of Creativity diagram according to professor Neri Oxman from MIT Media Lab, published in Journal of Design and Science (JoDS), January, 2016.

the pluses of collaborative design and the adventures resulting from a three-polar *intellectual digestion*.

Completed in 2008, in collaboration with Patrycja Mastej and Paweł Janicki which represents both the field of computer programming and art, it is an experimental space for exploring the phenomena of artistic concepts

such as color, perspective or texture. The effect of our team's work is proof, that the three design links are capable of multiplying the value of the generated artifact not only through the lens of their creative capabilities, but also by the skills acquired through mutual interaction. The building of further components of the exhibition performed in the spirit of laboratory research required individual members of the project team to continuously absorb the elements of knowledge generated by the other creators. The challenge for me and Patrycja Mastej's design art was to explore the basic secrets of the programming language and the hardware infrastructure essential for creating interactive systems. It was important for us (in the context of design) to gain more insight into the possibilities and limitations of using new technologies in creative processes.

The new task for Paweł Janicki was in particular the mastering of the ergonomic laws and the functional and aesthetic values of particular objects. Being confronted with the new qualities of knowledge, each of us strengthened his creative visions and made them more flexible, becoming open to new interpretative perspectives. I think, that intellectual digestion which took place during the development of *Interactive Playground* has evoked the attitude of explorers-creators in us, which still results in individual design decisions, marked by continuous evolution. Equipped with the ability to harmoniously combine actions generated in the field of different disciplines and to efficiently incorporate new technologies corresponding with the functions of the design object, visual effects and sound arrangements, we can spot new dimensions of the elaborated artifact (invisible at first glance).

By confronting my spatial ideas with Paweł Janicki's acoustic and software visions and the profoundly narrated graphical animations of Patrycja Mastej, I had the opportunity to realize the potential of this composition especially in the context of the power of its influence on various types of users. Although initially dedicated to children, the experimental, visual-spatial laboratory has become a platform open to people of all ages, also integrating viewers with psycho-physical disabilities.

This is an example of an artifact, which has an open character and allows the arrangement of multiple educational scenarios within the framework of its structures, due to the flexible processes leading to its creation and the presence of an interactive media component.

On the organizational level of design processes, it is influenced by multidirectional exploration and when confronted with the audience it activates the senses of the viewers. I'm inclined to say, that the more experimenting and action aiming at multi-level, sensationally immersive engagement takes place, the better for the final effect.

Such a position dismisses me from the cause-and-effect idea of the design model, which has been more fully described in my PhD dissertation (Chapter 9.3 *Redefining the Designing Process for Interactive Spaces*). As a designer of user-focused objects, I consider non-linear production process derived from *concurrent engineering* to be the optimal solution, where both activities are performed in a concurrent and simultaneous fashion. The equivalent of such structure on the plane of design and architecture is the synchronous design with all the procedures generated within it<sup>13</sup>. The nature and specificity of their course are an essential part of contemporary new design model theory. The design aspirations themselves, based on criteria such as durability, utility or beauty, remain unchanged here. It is rather about transformations of the interrelationship of the subsequent design stages and their connection with the final realization and timetable of actions. The values stemming from the commonplace patterns are: analysis, synthesis, and the final design. What is undergoing reevaluation is their embedding in the constellation of implementation activities and the mobile status of the assigned actions. The free movement of selected processes around the design process becomes possible, allowing flexible return to source impulses and intermediate procedures.

The basis for the synchronous design method is therefore the synergy of parallel activities, powered by mutual collaboration.

At this point of my deliberations I am approaching the essence of my habilitation dissertation. What I mean here is the concept of Collaborative Design, which I got to know more closely while working for Expo 2015, as it will be illustrated in detail in the second part of this paper.

Collaborative design research goes beyond the traditional framework of perceiving its role in purely technical terms, opening up to unconventional methods of observation and the creation of new design processes.

In an academic context, this means cooperation between researchers representing various disciplines, combining them into so-called research teams and being open to interaction with all kinds of external entities.

What is collective development of projects?

Putting it shortly, it can be said that it is a creative act performed by mutually stimulating links leading to optimal effects. As I had mentioned before this act is the main objective of my quest as an artist-designer.

Consequently, the next steps in my creative activity lead to its ever-expanding exploration, which is proved by conscious engagement in the increasingly complex structures of collaborative design. My multi-disciplinary design activities had started already during the university period and were continued on the basis of further creative initiatives, both in my own experimental research work and in the field of customer contract design.

The experience of the above-described, non-commercial artistic initiatives (such as the *Interactive Children's Space* and *Interactive Playground*) has been shifted to the parallel field of commercial activity taken up by me. I would like to pay special attention to my cooperation with the OMLab project team, with whom I had the opportunity to work on 3 different projects. OMLab was established by Prof. Bartosz Jakubicki and consists of designers of various artistic and technical specialties. Among them are: Katarzyna Anna Jagiełło, Aleksandra Gajzler-Baranowska, Krzysztof Kubasek, Agata Wojtyła-Młynarczyk and Magdalena Kacprzak-Gagatek. The Laboratory of Multimedia Objects was founded in 2011 and cooperates mostly by multimedia projects connected with exhibition spaces.

The reflection of OM Lab's activities in the years 2011–13 are the educational-exhibitory space projects performed in collaboration with Bartosz Jakubicki, Katarzyna Jagiełło and Aleksandra Gajzler-Baranowska, i.e. *Humanitarium*, *Łódź City Museum* and *Naturum*. Although working on each of these projects was a unique experience it was based on similar methodology. It usually started with a series of meetings of the project group dedicated to intense exchange of views. Designers involved in the project put forward ideas for specific design issues (such as multimedia stands and actions) and

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13 B. Jakubicki, *Projektowanie obiektów projekcyjnych, jako elementów wnętrza. (Studium obiektów multimedialnych, budujących wirtualno-materialne hybrydy)*, Habilitation dissertation, Eugeniusz Geppert Academy of Fine Arts in Wrocław, Department of Interior Design, Wrocław 2011 [komputeropis].

the brainstorming lead to the final selection of the most relevant design measures. The permanent mutual confrontations supported by the individual work of individual team members resulted in finding the optimal solutions to the individual aesthetic-formal problems.

Based on the effectiveness and measurable results of the above mentioned *intellectual digestion*, I would like to draw attention to the teaming up scenario appearing repeatedly in my design experience. What I mean here is the putting together different views of on one design platform, especially in the subject of the division of responsibilities according to personal pre-dispositions and skills. Individual roles have been assigned already after a few preliminary meetings of OM-Lab. Bartosz Jakubicki was appointed as the project coordinator and the coordinator of the activities, responsible for sketching the various concepts, Katarzyna Jagiełto was assigned to work on technical drawings, Aleksandra Gajzler was responsible for designing the visualizations and I was responsible for formal description of the functions and of the aesthetic-formal concepts.

The work on the project was accompanied by regular customer consultations often backed up by OMLab presentations, summarizing the various stages of the design process. One of the important tasks, especially in the context of creating the *Naturum* concept was i.a. promoting design ideas and negotiating with the client. These experiences, going beyond the range of my previous design skills, were later very useful during my work for Expo 2015. My commitment to OM Lab was the last commercial project initiative I had performed before I started the research on the exhibitory declination of *Clusters*.

Right after the defense of my PhD dissertation in 2013, I joined the design team at the Department of Thematic Space at Expo 2015. The research work, under the supervision of Politecnico di Milano (Polytechnic Institute of Milan), was another opportunity to broaden the design skills but, above all, a unique field of experience in testing unconventional design processes. It also fit perfectly into the successively developed currents of my interests, oriented on the global problems of the present.

In retrospect, I can say that the idea of collective design practice, initiated at the time of my university studies, strengthened by cooperation with the WRO Art Center and with OMLab, was fully developed on the basis of the experience gained during my participation in Expo 2015. (I mean especially my work by the Exhibitory Declination of Clusters and my activity in the distribution of commercial and service spaces at Expo 2015.) Working for this institutionally structured institution, I could fully appreciate the definition of collaborative design. Evidence for this hypothesis was collected in the second part of this study.

## Didactic and popular science activities

As a designer, I feel obliged not to slack off on the ongoing study of the reality surrounding me and, as much as it is possible, to keep up with the demands of the changing socio-cultural environment. I try to engage in such initiatives, which involve large experiments, require research attitude and readiness for multidirectional search. I try to introduce this attitude, of the designer-explorer, the designer-critic and the designer-mediator in the human – environment relations also in the academic field. My academic adventure, started in 2006 as an assistant in the III Department of Interior Design (led by Prof. Krzysztof Wołowski), supported by continuously expanding interest in interactivity, finally resulted in taking over the management of the Laboratory of Interactive Space and Multimedia Objects Design in 2012.

As the leader of *411 studio* I pay special attention to the continuous exploration of opportunities that involve the engagement of new media in design and architecture. The main research strategies are related to the use of scientific achievements such as computer science, automated technology or robotics to strengthen the relationship between the user and the projected artifact. From future designers I expect not only to get acquainted

with the range of possibilities and the scale of limits, which apply to them. I encourage them also to adopt the attitude of „humanistic technologists, who are trying to make technology not only simpler to use, but also closer to our body and senses”, as John Medea puts it.

Realizing the limited access to rational knowledge in field of programming and handling of the new media infrastructure, I strive to continually develop contacts with specialists representing both theory and practice of new technologies. My plans also include the gradual extension of academic activity into new research initiatives based on lively co-operation with other universities, starting in 2012 with the cooperation with the Institute of Computer Science of the Wroclaw University of Technology with MWW Wroclaw and with the French university Ecole Supérieure d'art des Pyrénées-Pau Tarbes, which was arranged by Patrycja Mastej. On this occasion I would like to point out that all my activities in the academic field for more than 3 years have been supported by great contribution of Patrycja Mastej. This was the case with my departure for academic internship to Milan resulting in need to employ someone in my place.

Working in the field of experimental design and artistic practice, our duo was then faced with a new kind of mission. Following the previously developed rhetoric of linking forces and mutual intellectual resonance, we have attempted to integrate teaching pathways and educational and research activities explored simultaneously (my activity at the Expo and Politecnico di Milano, Patrycja's in the Laboratory of Interactive Space and Multimedia Objects Design at the Academy of Fine Arts in Wroclaw). The undertaken method of collective education, supported by distant mode of communication with the students has brought interesting results. Tandem teaching (in spite of geographical distance) took place in the spirit of mutual inspiration, frequent exchange of views, and was based on joint decision-making (e.g. concerning issues of the paths of cooperation with non-academic units or semester topics). Working for Expo 2015 on Cluster topics, I simultaneously supervised the creative activity of students working under the supervision of Patricia.

The research and design themes investigated by me during the Cluster research have become an inspiration for semester topics. Being in touch with such an important global event, as the Expo 2015, I had the opportunity not only to share the currently acquired knowledge but also to provide stu-

dents with technical materials thanks to Patrycja. While in Milan, I was also supporting Patrycja's multi-directional cooperation in compliance with the elementary premises of *Studio 411*. As an example could serve the development of cooperation with Wroclaw University of Technology where, as a result of workshops, students' projects were equipped with interactive components designed by students of Computer Science and Management Department.

In line with the essential ideas of the project systems described in this paper, my ambition is to develop my research challenges i.a. by combining the initiative within the framework of my own design and artistic work and my work at the E. Geppert Academy of Fine Arts in Wroclaw, involving cooperation with other scientific and cultural institutions. The aim is to create an interdisciplinary platform for exchange between designers, artists, scientists, engineers and exhibitors. The fact of having a laboratory facility (*studio 411*) at the Innovation Center at the Academy of Fine Arts in Wroclaw motivates me to expand the profile of the Interactive Space Design Studio to new activities, reaching beyond the academic profile of the initiative.

The following educational initiatives were undertaken in the last 3 years in cooperation with Patrycja Mastej:

- Interdisciplinary workshops for students, developing ideas in three-person project groups within *Goerlitzer ART* (2016)
- Participation in the *Goerlitzer ART* exhibition of three winning student projects (*City Heartbeat, Head in the Clouds, Clock*)
- Organization and presentation of student interactive-educational and artistic installations at the spring fair of books for Children and Youth GOOD PARTNERS at the Wroclaw Convention Center at the Centennial Hall (28–31.05.2015)
- Presentation of the Interactive Space and Objects Design Studio at the Domar Design Night (18.06.2015)
- Realization of student works exhibition entitled *Common City / Szczepin – It Was, Is and Will Be* co-hosted by *Miejska* Foundation and invited architects (Łukasz Wojciechowski, Natalia Rowińska, Magdalena Szwejrowska, Mikołaj Smoleński)
- Realization of student works exhibition entitled: *Was / Is / Will be* at the Wroclaw Contemporary Museum as a result of the architectural workshops *Common City – Continuation* (2014)

I would like to continue working with students to create unique design concepts supported by new technologies, not only promoting the formal-aesthetic values, but also the universal contents of today's reality.

As a teacher I put a lot of emphasis on careful selection of semester subjects. I try to make them a reflection of surrounding environmental and social phenomena, to be a spatial, virtual or two-dimensional account of today's reality. Analyzing the contemporary issues, the student becomes sensitive to the invisible problems of the human community so far ignored in the design process which builds a sense of co-responsibility. As a mediator between the individual and the surrounding space, he/she takes on new roles. Once a prophet warning about environmental dangers, another time the director of narrative plays between the body and the object, and yet another time a promoter of cultural initiatives.

One could wonder why such a wide range of responsibilities?

I believe that design as a bridge between science, technology and its users is an excellent tool in innovative processes. In addition, because it is gaining more room for maneuver in the market economy and has an indirect impact on the social mentality and quality of life, it can be a promising change stimulating factor. Certainly today's unstable world needs such changes.

I believe that the new challenges awaiting future designers require a new interpretation of the teaching methods and the reorganization of the academic structures. This is the idea of **meta-design**, a new paradigm for design which creates conditions and infrastructure for network, multidimensional, and dynamic collaboration processes. Its methodology, based on 3 designing modes (*user-centered design*, *participatory-design*, *scenario-based design*) is the main inspiration for my teaching.

In my classes I i.a try to implement the concept of interdisciplinary design and design focusing in particular on the participatory quality of artifacts produced. I encourage the students to interview, test the public opinion or behaviour of the target group of the given project. Drawing inspiration from the experience I gained during the internships at the Polytechnic in Milan (2013–15), I prefer the workshop model of conducting courses.

In order to broaden my theoretical knowledge I try to keep up to date with domestic and foreign professional literature and press. In addition, I participate in all sorts of symposia and initiatives aimed at confronting other disciplines

of science, addressing the global issues of the present day or concerning the issues of using new media in architecture, design and art.

Among the various types of scientific and educational events I had the opportunity to participate in, I can distinguish two types of activity, which primarily differ from each other by the advisability of the undertaken actions. What I mean here is:

- Activities aimed at supplementing and updating the knowledge necessary for scientific and educational practice
- Activities aimed at the promotion and practical teaching of the new design paradigm described in this paper, including the collaborative design

Understanding that in order to teach others I still have to continuously learn myself, I often take part in various types of training initiatives. These are pro-social practices (presenting issues of design in public spaces involving the target group), conferences, which provide knowledge about the application of new technologies in art, design and architecture, and those that provide inspiration for interdisciplinary creative activities inspired by phenomena from the World of Science.

The most important of those include:

- My participation in Mindware-Dialogue Technologies organized in 2011 in Lublin within the framework of the National Cultural Program of Polish Presidency in the Council of European Union 2011 (implementation of the project: *The Seeing Place*) and in the accompanying lectures and debates on the role of new technologies and art in shaping the social worldview involving such persons as: Piotr Celiński (Associate Professor at UMCS in the Department of Philosophy and Sociology of Politics), Anna Maj (anthropologist of the media, Assistant Professor at the Institute of Cultural Studies of the Silesian University in Katowice), Anna Nacher (a contemporary researcher of culture and its relation to media, Assistant Professor at the Department of Audiovisual Media at the Institute of Audiovisual Arts of the Jagiellonian University) Janina Prudenko (associated with the National Pedagogical University Dragomanova in Kiev, curator and media art researcher) or Michał Derda-Nowakowski (Assistant Professor at the Department of Audiovisual Media and Culture at the University of Lodz)

- A visit to the NEXUS conference in 2015 organized by the Biennale di Venezia, the European Commission and DG Connect under the theme of *Creation at the nexus of science and technology* with the participation of such celebrities as: Paolo Baratta (president of La Biennale di Venezia), Bice Curiger (director and curator of Biennale Arte 2011), Gerfried Stocker, (head of Ars Electronica, Linz), Beatrice de Gelder (neurologist, University of Maastricht) Robert Trappl (Director of the Austrian Research Center for Artificial Intelligence), Mel Slater (Event Lab, University of Barcelona), Michele Bugliesi (Rector of Ca 'Foscari University in Venice) Antonio Camurri (InfoMus Research Center, University of Genova) Agnieszka Kurant (artist active in Poland and USA), Alejandro Aravena (architect, curator of the Biennale Architettura 2016), Aldo Cibic (architect and designer, curator of Venice Pavilion Biennale Arte 2015), Paul Dujardin (Bozar Director, Bruxelles) Simon Denny (artist, New Zealand), Laurent Gaveau (Google Cultural Institute, Paris) and Gerald Bast (University of Applied Arts, Vienna)
  - Participation in Sonia Massari's *Design Methods of the Visualization of Scientific Information & Design Thinking* workshop organized by the Joint Research Center in 2016
  - Participation in the SciArt Summer School, organized in late August and September of 2016 at the Joint Research Center in Ispra, Italy, with the participation of Peter Weibel (Karlsruhe Center for Art and Media), Michael John Gorman (Founder of the NaMu Bayern museum combining science, art and design at the Nymphenburg Palace in Munich, a professor at the Life Sciences in Society Department at Ludwig-Maximilians University in Munich, the founder of the Science Gallery at Trinity College in Dublin), Ariane Koek (artistic director and producer of culture at CERN's European Nuclear Research Organization, currently a consultant at DG CONNECT), Erik S. Reinert (economist, currently working at Tallinn University of Technology), Arthur I. Miller (retired Professor of History and Philosophy of Science at University College in London, author of many books dedicated to the issue of creative thinking in scientific and artistic processes, i.a. *Colliding Worlds: How Cutting-Edge Science is Redefining Contemporary Art*, lecturer in institutions such as: CERN, MIT Media Lab, Le Laboratoire in Paris, the School of Visual Arts, ZKM in Karlsruhe and Ars Electronica in Linz) and world-famous artists creating on the verge of art and science: Mariele Neudecker (Germany), Evelina Domnitch (Netherlands) and Frederik De Wilde (Belgium)
  - Visit to a series of lectures entitled *Giving soil a voice* organized by the Joint Research Center in 2015 in Ispra under the European Network on Soil Awareness, ENSA 4th Meeting in Italy, October 21–23, 2015
  - Participation in workshops for artists and officials of Wroclaw cultural institutions *This they will destroy* in the framework of the roundup of the project *Entrance from the backyard – Wroclaw Capital of European Culture 2016*
- My activities as a teacher had a slightly different character than the training initiatives, although I have to admit that they were equally valuable in terms of broadening my knowledge. Among the various workshops I conducted during the years of my academic career (a workshop for young people *Identity* in the framework of the exhibition organized under the same title in 2007 in the Museum of Architecture in cooperation with the Wroclaw Zachęta; family workshop entitled: *In the world of color and line* in the Arsenal Gallery in Białystok 2011; a workshop for students from Kyung Hee University in Seoul at the Academy of Fine Arts in Wroclaw in 2012 in cooperation with Karina Marusinska and Marlena Promna, *Confrontations at the table*; a workshop with students from HOGESCHOOL GENT and ASP Wroclaw in 2012, in cooperation with Prof. Michał Jędrzejewski from ASP Wroclaw and Tomas Navratil from HOGESCHOOL GENT entitled *Stage in the context of the city in the XXI century*), I especially appreciate the experience gained during my stay in Milan. I particularly mean my involvement in the didactic program of the design courses at the Faculty of Design of Politecnico di Milano in the years 2013–15 and the experience gained during the coordination of the exhibition titled RESONANCES organized in Milan by the Joint Research Centre of Ispra (Italy) as part of the European Union's participation in Expo 2015.
- As for the first of the themes mentioned, being involved in running the training and education program implemented in the Studio of Interior Architecture Design run by Prof. Alessandro Biamonti, then taking part in the *Fare Spazio a San Siro* initiative. under the supervision of Agnese Rebaglio, Luigi Brenna, Barbara Camocini, Elena Giunta (Laboratorio di Sintesi Finale in Design degli Interni), I had the opportunity not only to improve my Italian language skills, but also to supplement my knowledge of methodology of teaching students and of the culture of Italian design. I believe that the latter of these educational projects is the most precious episode in terms of enhancing my knowledge about modeling of innovative learning techniques. This micro-venture, which I had the chance to sample may be treated as an example of good practice, a case study illustrating the benefits of using *intellectual digestion*, teamwork,



participation and scenario designing described in this paper. Given the fact that this is an experience, which initiated my adventure with the principles of the collaborative design mechanism, I will describe its main premises.

*Fare Spazio a San Siro* is a micro design initiative, which supports a more complex research concept called Mapping San Siro<sup>14</sup>. Its main aim is to revitalize and integrate selected areas of the district with a high degree of social and architectural reintegration.

The following aspects seem to be crucial for the special value for the project:

1. Taking up social problems and trying to solve them with architecture and ad-hoc artistic and design activities
2. Methodology of work, based on the one hand on the idea of **intellectual digestion** and **meta-design** premises, and on the other hand **teaching in the area** (supported by exploration of the target environment)

Exchange of thoughts, the so-called *intellectual digestion* has taken place here on many levels:

- at the level of relations between the designers and the target group (participatory, user-centered design)
- at the level of internal discussion between the members of each project group (collaborative design)
- at the level of analysis of ideas developed by individual project teams, conducted (within corrections) with the participation of not only one professor, but a group of teachers (collaborative teaching)
- at the level of exchange of observations between lecturers (collaborative teaching)

As far as the methodology of student work is concerned, it is based mainly on field action. District exploration, interviews with residents, and regular consultations with teams of teachers were topped up in the formula of intensive few days workshops, resulting in the final solution of the design issues.

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14 [http://www.mappingsansiro.polimi.it/wp-content/uploads/2015/01/201410\\_MSS\\_Doc-Presentazione\\_aggiornato.pdf](http://www.mappingsansiro.polimi.it/wp-content/uploads/2015/01/201410_MSS_Doc-Presentazione_aggiornato.pdf).

The so-called 'research in action' project, conducted since 2013 at the Politecnico di Milano Department of Architecture and Urban Studies coordinated by Francesca Cognetti, assisted by Lilian Padovani (IUAV Venezia). It is a multi-disciplinary platform that brings together students, professors, researchers involved in project design and policies for solving social and housing needs in the San Siro neighborhood. The main areas of their activity are: dwellings and living conditions of residents, common spaces and vacant spaces.

I believe that the set of didactic procedures applied in the *Fare Spazio a San Siro* project could be a role model for educating future designers. As far as it is possible I try to apply the strategies developed there in the field of my academic work at the Academy of Fine Arts in Wrocław. However, it is not the only source of my inspiration. During my stay in Italy, apart from conducting research activities, I had the opportunity to work for the Joint Research Centre of the European Commission. On behalf of Expo 2015 and Politecnico di Milano I have been posted to develop an exhibition of scientific and artistic character. *Resonances. Arts, Science & Politics* organized in Milan as part of the European Union's participation in Expo 2015. The exhibition was an experimental idea by Frank Raes, the head of the Climate Change Unit at the JRC. It provided a presentation of art installations created by the JRC team of scientists addressing the most urgent environmental problems. It was supposed to be a starting point for a broad debate bringing together representatives of the world of art, science and politics. The overriding idea was to show the benefits of mutual resonance of opinions (*intellectual digestion*) between the three above mentioned environments.

Starting my cooperation with JRC half a year before the scheduled opening date (10.2015), in addition to designing the arrangement, I also declared to act as consultant for researchers engaged in the development of artistic installations. I must admit that this was an amazing experience from the academic point of view. For the first time in my career of educating students I had the opportunity to teach people from the world of science. By conducting a series of consultations, I helped them to develop ideas (mainly conceptually, functionally and formally), select materials, and to clarify messages the various artifacts were conveying. In return, I received the knowledge necessary to understand and synthesize scientific issues difficult to interpret (animal testing or soil devastation) and scientific phenomena from the field of geo-engineering, mathematics, hydrology or molecular biology. Intellectual processes have certainly achieved a high (bipolarly oriented) energetic level here. The results of those experiences keep giving me fruitful inspiration until today.

## A new design perspective in the light of the experience gained during the Expo 2015 research and teaching at Politecnico di Milano

Recalling the time spent at the JRC, and especially at the Expo 2015 under the supervision of Politecnico di Milano, I can explicitly state that it was a period of great development both in terms of my career and personal experience. Participating in the project assignments described in the following part of this dissertation, marked by intensive teamwork, has become an incredible opportunity for me to improve my skills and to acquire new qualifications. I think that during my two-years research in Milan I took full advantage of the opportunity to broaden my knowledge not only in design and architecture, but also in the fields of international relations and project management and coordination. I see my participation in Expo, against the background of current design practices, as the zenith of exploration based on parameters of intellectual digestion of collaborative design.

Although considering the scale of Expo, my research and design contribution is trifling, I feel honoured, that I could at least contribute to the development of this unique initiative.

As for the experience in the field of teaching, I very much appreciate the opportunity to confront the Italian teaching model. The practice at Politecnico di Milano has also passed in the spirit of intellectual digestion. Offering new insights into the didactic process, it gave me the opportunity to demonstrate the knowledge and skills accumulated during several years of work at the Academy of Fine Arts in Wrocław, which was appreciated by the Italian academic staff.

I consider the materials and knowledge gained during over 2 years of research in Milan as an invaluable capture that will surely result in my future work.

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- [http://www.portablepalace.com/camera\\_lucida.html](http://www.portablepalace.com/camera_lucida.html)
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- <http://www.jasonbruges.com>
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- [http://www.polisocial.polimi.it/wp-content/uploads/2016/02/reloading\\_spaces\\_ENG.pdf](http://www.polisocial.polimi.it/wp-content/uploads/2016/02/reloading_spaces_ENG.pdf)
- [http://www.mappingsansiro.polimi.it/wp-content/uploads/2015/01/201410\\_MSS\\_Doc-Presentazione\\_aggiornato.pdf](http://www.mappingsansiro.polimi.it/wp-content/uploads/2015/01/201410_MSS_Doc-Presentazione_aggiornato.pdf)

**III**

**HABILITATION WORK – DESIGN DOCUMENTATION**



# Dominika Sobolewska

## Title of design / artistic achievement\*

Research processes during exhibition space design for Expo 2015.

Collaborative design practice

## Description of the design / artistic achievement

The projects selected as the subject of my habilitation work are the result of multi-directional activities performed on the platform of collaborative design during my research projects conducted under the supervision of Politecnico di Milano at Expo 2015 in the period 05.2013–01.2015.

As part of the description of my project achievements, I would like to draw attention not only to the final result of research activities (projects developed in collaboration with Marco Chiodi, Michele Di Santis, Edoardo Nardella and Marco Gianni), but also to the specificity of the processes accompanying it.

## Projects selected as the subject of this dissertation, created during the research and design work for Expo 2015:

### CLUSTERS / 05.2013–10.2014

- **Project of thematic exhibitions for the common space of individual Clusters (Total of 9 implemented concepts)\*\***

Team consisting of: Dominika Sobolewska, Marco Chiodi – narration of space, including the verification of the architectural concept of Cluster exhibitions delivered by groups of architects from Politecnico di Milano (one for each cluster) in terms of implementation possibilities (technological, budgetary and logistic).

Team consisting of: Dominika Sobolewska, Michele Di Santis – preparing the final version of the layout of the exhibition items for the common space of each cluster (based on the documentation submitted by the groups of architects from Politecnico di Milano)

- **The “model” project of personalization of modular pavilions located in individual Clusters (a total of 9 realized concepts)**

Team consisting of: Dominika Sobolewska, Michele Di Santis – elaboration of guidelines for the personalization of the pavilions of the countries participating in individual Clusters

- **The design of the Cluster exhibition layout at the International Participants Meeting organized in Bergamo, 19–21.02.2014**

Dominika Sobolewska – preparation / gathering of materials and design of the exhibition; Edoardo Nardella – developing visual identification of the exhibition

- **Project of collocation and aesthetic arrangement of Magnum exhibitions in the space of individual Clusters (a total of 9 realized concepts)**

Team consisting of: Dominika Sobolewska, Michele Di Santis – elaboration of a presentation with technical cards, illustrating the final location of photographic exhibitions for each cluster along with the description of the exhibition scenario for each Cluster

### COMMERCIAL AND SERVICE SPACES / 09.2014–01.2015

- **Concept of distribution of commercial and service spaces, commercial stands and artistic installations in the Expo 2015 area**

Dominika Sobolewska – monitoring of service spaces (ASV: A, B2, C1, F2, G1, G2, H1, H2), some plots for lease and public spaces together with main routes of Expo 2015 (Cardo, Decumanus), development of maps illustrating the status of space for rent (its square yardage with an indication of the context of location on the map, access to storage space, sanitary facilities etc.), elaborating the presentation for potential partners (indicating the situational context, space for lease along with the entire infrastructure depending on the character of the service).

Marco Gianni – monitoring of service areas (ASV: A, B2, C1, F2, G1, G2, H1, H2), some plots for rent and public spaces along with main routes of Expo 2015 (Cardo, Decumanus) in cooperation with marketing and other involved units.

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\* Pointing at the achievement due to the paragraph 16 of 2<sup>nd</sup> bill from 14<sup>th</sup> March 2003 on degrees and academic titles and degrees and titles in art (Dz.U. n° 65, item 595 with changes)

\*\* the supervising project team, representing Expo 2015 S.p.A. which consisted of Marco Chiodi Michele di Santis and myself, was just one of the many interactions in the process of designing of the thematic exhibitions for the Clusters. The organizational structure of the entities involved in the project will be illustrated later in this paper (p. 34)

## Theme of the research:

*Research activity supporting the project of the exhibitory declination of the thematic exhibitions for common space in Clusters within Expo 2015*

Dominika Sobolewska – Polytechnic Institute of Milan/ASP Wrocław  
05.2013–10.2014

# Characteristics of the assumptions and objectives of the research program in the context of the specificity of the Expo 2015 S.p.A. and its organizational structure



### Organizational Structure of Expo 2015

As a starting point for my considerations about my contribution in the research process during the designing of exhibition space for Expo 2015 I put forward an organizational schedule of the institution. I couldn't imagine presenting of my role in the structure of EXPO without highlighting its high degree of complexity. The organizational scheme of Expo 2015 gives us a concept of the scale and character of the institution, which is linked with the definition of collaborative design, crucial for this elaboration.

Putting it in an abstract way, EXPO is an organism consisting of tens of interdependent and interacting organs. In a situation of dysfunction of one of the organs it affects the rest. Therefore, it was very important to keep the synchronic continuity based on close cooperation of different subjects while performing activities in particular departments. If one of the department evolved due to a natural course of evolution, other organs evolved as well. This way the domino effect processes spreading within individual organizational departments of Expo 2015 had influence on the general organizational scheme, which was finally established a couple of months before the opening of Expo 2015. The schedule from October 2015 presented in this elaboration has nothing in

common with the structure I encountered arriving at EXPO S.p.A in may 2013. 42 departments responsible for different tasks have been placed under the supervision of the general commissioner. However beforehand the names and positions of different departments has altered frequently. That is why it is difficult for me to specify the continuity of the names of departments I worked in.

And so etc. the Department of Thematic Spaces = DTS lead by architect Matteo Gatto to which I was assigned to in the course of performing my research, in September 2014 has been transformed into Visitor Experience and Exhibition Design. About that time due to the staff vacancies in another sector I have been transferred to Distribution of Service and Commercial Spaces, which was established on the basis of two other units Visitor Services & Retail and Partners & Sponsors. A more detailed description of the dynamics of work within individual departments will be presented further in this elaboration.



**THE PRINCIPLES OF IMPLEMENTATION OF THE RESEARCH ACTIVITY in the Department of Design of Polytechnic Institute of Milan within the research program entitled *Clusters in Expo 2015: project research supporting the exhibitions of the main event subject.***

The objective of my work was to gain a more profound insight into the exhibitory declination of the subjects presented in the pavilions of Expo 2015 Clusters, spotlighting especially the architectural culture and design. The benchmark and inspiration for the project research was 5 Thematic Areas and *Theme Guide Expo 2015*.

The superior task was the exhibitory declination of subjects from 9 Cluster areas: *Rice, Cocoa, Coffee, Cereals and Tubers, Fruits and Legumes, Spices, Biomediterraneum, Islands and Arid Zones*.

In compliance with the constraints of Expo 2015 I had to include:

- specific national identity of clusters, the countries culture, customs, climate and geographic location;
- leading theme underlying the architectonic concept of each Cluster, highlighting the character of the internal, external and common space which reflects it;
- interaction between Clusters along with the communication routes and the dialogue between the remaining Thematic Areas: Padiglione Zero, Future Food District, Children park, Biodiversity Park, Arts&Foods).

Based on the above mentioned guidelines, my research was concerned with the development of the subjects of each Cluster exhibition and their declination within the scope of the arrangement, exhibitions and cultural events

schedule planned for the half-year period of Expo 2015. My task was to design and monitor the infrastructure of information points, service-commercial and innovative routes of experimental character within the particular Clusters aimed at the audience (e.g. food-tasting, food performance etc.).

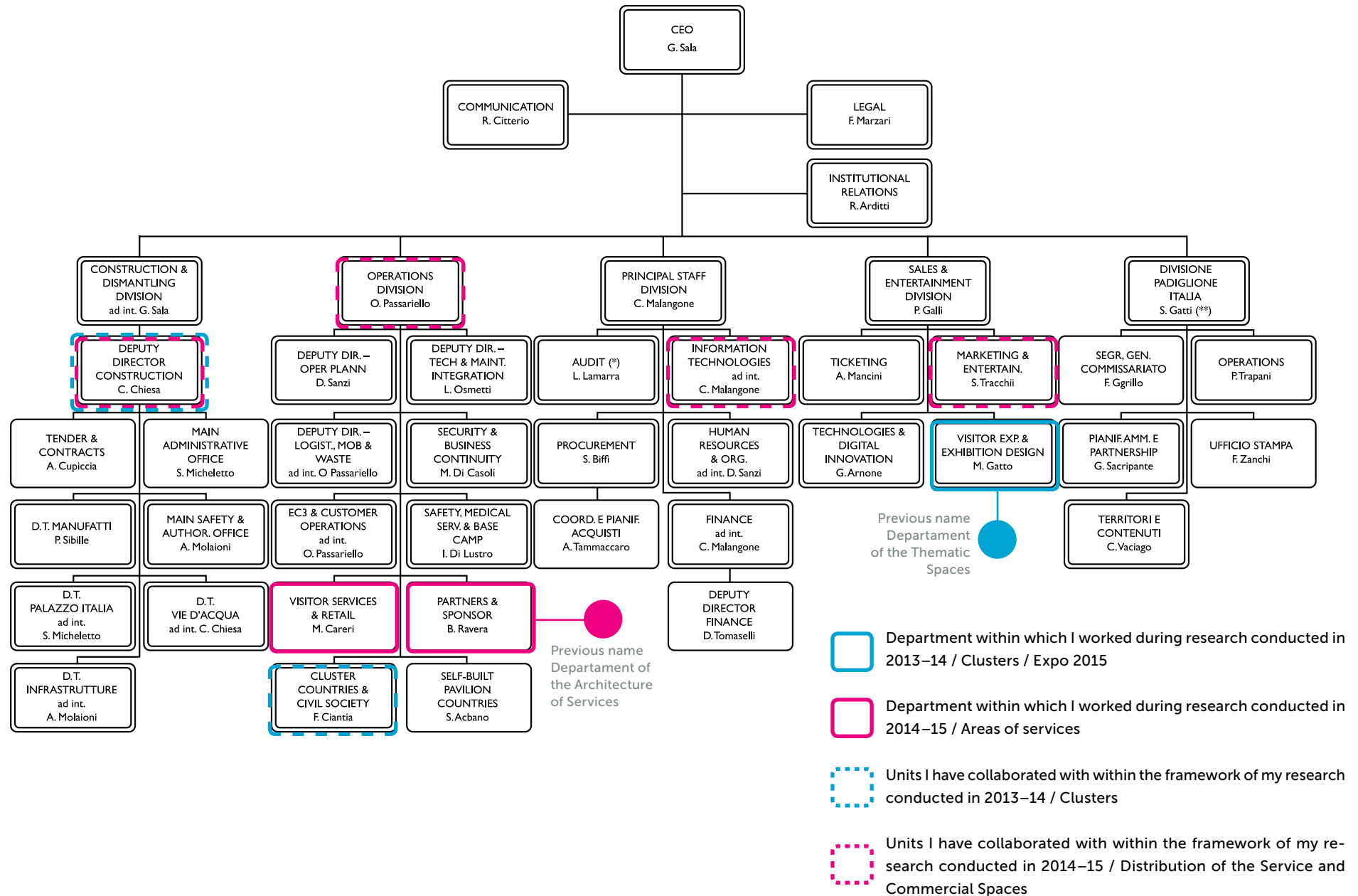
Additionally, there were other duties in my job description as the grant's beneficiary:

- Staying in touch with Expo 2015, with participants involved in the introductory design of cluster areas and third parties assigned to develop the final project and manage the work both in the scope of broadly understood design as well as from the angle of the conservator of estate over the content of individual exhibitions dedicated to particular Clusters
- Monitoring of the commitment of the states related to the individual Cluster
- Laying down schemes defining the activities and subjects taking part in the arrangement of space within the Clusters and developing the selected project premises
- Elaborating the substantive and exhibitory content of particular Clusters
- Elaborating the themes and the so-called experimental routes of the Clusters
- Coming up with the possible educational and cultural initiatives for each Cluster (provided for the 6-month period of Expo 2015)

The most important tasks within the process of my research, which are significant in terms of my tenure proceedings will be presented in detail in the following part of this presentation.

**Assumptions and objectives of the research program**

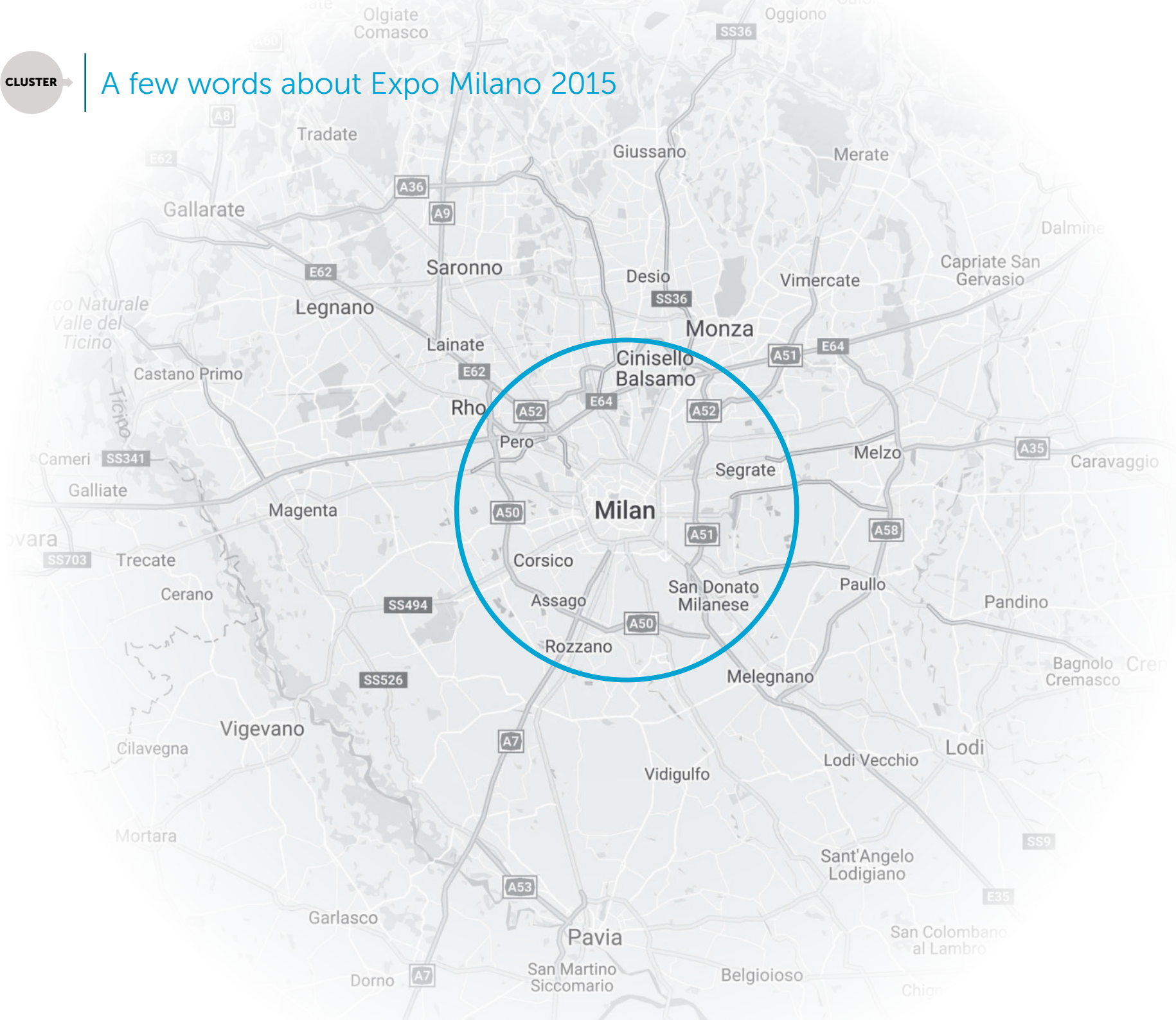
# Scheme illustrating the organisational structure of Expo 2015 / 1.10.2014

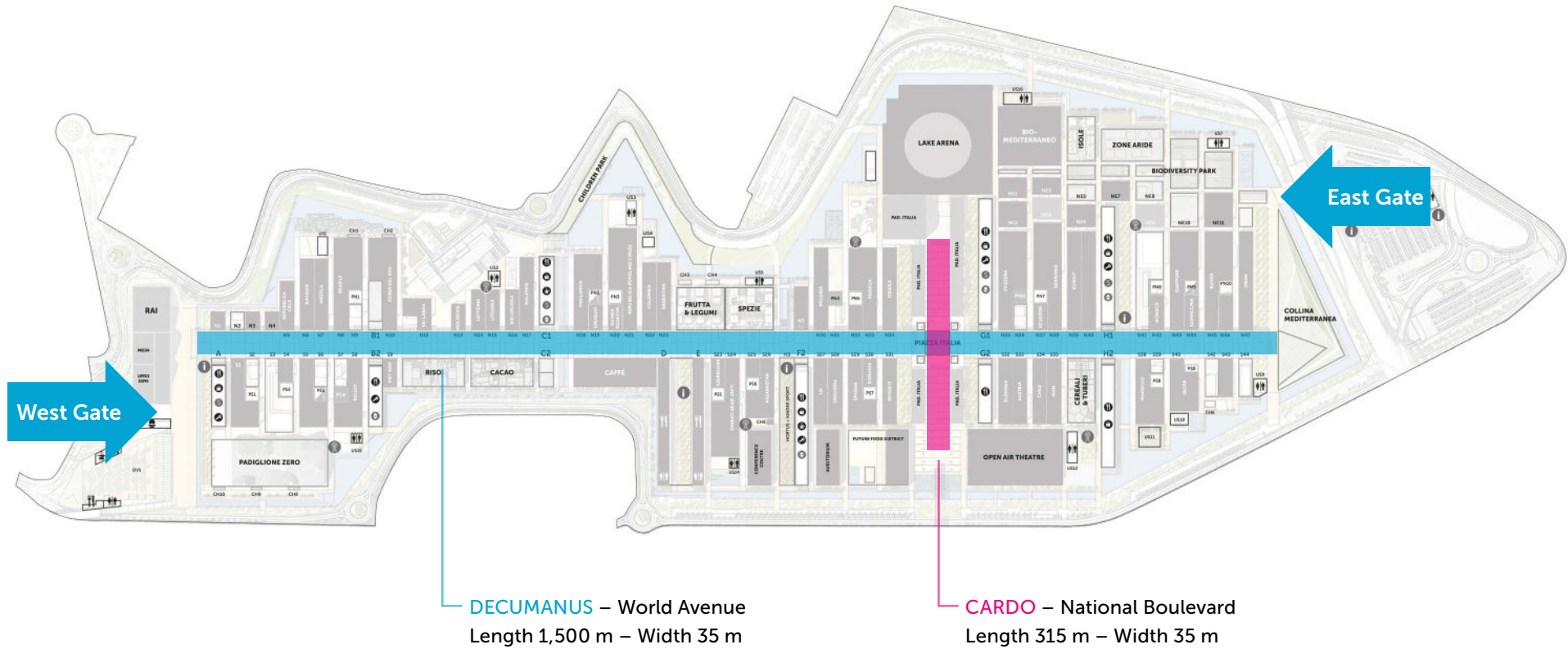




CLUSTER

## A few words about Expo Milano 2015





## Expo MILANO 2015 some data

**Date:**

1 may–31 october 2015, (184 days)

**Main target:**

140 countries and organisations  
20 mln visitors

**Exhibition space:**

1 mln sqm

**Public investment:**

~1.3 bln Euro

**Private sector contribution:**

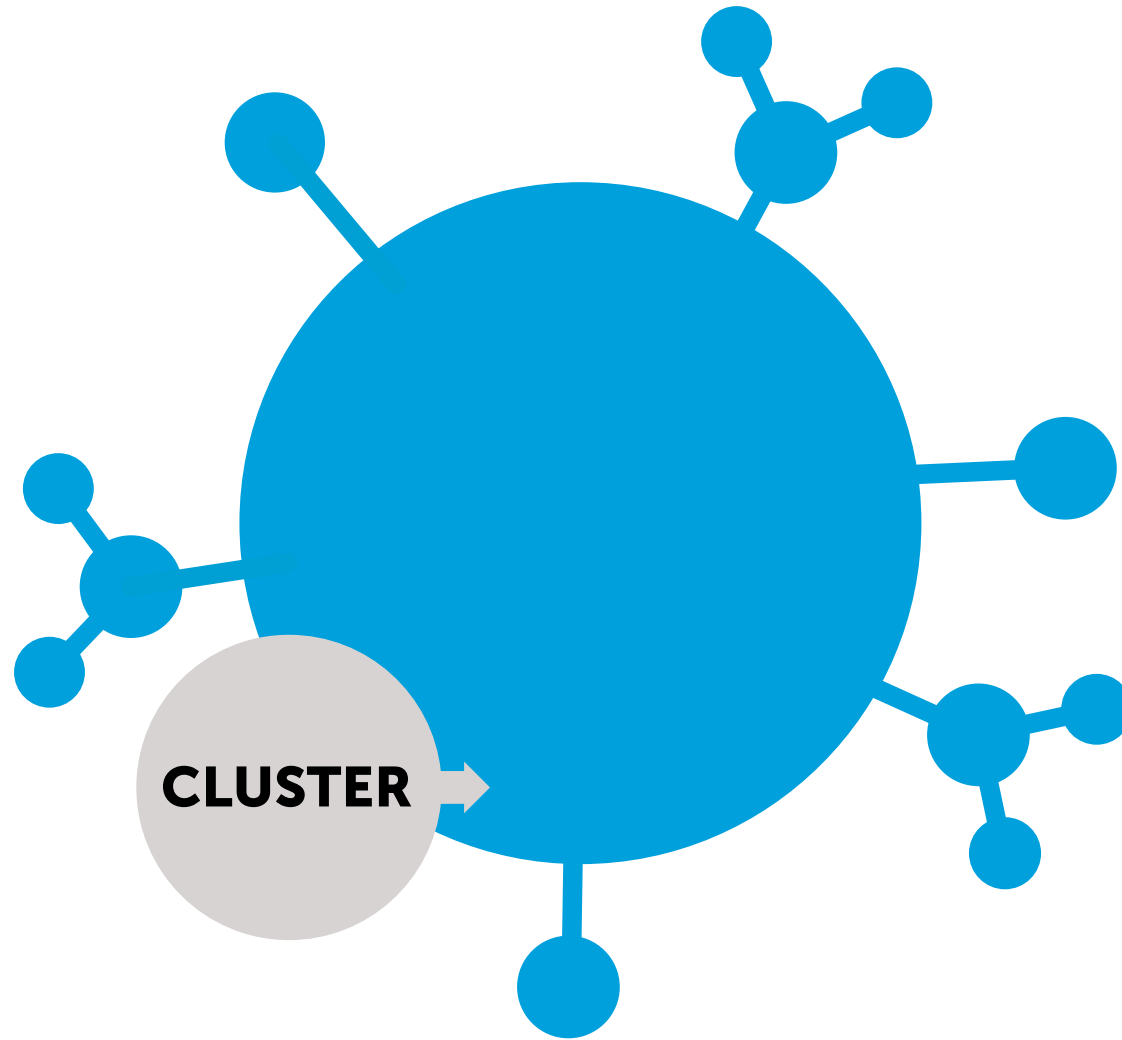
~0.3 bln Euro

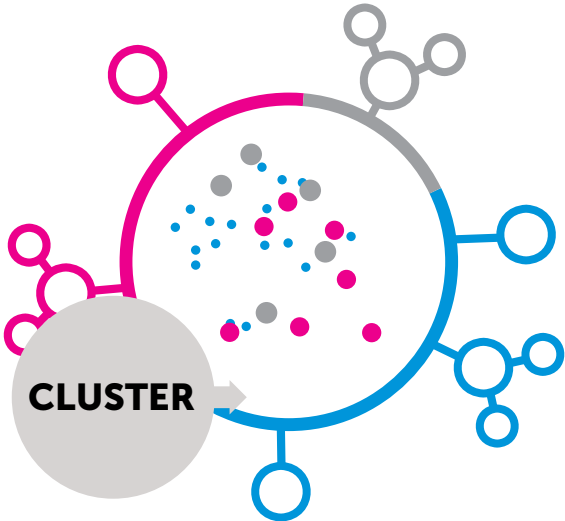
**Investments of Official Participants:**

~1 bln Euro

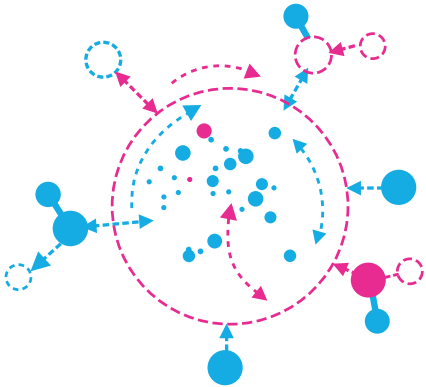


# Cluster as key architectural concept of Expo 2015 and an innovative model of participation in Expo





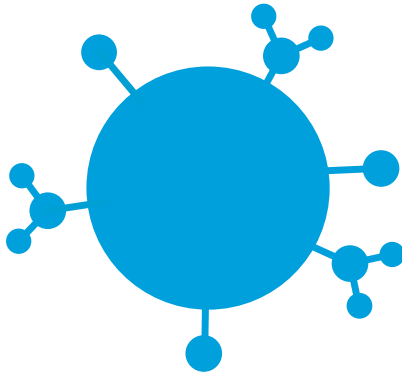
CLUSTER It is a spatial grouping or a systemic combination of smaller objects into one larger one



DESIGN PROCESSES

The effect of innovative design process, the so-called collaborative design engaging in the creative process a group of entities from different fields

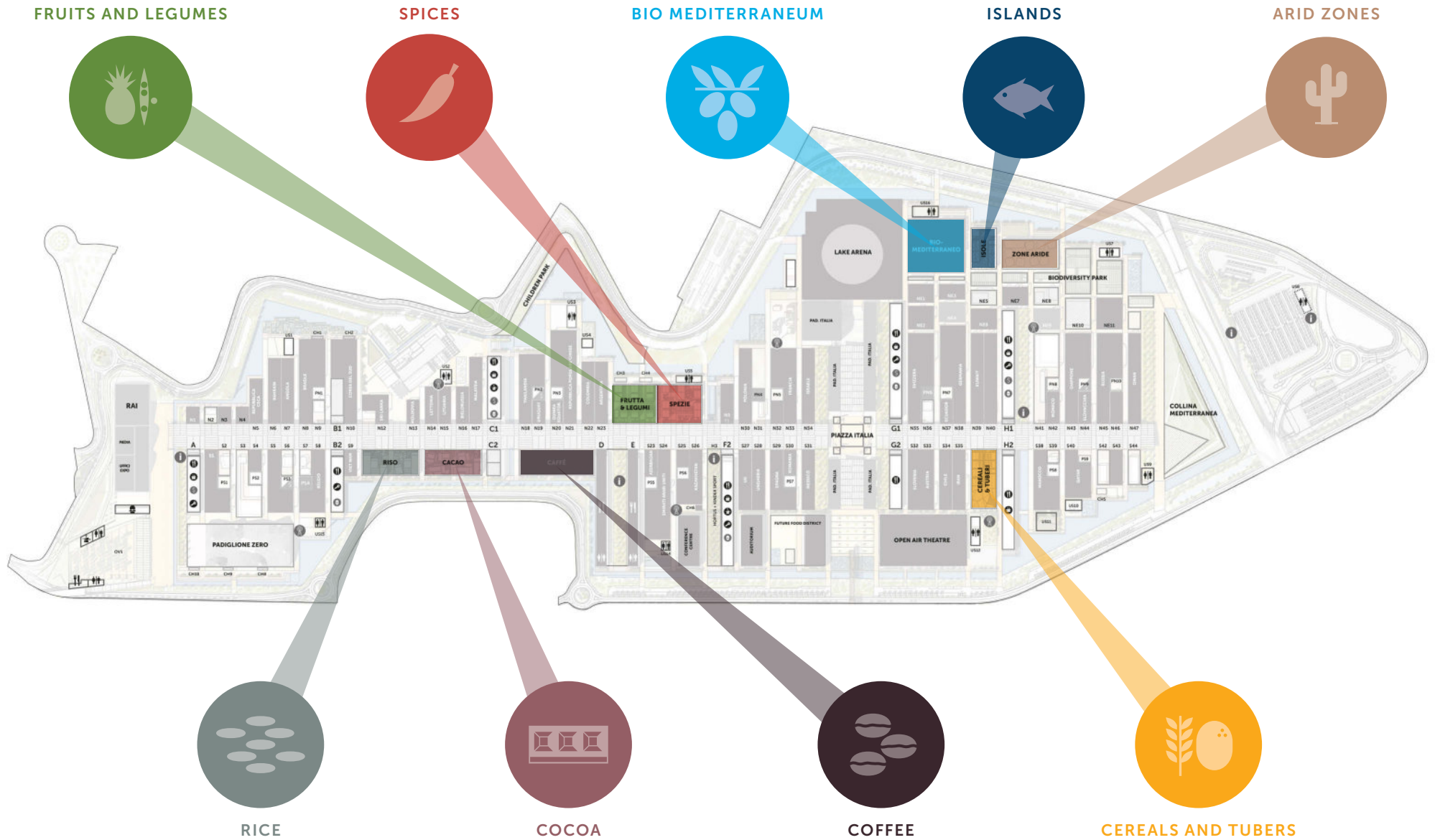
In context of Expo 2015



ARCHITECTURAL ASPECT

An innovative model of multifunctional architectural environment, enabling multidimensional promotion and involvement of participating countries

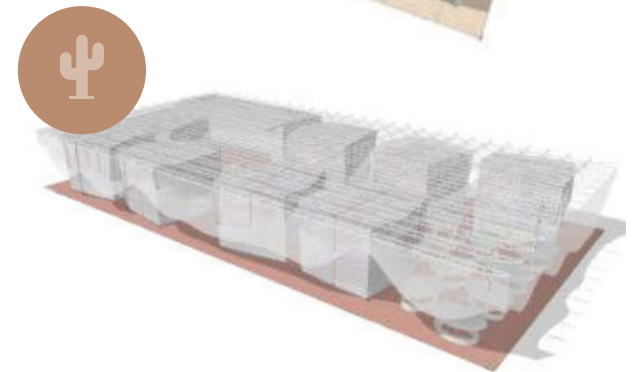
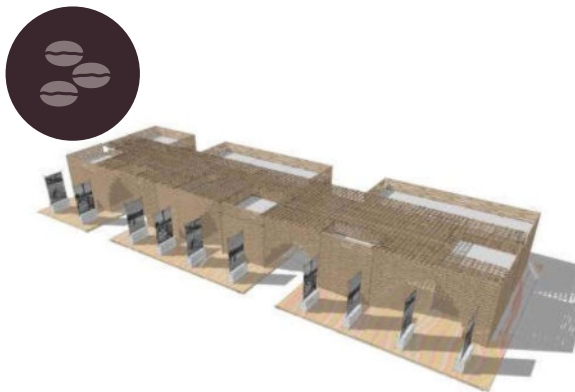
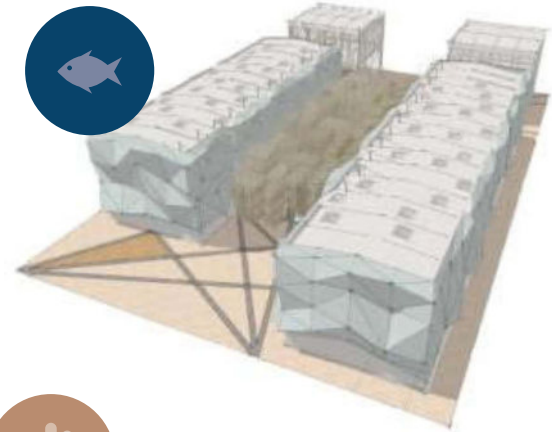
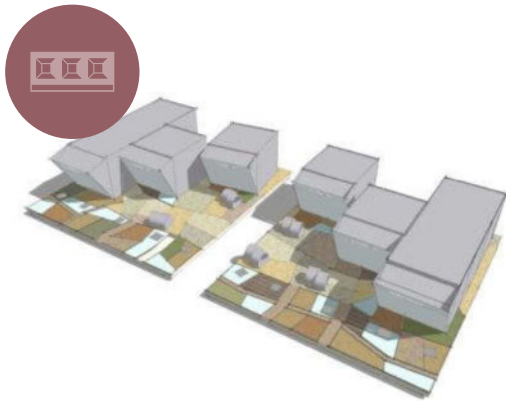
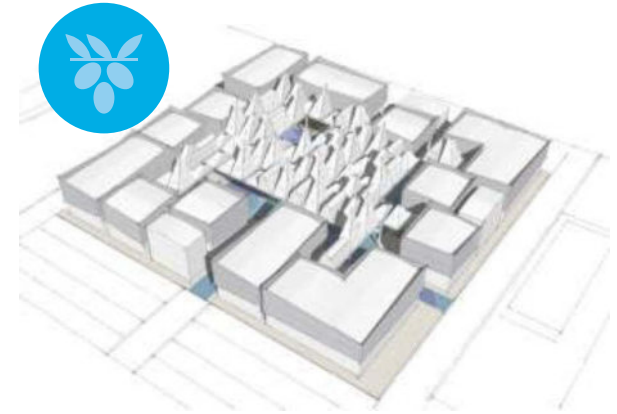
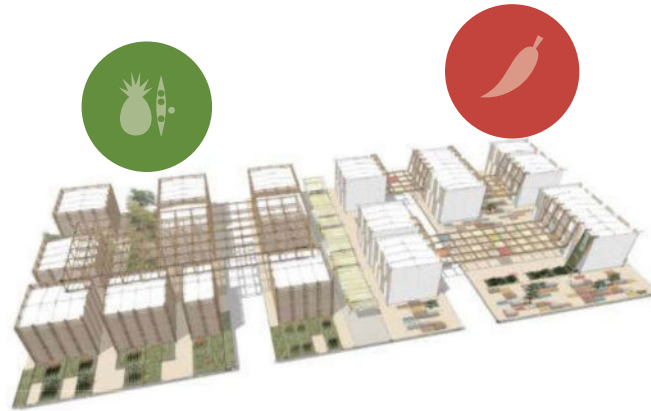
# Clusters within Expo 2015. Arrangement and subject matter





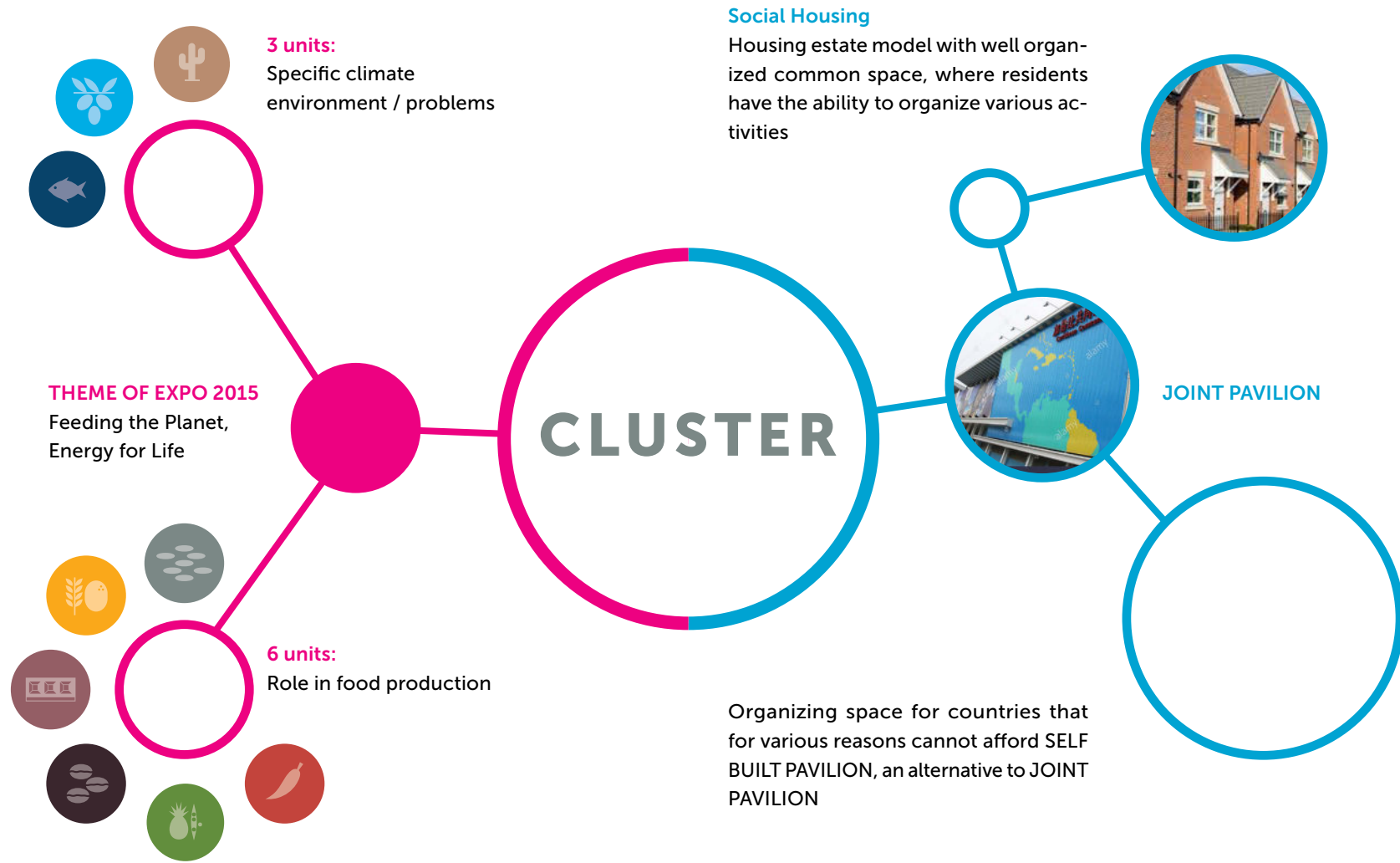
# Clusters within Expo 2015. 9 thematic units

CLUSTER →



# Cluster as an innovative model of multifunctional architectural environment and a new model of participation in Expo

Hybrid emerged on the ground of 2 Expo needs



# Cluster as an innovative model of the multifunctional architectural environment– functions

CLUSTER

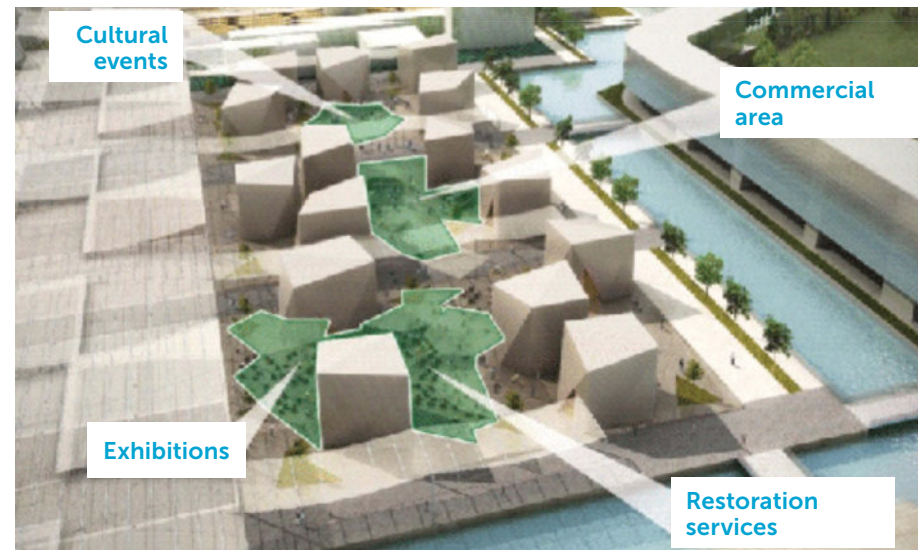
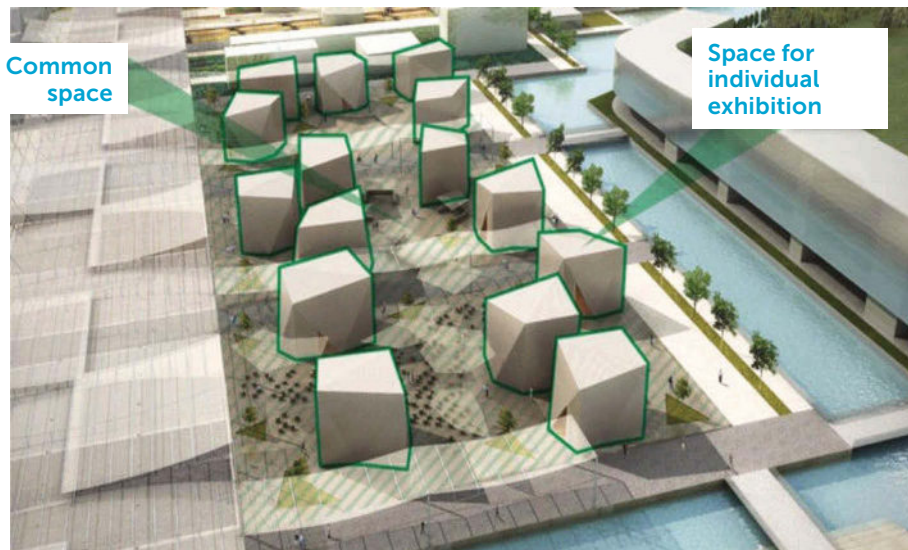
## Definition

In the context of Expo 2015 CLUSTER is an architectural space focusing on specific modular pavilions dedicated to the countries that are directly involved with the keynote of Clusters.

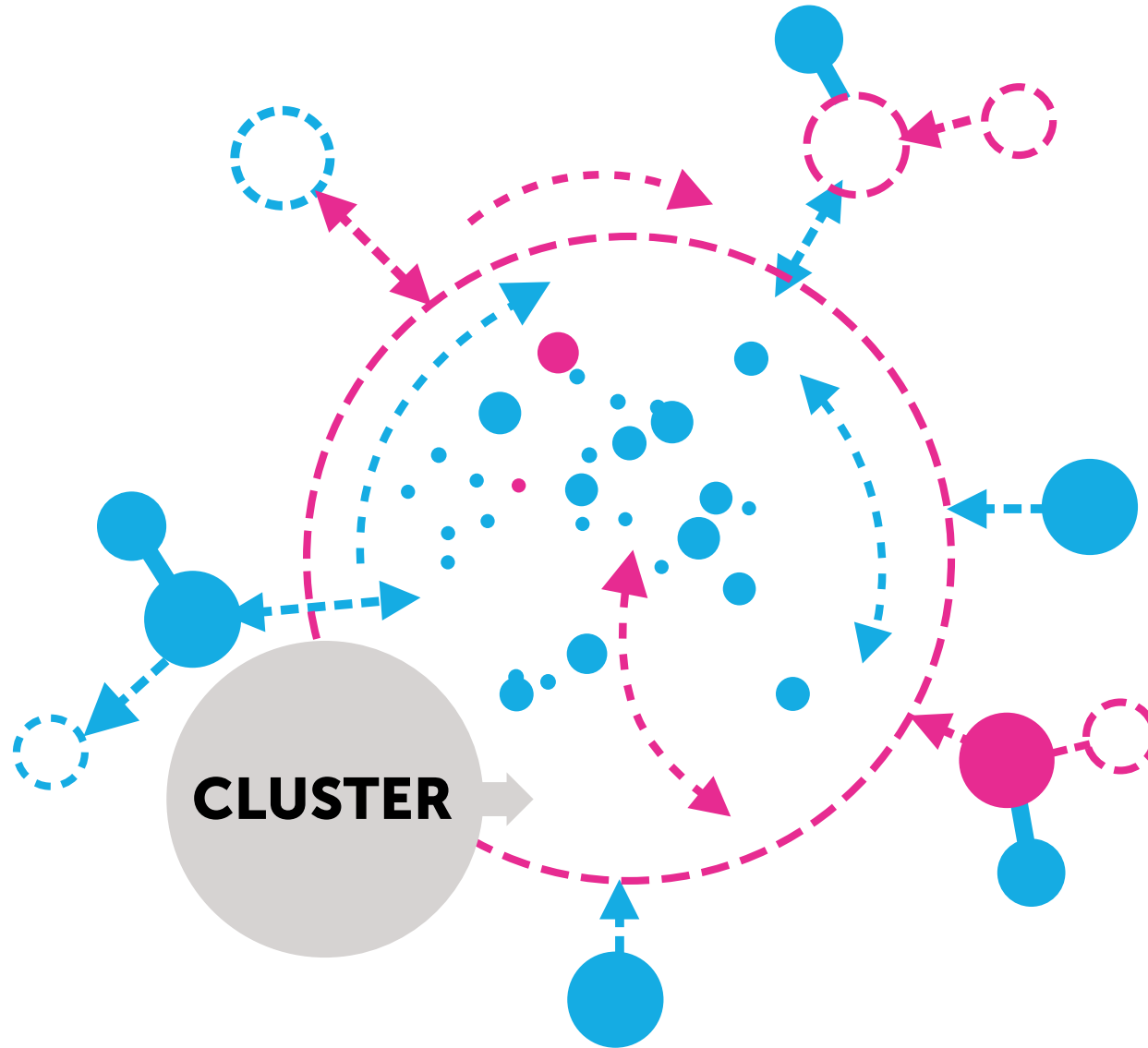
## Functions of the common space

The architectural model of the Clusters offers the participating countries great opportunities for self-promotion. The largest area of maneuver the participant gains in the inner space of his own pavilion, which is provided for an individual exhibition.

In addition, there are a number of areas with a variety of functions available to the participants, including: promotional and commercial zones, restaurants, relaxation, cultural events and exhibitions.



Cluster as a result of innovative design process. Definition and methodology of the collaborative design



# Cluster as a result of innovative design process based on collaborative methods

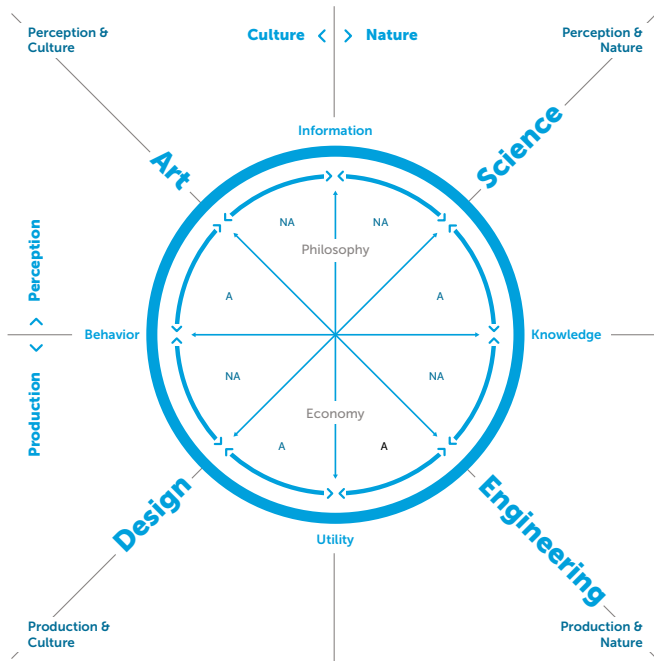


## Definition

Collaborative design is a notion which emerged on the basis of a contemporary theory in relation to a new way of conceiving project assignments. In general, it can be identified with the designing of a design. This paradigm applies to research conducted in this field as well as multidirectional design strategies. The research on collaborative design go beyond the traditional frames of conceiving its function only in a technical sense, being open to unconventional methods of observation and creation of new design processes.

In an academic context it means the collaboration with researchers representing different disciplines, merging them into research teams and also being open to interaction with external units.

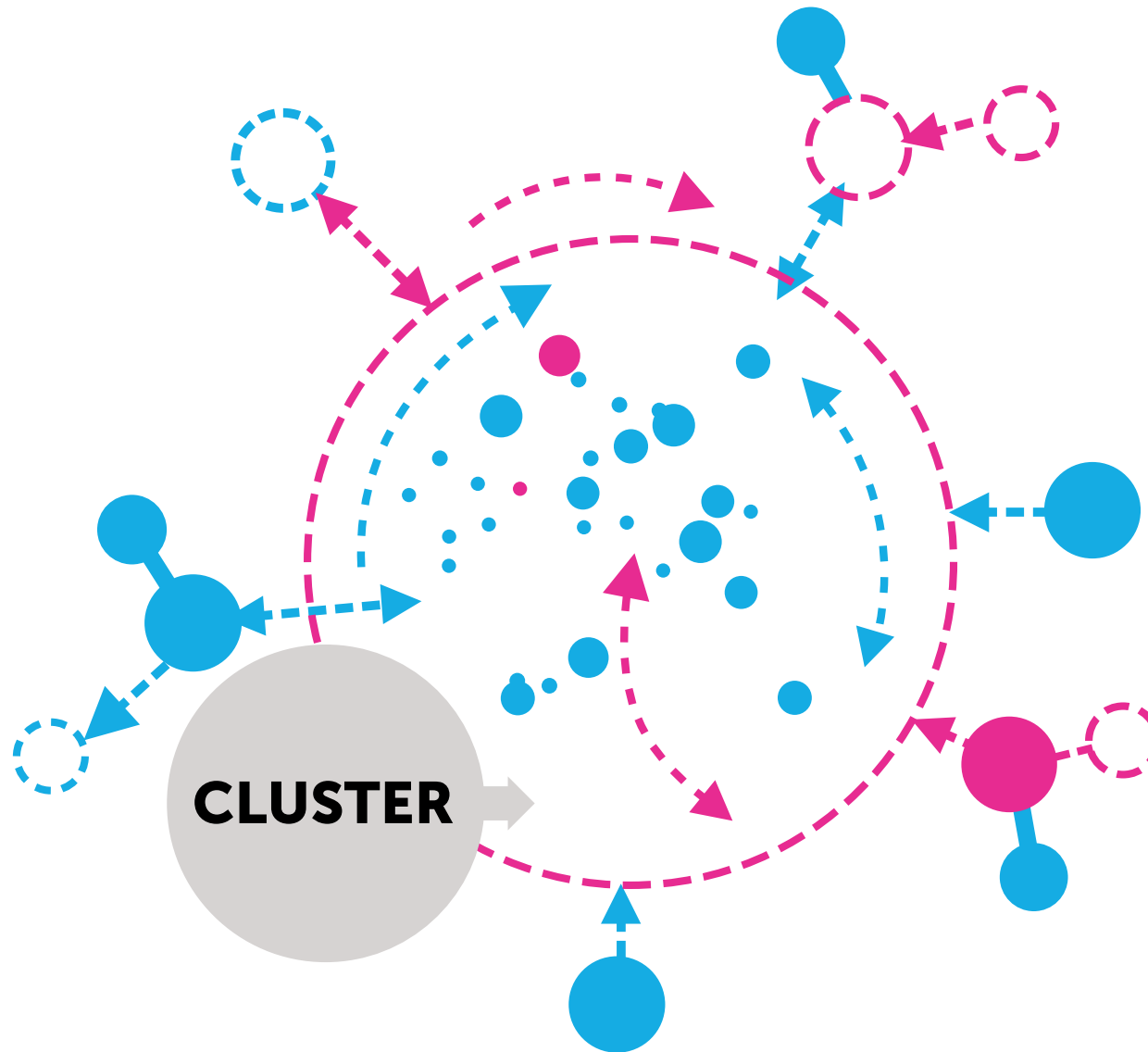
The effectiveness of the collaborative design and related paradigms such as: meta-design, participatory design, user-centered design or scenario based-design has been validated by the contemporary theory. I will now quote one of them inspired by the Krebs Cycle.



## Krebs Cycle

The Krebs Cycle is a series of biochemical reactions that are the final step in the metabolism of aerobes, oxygen-breathing organisms. Without it, these organisms would not be able to function. Within the Cycle through the oxidation of nutrients, chemical energy is produced, carried by the cell in the form of adenosine triphosphate (ATP). ATP can therefore be treated as a molecular currency unit for energy transfer. The Krebs Cycle is a type of metabolic clock that first generates, then consumes, and eventually (additionally) regenerates the ATP currency. Putting it shortly, the better the metabolism, the better the results. However, following this trail, moving on to the plane of widely understood multi-disciplinary design, I ask myself: does so-called *intellectual digestion*, often requiring a total change of point of view, carry an invaluable potential for creation?

Successive stages of developing the concept of Clusters with emphasis on the date of the beginning of the research on declining exhibitions within Clusters



# Cluster as a result of innovative design process based on collaborative methods

CLUSTER

In order to depict the character of my participation in the process of building exhibitory schemes for the common space of particular Clusters I have to point out that it was an effect of strategies conceived at the time of birth of the architectonic concept of Clusters in 2011.

The principle of organizing activities around the construction of particular ideological and functional aspects of singular units, the so-called designing of design was based on the principles of collaborative design. To illustrate the specifics of this phenomenon, I will present further strategies leading to the distinguishing of 9 Cluster architectural models (page 48).

I will start with the fact that the Cluster as an innovative model of multifunctional architectural environment was determined by two following demands of Expo 2015:

- Highlighting of the thematic line of Expo 2015: *Food for the planet, energy for life*
- Organizing space for countries that (mainly for financial reasons) cannot afford a SELF BUILT PAVILION. (As an alternative to a JOINT PAVILION)

In order to realize the first of these demands, the organizers of Expo decided to get support from the scientists from the Faculty of Agriculture of the **Università degli Studi di Milano**. A scientific committee established, following the spirit of Expo 2015, according to which all the initiatives were built around the leading theme, developed 9 themes for particular Clusters. It is worth emphasizing on this occasion the primary role that TOPIC played in Expo 2015. The best testimony to this is the fact that the Expo S.P.A. established The Thematic Space Department (DTS) and the Theme Guide for the participating countries.

According to the Expo 2015 concept, individual participants were grouped according to a type of food produced by a given country, which has been interpreted here as Energy for Life. In this way countries were united in their diversity.

Cluster thematic motifs can be divided into 2 groups. The first, referring to the problem of global planet nourishment, also including cultural issues, contains the following topics: Rice, Cereals and Tubers, Fruits and Legumes, Spices, Coffee and Cocoa. The second, indicating the specific climatic conditions of the earth includes: Biomediterraneum (understood as referring to the bio-Mediterranean climate), Islands and Arid Zones

## The concept of Cluster

### 6 units:

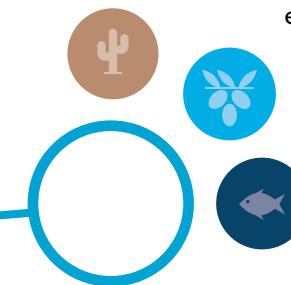
Role in food production



THEME OF EXPO 2015  
Feeding the Planet, Energy for Life

### 3 units:

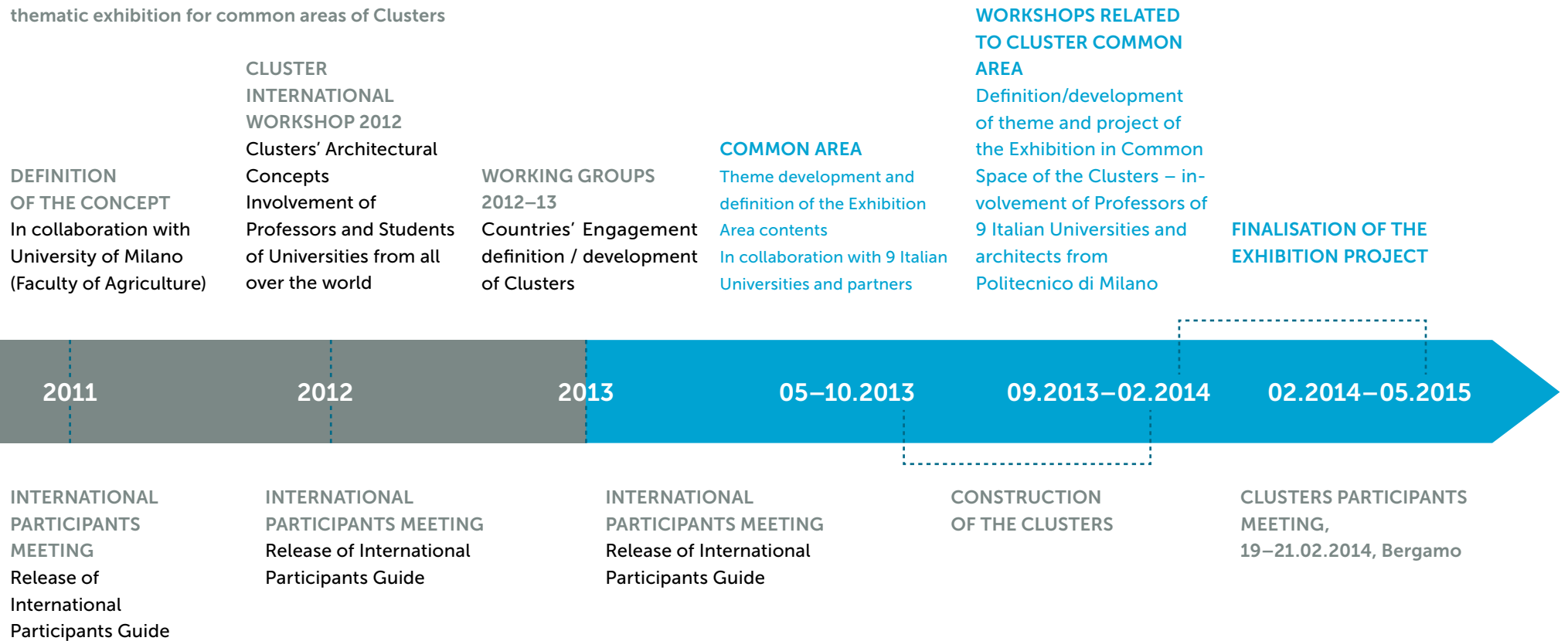
Specific climate environment / problems





# Cluster as a result of innovative design proces. Timeline

Line graph illustrates individual phases of the project of Clusters with emphasis (marked in blue) on the processes responsible for the declination of the thematic exhibition for common areas of Clusters



The period of my design activity conducted within the framework of research on Politecnico di Milano for Expo 2015 is highlighted in blue  
 Theme: *Research activity supporting the project of the exhibitory declination of the thematic exhibitions for common space in Clusters within Expo 2015*



# Cluster as a result of innovative design process

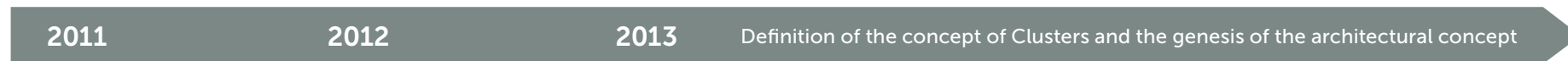
CLUSTER

Architectural project of Cluster

After identifying the 9 Cluster topics, it was important to organize space for the participating countries in an appropriate manner. I think that the process of developing architectural models is worthy of precise analysis, as it perfectly reflects the definition of collaborative design, which is extremely important for this study.

The organizers of Expo s.p.A. set out to implement an experimental, multilevel design scenario involving not individual architects but groups of students and teachers of architecture from all around the world. To this end, by formally cooperating with the Polytechnic in Milan, in summer 2012, they organized a three-week workshop involving 18 universities from different parts of the globe, selected not only with regard for their reputation, but also for their geographic affinity with the subject of Clusters. During the workshops, as part of the multidirectional cultural exchange, the individual participants

mixed, which resulted in the formation of 9 project teams consisting of students and teachers of different nationalities, including the lecturers from the Polytechnic Institute of Milan. In total there were about 200 participants (127 students, 40 professors and 46 other instructors). The task of distinguishing project groups supported by various experts (Marti Guixé, Kengo Kuma, Carlo Cracco, Davide Rampello, Michael Radtke, Stefano Mirti) was the development of architectural concepts for individual Clusters. As a result, 27 projects (3 for each cluster) were presented during the Cluster International Workshop which took place between the 10<sup>th</sup> and 12<sup>th</sup> of October of 2012. During this time, the international jury (composed of professors and architectural experts) selected one project for each cluster in the competition. The winning ideas were afterwards processed by 9 teams of architects from Polytechnic Institute of Milan and Fiera di Milano.



UNIVERSITÀ DEGLI STUDI DI MILANO  
Department of Agriculture



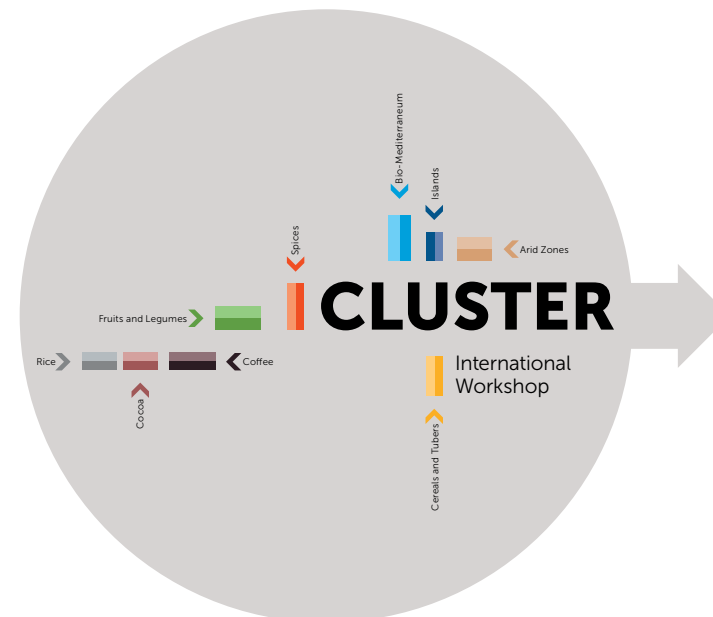
POLITECNICO MILANO 1863



- Rice
- Cocoa
- Coffee
- Fruits and Legumes
- Spices

- Cereals and Tubers
- Bio-Mediterranean
- Islands
- Arid Zones

- 18 Universities
- 40 Professors
- 46 Tutors
- 127 Students

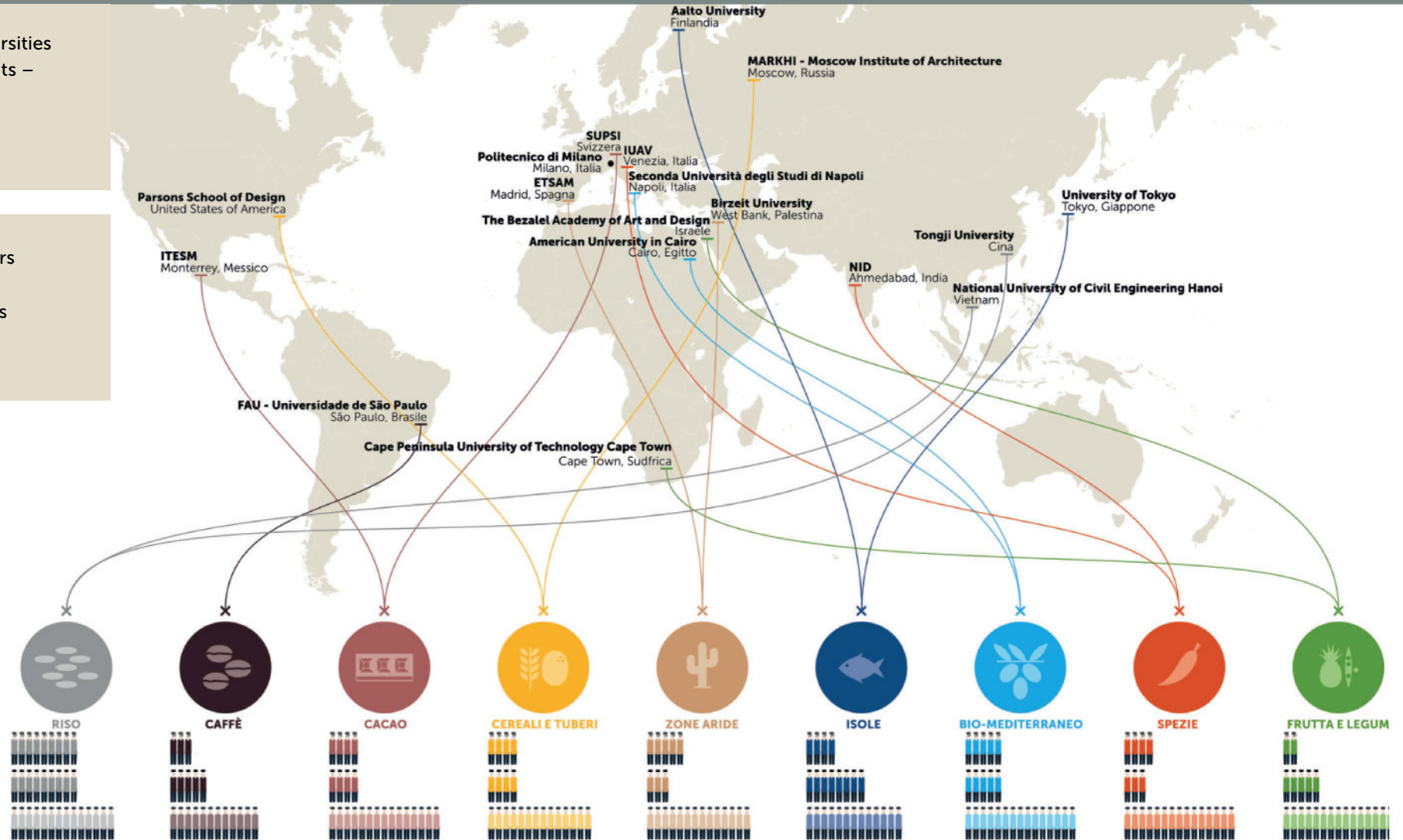


# Cluster as a result of innovative design process – genesis of the architectural concept. Workshop 2012

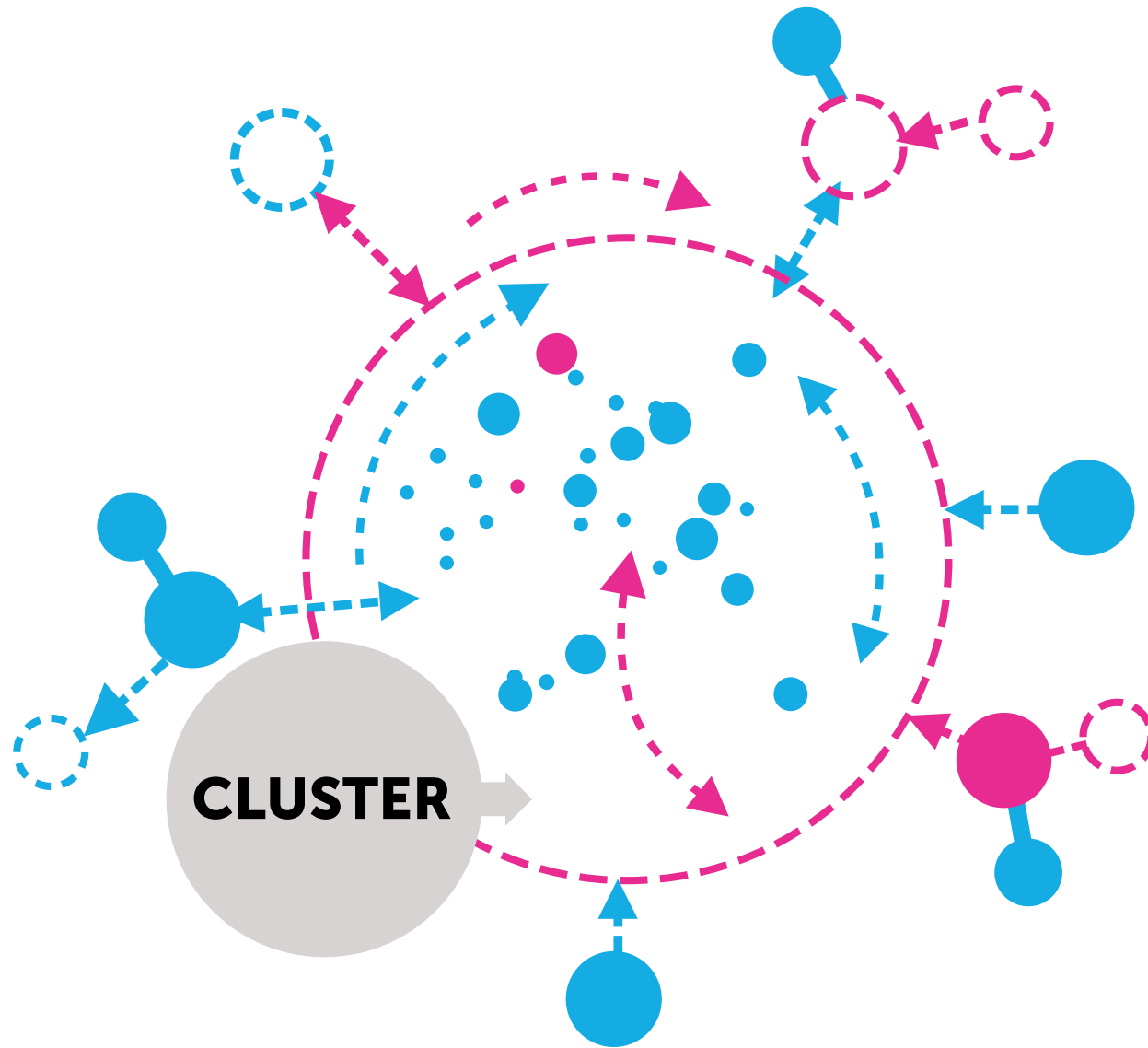
Internarional workshop clusters for Expo 2015 (19<sup>th</sup> September–9<sup>th</sup> October, 2012)

18 World universities  
9 Thematic units –  
Clusters

- 40 Professors
- 46 Tutors
- 127 Students



My own design research to support the project for the declination of the thematic exhibitions for each Cluster



### My way to Expo 2015

From the moment of defining the architectural concepts for individual Clusters, the attention of the organizers has been focused on exploring particular design problems within the common space of each of the 9 modules (modular pavilions, common space).

Also this time they focused on multi-disciplinary cooperation with scientific units. The Polytechnic Institute of Milan played a significant part and after setting relevant agreements with Expo 2015 it undertook to provide the staff needed to coordinate research on the various project themes of Clusters. The university set up a competition for 4 research positions under the supervision of Prof. Luisa Collina – each with a different task profile. As at that time, in collaboration with OM-Lab, I was involved in the designing of museum-

educational exhibitions I took interest in the position of the Coordinator for Exhibitory Declination of Clusters. I decided to apply for this post.

The competition was open and took place in two stages:

The first stage was based on the submitted materials and the second one was based on an interview. Out of several candidates, 3 prospective candidates were selected for each position. I was in the first place for the position of Coordinator for Exhibitory Declination of Clusters. Shortly after the announcement of the results, in May 2013, the members of the committee asked me for my availability, indicating an almost immediate date for initiating research. And so my period of activity at Expo 2015 began.

### Organization of the design processes

*Clusters within Expo 2015: design research supporting a research project for exhibitory declination of topics being the subject of the Event*

It is the full version of the title of my research program. In order to precisely define the nature of my activities I decided to begin with illustrating my position in relation to the other actors involved in the project. Also this time the organization of all processes was based on the principles of collaborative design, the task teams being concentrated around the Department of the Thematic Spaces (DTS), which I was a representative of.

DTS (Department of the Thematic Spaces) under the direction of Matteo Gatto served as a buffer, moderator of all creative processes.

Research groups from 9 Italian universities were made responsible for the substantive aspect of the research, teams of architects from the Polytechnic

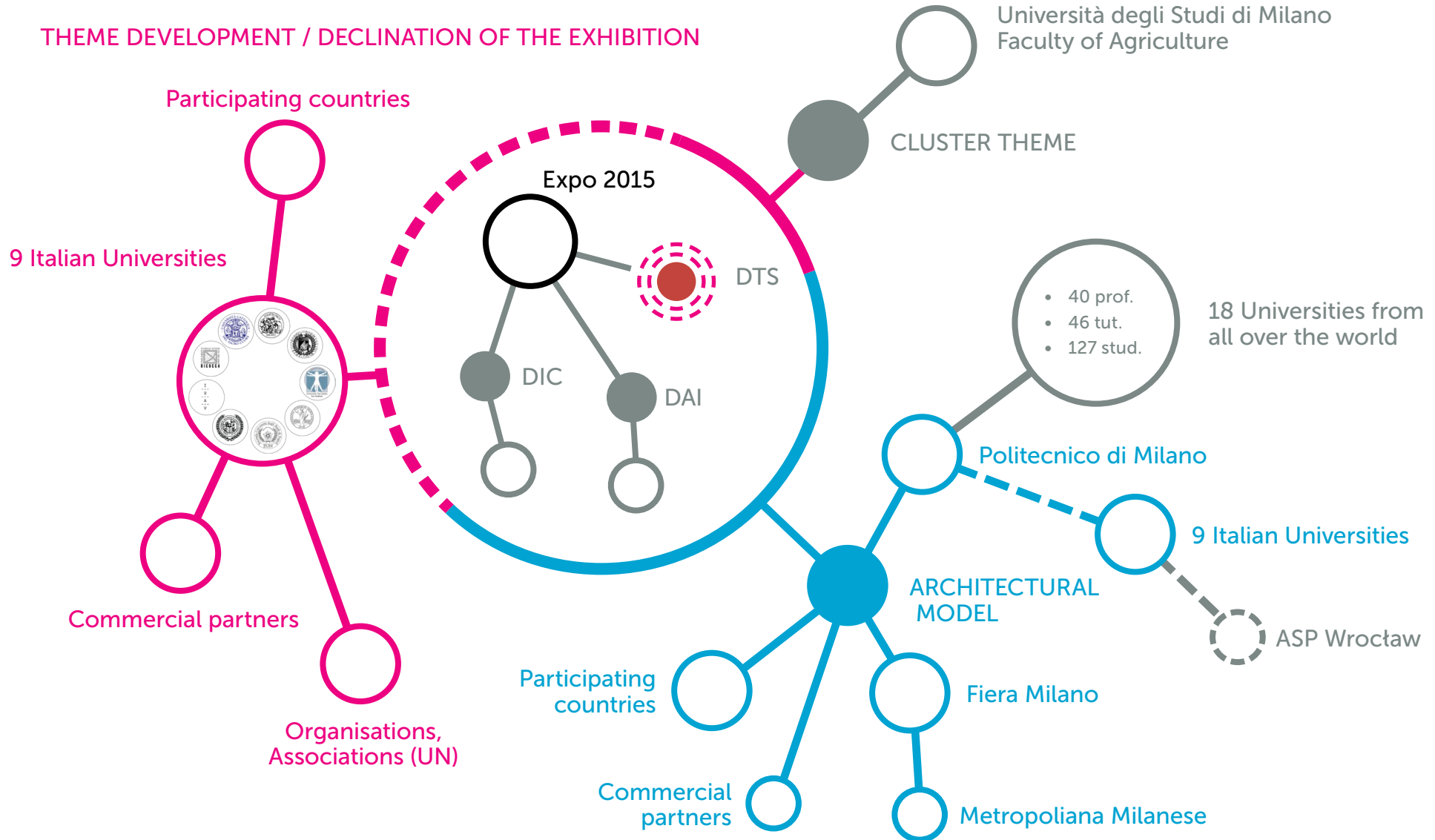
Institute of Milan were to handle the technical aspect (one for each Cluster). The participating countries represented by the Department of International Affairs (DAI), Fiera di Milano, various associations (eg. UN) and commercial partners of individual Clusters (eg. Illy) constituted the additional units involved in the project.

What was actually my role? In a nutshell, I can say that as a representative of the Department of the Thematic Spaces of Expo 2015 together with 2 of my colleagues (Marco Chiodi and Michele Di Santis) I coordinated the activities and communication between the various units. In fact, the nature of my tasks was more complex, as it will be described later in this study. I will now return to the tasks of the various actors involved.

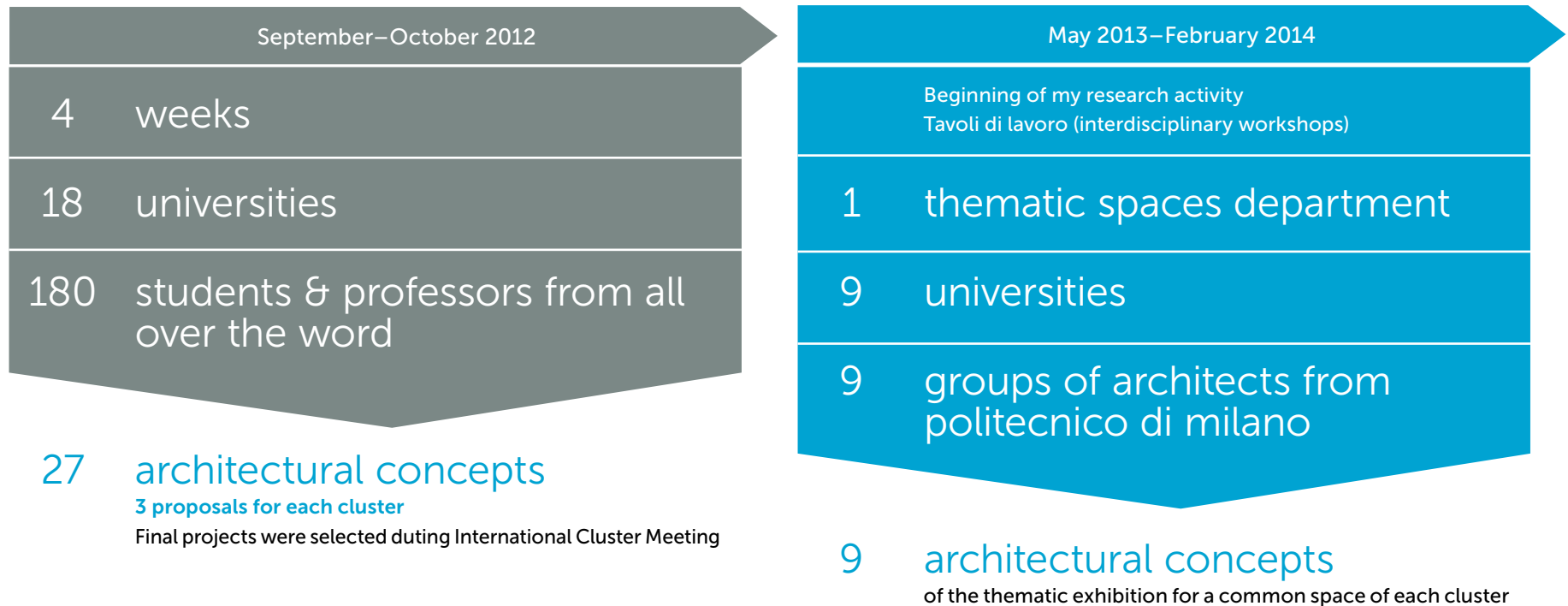
# Collaborative design. Scheme illustrating connections between the actors involved in the elaboration of the Cluster concept and its further declination



## THEME DEVELOPMENT / DECLINATION OF THE EXHIBITION



## Organization of design processes for elaboration of the concept of Clusters and for exhibition declination



The development of thematic exhibitions for Cluster common spaces began with the declination of the topic for each of the Clusters. The bodies responsible for the development of research under the supervision of the DTS were research teams appointed by each of the 9 Italian universities. Staying in constant contact with participating countries (via DAI) and drawing inspiration from the UN suggestion, their task was to deepen the subject content of the given Cluster and to provide Expo with a written study which would be the basis for the exhibition. The process of preparing the individual contents was performed in the spirit of the workshop methodology suggested by the directorate of DTS, including an animated exchange of information and mutual inspirations between individual units. An important role was played here by

Tavoli di lavoro – working meetings bringing together all participants in the research project. This was a series of extremely fruitful confrontations organized at the Expo during the first months of my work with the participation of representatives of Expo 2015 (DTS, DAI) as well as scientific units responsible for the content of the exhibition (9 Italian universities – 1 for each cluster), groups of architects from the Polytechnic (1 for each cluster), Fiera di Milano and commercial partners (eg. Illy for the Coffee Cluster). Entities representing the various fields, responsible for different aspects of the exhibition in the public space of Clusters, exchanged their ideas, trying to respond to the cognitive needs of the public. I represented the interests of Expo here, together with arch. Marco Chiodi, sometimes also with arch. Michele di Santis.

Methodology of work  
Tavoli di Lavoro

My main tasks during this research project were:

- attending to all formal issues, especially the settlement of the agreements with the various entities,
- developing a work schedule for each working group, indicating the moment of their mutual infiltration, arranging meeting dates for individual Clusters,
- moderating the course of individual meetings,
- preparing guidelines for the interpretation of individual themes based on DTS recommendations and UN recommendations
- preparing guidelines on budgetary, technical and logistical capabilities,
- supervision of substantive research conducted by 9 university centers from Italy,

- control of meeting deadlines for individual working groups
- verification of the final substantive studies in terms of meeting the formal requirements imposed by Expo 2015
- checking the execution possibilities of individual architectural concepts (in collaboration with Fiera di Milano)

Tasks in the first  
stage of works

Each of the tasks entrusted to me was solved on a regular basis in consultation with the relevant Expo department and in close cooperation with DTS (Matteo Gatto). This was often a backward balancing between the various actors involved in developing a thematic exhibition for a given Cluster.

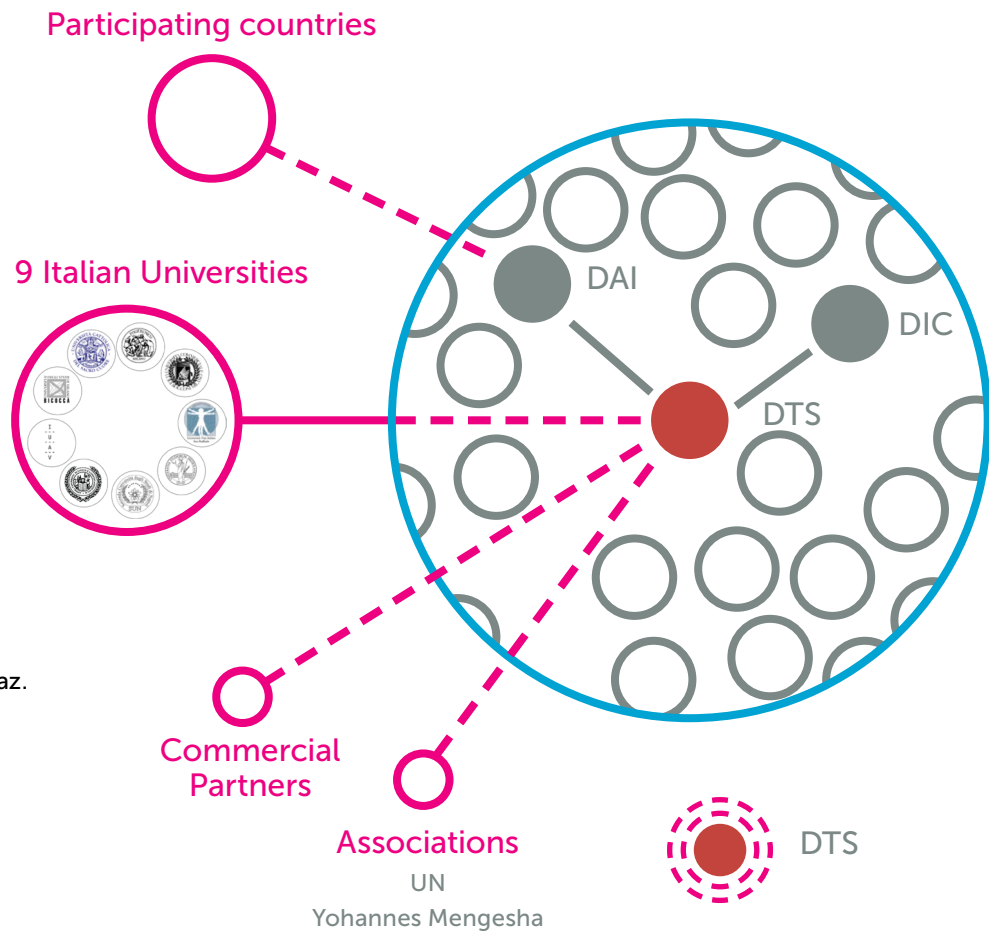
CLUSTER

# Scheme illustrating the actors involved in developing the substantive content for Clusters

-  Università degli Studi di Milano Bicocca
-  Università Cattolica dei Sacro Cuore
-  Università Commerciale Luigi Bocconi
-  Università Vita e Salute San Raffaele
-  Università IUAV di Venezia
-  Università degli Studi di Milano
-  Seconda Università di Napoli
-  IULM Libera Università di Lingue e Comunicaz.
-  Politecnico di Milano

### DIRECTORS OF RESEARCH GROUPS:

- RICE – Prof. Marialuisa Lavitrano
- COCOA – Prof. Pier Sandro Cocconcelli
- COFFEE – Prof. Chiara Mauri, Prof. Giovanni Valotti
- ARID ZONES – Prof. Luisa Collina
- FRUITS AND LEGUMES – Prof. Roberto Mordacci
- ISLANDS – Prof. Vincenzo Russo
- CEREALS AND TUBERS – Prof. Ambrogina Pagani, Prof. Gian Vincenzo Zuccotti
- BIOMEDITERRANEUM – Prof. Cherubino Gambardella
- SPICES – Prof. Benno Albrecht



DEPARTMENT OF INTERNATIONAL AFFAIRS  
 Expo 2015 Project manager and scientific coordinator:  
 Filippo Ciantia  
 Contributors (Expo 2015 Country Officers):  
 Barbara Borra  
 Veronica Corallo  
 Mohamed Elshimy  
 Beatrice Gemma  
 Chiara Lamera  
 Simone Mancini  
 Severine Pesquerel  
 Paolo Sabatini  
 Chiara Loreta



DEPARTMENT OF THEMATIC SPACES  
 Dominika Sobolewska  
 Marco Chiodi  
 Michele Di Santis



One of the first tasks during my stay at the Expo was to develop a time frame for the individual tasks and various guidelines for each team. Below I am posting a line graph illustrating the various stages of the project for the working groups and the actors involved in the development of the exhibitions for the Clusters.

The research program began under the banner of the activity of 9 Universities. The task of each scientific team was to develop the themes of the individual Clusters, based on the guidelines presented by me in the initial phase of the project. While preparing the content material, the researchers were to pay particular attention to the themes mentioned in more detail later in this study. The DTS timeframes were 5 months of work, taking into account the 3 phases of research. During this period, the researchers prepared: a sketch of the research conducted, its synthesis in the form of PPT presentations and the final version of the research paper. The stages of their work together with the selection of relevant content were discussed in detail in the Tavoli di Lavoro.

The forming of the final shape of the content was the result of joint analyzes between all the parties involved in the project. My role was to moderate the

discussions being held and to direct the individual speakers to the most important aspects of the topic being developed. Already at this stage of research I tried to encourage them to the maximum synthesis of presented content. It was extremely important from the perspective of later transforming them into exhibition strategies.

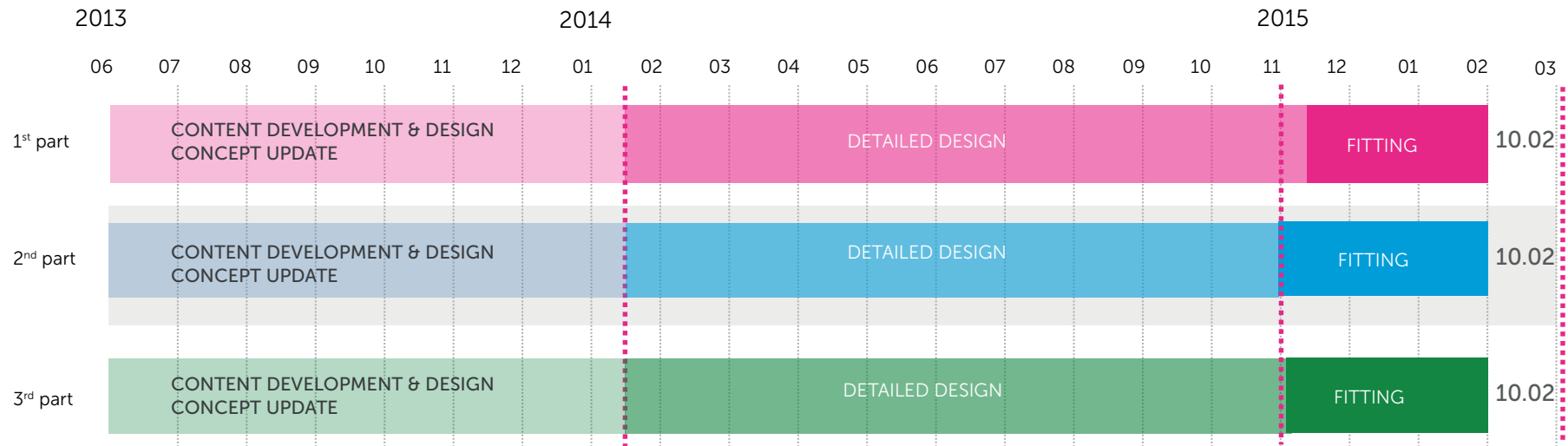
The final submission of the research papers took place in mid-October 2013 but it did not end the cooperation with 9 University Centers.

In the later phase of the project, the same research teams together with the architects from the Polytechnic Institute of Milan, with my assistance, had to select individual contents with regard for their transformation into attractive and effective exhibition objects.

During the collaboration with the 9 Italian Universities, sometimes the so-called "special missions" were established. In the course of one of these events I had the opportunity to be a jury member of the cake design competition organized by Università Commerciale Luigi Bocconi in June 2014 as a representative of Expo 2015.

My role in  
the first stage  
of work

# Cluster as a result of innovative design process based on collaborative methods



Scientific Contents & Concept Design Update  
Politecnico di Milano+ 9 Italian Universities

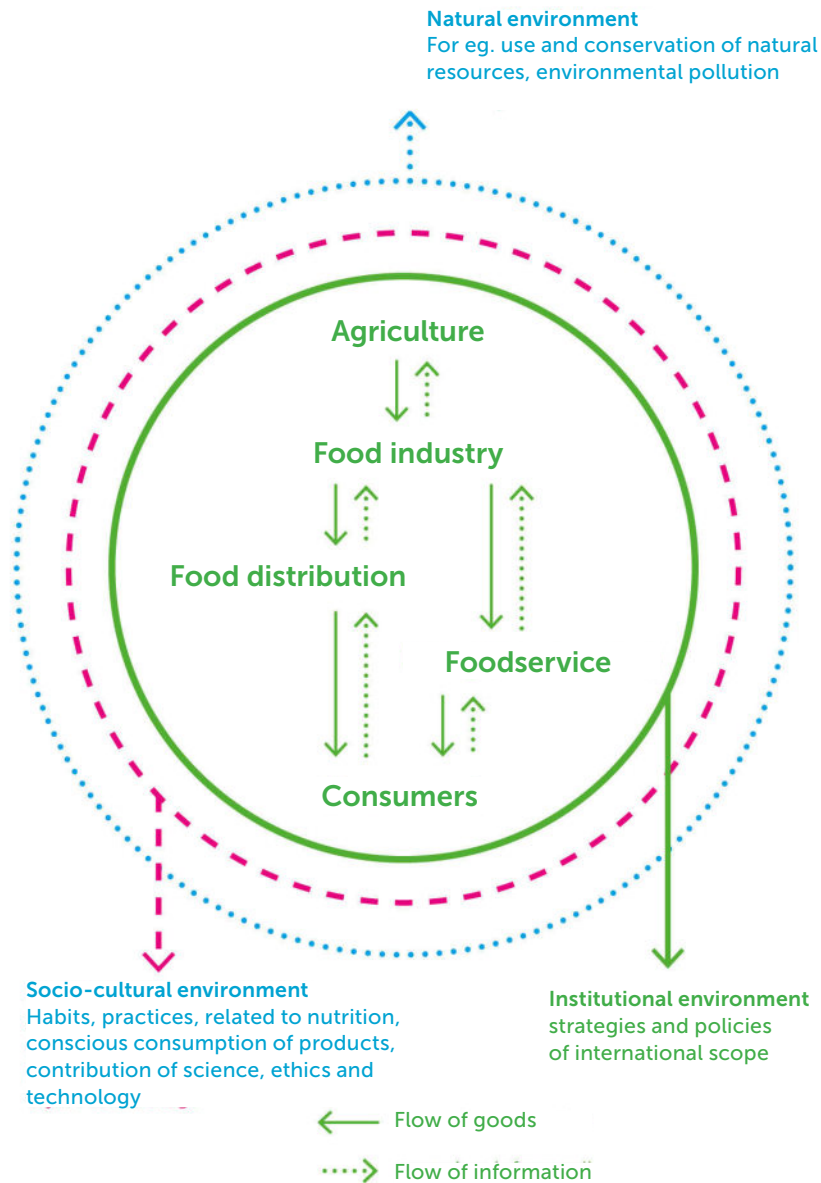
Detailed Design  
Fiera Milano

Fitting  
Fiera Milano

June 2013 - February 2014

March - November 2014

November 2014 - February 2015



## Submission of research papers

- 02/08/13 submission of the index and the abstracts
- 16/9/13 submission of the PPT presentation and other developed materials
- 14/10/13 submission of a complete research paper

Guidelines related to the declination of the substantive content

## ISSUES TO BE DEVELOPED IN THE RESEARCH

### 1. CLUSTER THEME

The need to clarify the link between the main theme to the Cluster theme EXPO 2015: *Food for the planet. Energy for life*, based on documents and guides previously developed by the organizers during the Cluster International Workshop

### 2. PARTICIPATING COUNTRIES

An appropriate analysis should be made on the topic represented by the cluster, paying particular attention to the relation between the Participating Countries and the Cluster theme.

### 3. SUPPORTING THE SUBJECT FROM THE POINT OF VIEW OF THE AGRI-FOOD SYSTEM

The attached scheme should be commented on and a vision for the development of the topic should be put forward taking into account the three themes:

- Natural environment
- Socio-cultural aspect
- Institutional aspect

Guidelines related to the preparation of the content in the terms of new media

## NEW TECHNOLOGIES IN THE EXHIBITORY SPACE OF CLUSTERS

Multimedia devices are ideal tools for deepening the thematic content developed for the exhibition in the common space of each cluster. Their dynamics and specificity of use guarantee efficient and memorable content generativity. The media should be treated as means of strengthening the transmission of selected themes.

The advantage of the new technology is their high performance with non-invasive application to architectural tissue.

Additional benefits of using them in exhibition areas:

- Enhancing the quality of perception by synchronizing information generated at different levels of sensory reception
- The ability to integrate technological tissue with architecture to enhance the aesthetic effect
- Ability to create unique scenography – immersive environments on the verge of the real and virtual world
- Opportunity to use game strategies to enhance the commitment of users

## MODALITIES CONCERNING PRESENTATION OF THE SELECTED CONTENTS ON THE BASIS OF THE PROPOSED EXHIBITORY STRATEGIES

Due to the specificity of the exhibitions organized in the Cluster common spaces, their scale in confrontation with the Expo 2015 superior exhibition, the reduction of the generated content with the selection of the most interesting topics is being suggested.

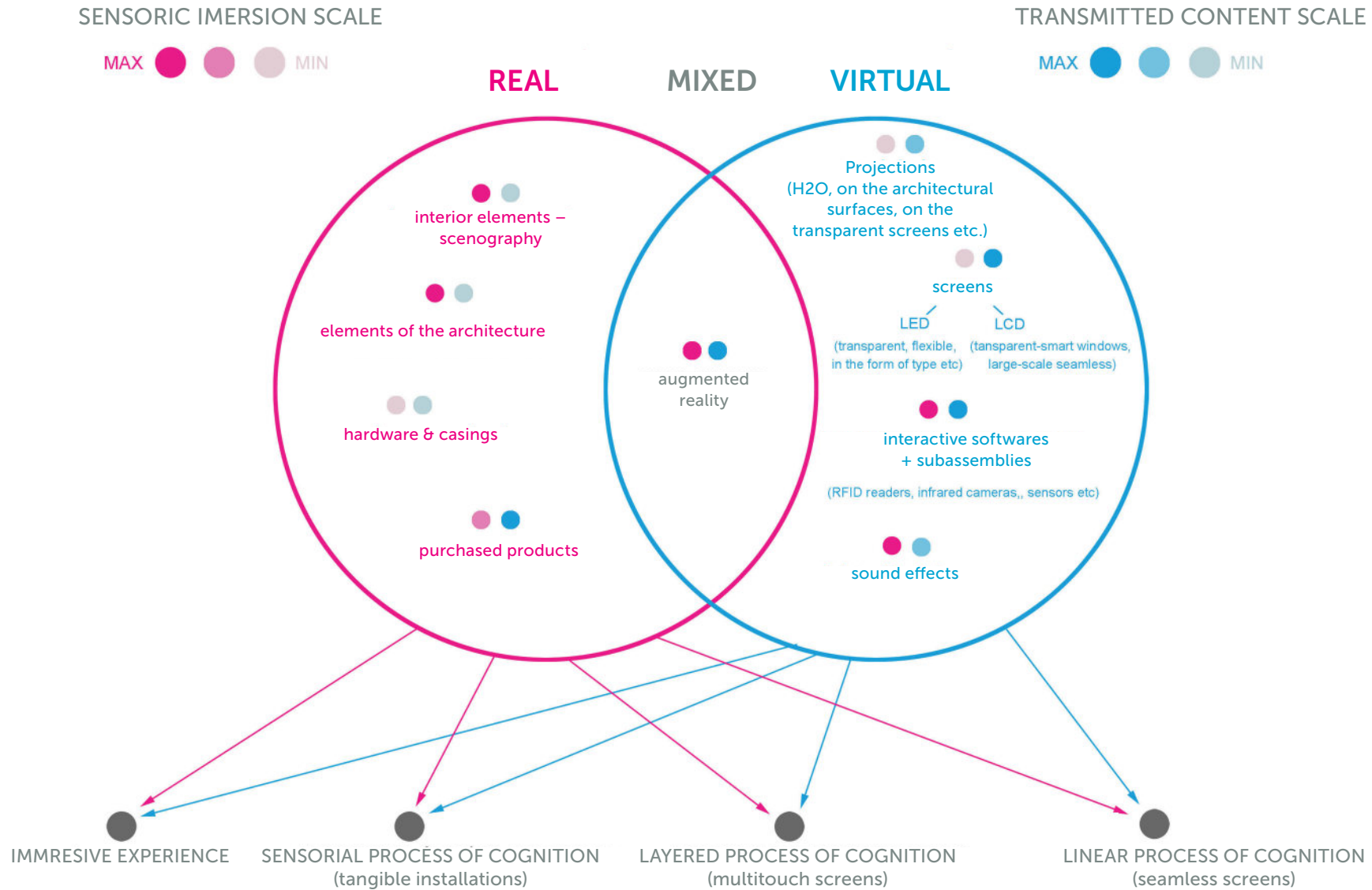
It is necessary to find a compromise between the scale of the immersion and the scale of the substantial content. Underneath, a set of exhibition strategies, which should be based upon while coming up with the concept of the exhibition.

The content of the exhibition and its related thematic areas mentioned earlier can be assimilated by the users through the so-called multilevel model of generated content. Thanks to this fact, the exhibition will be able to be dedicated to all age groups of the audience, meeting the expectations of both the ordinary recipient and the user with greater cognitive ambitions.

# Cluster as a result of innovative design process based on collaborative methods



## ENVIRONMENT OF COGNITION – ELEMENTS OF THE EXHIBITION



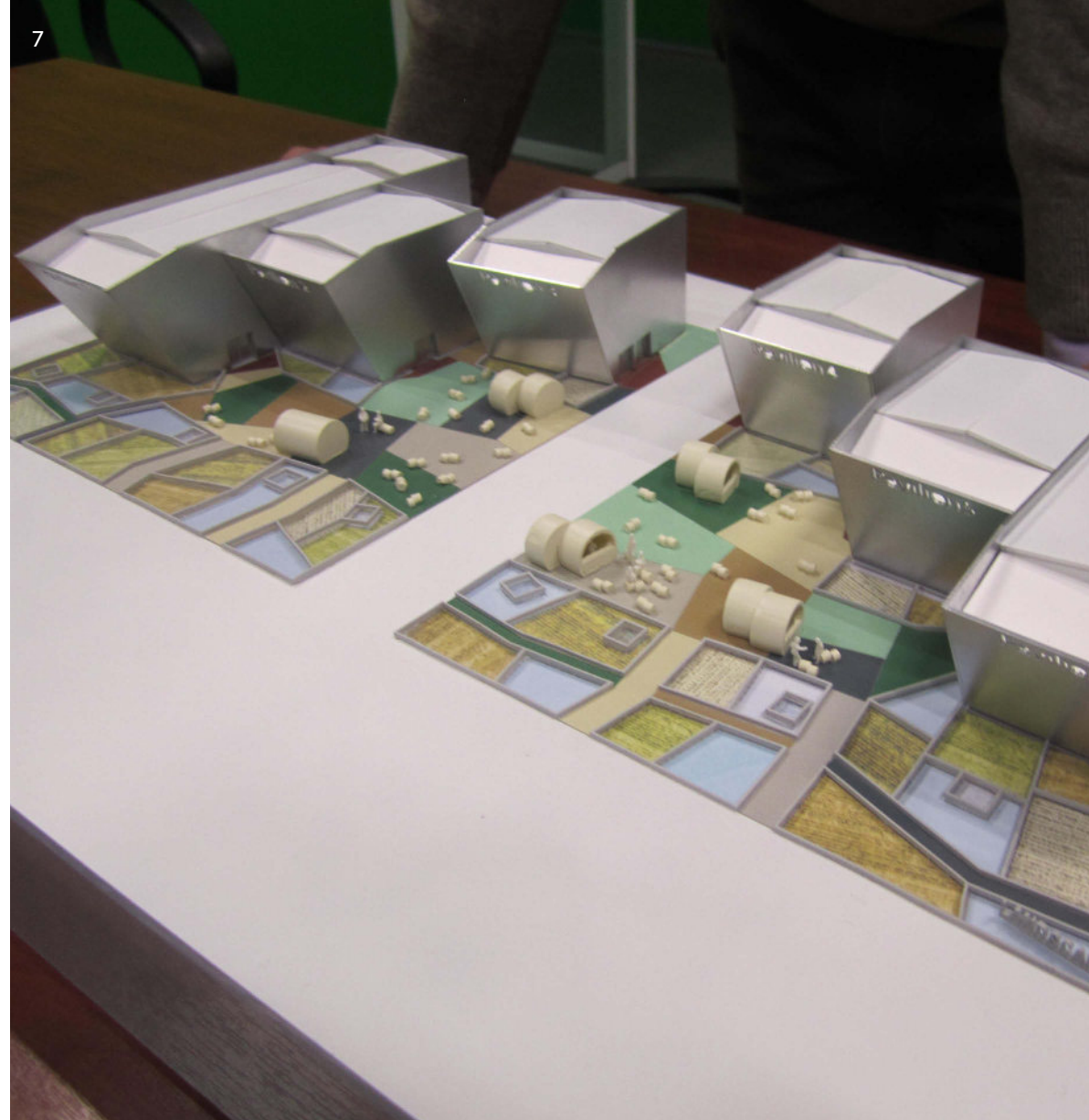




5



6



7

1. Models of Clusters realised during Cluster International Workshop (IPM 2012, MiCO, 10–12.10.12)
2. My office in Expo 2015, via Pisacane 1
3. Materials related to the substantive content for common exhibition of Rice Cluster
4. "Tavolo di lavoro" Collaboration with Politecnico di Milano and 9 Italian Universities. On the picture meeting related to Cluster of Arid Zones
5. "Tavolo di lavoro" Collaboration with Politecnico di Milano and 9 Italian Universities. On the picture meeting related to Cluster of Cocoa
6. as above
7. Rice Cluster model



MILANO





During the collaboration with the 9 Italian Universities, sometimes I was involved in so-called special missions. Within one of them, as a representative of Expo 2015, I had the opportunity to be a member of the jury in the cake design competition organized by the Università Commerciale Luigi Bocconi in June 2014.

Cake design competition organized by the Università Commerciale Luigi Bocconi in June 2014.

On the left: Awarded cake.

On the other pictures: The rest of the rewarded cakes

## Cluster as a result of innovative design process based on collaborative methods

### My role within another stage of work

The second important stage of my activity, which started simultaneously with the first stage of research project is linked to the development of an architectural concept for thematic exhibitions in the common spaces of individual Clusters. The architects from the Polytechnic Institute of Milan and Fiera di Milano played a major part here. The task of the former was to develop a conceptual thematic exhibition for each cluster based on the

content selected together from the research materials provided by the university units. Designers of Fiera had to make final adjustments and technical verification of the projects, especially in terms of realization possibilities. I was a mediator between the groups of scientists and the architects and between architects and Fiera (and in some cases commercial partners).

### Tasks within another stage of work

In addition, my tasks at this stage of the research project encompassed:

- moderating the course of individual meetings
- participation in the selection of relevant material for exhibitions
- developing guidelines for the application of new technologies in display strategies
- control of meeting deadlines by working group
- checking the implementation possibilities of individual architectural concepts (in collaboration with Marco Chiodi with technical support from Fiera di Milano)
- preparation of the final presentation of the layout of the exhibition items for the common space of each cluster (along with Michele Di Santis on the basis of documentation from the architects' group of Polytechnic Institute of Milan)

- developing guidelines for the personalization of the pavilions of the participating countries within the individual clusters (together with Michele Di Santis)
- developing a presentation with technical charts illustrating the final location of Magnum photo exhibitions for each Cluster along with a description of the exhibition scenario for each cluster (together with Michele di Santis)
- preparation of the layout of the Cluster exhibition at the International Participants Meeting (with Edoardo Nardella)

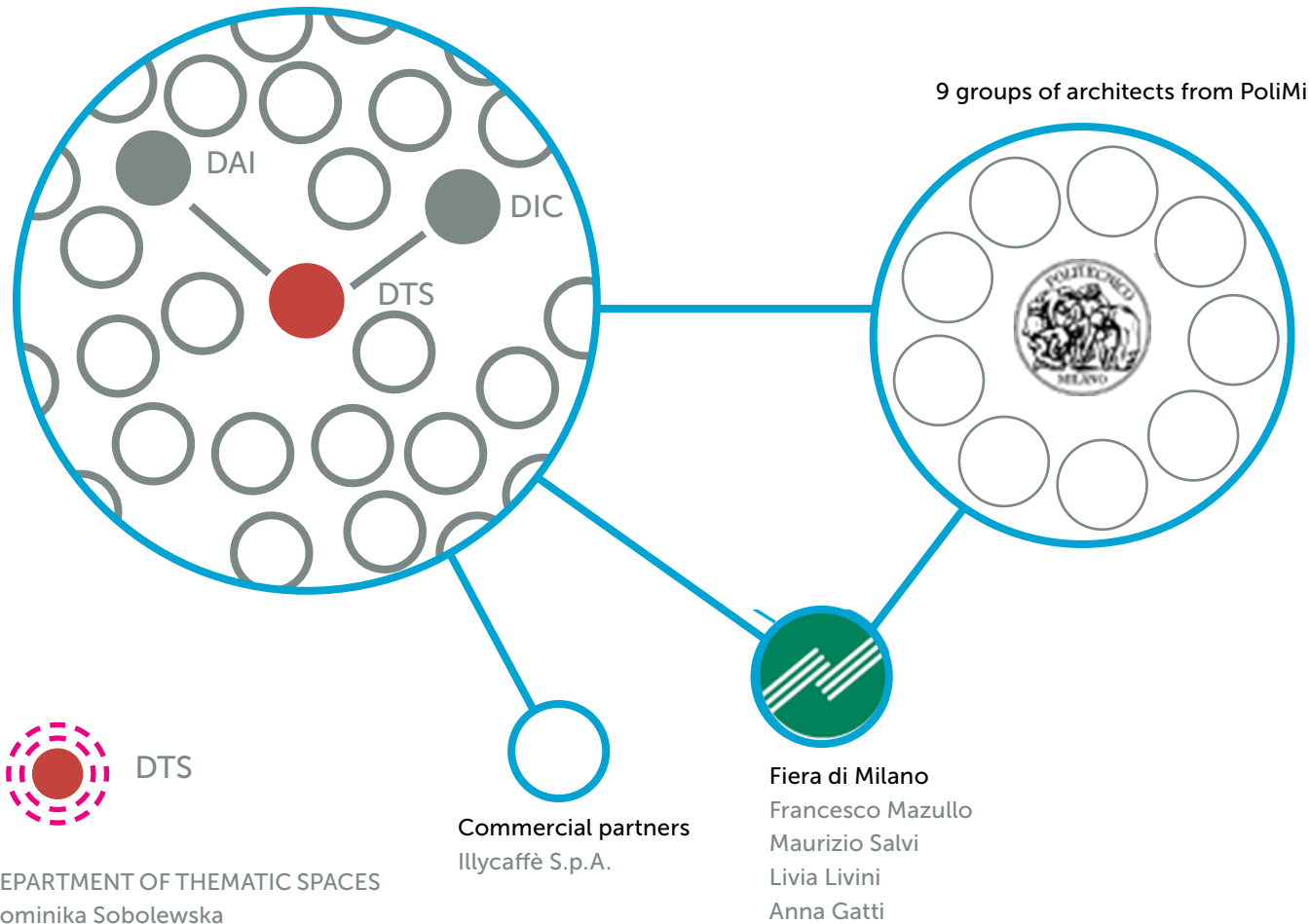
Each of the tasks entrusted to me was performed on a regular basis in consultation with the relevant Expo department and in close cooperation with DTS (Matteo Gatto)

# Scheme illustrating the actors involved In architectural design of the Thematic Exhibitions for Clusters



## DEVELOPEMENT OF THE ARCHITECTURAL CONCEPT

Based on the research of the 9 Italian Universities



### Groups of architects from PoliMi



#### RICE

Agnese Rebaglio, Davide Crippa, Barbara Di Prete, Lorenzo Loglio, Francesco Tosi



#### COCOA

Fabrizio Leoni, Mauricio Cardenas, Cesare Venutura



#### COFFEE

Alessandro Colombo, Stefan Vieths, Francesca Rapisarda



#### FRUITS AND LEGUMES

Massimo Ferrari, Matteo Vercelloni



#### SPICES

Michele Brunello, Silvia Bertolotti, Guadalupe Ciocchetto



#### CEREAS AND TUBERS

Alessandro Rocca, Franco Tagliabue, Maria Feller



#### BIOMEDITERRANEUM

Stefano Guidarini, Camillo Magni, Cherubino Gambardella, Lorenzo Capobianco, Simona Ottieri



#### ISLANDS

Marco Imperadori, Valentina Gallotti, Giuliana Ianaccone



#### ARID ZONES

Alessandro Biamonti, Barbara Camocini, Michele Zini

DEPARTMENT OF THEMATIC SPACES  
Dominika Sobolewska  
Marco Chiodi  
Michele Di Santis

Commercial partners  
Illycaffè S.p.A.

Fiera di Milano  
Francesco Mazullo  
Maurizio Salvi  
Livia Livini  
Anna Gatti

## Cluster as a result of innovative design process. A fragment of the report illustrating the course of Tavolo di lavoro from 24. 09. 2013 / SPICES

### IL MONDO DELLE SPEZIE

Tavolo di lavoro organizzato il 17.09.2013

**DTS:** Marco Chiodi, Dominika Sobolewska

**DAI:** Filippo Ciantia, Severine Pesquerel, Mohamed Elshimy, Simone Mancini, Francesca Bellù

**Università IUAV di Venezia:** Prof. Benno Albrecht, arch. Silvia Dalzero, arch. Jacopo Galli, arch. Nicola Pavan

Politecnico di Milano: arch. Michele Brunello, arch. Pierluigi Salvadeo

Il prossimo tavolo di lavoro: Mercoledì 24.10.2013 ore 11.00

#### Punti generali emersi:

1. **DTS:** comunica che il prossimo Meeting Cluster è fissato per il 29–31 gennaio 2014.
2. **DTS:** introduce il tema degli allestimenti e delle modalità espositive (proiezioni, pannelli grafici etc).

**IUAV:** Ask about the possibility of using a video material

**X DTS:** Is to verify if the production of audio / video materials will take place through a competition, call for tenders, or will take place in close cooperation with the Cluster (Verification via DAI)

**DAI:** n case if the Cluster countries are involved or if a contest is organized, a universal template and a set of guidelines for the development of audio / video material should be developed.

3. **DTS:** nella realizzazione di infografiche a supporto dei contenuti della mostra bisognerà considerare diverse modalità: infografica, parti testuali, utilizzo di QR code... nonchè modalità di interazione non digitale  
**X DTS:** verificare se l'eventuale produzione di questo materiale potrà essere gestita all'interno del tavolo di lavoro oppure sarà affidata tramite una gara
4. **IUAV:** introduce il tema dell'abstract evidenziando le 3 aree tematiche dedicate alla mostra comune delle SPEZIE  
**DTS:** da definire: la tipologia della mostra; si suggerisce di raggruppare i diversi tipi dei contenuti in modo da poter scegliere le modalità espositive (es. mappe, grafici, statistiche); bisogna individuare i sistemi espositivi adeguati al tipo di contenuti considerando sia delle tradizionali tecniche espositive sia le modalità scenografiche, divulgative e sensoriali  
**Da valutare:** approfondimento dei dati attraverso le nuove tecnologie comunicative (QR code, NFC)

**DTS:** la realizzazione degli spazi consumo (ristorazione + area eventi) dipende dall'individuazione di un partner che ne prenda in carico realizzazione e gestione

**X IUAV:** lista degli eventuali soggetti da coinvolgere nel progetto, lista delle possibili soluzioni tecniche e tecnologiche da utilizzare in questo progetto e lista delle eventuali domande da porre ai paesi partecipanti per lo sviluppo dei contenuti espositivi<sup>1</sup>; valutare la possibilità di integrare la mostra con delle attività educative (area eventi)

**X POLI:** valutare rispetto alla pianta del cluster quali spazi si prestano all'utilizzo di tipologie comunicative proposte

**X DTS:** verificare l'accesso all'elettricità per eventuali strutture da appendere;

**X DAI:** preparare lo stato dell'arte per impostare la collaborazione con i paesi.

Rispetto alle 3 aree evidenziate nell'indice si propone:

1. GEOGRAFIA DELLE SPEZIE: LE VIE DI IERI E DI OGGI (lo sguardo globale) + GLI EMPORI DEL MONDO (lo sguardo locale)
  - Scenario: dalle isole delle spezie e l'epoca pre-romana, attraverso le grandi esplorazioni fino al declino
  - Tipo dei contenuti: informazioni generali (mappe, dati storici, statistiche, grafici)
  - Livello di approfondimento: semplice

**DTS:** propone di valutare l'ipotesi di prevedere pannelli con delle mappe, oppure una mappa interattiva con diversi livelli di lettura;  
**Da considerare:** presenza (fisica o virtuale) delle mappe storiche (collezioni museali);  
Si propone di introdurre anche delle informazioni generali di carattere scientifico  
**X POLI:** Proporre una ricaduta fisica del contenuto proposto  
**DAI:** Rammenta di sviluppare l'argomento considerando il punto di vista dei diversi paesi (non solo Europeo)
2. IL RUOLO DELLE SPEZIE NELLO SVILUPPO ECONOMICO (lo sguardo globale) + I NUOVI PAESAGGI DELLE SPEZIE: LE COLTIVAZIONI DELLE SPEZIE NEL MONDO (lo sguardo locale)

1 In allegato, la lista dei contatti dei country officers coinvolti nel Cluster delle SPEZIE

# Clusters within Expo 2015. Final results. Realization of Thematic Exhibitions in the common space of each Cluster

CLUSTER

- Scenario: geografia e l'economia sostenibile della produzione + geografia della coltivazione
- Tipo dei contenuti: informazioni generali (statistiche, grafici)
- Livello di approfondimento: avanzato

**DTS:** si propone di introdurre delle informazioni generali di carattere scientifico (statistiche, rappresentazioni grafiche). Bisogna individuare possibili modalità espositive adeguate al tipo dei contenuti; da valutare l'ipotesi di prevedere pannelli grafici, mappe oppure directional speakers puntuali

**IUAV:** suggerisce coinvolgimento dei soggetti istituzionali, es. Indian Institute of Spices Research, International Pepper Community (IPC) oppure American Spice Trade Association.

**X POLI:** Proporre una ricaduta fisica del contenuto proposto

### 3. TASSONOMIA + ANTROPOLOGIA DEI SAPORI E PROFUMI DELLE SPEZIE (lo sguardo globale)

- Scenario: profumi, sapori, uso e valore, proprietà, virtù e la fine delle spezie; tradizioni, racconti, ricette, mercati illeciti (lo sguardo locale)
- Tipo dei contenuti: informazioni complesse (racconti riferiti alla storia, cultura e tradizioni)
- Livello di approfondimento: avanzato

**DTS:** propone le modalità scenografiche, divulgative e sensoriali considerando il coinvolgimento degli spazi del mercato; la realizzazione di questi spazi dipende dall'individuazione di un partner che se ne prenda in carico la realizzazione e la gestione; da valutare l'ipotesi di prevedere pannelli (anche appoggiati) con delle storie, oppure con dei materiali video (modalità scenografiche e divulgative);

**DAI:** si potrebbe estendere la richiesta di una lista di materiali (es. racconti) anche ai paesi partecipanti nel cluster

**DTS:** proposes educational and sensory type of scenographic strategies by using market space (legumes and spices); the realization of this space depends on finding the right partner who will organize the exhibition; To consideration: variant with graphic panels containing various stories or multimedia panels containing video (scenographic-interactive strategies)

**DAI:** proposes the requesting the supply of relevant materials (stories, stories) to the countries belonging to the Cluster

**X POLI:** Proporre una ricaduta fisica del contenuto proposto

Following a series of meetings between June and October 2013 between the various actors involved in the designing of thematic exhibitions of Clusters was a contribution to the physical realization of scientific content within cluster architecture. Prior to this the individual teams involved in the research project had to deal with the selection of substantive materials. Both authors of written dissertations, architects from the Polytechnic Institute of Milan and also DTS representatives were involved in the process. It's hard to say who had a leading role here. University representatives, following the guidelines I gave them after reading the complex documents, made the first synthesis of the articles.

They prepared several pages of ppt presentations, which were followed by my comments and those of architects from PoliMi. My role was to check the content in terms of consistency with Expo 2015 themes and attractiveness for the audience. Architects, on the other hand, referred to the presented content in terms of the possibility of their transformation into physical exhibits.

As a summary of the first phase of work on the exhibitory declination of Clusters these materials were presented at the International Participants Meeting in Bergamo in February 2014. In collaboration with Edoardo Nardella I had the opportunity to design the layout for the exhibition *Clusters for Expo 2015*.

Elaboration of the Architectural Concept of the Thematic Exhibitions



**EXPO**  
MILANO 2015



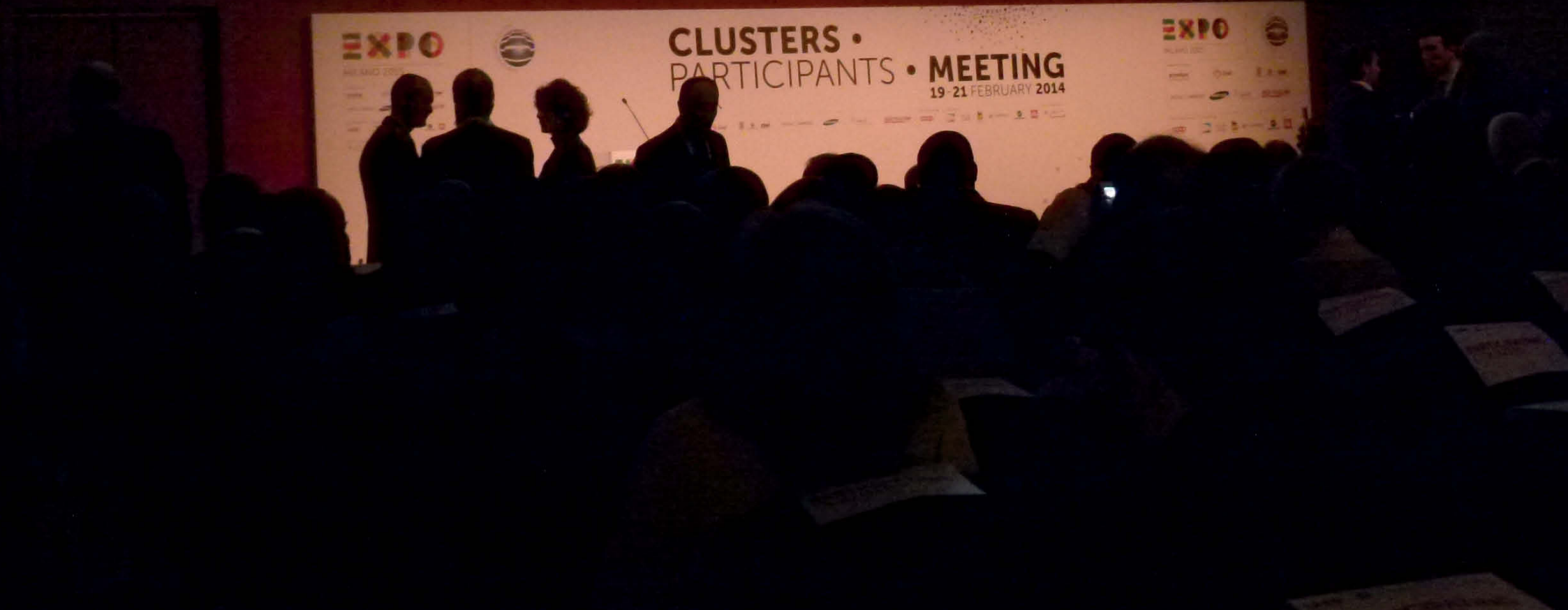
**CLUSTERS  
PARTICIPANTS  
MEETING**  
19-21 FEBRUARY 2014



**EXPO**  
MILANO 2015



**CLUSTERS •  
PARTICIPANTS • MEETING**  
19-21 FEBRUARY 2014





## CLUSTERS • PARTICIPANTS • MEETING

Venue: Fiera Bergamo, via Lunga, 24125 Bergamo

### CONCEPT • AND • PROGRAMME

The thematic Clusters are probably the most engaging among the innovations of Expo Milano 2015. They consolidate Participants around key issues of a thematic nature and will provide very significant content to the Visitor Experience.

The goal of designing attractive, thematic and sustainable Exhibition Spaces has been achieved, with the cooperation of all Participants and associated partners.

The time has now come to develop the content of the Clusters and their management model.

Cluster Participants should now focus on creating their own exhibitions and defining the content and setting up of their Exhibition Spaces.

This Meeting intends to support both the Organizer and Participants in consolidating the preparation work and providing impulse for the finalization phases.

It will be held at Fiera Bergamo, the Fair of the city of Bergamo and it will be preceded by the first session of the Working Group on the 'Islands, Sea and Food' Cluster.



## WEDNESDAY 19 FEBRUARY 2014

### WORKING GROUP 'ISLANDS, SEA AND FOOD' CLUSTER

(by invitation only)  
DONIZETTI ROOM

**9.30 - 10.00** Introduction  
Stefano Gatti, General Manager Participants  
Filippo Ciantia, Manager Thematic Clusters and Assistance Program

**10.00 - 11.00** Focus on the Content Development of the 'Islands, Sea and Food' Cluster  
Matteo Gatto, Director Thematic Spaces  
Professor, IULM University

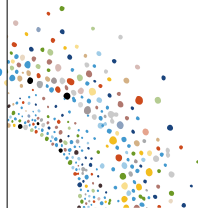
**11.00 - 11.15** Coffee Break

**11.15 - 12.15** Individual Exhibition Spaces Internal Fitting  
Thematic Spaces Direction and Fiera Milano

**12.15 - 13.00** Q&A Session

Ad hoc bilateral meetings with the service provider in charge of the fitting of the Exhibition Spaces (by invitation only)

**13.00 - 14.30** Lunch and networking



### PLENARY OPENING SESSION

CARAVAGGIO ROOM

**14.30 - 15.00** Welcome remarks  
Maurizio Martina, Undersecretary of State for Expo Milano 2015  
Franco Tentorio, Mayor of Bergamo  
Giovanni Paolo Malvestiti, President, Chamber of Commerce of Bergamo

**15.00 - 17.00** The Cluster Model  
Stefano Gatti, General Manager Participants, introduces and chairs the discussion on:

Status of the project, achievements and challenges  
Filippo Ciantia, Manager Thematic Clusters and Assistance Program

Architecture and focus on the exhibition in the Common Areas  
Matteo Gatto, Thematic Spaces Director

Management of the common areas: focus on partnerships and events  
Piero Galli, General Manager Event Management

A day in the life of a Cluster: focus on logistics and operations  
Ottorino Passariello, General Manager Operations

**17.00 - 18.00** Q&A Session

**19.30** DINNER (by invitation only)  
Welcome remarks by Matteo Zanetti, Vice-President Bergamo Chamber of Commerce and Confindustria Bergamo

## THURSDAY 20 FEBRUARY 2014

### PARALLEL WORKING SESSIONS

**9.30 - 10.30** Setting up and tailoring of Exhibition Spaces

**TECHNICAL WORKING GROUP 1**  
DONIZETTI ROOM : Participants not included in the assistance programme

**TECHNICAL WORKING GROUP 2**  
CARAVAGGIO ROOM : Participants included in the assistance programme

**10.30 - 13.00** Clusters Working Groups  
Countries will be grouped according to their Cluster membership

Focus on: content of exhibition within the Clusters, design and management of the common areas, customization of the external façades,

**WORKING GROUP A**  
DONIZETTI ROOM  
Fruits and Legumes, World of Spices and Rice Clusters

**WORKING GROUP B**  
MANZU ROOM  
BioMediterranean, Agriculture and Nutrition in Arid Zones Clusters

**WORKING GROUP C**  
CARAVAGGIO ROOM  
Coffee, Cocoa, Cereals and Tubers Clusters

**13.00 - 14.30** Lunch and networking



### PLENARY CLOSING SESSION

CARAVAGGIO ROOM

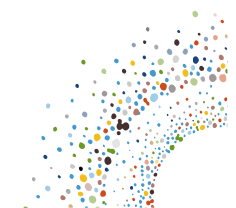
**14.30 - 15.30** Roundtable - partnering on the thematic clusters  
Stefano Gatti, General Manager Participants, chairs the roundtable.

Interventions by:  
Eduardo Rojas-Briales, Commissioner General of the United Nations  
Dario Cartabellotta, Assessore Regionale alle Risorse Agricole e Alimentari, Sicily Region  
Roberto Morelli, Business Development Executive Director, illycaffè  
Paolo Pastore, Director, Fairtrade Italia

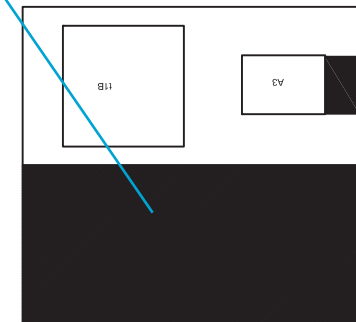
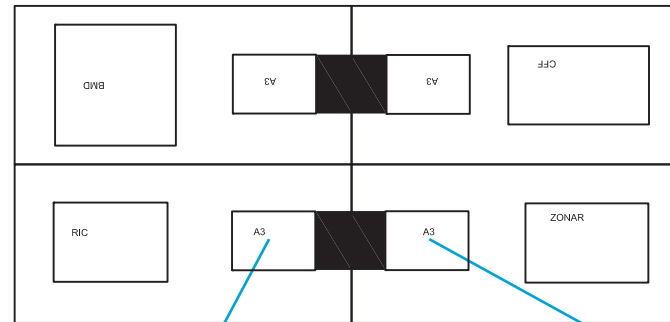
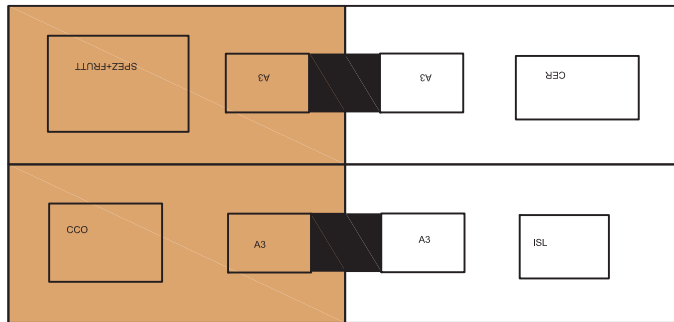
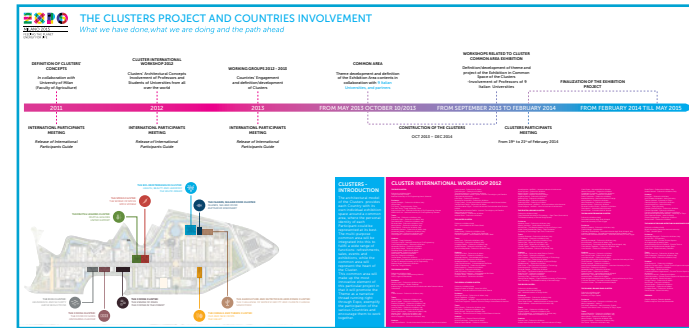
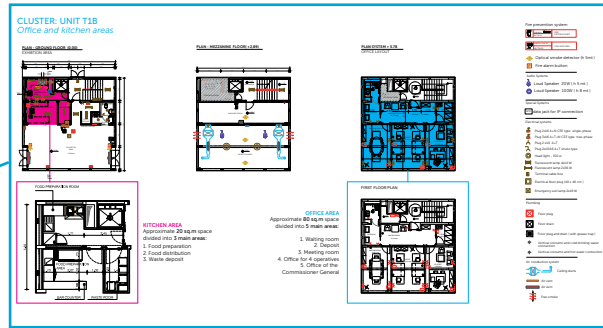
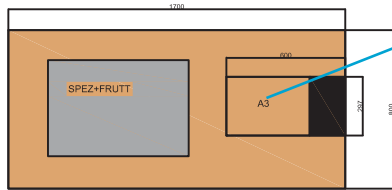
**15.30 - 15.45** Signature of Participation Contracts - Photo opportunity

**15.45 - 16.30** Interventions  
Giuseppe Sala, Commissioner of the Governemnt of Italy for Expo Milano 2015 and CEO Expo 2015 Company  
Vicente Gonzalez Loscertales, Secretary General, Bureau International des Expositions

Closing remarks  
Marta Dassù, Deputy Minister for Foreign Affairs



# Clusters Participants Meeting. Draft of the layout of the Cluster exhibition



**KLASTER „WYSPY, MORZE I JEDZENIE”**  
WYSPY, MORZE I JEDZENIE / RYTM ODWYJAWIANA

Panel featuring a fish icon and text describing the cluster's focus on islands, sea, and food.

**KLASTER „ROLNICTWO I ODWYJAWIANIE NA TERENACH SUCHYCH”**  
WYKORZYSTANIE SIŁY SIŁY SIŁY WODY CIEPŁYCH ZŹRÓDEŁ KLIMATYCZNE I BURZA PIASKOWA

Panel featuring a cactus icon and text describing the cluster's focus on agriculture and water management in arid regions.

**KLASTER „KAWA”**  
PALIWO POMYSŁÓW / KAWA W BŁUSZU

Panel featuring coffee bean icons and text describing the cluster's focus on coffee and innovation.

**KLASTER „KAKAO”**  
POKARM EGZOTYKI / LUBIĄCY SIĘ SMAK

Panel featuring chocolate bar icons and text describing the cluster's focus on cocoa and gourmet food.





# Clusters Participants Meeting. Fragments of the graphical layout of the Clusters exhibition

**THE SPICES CLUSTER: THE WORLD OF SPICES / SPICE VOYAGE**

**THEME OVERVIEW**  
The history of the spice trade is a tale of exploration and desire. The use of the product has gone as far as to inspire literary masterpieces, colorful maps and even magic. Spices have been the catalyst for the expansion of the globe, the discovery of new continents and the discovery of their unique taste. Spices have been the catalyst for the expansion of the globe, the discovery of new continents and the discovery of their unique taste. Spices have been the catalyst for the expansion of the globe, the discovery of new continents and the discovery of their unique taste.

**THE SPICES CLUSTER ARCHITECTURAL CONCEPT**  
Spice voyage offers the visitor an experience of a journey into contemporary commerce and a "living" history of the "spice" trade. The architectural concept is based on the idea of a "spice" trade, which is a journey into contemporary commerce and a "living" history of the "spice" trade. The architectural concept is based on the idea of a "spice" trade, which is a journey into contemporary commerce and a "living" history of the "spice" trade.

**CLUSTER PROJECT WORKING GROUP**

**EXHIBITION CONTENT**  
EXHIBITION CONTENT: [List of items]

**EXPO 2015 S.p.A.**  
EXHIBITION CONTENT: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**ARCHITECTURAL CONCEPT AND DESIGN UPDATE**  
ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE ISLANDS, SEA AND FOOD CLUSTER: ISLANDS, SEA AND FOOD / RHYTHM OF DISCOVERY**

**THEME OVERVIEW**  
The Islands, Sea and Food Cluster is a journey through which people are invited to experience a unique and exciting experience. The Islands, Sea and Food Cluster is a journey through which people are invited to experience a unique and exciting experience. The Islands, Sea and Food Cluster is a journey through which people are invited to experience a unique and exciting experience.

**THE ISLANDS, SEA AND FOOD CLUSTER ARCHITECTURAL CONCEPT**  
The Islands, Sea and Food Cluster is a journey through which people are invited to experience a unique and exciting experience. The Islands, Sea and Food Cluster is a journey through which people are invited to experience a unique and exciting experience. The Islands, Sea and Food Cluster is a journey through which people are invited to experience a unique and exciting experience.

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE AGRICULTURE AND NUTRITION IN ARID ZONES CLUSTER: THE CHALLENGE OF WATER SCARCITY AND CLIMATE CHANGE / SANDSTORM**

**THEME OVERVIEW**  
The Agriculture and Nutrition in Arid Zones Cluster is a journey through which people are invited to experience a unique and exciting experience. The Agriculture and Nutrition in Arid Zones Cluster is a journey through which people are invited to experience a unique and exciting experience. The Agriculture and Nutrition in Arid Zones Cluster is a journey through which people are invited to experience a unique and exciting experience.

**THE COCOA CLUSTER ARCHITECTURAL CONCEPT**  
The Cocoa Cluster is a journey through which people are invited to experience a unique and exciting experience. The Cocoa Cluster is a journey through which people are invited to experience a unique and exciting experience. The Cocoa Cluster is a journey through which people are invited to experience a unique and exciting experience.

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE FRUITS & LEGUMES CLUSTER: FRUITS & LEGUMES / UNITED SUPPORT**

**THEME OVERVIEW**  
Legumes, nuts, fruits and vegetables are a significant part of many diets and represent almost the world's diversity in terms of varieties. They are rich in fiber and are important for health and well-being. Legumes, nuts, fruits and vegetables are a significant part of many diets and represent almost the world's diversity in terms of varieties. They are rich in fiber and are important for health and well-being.

**THE FRUITS & LEGUMES CLUSTER ARCHITECTURAL CONCEPT**  
The Fruits & Legumes Cluster is a journey through which people are invited to experience a unique and exciting experience. The Fruits & Legumes Cluster is a journey through which people are invited to experience a unique and exciting experience. The Fruits & Legumes Cluster is a journey through which people are invited to experience a unique and exciting experience.

**CLUSTER PROJECT WORKING GROUP**

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE BIO-MEDITERRANEUM CLUSTER: HEALTH, BEAUTY AND HARMONY / THE WHITE DREAM**

**THEME OVERVIEW**  
Mediterranean foods are those cultural products that have historically inspired people to spend their lives in Mediterranean. They are rich in fiber and are important for health and well-being. Mediterranean foods are those cultural products that have historically inspired people to spend their lives in Mediterranean. They are rich in fiber and are important for health and well-being.

**THE BIO-MEDITERRANEUM CLUSTER ARCHITECTURAL CONCEPT**  
The Bio-Mediterraneum Cluster is a journey through which people are invited to experience a unique and exciting experience. The Bio-Mediterraneum Cluster is a journey through which people are invited to experience a unique and exciting experience. The Bio-Mediterraneum Cluster is a journey through which people are invited to experience a unique and exciting experience.

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE CEREALS AND TUBERS CLUSTER: OLD AND NEW CROPS / THE VALLEY**

**THEME OVERVIEW**  
Cereals and tuber cultivation has a relevance across the history of mankind. They are rich in fiber and are important for health and well-being. Cereals and tuber cultivation has a relevance across the history of mankind. They are rich in fiber and are important for health and well-being.

**THE CEREALS AND TUBERS CLUSTER ARCHITECTURAL CONCEPT**  
The Cereals and Tubers Cluster is a journey through which people are invited to experience a unique and exciting experience. The Cereals and Tubers Cluster is a journey through which people are invited to experience a unique and exciting experience. The Cereals and Tubers Cluster is a journey through which people are invited to experience a unique and exciting experience.

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE RICE CLUSTER: ABUNDANCE AND SECURITY / GROW REFLECTIONS**

**THEME OVERVIEW**  
Rice is a staple food essential for human life. It has been cultivated for over 10,000 years and is the world's most important staple food. Rice is a staple food essential for human life. It has been cultivated for over 10,000 years and is the world's most important staple food.

**THE RICE CLUSTER ARCHITECTURAL CONCEPT**  
The Rice Cluster is a journey through which people are invited to experience a unique and exciting experience. The Rice Cluster is a journey through which people are invited to experience a unique and exciting experience. The Rice Cluster is a journey through which people are invited to experience a unique and exciting experience.

**CLUSTER PROJECT WORKING GROUP**

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CONTRIBUTORS: [List of names]

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE COCOA CLUSTER: THE FOOD OF GODS / UNFOLDING FLAVOUR**

**THEME OVERVIEW**  
Cocoa is a staple food essential for human life. It has been cultivated for over 10,000 years and is the world's most important staple food. Cocoa is a staple food essential for human life. It has been cultivated for over 10,000 years and is the world's most important staple food.

**THE COCOA CLUSTER ARCHITECTURAL CONCEPT**  
The Cocoa Cluster is a journey through which people are invited to experience a unique and exciting experience. The Cocoa Cluster is a journey through which people are invited to experience a unique and exciting experience. The Cocoa Cluster is a journey through which people are invited to experience a unique and exciting experience.

**CLUSTER PROJECT WORKING GROUP**

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ARCHITECTURAL CONCEPT AND DESIGN UPDATE: [List of items]

**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]

**THE COFFEE CLUSTER: THE ENGINE OF IDEAS / THE COFFEE IN THE FOREST**

**THEME OVERVIEW**  
Coffee is a staple food essential for human life. It has been cultivated for over 10,000 years and is the world's most important staple food. Coffee is a staple food essential for human life. It has been cultivated for over 10,000 years and is the world's most important staple food.

**THE COFFEE CLUSTER ARCHITECTURAL CONCEPT**  
The Coffee Cluster is a journey through which people are invited to experience a unique and exciting experience. The Coffee Cluster is a journey through which people are invited to experience a unique and exciting experience. The Coffee Cluster is a journey through which people are invited to experience a unique and exciting experience.

**CLUSTER PROJECT WORKING GROUP**

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**CONTRIBUTORS**  
CONTRIBUTORS: [List of names]



Above: Rice and Cocoa Cluster graphical layouts  
Right: Arid Zones and Cocoa Cluster models

## My contribution in the implementation of thematic exhibitions in the common space of each Cluster

### Final elaboration of the Thematic Exhibitions

When the so-called analytical phase of the Cluster content has been completed, the force of gravity in the process of shaping the concept of thematic exhibitions has been shifted to the design aspects. Here, the Politecnico di Milano project teams played a major role. It was not an easy task. As is usually the case before designing the final version of the exhibition space (shortened to some extent) some very ambitious, high-budget solutions have been proposed.

Unfortunately, the financial resources for the cluster exhibitions were suddenly reduced, which greatly reduced the creative possibilities (both in terms of materials selection and application of new technologies). In this manner, most of the projects, after several transformations was reduced to iconographic in the accompaniment of merely a few spatial objects.

During this period my role was to coordinate individual task groups and to check the implementation possibilities of individual concepts. My work has been performed in constant cooperation with Fiera and DTS.

After obtaining their full acceptance, the projects have been submitted for implementation. At this stage, my cooperation with architects from the Technical University came to an end. My only responsibility was to develop guidelines for the personalization of individual pavilions, to calculate the space for the content of the exhibition and to prepare the appropriate technical documentation for the companies taking part in the tender for infographics realization.

As I mentioned above most of the projects of thematic exhibitions of Clusters were reduced to information panels. Ultimately, the realization of the design assumptions was successful only when the commercial partner supplying the exhibition appeared. The best example is the Coffee Cluster and Illy's contribution as a project sponsor. The only booth for the exhibition potential of the cluster exhibitions were the expositions of photographers of the New York Magnum Agency. It was a spontaneous initiative of DTS thanks to the signing of sponsorship agreements with Illy, Magnum Photos, Contrasto and Canon Italia. The Magnum photo agency nominated 9 artists (Salgado, Gardin, Kung, Meyerowitz, Parr, Sanguinetti, Scianna, Steinmetz Webb) who worked with Expo to develop a series of photos deepening the various themes of Clusters. In addition to my other tasks with Michele di Santis, I came up with the target location and the exhibitory modalities for individual photographic exhibitions.

At this ends my role in the exhibitory declination of the common space of Clusters. In September 2014 I was transferred to the Department for Distribution of Commercial Space. Further tasks related to the implementation of the concepts of the thematic exhibitions of the Clusters were handed over to Villapanesi s.a under the supervision of Luca Molinari.

## PHOTOGRAPHIC EXHIBITIONS – MAGNUM / CONTRASTO



COFFEE Cluster  
Sebastião Salgado



### MAGNUM PHOTOS / CONTRASTO



RICE  
Gianni Berengo Gardin



FRUITS AND LEGUMES  
Irene Kung



CEREALS AND TUBERS  
Joel Meyerovitz



ISLANDS  
Alessandra Sanguinetti



COCOA  
Martin Parr



SPICES  
Alex Webb

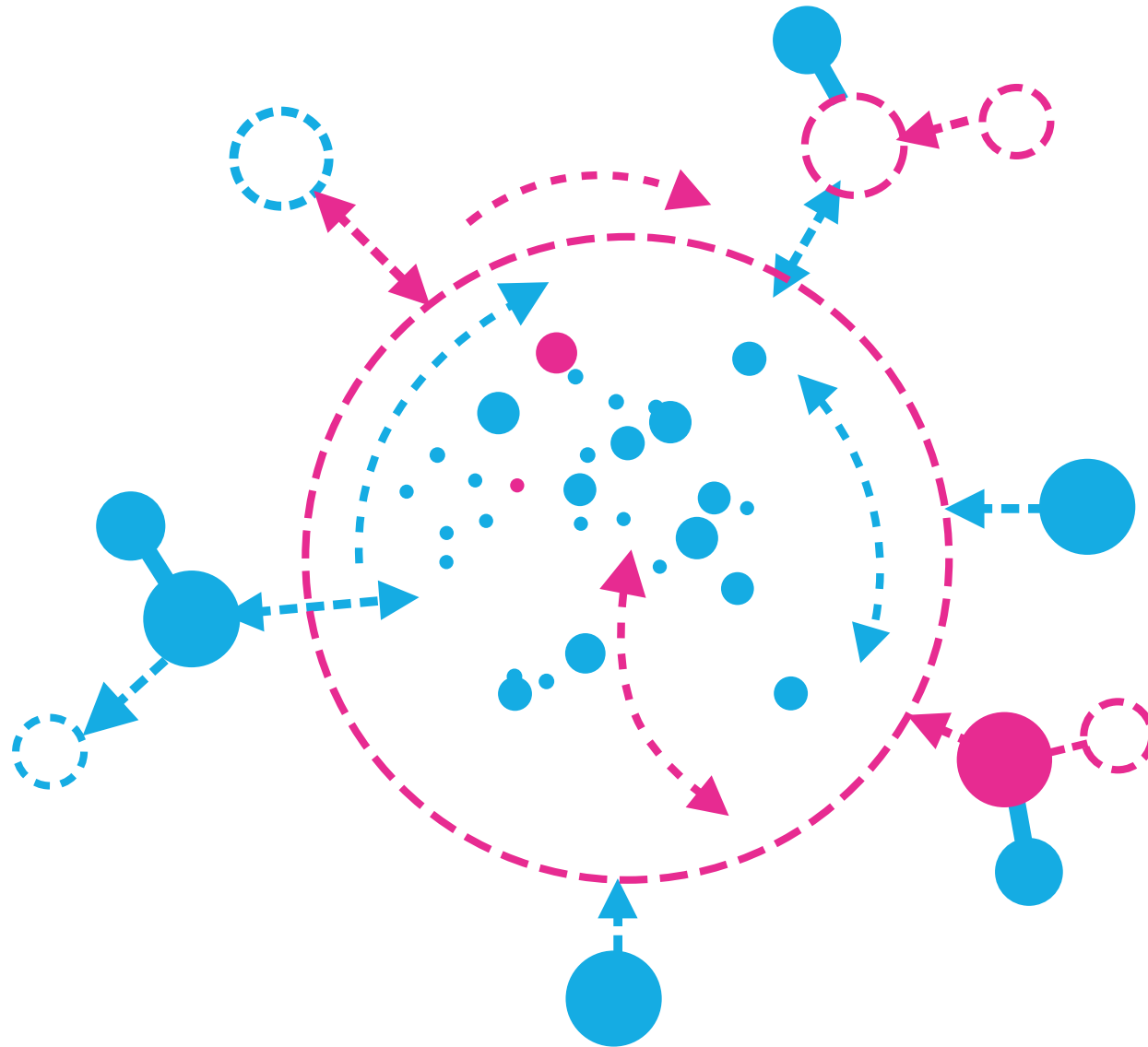


BIO-MEDITERRANEUM  
Ferdinando Scianna



ARID ZONES  
George Steinmetz

Thematic exhibition in the common space of Clusters.  
Study case of COFFEE Cluster





# COFFEE Cluster. Development of the architectural concept of the thematic exhibition



## THE COFFEE CLUSTER: THE ENGINE OF IDEAS / THE COFFEE IN THE FOREST



### THEME OVERVIEW

Coffee (*Coffea spp.*) is today one of the most important drinks in the world.

It is mainly grown as a beverage, though the plant residues can provide fuel (coffee charcoal or wood) and good mulch.

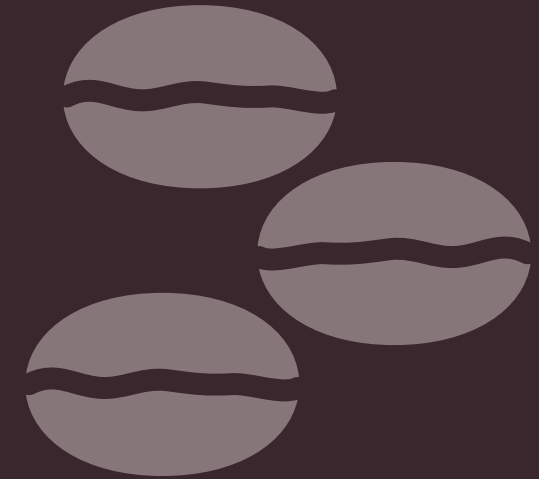
But it is not simply a product: it is a world of social relationships, it is a culture, a ritual, a source of wealth for those who produce it and a source of pleasure for those who consume it, it is the subject of famous art works. Three data are enough to witness the importance of coffee for local economies and cultures and for all world citizens:

- Coffee is the source of life for 26 million people, and most of them are small farmers living in developing countries;
- Every day in the world people drink 2.610.792.877 cups of coffee;

- Every year each single individual in the world drinks 136 cups of coffee.

### THE COFFEE CLUSTER ARCHITECTURAL CONCEPT

The traditional way to cultivate coffee under the shade of tropical rainforests in Central America and Africa is the basic concept of the project: the cover, which recalls the treetops, stand above the pavilions that are the metaphor of the trunks. The canopy, developed on three levels, allow the light penetrate with different intensities, resulting in changing spatiality.



## CLUSTER PROJECT WORKING GROUP

### EXHIBITION CONTENT

Università Commerciale "Luigi Bocconi", Italy  
**SCIENTIFIC RESPONSIBLE:** Giovanni Vallotti, Chiara Mauri  
**RESEARCH COORDINATION:** Illycaffè S.p.A.

### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy  
**DESIGN CREDITS:** Alessandro Colombo, Stefan Vieths, Francesca Rapisarda  
**CONTRIBUTORS:** Alexandre Hepner, Maddalena Nakato Mainini, Silvia Pomodoro, Francesca Rapisarda

### EXPO 2015 S.p.A.

**COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:** Thematic Space Department  
**DIRECTOR:** Matteo Gatto

**ARCHITECTURE COORDINATOR:** Marco Chiodi  
**CONTRIBUTOR:** Michele Di Santis  
**EXHIBITION DESIGN COORDINATOR:** Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska, Alessandro Benetti, Milena Sacchi  
**CONTENT DEVELOPMENT COORDINATION:** Department of International Affairs

**PROJECT MANAGER AND SCIENTIFIC COORDINATOR:** Filippo Ciantia

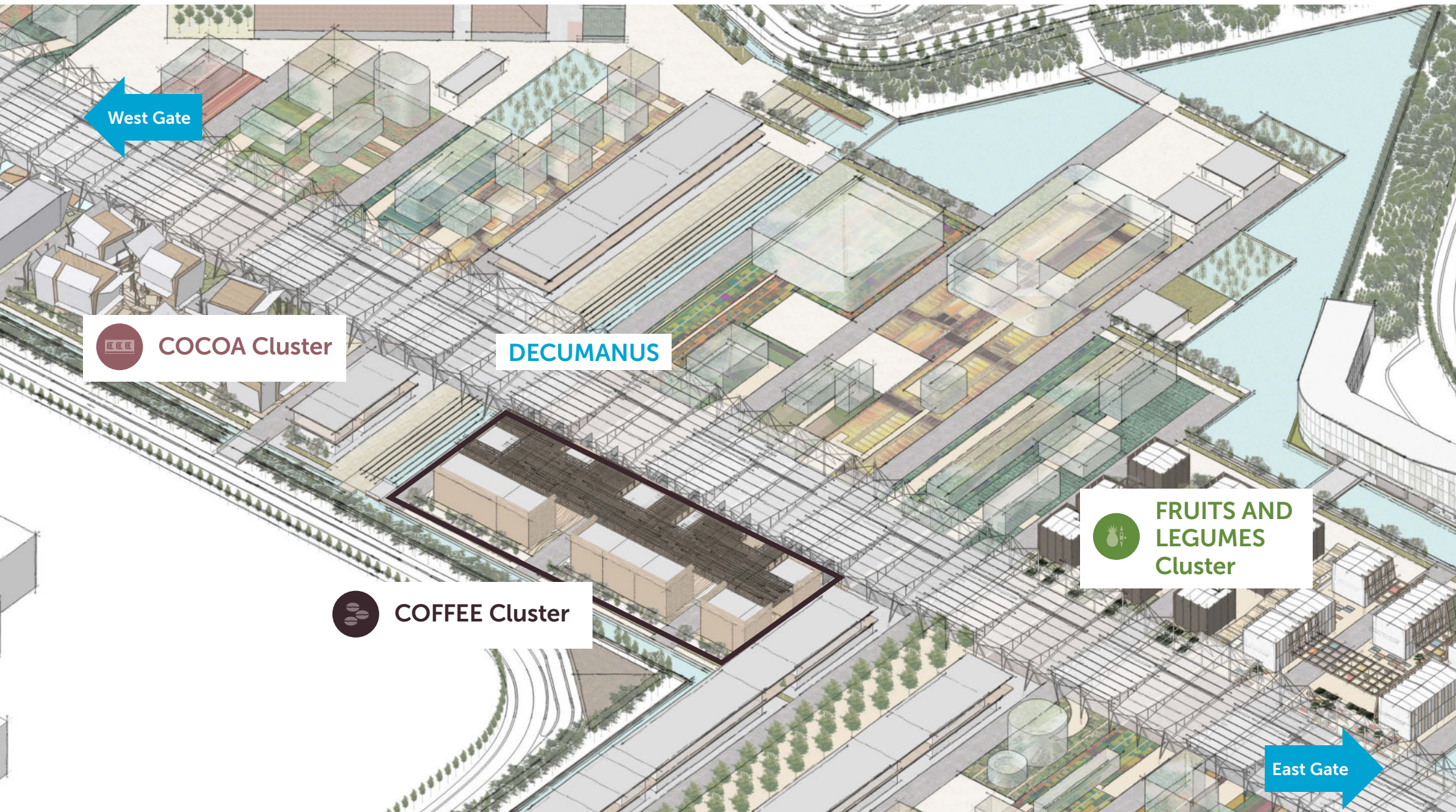
**CONTRIBUTORS (COUNTRY OFFICERS):** Barbara Borra, Veronica Corallo, Mohamed Elshimy, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquerel, Paolo Sabatini, Chiara Loreta

**ENGINEERING:** Fiera Milano S.p.A.

**SCHEME DESIGN:** Francesco Mazullo  
**DESIGN COORDINATOR:** Maurizio Salvi  
**CONTRIBUTORS:** Livia Livini, Anna Gatti

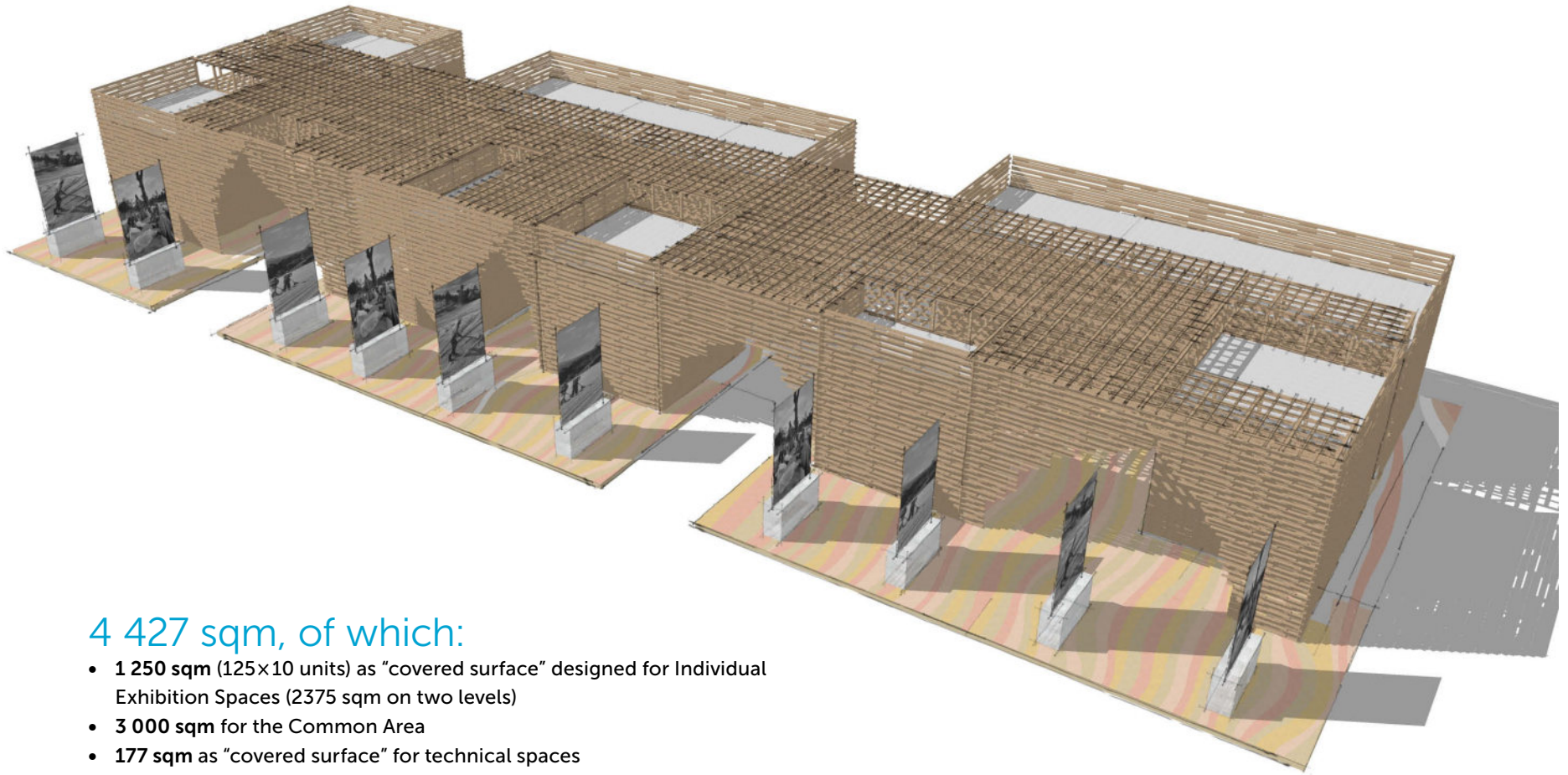


# COFFEE Cluster. Location on the Expo site and situational context





## COFFEE Cluster. Spatial parameters



### 4 427 sqm, of which:

- 1 250 sqm (125x10 units) as "covered surface" designed for Individual Exhibition Spaces (2375 sqm on two levels)
- 3 000 sqm for the Common Area
- 177 sqm as "covered surface" for technical spaces



# COFFEE Cluster.

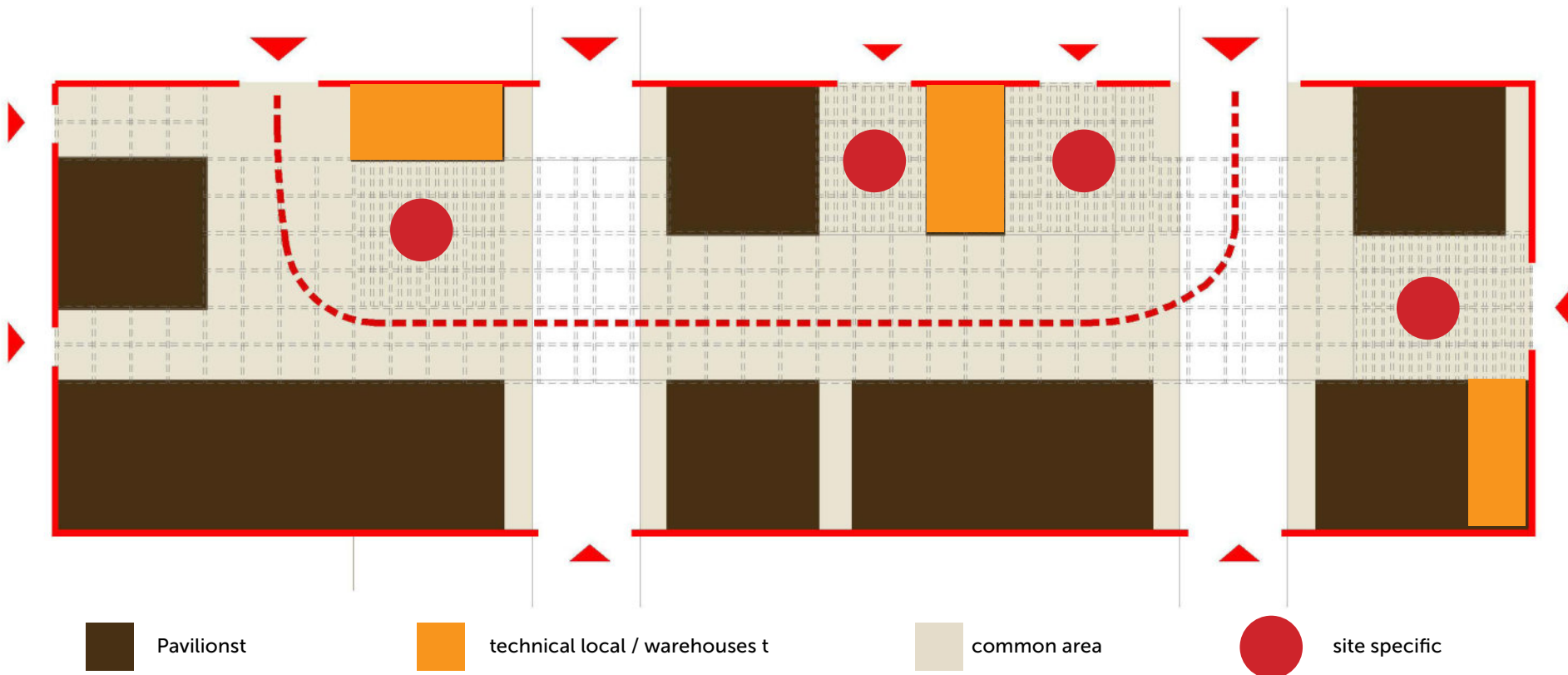
## Synthesis of the content of the thematic exhibition



A wood covering perimeter around the cluster, creating an enclosure that includes three lots available. The access of the cluster are marked with large portals, surrounded by panels with frayed, irregular strips. The different heights of apertures in the coating, different between primary and secondary inputs, creates a hierarchy of paths.

The exhibition begins in outer space, and then continues in a covered, where there are several moments of interest, where you can:

- deepen your knowledge of coffee
- learn about the different types of coffee
- taste and enjoy different coffee



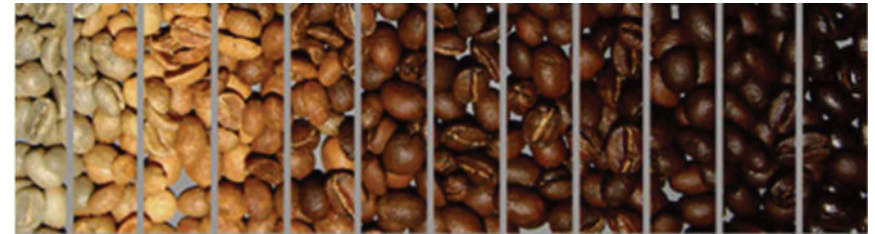


## COFFEE Cluster. Synthesis of the content of the thematic exhibition Green areas

The coffee colors, in different periods of ripeness from green coffee to mature coffee, become compositional elements with which we characterize the pavement.

The technique of drying used in some countries becomes a suggestion and it is taken as pattern in the treatment of the soil.

The concrete floor is machined and it draws curvilinear signs in reference to the traces left by human hands during the coffee drying.



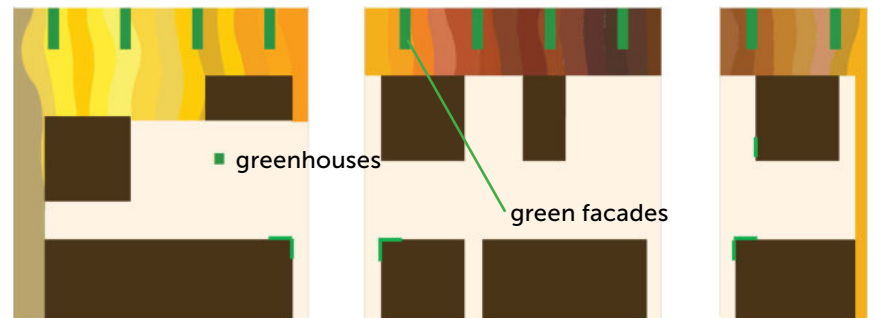
Coffee plants are placed in greenhouses and they are positioned in front of the Decumano, they can be watched by all visitors

Vegetation is also included in the interior space design:

- a greenhouse is positioned at the beginning of the central axis: this gives continuity to the presence of plants outside;
- the vegetation is previewed along some vertical facades

Exhibition spaces are divided along the way.

The greenhouses are also support to expose the photographs of Salgado.



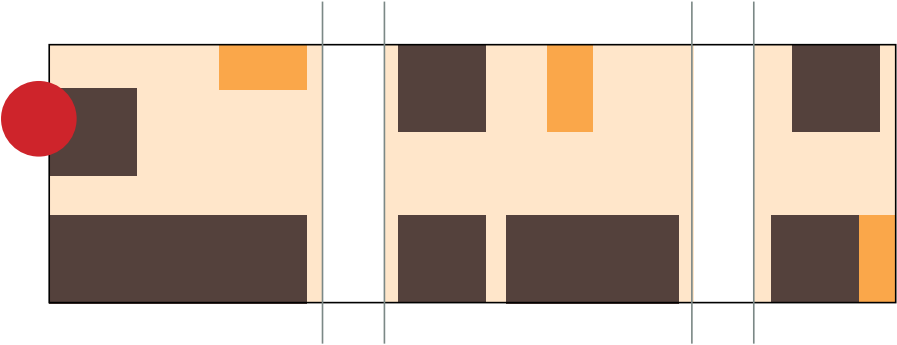


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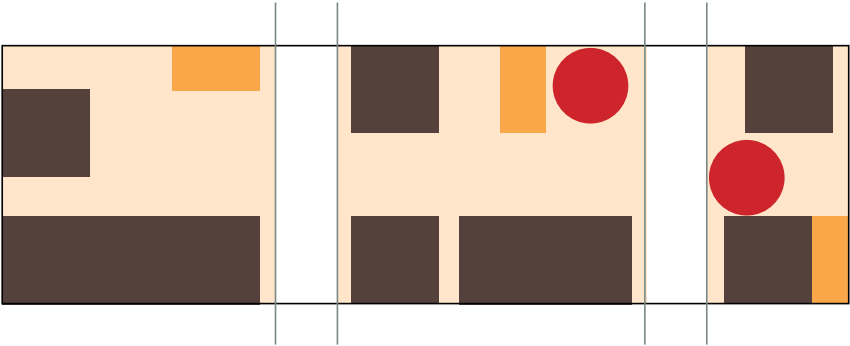


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# COFFEE Cluster. Synthesis of the content of the thematic exhibition. Market



The coffee transportation is showed in this area. The routes of coffee are drawn on a large inflatable globe hanging from ceiling. The major exporters of coffee are indicated too. The container is a metaphor of coffee transportation.

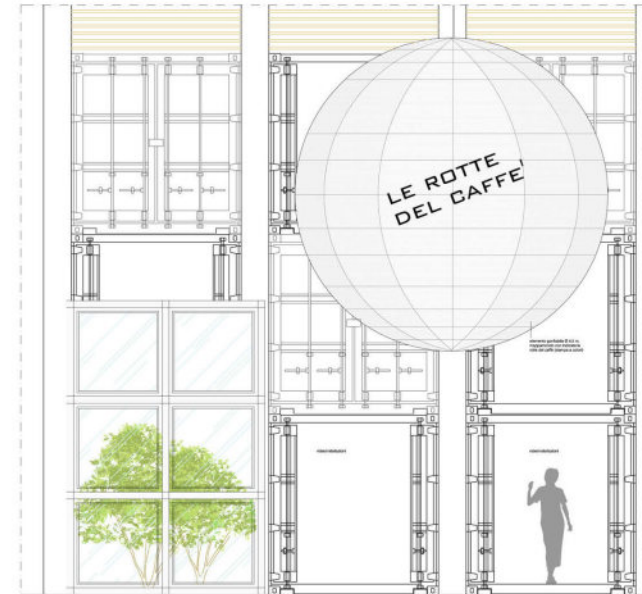
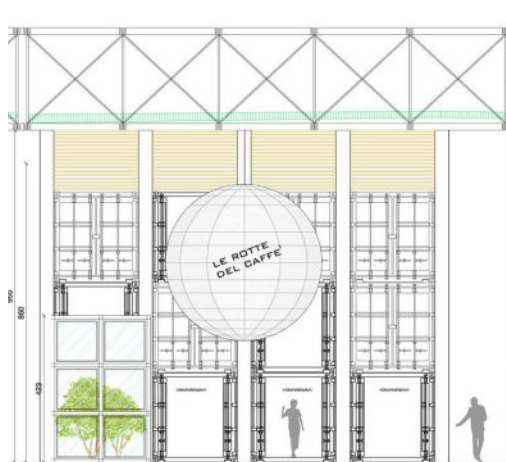
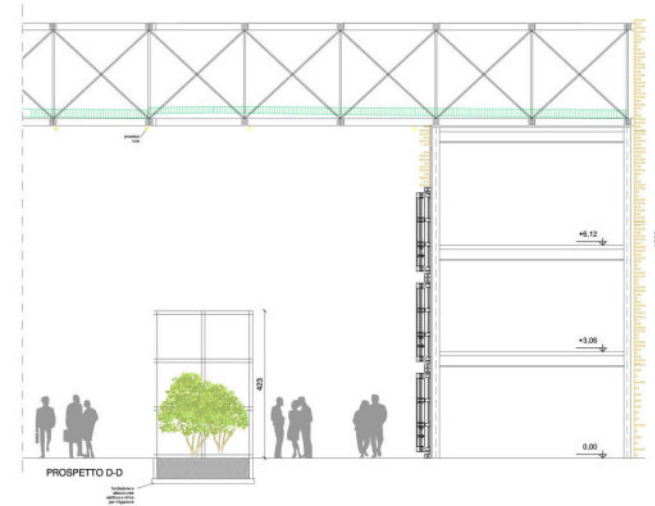
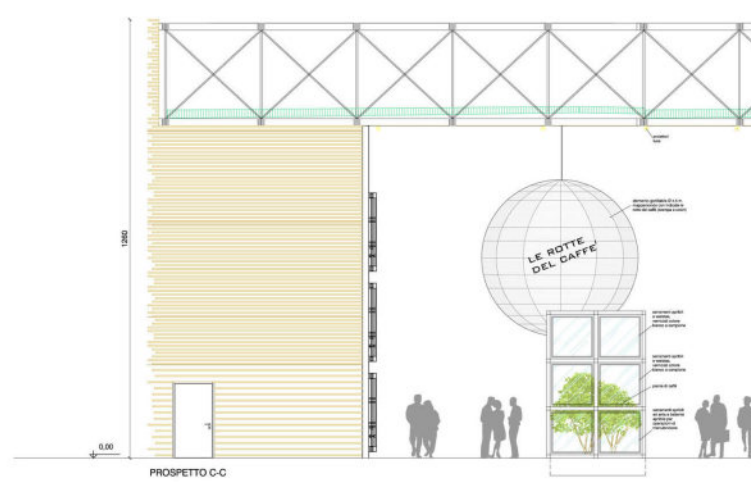
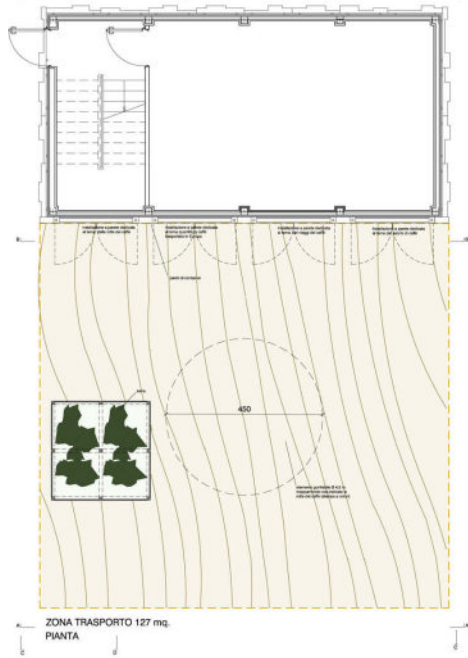


In this area each country will have the opportunity to exhibit and sell their coffee products. A modular element has been designed for displaying products for sale.



# COFFEE Cluster. Tecnical documentation of the thematic exhibition

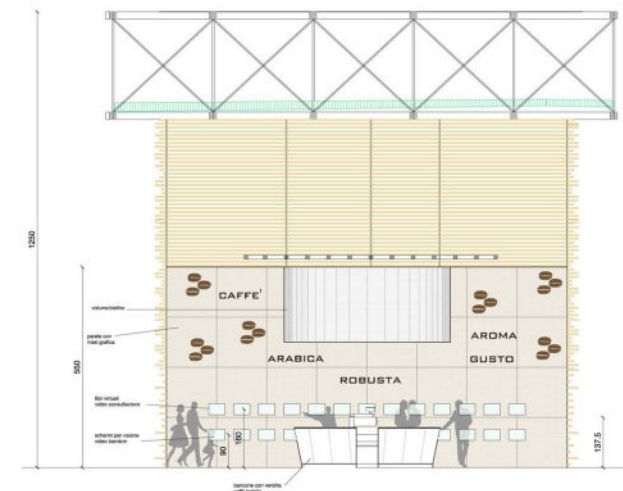
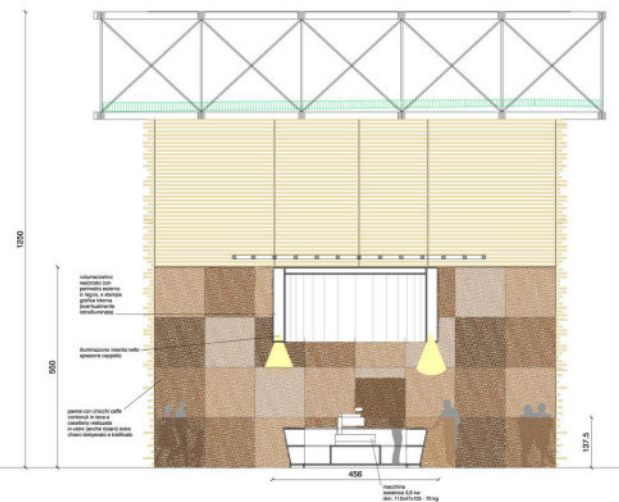
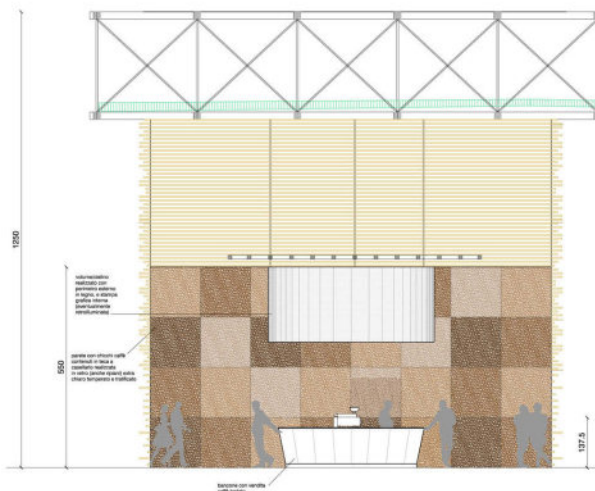
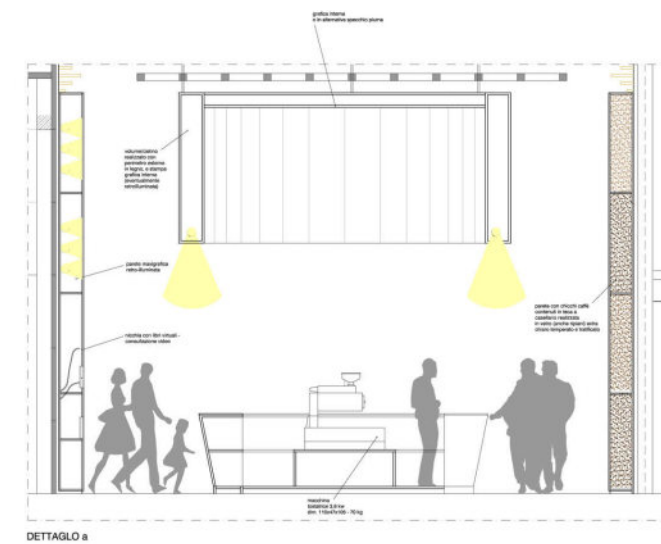
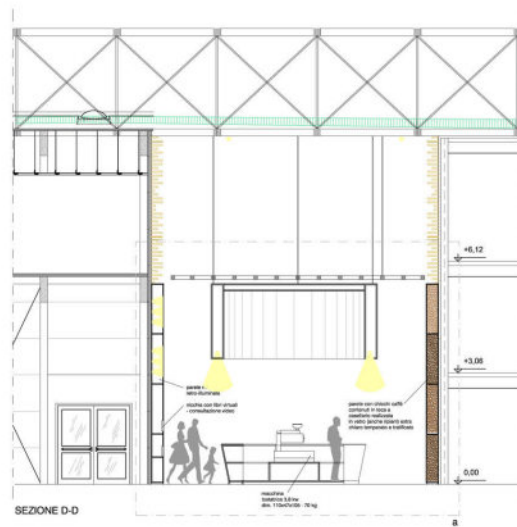
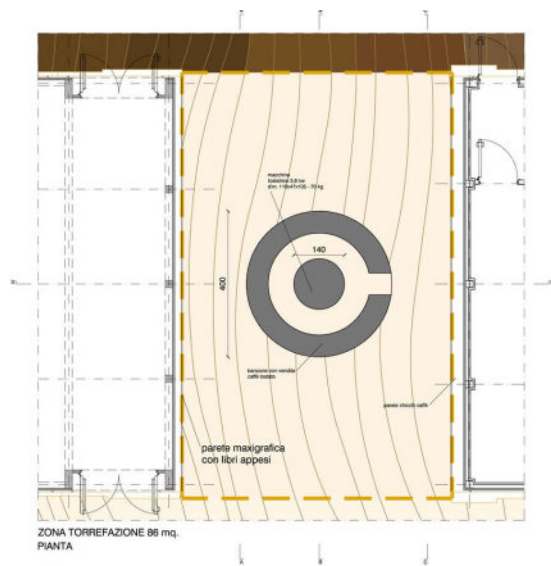
Elaboration with involvement of team consisting of Alessandro Colombo, Stefan Vieths and with assist of Fiera di Milano.  
The descriptions of the drawings in the original language version (italian)



# COFFEE Cluster. Tecnical documentation of the thematic exhibition



Elaboration with involvement of team consisting of Alessandro Colombo, Stefan Vieths and with assist of Fiera di Milano.  
The descriptions of the drawings in the original language version (italian)

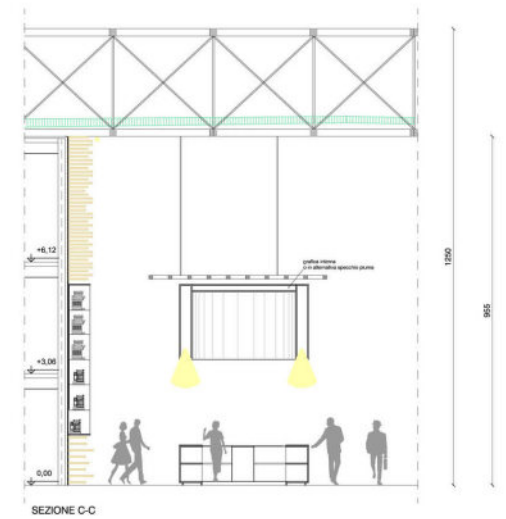
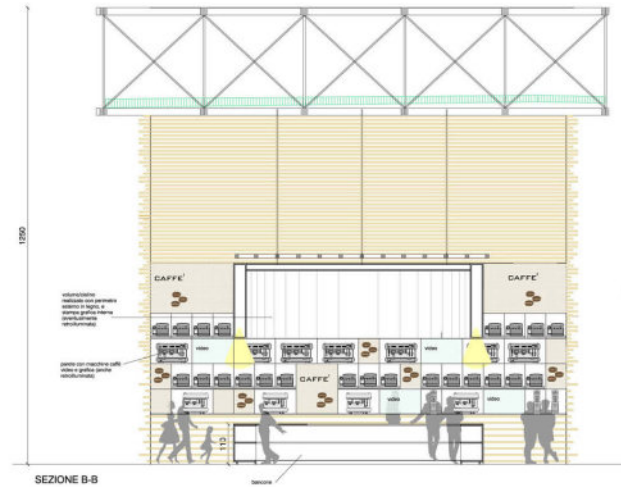
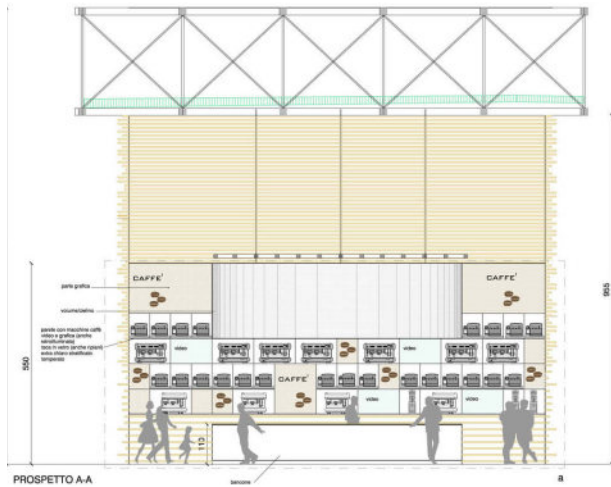
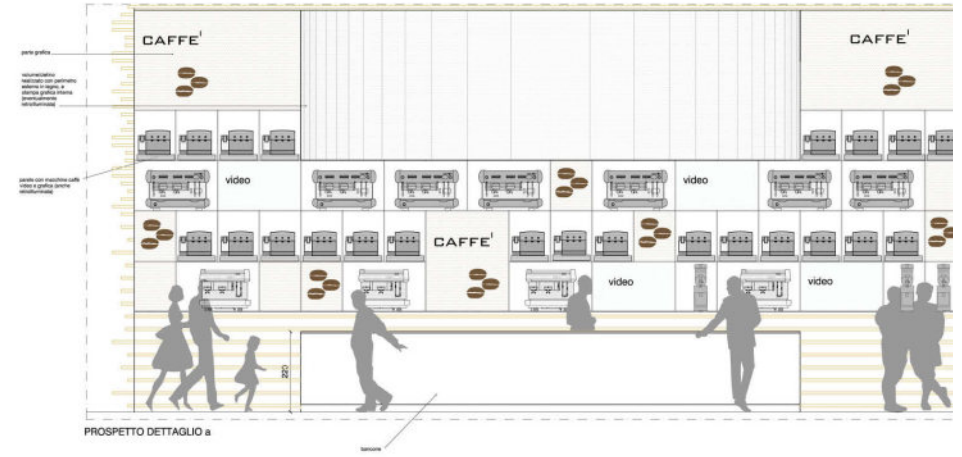
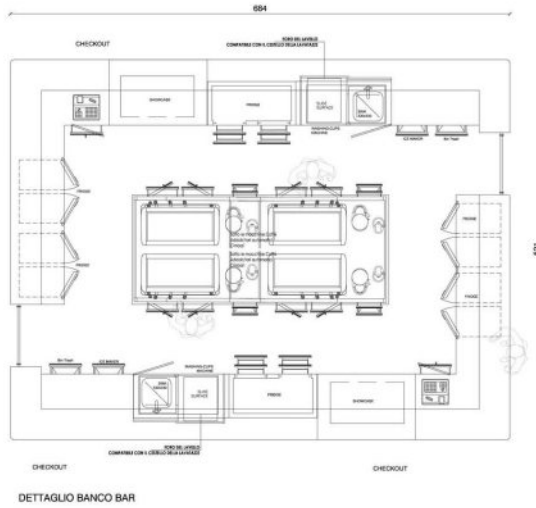
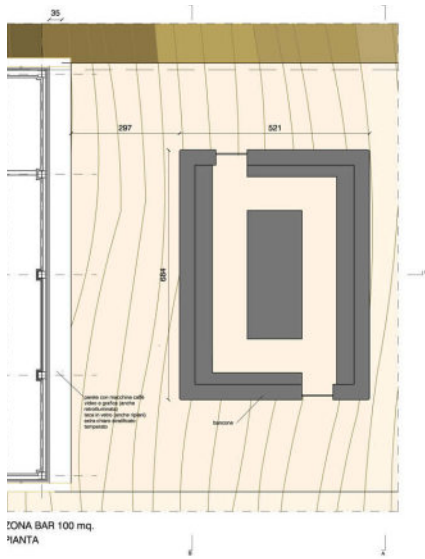




# COFFEE Cluster.

## Tecnical documentation of the thematic exhibition

Elaboration with involvement of team consisting of Alessandro Colombo, Stefan Vieths and with assist of Fiera di Milano.  
 The descriptions of the drawings in the original language version (italian)





COFFEE Cluster.  
Photo documentation of the thematic exhibition

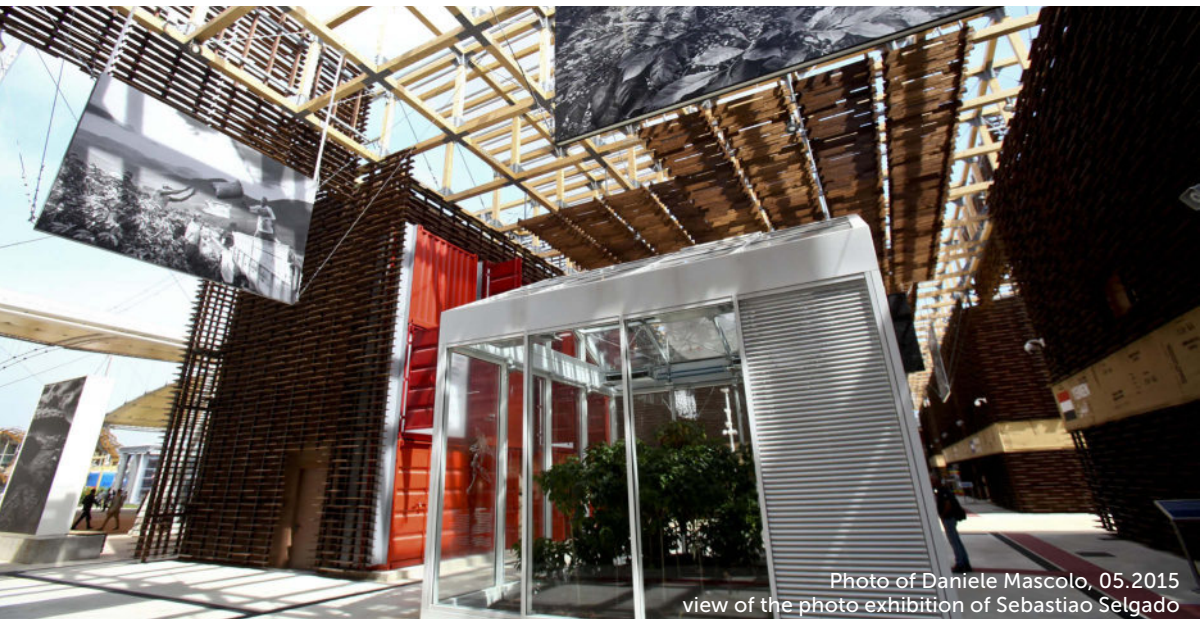


Photo of Daniele Mascolo, 05.2015  
view of the photo exhibition of Sebastiao Selgado



Photo by Daniele Mascolo, 05.2015  
view of the photo exhibition of Sebastiao Selgado



Photo by Pietro Baroni, 03.2015  
view of the graphic panel of the pavilion of Yemen and coffe bags



Photo by Daniele Mascolo, 05.2015  
a view of the COFFEE Cluster from the channel side



Photo by Daniele Mascolo, 05.2015  
view of the photo exhibition of Sebastiao Selgado



Photo by Pietro Baroni, 03.2015  
towards the thematic exhibition



Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of Sebastiao Selgado and  
the part of the exhibition focused on coffee transport

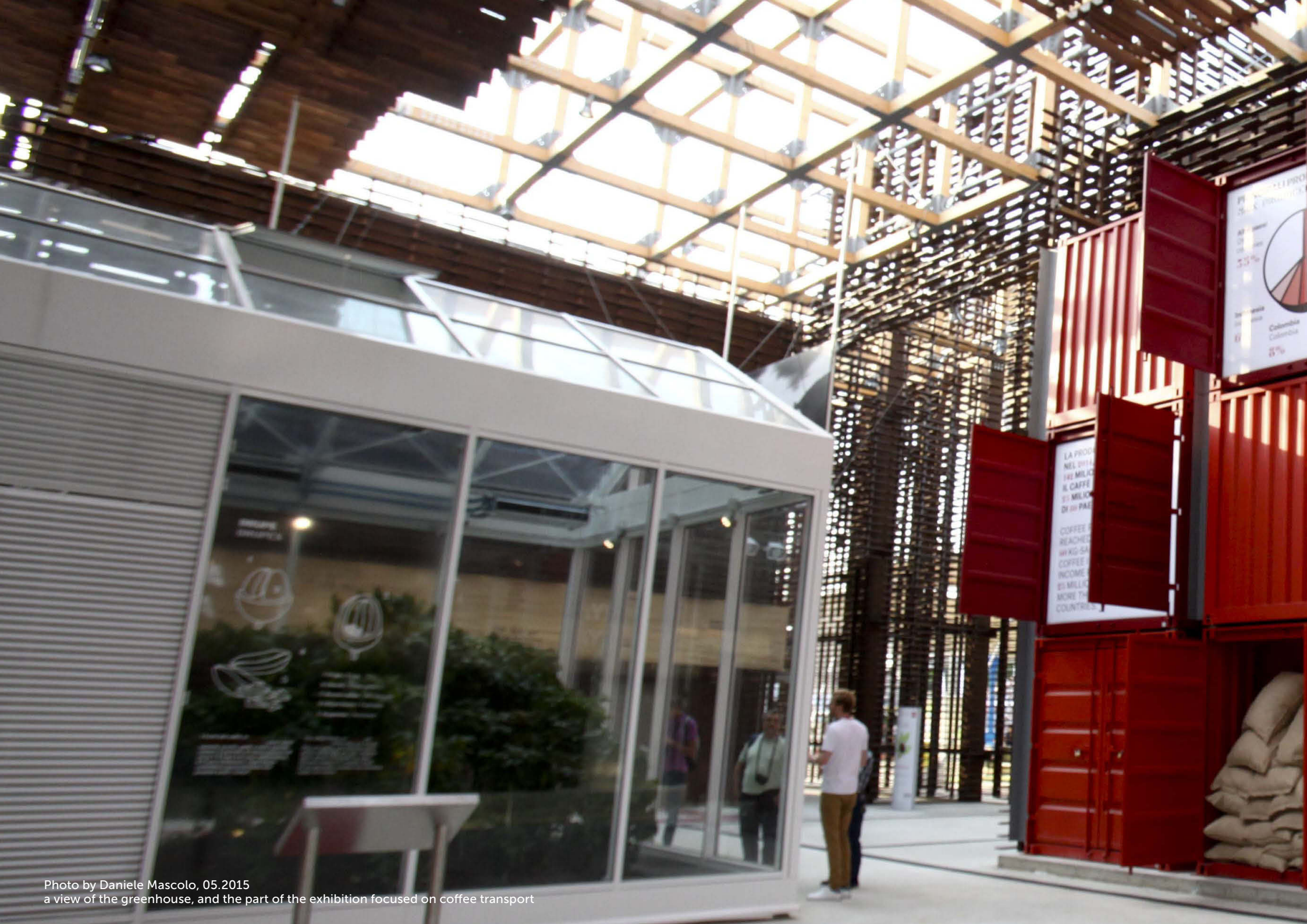
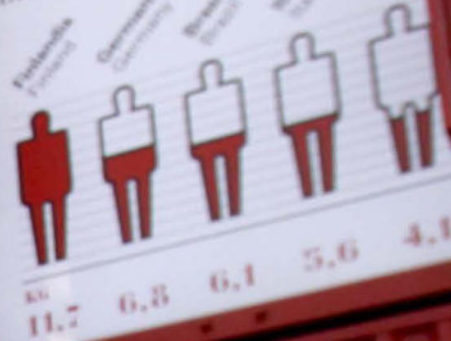
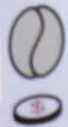


Photo by Daniele Mascolo, 05.2015  
a view of the greenhouse, and the part of the exhibition focused on coffee transport

# CONSUMATORI CONSUMERS PER



227.5  
Miliardi



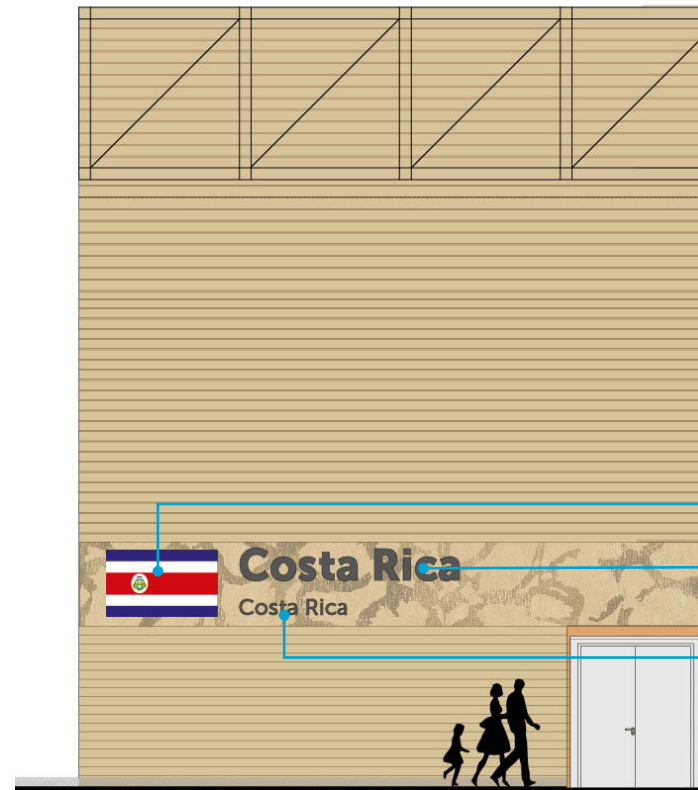
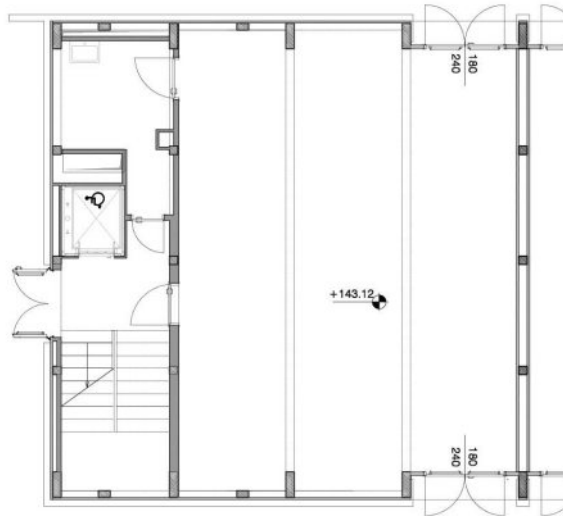
227.5 MILIARDI DI DOLLARI IL VALORE  
DEL CAFFÈ VERDE. 200 MILIARDI DI DOLLARI  
IL VALORE COMPLESSIVO DEL MERCATO

227.5 BILLION DOLLARS THE TOTAL VALUE  
OF GREEN COFFEE MARKET. 200 BILLION  
DOLLARS THE TOTAL VALUE OF THE COFFEE MARKET





# COFFEE Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster



- Flag
- Name (italian)
- Name (language of the country)



# GUATEMALA GUATEMALA

GENUINE  
ANTIGUA  
150 LBS.SPAN

CLEAN COFFEE  
PRODUCTO DE  
PRODUCT OF  
GUATEMALA  
150 LBS.SPAN.NET

LOT#  
5014005  
HG EP

GUATEMALAN  
COFFEES

LBS.SPAN  
ANTIGUA

GUATEMALAN  
COFFEES

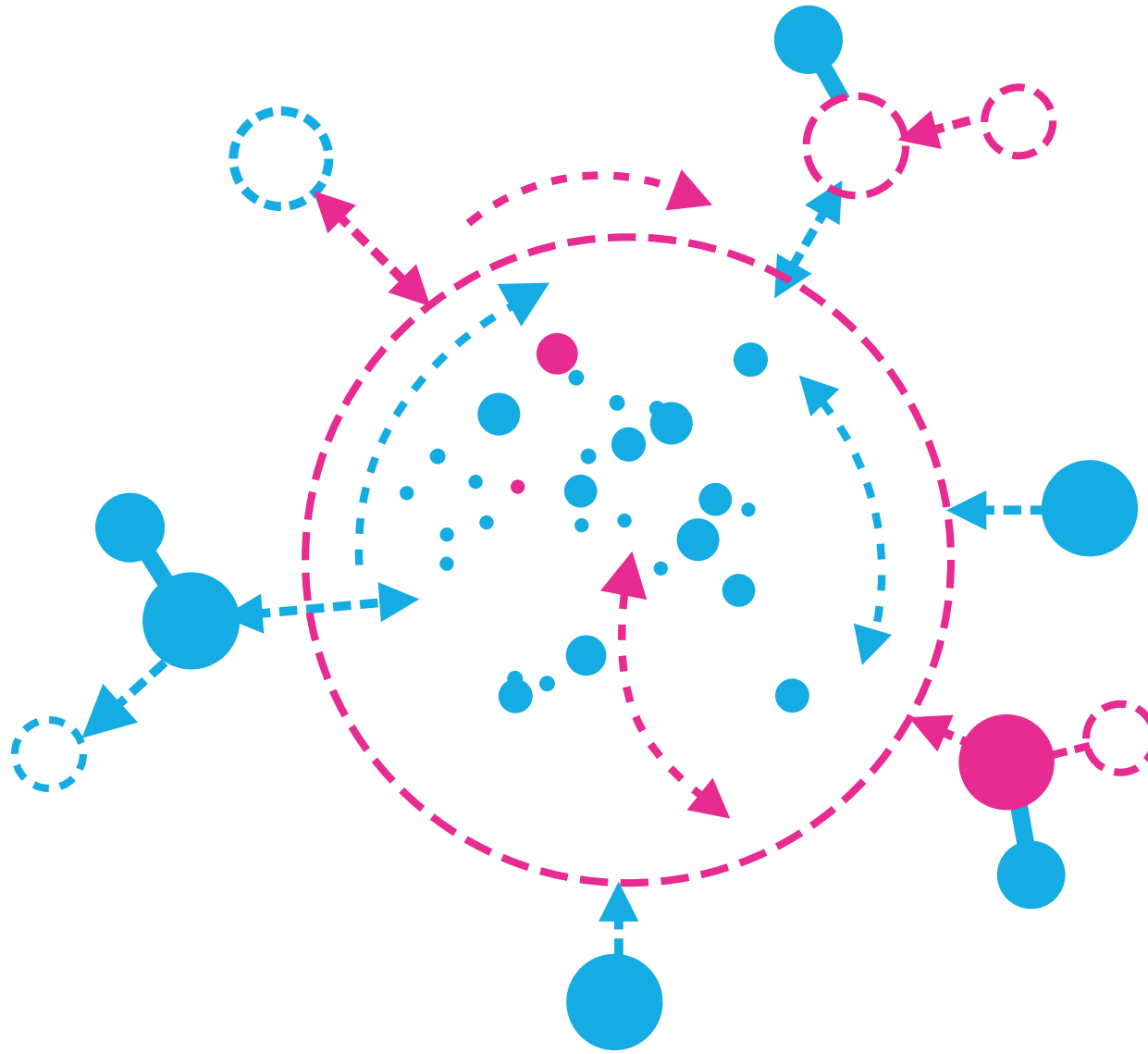
GUATEMALAN  
COFFEES

HG EP

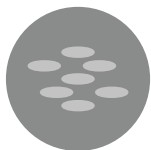


Photo of Pietro Baroni, 03.2015  
view of the graphic panel of the pavilion of Guatemala

Photo documentation of the other Clusters.  
Thematic exhibitions, Magnum exposure, customisation of the pavilions







### THE RICE CLUSTER: ABUNDANCE AND SECURITY / GROW REFLECTIONS

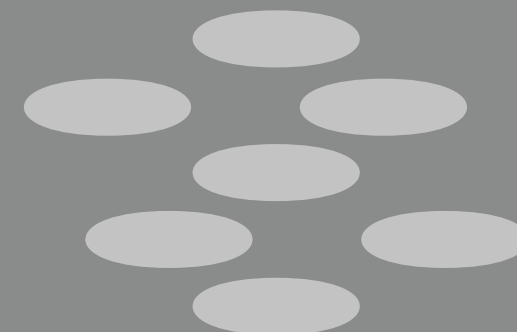


#### THEME OVERVIEW

Rice is a staple food essential in human life. It has been calculated that about one fifth of the world population depends on rice for their diet. Therefore, it also symbolizes security, providing a hedge against future hunger. Approximately 3.5 billion people derive around 20% of their daily caloric needs from rice, but in some Asian countries the percentage rises to 50%. Per-capita rice consumption can be as high as 100 kg/year (in Italy it is around 5.6 kg/year, compared to 66 kg of bread). World rice production is about 720 million tons, 90% of which is cultivated in Asia, with China and India as world's top producers, while Italy is the European top producer. Rice cultivations cover about 160 million hectares, most of them in Asia. This figure represents over 10% of the whole world surface dedicated to agriculture. In Asian traditional cultures, rice is the standard of wealth rather than gold or money.

#### THE RICE CLUSTER ARCHITECTURAL CONCEPT

The Rice Cluster appears like an out of scale rice field where the soil texture are recognizable. The colours, the fragrances and the shadows come with the rice's growing and they characterize the flowing of time between the pavilions.



### CLUSTER PROJECT WORKING GROUP

#### EXHIBITION CONTENT

Università degli Studi di Milano Bicocca, Italy

#### SCIENTIFIC RESPONSIBLE AND RESEARCH COORDINATION:

Marialuisa Lavitrano

#### RESEARCHERS AND CONTRIBUTORS:

Anna Marchetti, Carla Favaro, Marialuisa Lavitrano, Massimo Labra, Maurizio Casiraghi, Paola Palestini

#### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy

DESIGN CREDITS: Agnese Rebaglio, Davide Crippa, Barbara Di Prete, Lorenzo Loglio, Francesco Tosi

#### EXPO 2015 S.p.A.

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#### CONTRIBUTOR:

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#### CONTRIBUTORS:

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#### CONTENT DEVELOPMENT COORDINATION:

Department of International Affairs

#### PROJECT MANAGER AND SCIENTIFIC COORDINATOR:

Filippo Ciantia

#### CONTRIBUTORS (COUNTRY OFFICERS):

Barbara Borra, Veronica Corallo, Mohamed Elshimy, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquerel, Paolo Sabatini, Chiara Loreta

#### ENGINEERING:

Fiera Milano S.p.A.

#### SCHEME DESIGN:

Francesco Mazullo

#### DESIGN COORDINATOR:

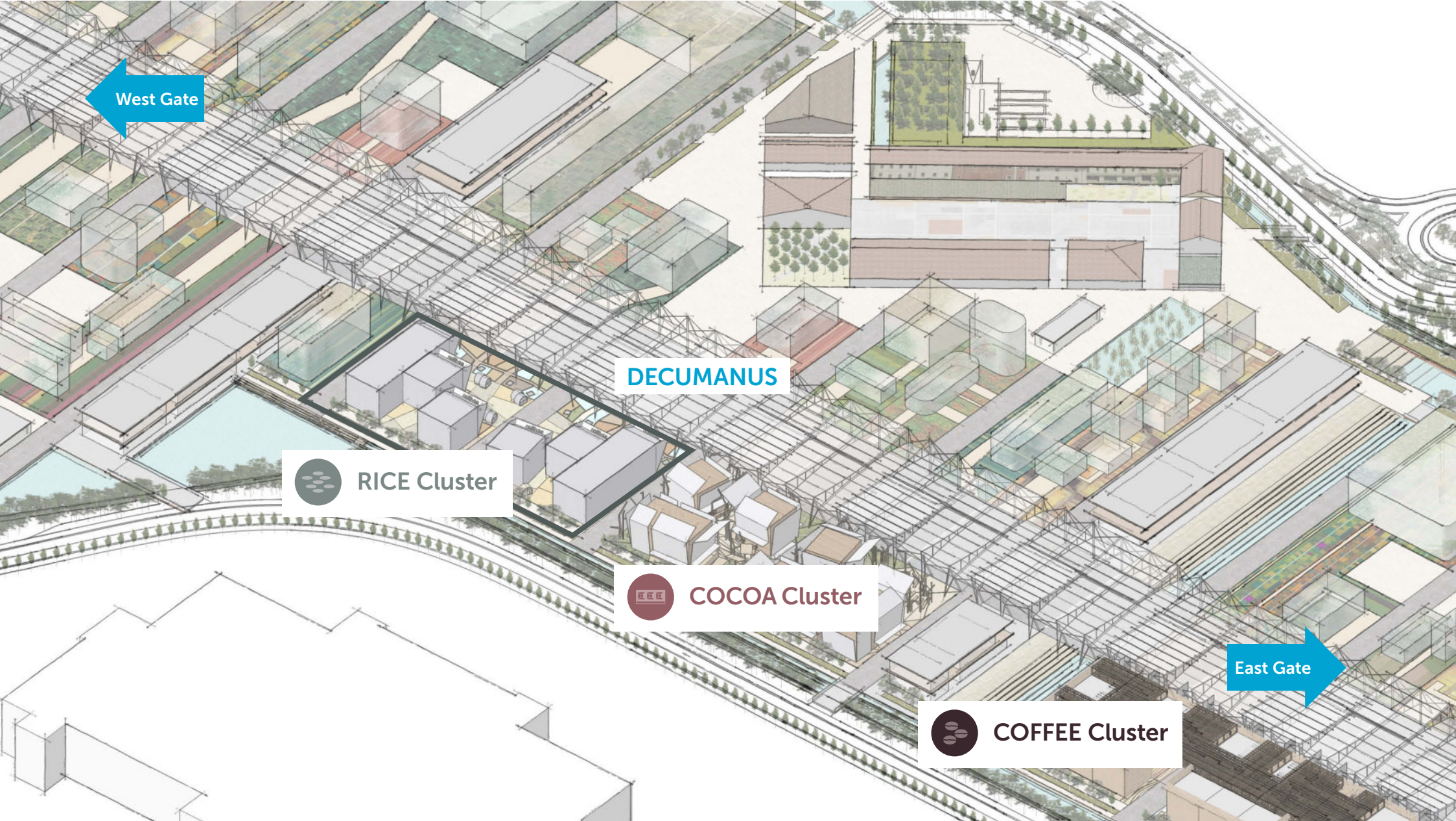
Maurizio Salvi

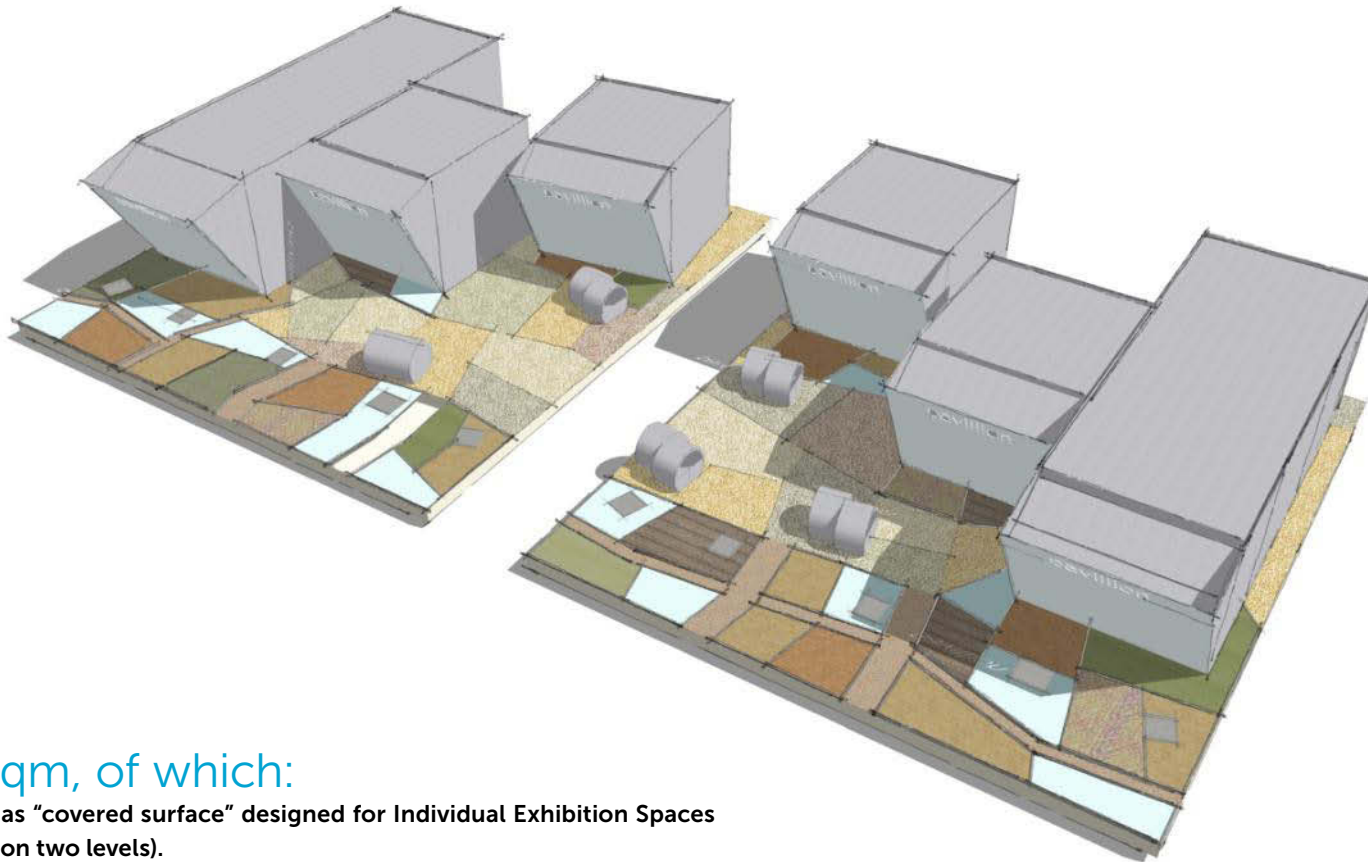
#### CONTRIBUTORS:

Livia Livini, Anna Gatti



# RICE Cluster. Location on the Expo site and situational context





### 3 546 sqm, of which:

- 1 000 sqm as “covered surface” designed for Individual Exhibition Spaces (1 750 sqm on two levels).
- 2 420 sqm for the Common Area
- 125 sqm as “covered surface” for technical spaces



Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of Gianni Berengo Gardin



Photo by Daniele Mascolo, 05.2015  
view of the Myanmar's pavilion



Photo by Daniele Mascolo, 05.2015  
view of the exhibition panel on the Sierra Leone's Pavilion



Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of Gianni Berengo Gardin



Photo by Daniele Mascolo, 05.2015  
view of the Cluster's pavilions from the side of the alley

# story of a rice seed

## storia di un seme di riso



indica



japonica

10000 a.C. *Oryza sativa* - Zhu Jiong

una specie selvaggia  
che deriva la maggior  
parte delle varietà di riso.  
Prof. wild species to be  
cultivated, which derive most  
of our rice.

La *Oryza sativa* è uno dei primi cereali coltivati dall'uomo, circa 10-12 mila anni fa. È una specie spontanea cinese, *Oryza sativa*, che avvenne grazie a una mutazione della pianta di disperdere i semi, raccolto dagli agricoltori. Quasi ovunque nel mondo appartiene alla specie *Oryza sativa*. L'unica altra specie di riso, *Oryza glaberrima*, poco conosciuta, è originaria dell'Africa occidentale. È stata incrociata con *Oryza sativa* e le due varietà sono note come "riso africano". Le varietà di riso sono 23, ma solo alcune di esse sono imparentate con *Oryza sativa* e *Oryza glaberrima*, le uniche due considerate i "veri risi".

One of the first cereals to be cultivated by humans, rice (*Oryza sativa*) was first planted some 10-12 thousand years ago, starting with a spontaneous species native to China, *Oryza sativa*. At the base of the domestication process, a single genetic mutation impacted the natural dispersion of the seeds, allowing the first farmers an easier way of collecting them. *Oryza sativa*, a kind of Asian rice, is by far the most important and widespread rice species in the world. A less common species, the African *Oryza glaberrima*, is often crossed with other types of rice. Apart from these two main varieties, the only ones commonly considered "true rices", more than 23 other wild rice species exist, some of which loosely connected to *Oryza sativa* and *Oryza glaberrima*.

Le due sottospecie principali di *Oryza sativa* sono la *indica* e la *japonica*. *Oryza sativa* has two main subspecies: *indica* and *japonica*.

Le principali sottospecie di *Oryza sativa* sono la *indica* - ampiamente diffusa nei climi tropicali (Cina meridionale, Giappone, India, alcune zone dell'Europa meridionale, USA meridionale ecc.) - e caratterizzata da una carenza di lunga e sottile - e la *japonica*, più adatta a coltivazioni in climi temperati e caratterizzata da un seme corto e arrotondato. La *japonica* è ampiamente diffusa in Paesi come Giappone, Corea, Cina settentrionale, Brasile, USA, Egitto, e nella maggior parte delle nazioni europee, inclusa l'Italia.

*Oryza sativa* is characterized by different subspecies, the most common being *indica* - widely distributed in tropical climates (southern China, Philippines, India, southern Europe, southern United States, etc.) and characterized by a long, slender convex - and *japonica*, which is more suitable for cultivation in temperate climates and characterized by a short, rounded grain. The latter is broadly distributed in countries such as Japan, Korea, northern China, Brazil, United States, Egypt and most European countries, including Italy.



Il Fiume Giallo (il Fiume del Giallo) nel sud della Cina. Dal 1950, il Fiume Giallo è stato il principale canale di irrigazione per il riso in Cina.



Photo by Daniele Mascolo, 05.2015  
view of the exhibition panel *Story of a rice seed*

# COCOA Cluster.

## Development of the architectural concept of the thematic exhibition



### THE COCOA CLUSTER: THE FOOD OF GODS / UNFOLDING FLAVOUR



#### THEME OVERVIEW

The Cacao originates from the Latin American first cultivations, already in 2500 a.C., and its consumption is dated from 1500 a.C. by the fascinating culture of Mayans and Aztecs .

After the Spanish colonization of the Americas in the 16th century, the so called "dark gold" was soon exported towards Europe, where it became a status symbol for the aristocracy.

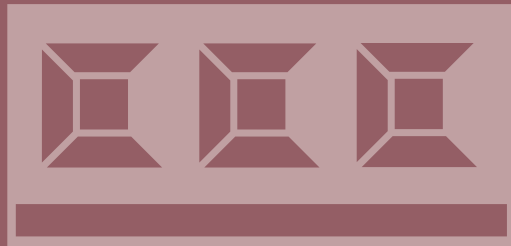
In the 19<sup>th</sup> and 20<sup>th</sup> centuries the innovations in the production and the exponential growth of the consumer demand led western countries to invest in both Latin America and Africa.

Today most of the cocoa grown in Africa is of the Forastero (Amelonado) variety. The other two varieties of cocoa beans, Criollo and Trinitario, are grown mainly in Central and South America, and provide a more complex flavour which is ideal for darker chocolates. Chocolate is now a symbol of contemporary

confectionery. People around the world enjoy chocolate in thousands of different forms. More than 30 Developing Countries produce cocoa, representing a main asset for their economies.

#### THE COCOA CLUSTER ARCHITECTURAL CONCEPT

The skin of the pavilions, a lightweight fabric that metaphorically protects the precious contents of Cocoa products, opens and unfolds. The trees, individually, in pairs or groups, as simple as poles or as complex as urban furniture systems, define functional areas, act as landmarks, support the different levels of light and orient visitors into the jungle-plateau.



### CLUSTER PROJECT WORKING GROUP

#### EXHIBITION CONTENT

Università Cattolica del Sacro Cuore, Italy

#### SCIENTIFIC RESPONSIBLE AND RESEARCH COORDINATION:

Pier Sandro Cocconcelli

**RESEARCHERS AND CONTRIBUTORS:** Adriano D'Aloia, Fabio Antoldi, Raffaella Battaglia, Pier Sandro Cocconcelli, Fausto Colombo, Dante Marco De Faveri, Milena Lambri, Adriano Marocco, Alvaro Mordente, Emanuele Pagano, Silvano Rubino, Claudia Schirru

#### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy

**DESIGN CREDITS:** Fabrizio Leoni, Mauricio Cardenas, Cesare Venutura

#### EXPO 2015 S.p.A.

#### COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:

Thematic Space Department

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**CONTRIBUTOR:** Michele Di Santis

**EXHIBITION DESIGN COORDINATOR:**

Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska,

Alessandro Benetti, Milena Sacchi

**CONTENT DEVELOPMENT COORDINATION:**

Department of International Affairs

**PROJECT MANAGER AND SCIENTIFIC**

**COORDINATOR:** Filippo Ciantia

#### CONTRIBUTORS (COUNTRY OFFICERS):

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#### ENGINEERING:

Fiera Milano S.p.A.

**SCHEME DESIGN:** Francesco Mazullo

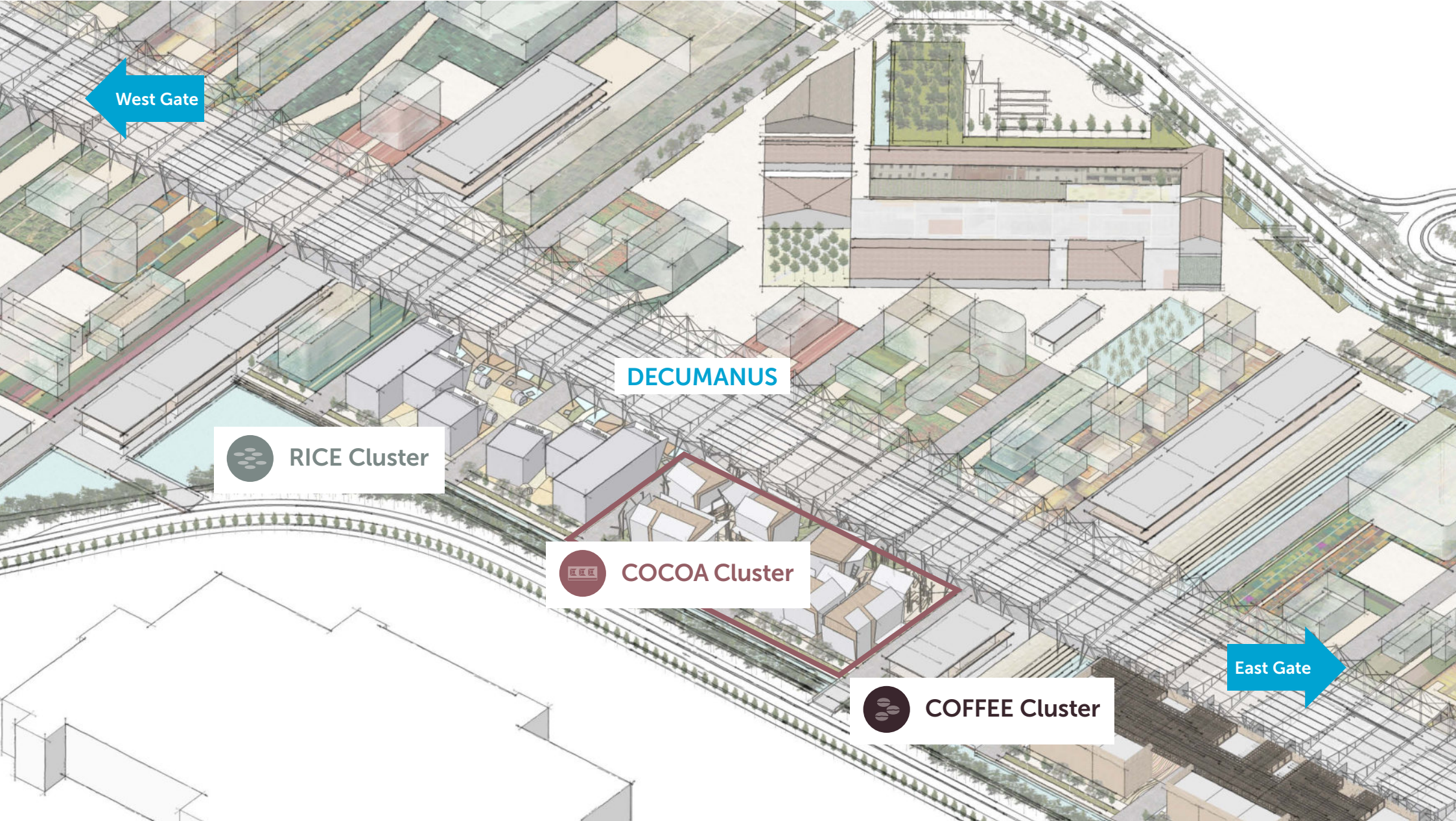
**DESIGN COORDINATOR:** Maurizio Salvi

**CONTRIBUTORS:** Livia Livini, Anna Gatti

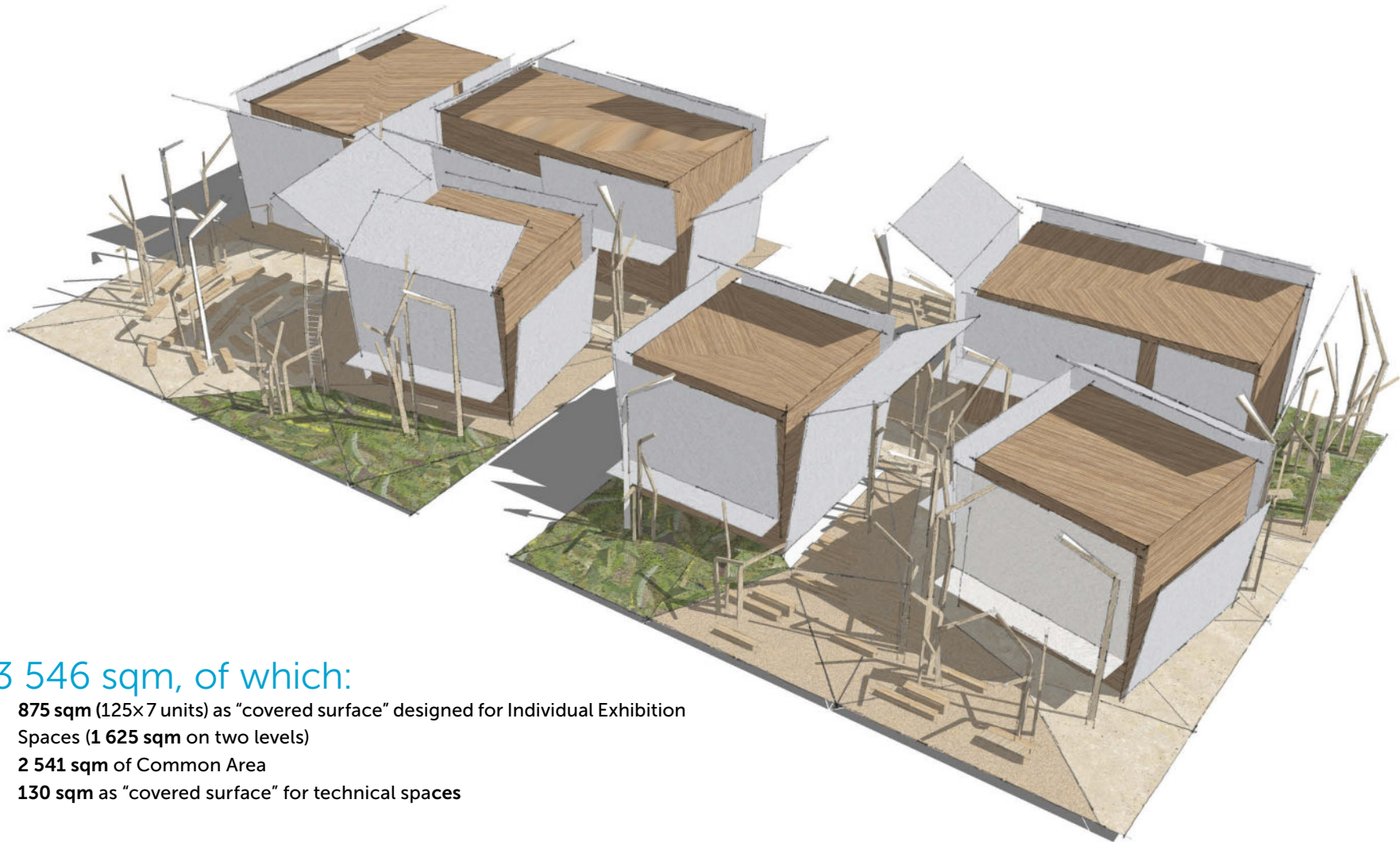




# COCOA Cluster. Location on the Expo site and situational context







### 3 546 sqm, of which:

- 875 sqm (125x7 units) as "covered surface" designed for Individual Exhibition Spaces (1 625 sqm on two levels)
- 2 541 sqm of Common Area
- 130 sqm as "covered surface" for technical spaces



Photo by Daniele Mascolo 05.2015, view of the internal paths of the Cluster



Photo by Pietro Baroni, 03.2015 view of the exhibition panel *Biodiversity and cultivation of cocoa*



Photo by Pietro Baroni, 03.2015 view of the photo exhibition of Martin Parr





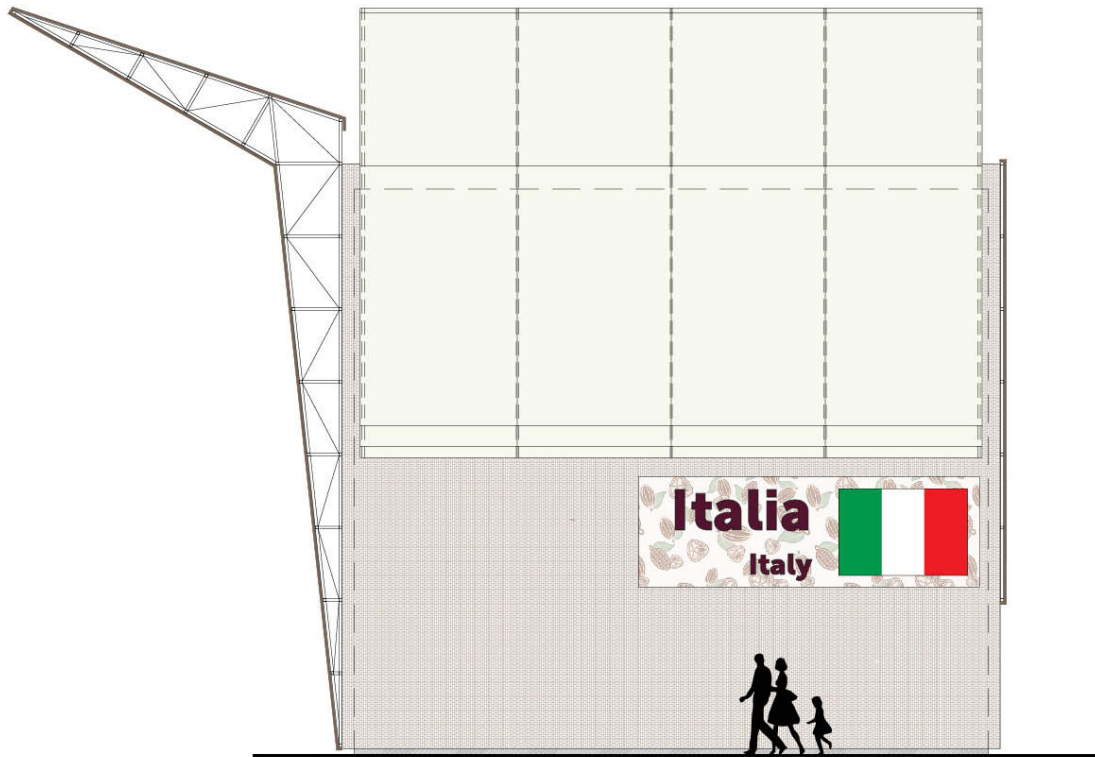
Photo by Pietro Baroni, 03.2015  
view of the Events area



Photo by Daniele Mascolo, 05.2015  
view of the internal paths of the Cluster



# COCOA Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster



- Flag
- Name (italian)
- Name (language of the country)



Photo by Daniele Mascolo, 05.2015  
view of the pavilions of the COCOA Cluster



# CEREALS AND TUBERS Cluster.

## Development of the architectural concept of the thematic exhibition



### THE CEREALS AND TUBERS CLUSTER: OLD AND NEW CROPS / THE VALLEY



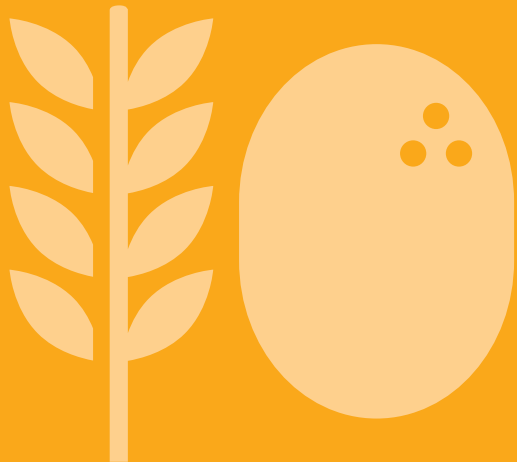
#### THEME OVERVIEW

Cereals and tubers cultivation has a relevance written in the history of mankind. From wheat to corn, from potatoes to millet, these basic products-giving carbohydrates have nourished and sustained the population of the whole planet from their discovery to the present, from East to West. Cereals are historically associated with the origin of civilization and culture of all people. Quinoa has a long and distinguished history in South. In the Quechua language of the Incas, quinoa is the chisiya mama or "mother grain". Nowadays 15 crop plants provide 90 percent of the world's food energy intake; moreover rice, maize and wheat are the staples of over 4 billion people. Root and tuber crops are second only in importance to cereals as a global source of carbohydrates. They are important staples for over 1 billion people in the developing world and also provide some minerals

and essential vitamins.

#### THE CEREALS AND TUBERS CLUSTER ARCHITECTURAL CONCEPT

A multisensory experience guides the visitor through a progression of colors, textures and scents to create an informative and memorable visit. A river cultivated with cereals and tubers "flows" through the pavilions, ending in a large covered hearth which also houses all the communal activities.



### CLUSTER PROJECT WORKING GROUP

#### EXHIBITION CONTENT

Università degli Studi di Milano, Italy

**SCIENTIFIC RESPONSIBLES:** Gian Vincenzo Zuccotti, Francesco Bonomi, Claudio Gandolfi

**RESEARCHERS AND RESEARCH COORDINATORS:** Ambrogina Pagani, Guido Sali

**CONTRIBUTORS:** Marco Acutis, Andrea Giussani, Mauro Marengo, Alessandra Marti, Chiara Mazzocchi, Gianvincenzo Zuccotti

#### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy

**DESIGN CREDITS:** Alessandro Rocca, Franco Tagliabue, Maria Feller

#### EXPO 2015 S.p.A.

**COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:**

Thematic Space Department

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**ARCHITECTURE COORDINATOR:** Marco Chioldi

**CONTRIBUTOR:** Michele Di Santis

**EXHIBITION DESIGN COORDINATOR:**

Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska, Alessandro Benetti, Milena Sacchi

**CONTENT DEVELOPMENT COORDINATION:**

Department of International Affairs

**PROJECT MANAGER AND SCIENTIFIC**

**COORDINATOR:** Filippo Ciantia

#### CONTRIBUTORS (COUNTRY OFFICERS):

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#### ENGINEERING:

Fiera Milano S.p.A.

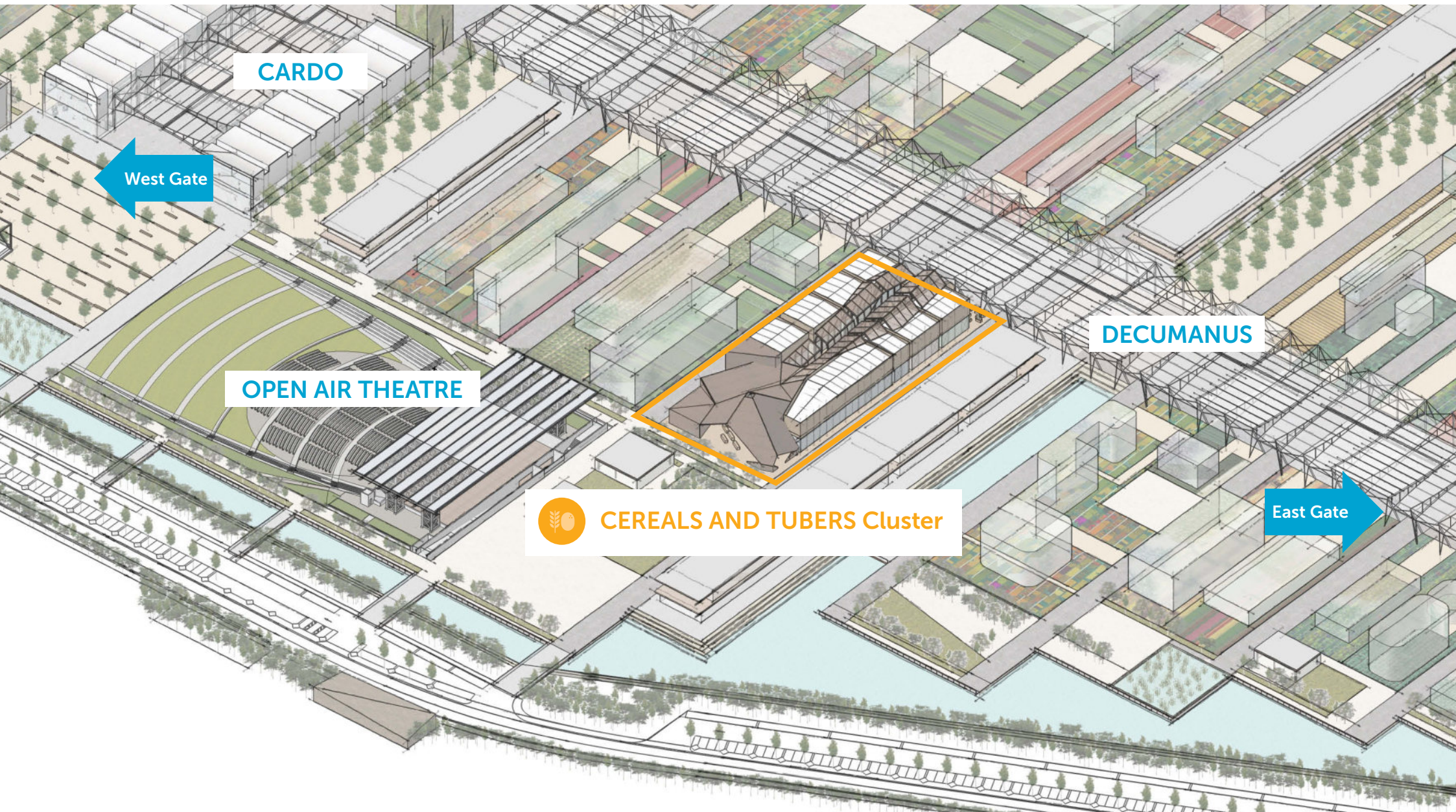
**SCHEME DESIGN:** Francesco Mazullo

**DESIGN COORDINATOR:** Maurizio Salvi

**CONTRIBUTORS:** Livia Livini, Anna Gatti



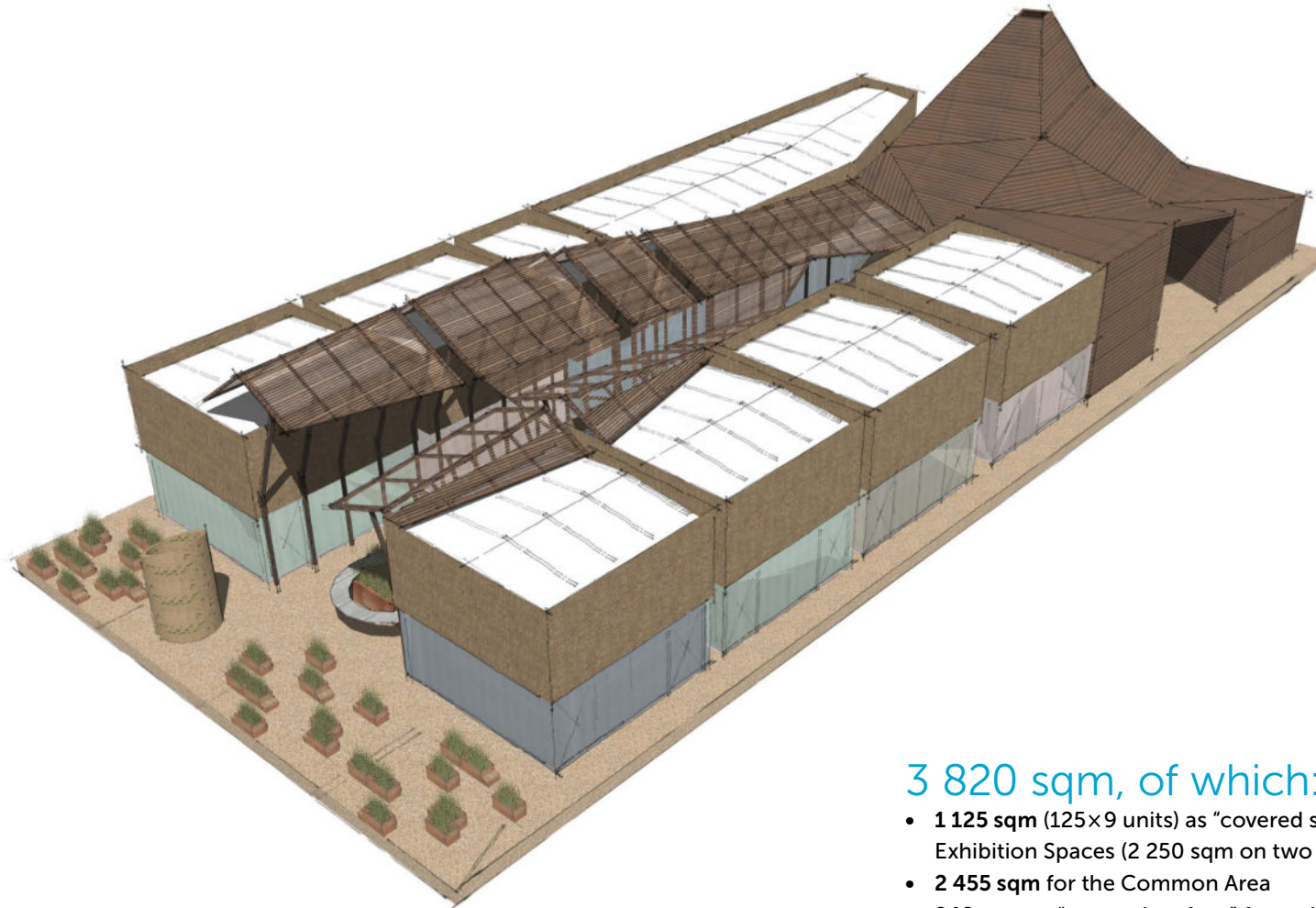
# CEREALS AND TUBERS Cluster. Location on the Expo site and situational context



**CEREALS AND TUBERS Cluster**



## CEREALS AND TUBERS Cluster. Spatial parameters

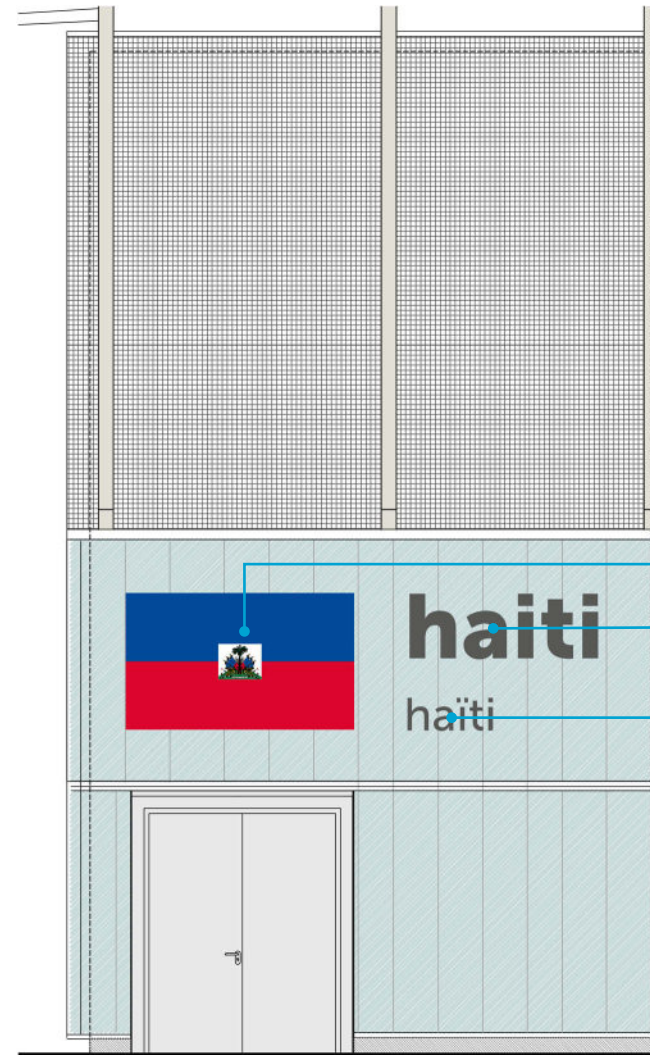
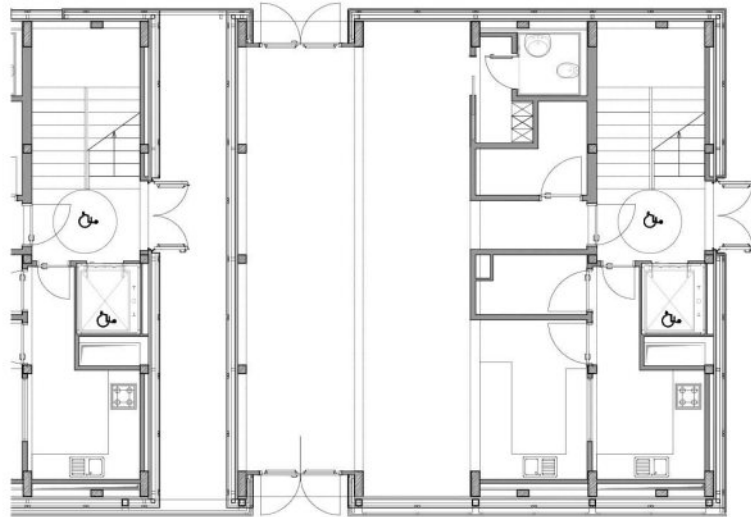


### 3 820 sqm, of which:

- 1 125 sqm (125x9 units) as "covered surface" designed for Individual Exhibition Spaces (2 250 sqm on two levels)
- 2 455 sqm for the Common Area
- 240 sqm as "covered surface" for technical spaces



# CEREALS AND TUBERS Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster



- Flag
- Name (italian)
- Name (language of the country)



# CEREALS AND TUBERS Cluster. Photo documentation



Photo by Dominika Sobolewska, 05.2015  
view of the panels of the Thematic Exhibition



Photo by Dominika Sobolewska, 05.2015  
view of the panels of the Thematic Exhibition



Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of Joel Meyerovitz



Photo by Pietro Baroni, 03.2015  
view of the side facade of Mozambique's pavilion



Photo by Pietro Baroni, 03.2015  
view of the main hall of the Cluster



Photo by Daniele Mascolo, 05.2015  
view for the CEREL AND TUBERS Cluster from the Aree Services (ASV)

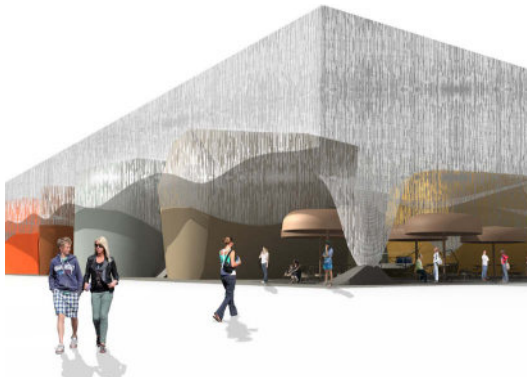


## ARID ZONES Cluster.

# Development of the architectural concept of the thematic exhibition



## THE AGRICULTURE AND NUTRITION IN ARID ZONES CLUSTER: THE CHALLENGE OF WATER SCARCITY AND CLIMATE CHANGE / SANDSTORM



### THEME OVERVIEW

One-fifth of the world's population lives in areas of water scarcity. Arid environments are extremely diverse in terms of their land forms, soils, fauna, flora, water balances, and human activities. Because of this diversity, no practical definition of arid environments can be derived. The term Arid Zones refers to a geographical area, marked by many troubles, but also rich in natural and cultural resources. It also includes territories and communities which vary greatly.

Aridity may be expressed by the ratio between the amount of rainfall and the evapo-transpiration in a defined period of time. This index allows us to identify the climatic categories that may be included in the Arid Zones: these are Hyper-Arid, Arid, Semi-Arid, Sub-Humid. These climatic zones correspond to very different environments; they are not found only in Africa and are often areas with very cold temperatures and continental climates.

### THE COCOA CLUSTER ARCHITECTURAL CONCEPT

The project stems from the idea of the sandstorm in the desert. The phenomenon is a metaphor for the difficulty of living and exploit the territory in arid zones where, however, some hidden resources still exist.

## CLUSTER PROJECT WORKING GROUP

### EXHIBITION CONTENT

Politecnico di Milano, Italy

**SCIENTIFIC RESPONSIBLE:** Luisa Collina – Politecnico di Milano, Italy

**RESEARCHER AND RESEARCH COORDINATOR:** Barbara Camocini – Politecnico di Milano, Italy

**CONTRIBUTORS:** Alessandro Biamonti, Luisa Collina, Emanuela Colombo, Mohamed Elshimy, Giuseppe Enne, Studi Di Sassari, Silvia Gramegna, Gianfranco Greppi, Angela Morelli, Dominika Sobolewska, Michele Zini, Francesco Zurlo

### ARCHITECTURAL CONCEPT

#### AND DESIGN UPDATE

Politecnico di Milano, Italy

**DESIGN CREDITS:** Alessandro Biamonti, Barbara Camocini, ZPZ PARTNERS, Sara Callioni, Andrea Cattabriga, Sebastiano Longaretti, Sara Michelini, Michele Zini, Claudia Zoboli

### EXPO 2015 S.p.A.

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**CONTRIBUTOR:** Michele Di Santis

**EXHIBITION DESIGN COORDINATOR:** Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska, Alessandro Benetti, Milena Sacchi

### CONTENT DEVELOPMENT COORDINATION:

Department of International Affairs

### PROJECT MANAGER AND SCIENTIFIC COORDINATOR:

Filippo Ciantia

### CONTRIBUTORS (COUNTRY OFFICERS):

Barbara Borra, Veronica Corallo, Mohamed Elshimy, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquerel, Paolo Sabatini, Chiara Loreta

### ENGINEERING:

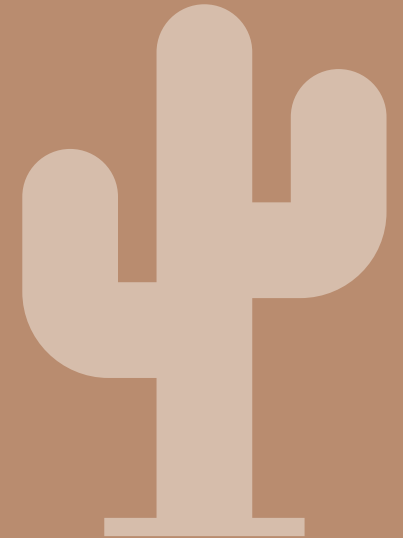
Fiera Milano S.p.A.

### SCHEME DESIGN:

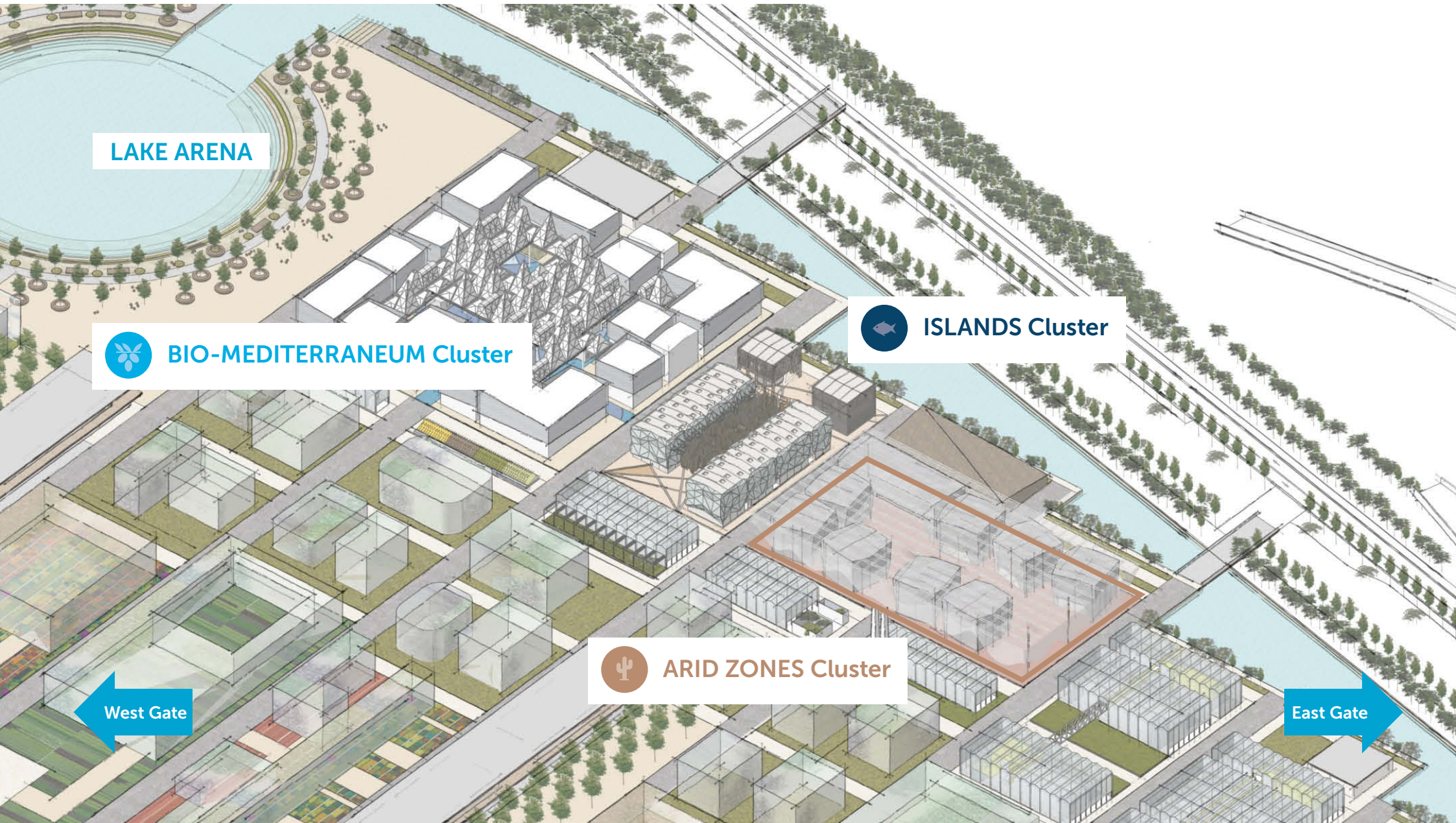
Francesco Mazullo

**DESIGN COORDINATOR:** Maurizio Salvi

**CONTRIBUTORS:** Livia Livini, Anna Gatti

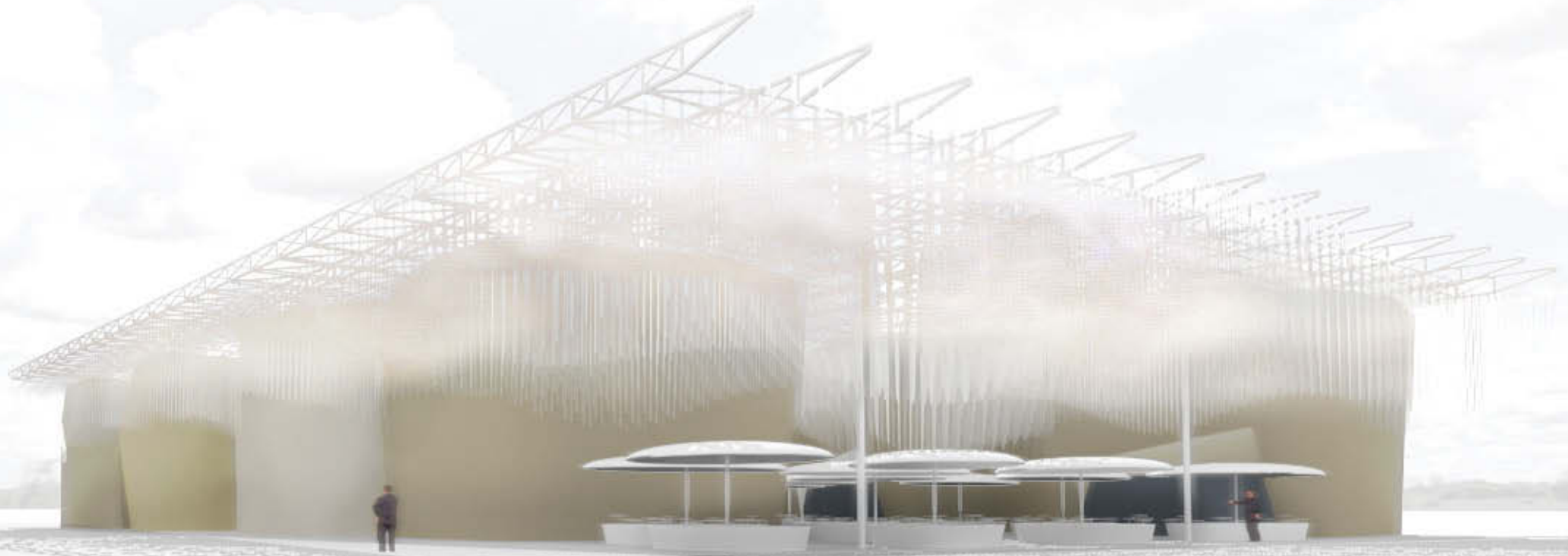


ARID ZONES Cluster.  
Location on the Expo site and situational context





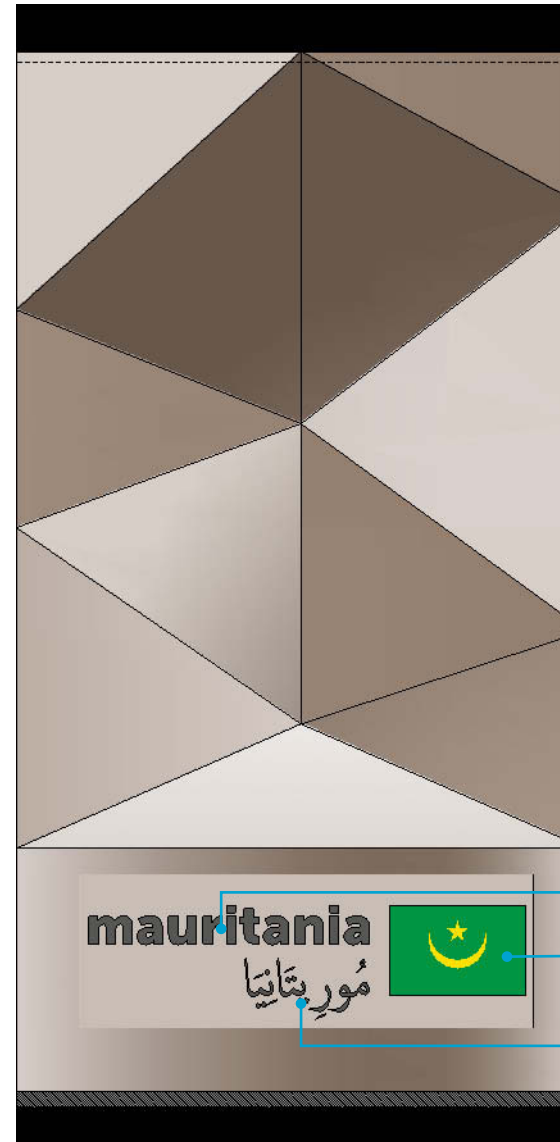
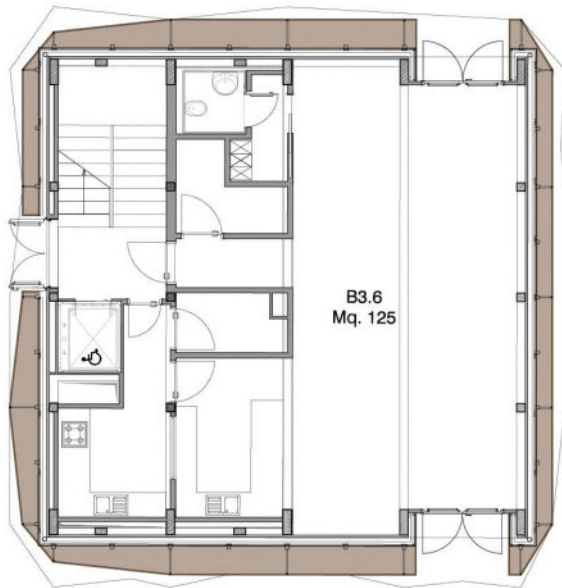
## ARID ZONES Cluster. Spatial parameters



### 4 030 sqm, of which:

- **1 125 sqm** (125×9 units) as “covered surface” designed for Individual Exhibition Spaces (2 125 sqm on two levels)
- **2 840 sqm** for the Common Area
- **65 sqm** as “covered surface” for technical spaces

# ARID ZONES Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster



Name (Italian)

Flag

Name (language of the country)



Photo by Daniele Mascolo, 05.2015  
view of the ARID ZONES Cluster on the side of the alley





Photo by Pietro Baroni, 03.2015  
view of the facades of the pavilions and the thematic exhibition (in the background)



Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of George Steinmetz



Photo by Fot. Daniele Mascolo, 05.2015  
view on the thematic exhibition and the exhibition stand of UN



Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of George Steinmetz

GEORDANIA  
JORDAN



Photo by Pietro Baroni, 03.2015  
view of the graphic panel of the pavilion of Jordan

# FRUITS AND LEGUMES Cluster.

## Development of the architectural concept of the thematic exhibition



### THE FRUITS & LEGUMES CLUSTER: FRUITS & LEGUMES / UNITED SUPPORT



#### THEME OVERVIEW

Legumes, nuts, fruits and vegetables are a significant part of daily diet for most human around the world, especially as sources of vitamins. They are rich in fiber, a component of no nutritional value to humans but essential to health in that they reduce the risk of contracting colorectal cancer, diabetes and other cardiovascular diseases. Legumes contain a significant level of B complex vitamins and a quantity of protein equal to and sometimes exceeding that of meat. Fruits and vegetables can contribute to a healthy life style providing vitamin C, A, thiamine (B1), niacin (B3), pyridoxine (B6), folacin (B9), E, minerals, and fiber. Fruits and vegetables also supply magnesium and iron. Legume vegetables and tree nuts (such as almond, filbert, pecan, pistachio, and walnut) contribute with moderate amount of per capita availability of proteins in the average diet but their proteins are of high quality as their content of

essential amino acids.

#### THE FRUITS AND LEGUMES CLUSTER ARCHITECTURAL CONCEPT

The order created by the singular unity of the pavilions is used to build the sequence of public spaces, identified by a large scale suspended timber grid that brings to mind the pergola of the vineyard and the visual joke of the shadows that we find in the cultivated bosco.

### CLUSTER PROJECT WORKING GROUP

#### EXHIBITION CONTENT

Università Vita Salute S. Raffaele, Italy

**SCIENTIFIC RESPONSIBLE AND RESEARCH COORDINATION:** Roberto Mordacci

**RESEARCH:** Francesca Pongiglione, Eleonora Viganò

**CONTRIBUTORS:** Marco Acutis, Andrea Giussani, Mauro Marengo, Alessandra Marti, Chiara Mazzocchi, Gianvincenzo Zuccotti

#### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy

**DESIGN CREDITS:** Massimo Ferrari, Matteo Vercelloni

**CONTRIBUTORS:** Stefano De Feudis, Stefano Sala, Claudia Tinazzi

#### EXPO 2015 S.p.A.

**COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:** Thematic Space Department

**DIRECTOR:** Matteo Gatto

**ARCHITECTURE COORDINATOR:** Marco Chiodi

**CONTRIBUTOR:** Michele Di Santis

**EXHIBITION DESIGN COORDINATOR:** Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska, Alessandro Benetti, Milena Sacchi

**CONTENT DEVELOPMENT COORDINATION:** Department of International Affairs

**PROJECT MANAGER AND SCIENTIFIC COORDINATOR:** Filippo Ciantia

**CONTRIBUTORS (COUNTRY OFFICERS):** Barbara Borra, Veronica Corallo, Mohamed Elshimy, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquere, Paolo Sabatini, Chiara Loreta

**ENGINEERING:** Fiera Milano S.p.A.

**SCHEME DESIGN:** Francesco Mazullo

**DESIGN COORDINATOR:** Maurizio Salvi

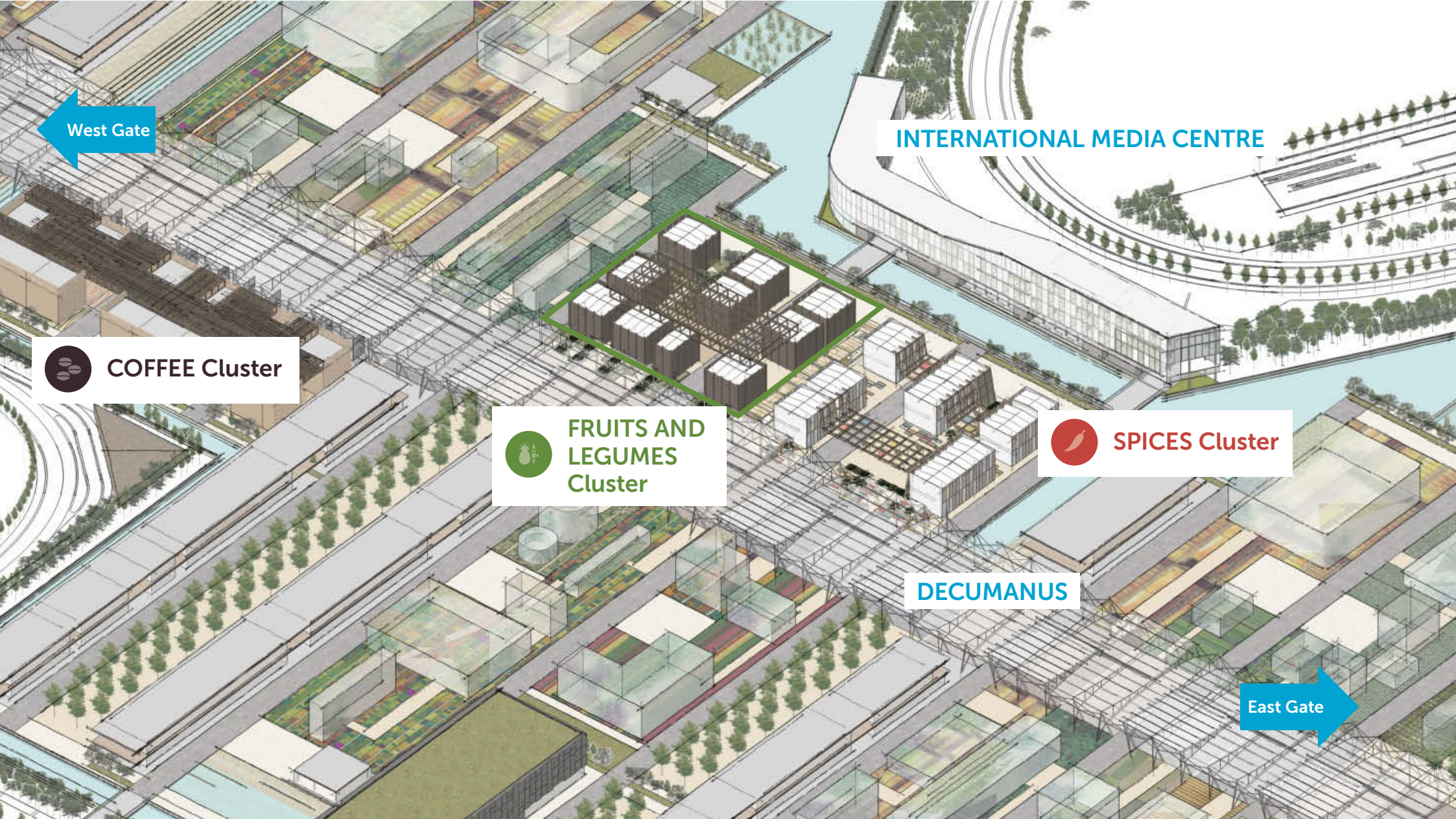
**CONTRIBUTORS:** Livia Livini, Anna Gatti

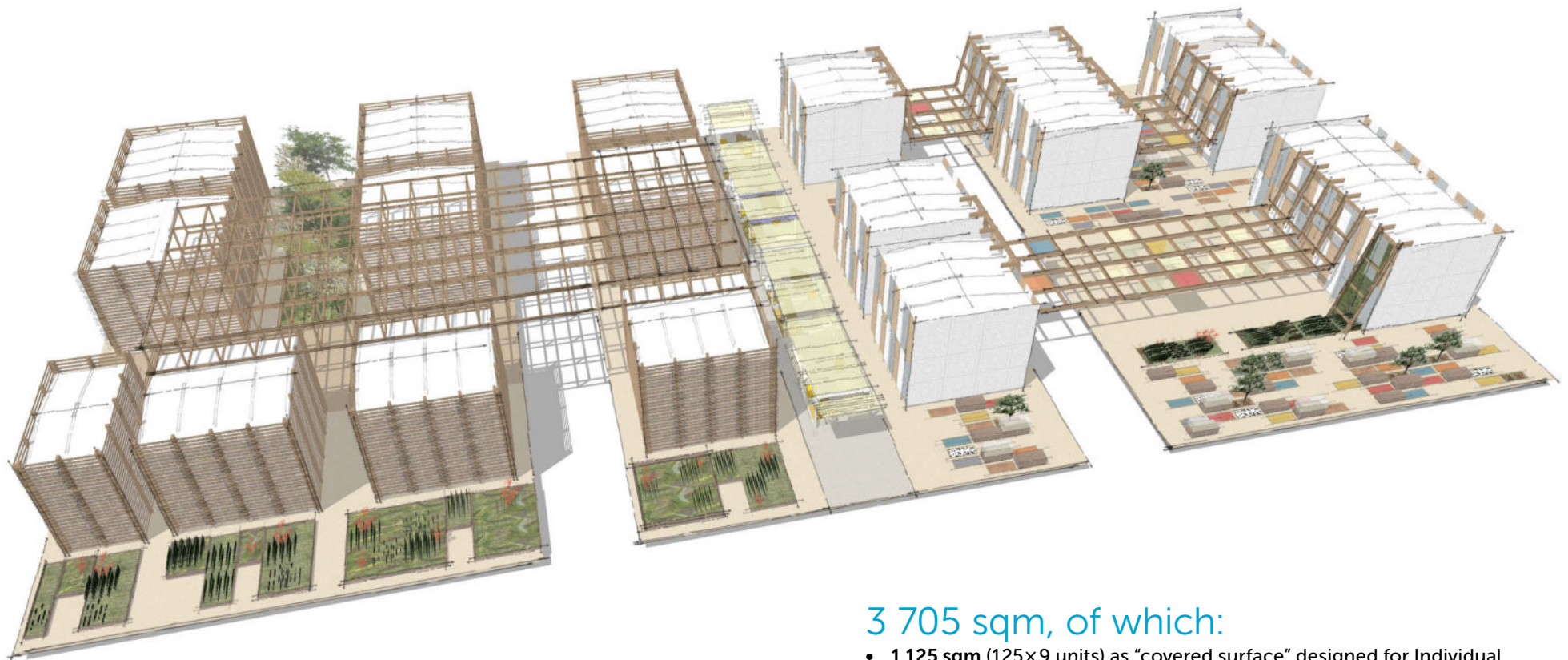




# FRUITS AND LEGUMES Cluster.

Location on the Expo site and situational context





## 3 705 sqm, of which:

- 1 125 sqm (125x9 units) as "covered surface" designed for Individual Exhibition Spaces (2 250 sqm on two levels)
- 2 515 sqm of the Common Area
- 65 sqm as "covered surface" for technical spaces



# FRUITS AND LEGUMES Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster

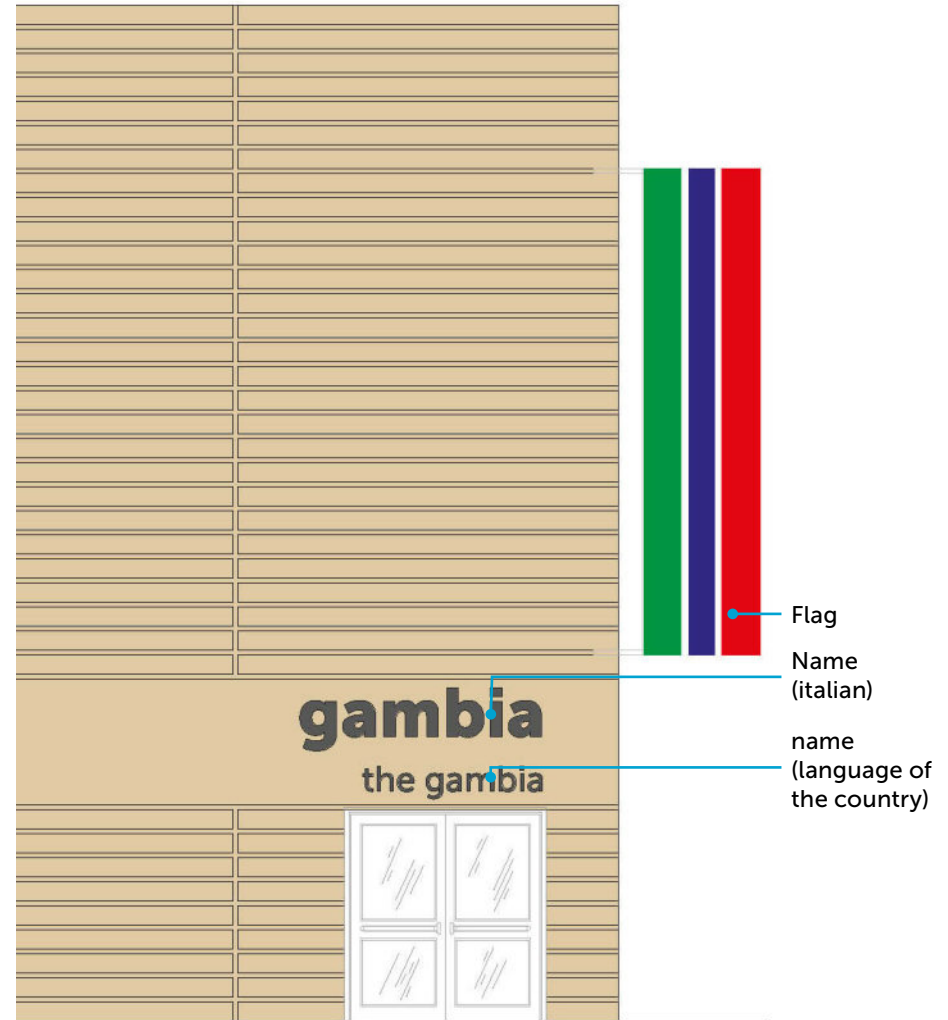




Photo by Daniele Mascolo, 05.2015  
view of the Cluster from the side alley



# FRUITS AND LEGUMES Cluster. Photo documentation



Photo by Pietro Baroni, 03.2015  
view of the internal area of the Cluster



Photo by Daniele Mascolo, 05.2015  
view of Irene Kung collection of photographs and exhibition panels





Photo by Pietro Baroni, 03.2015  
view on the thematic exhibition and Irene Kung's photography



Il maggiore produttore mondiale di legumi è l'Italia, con 17 milioni di tonnellate. I legumi producono i fertilizzanti di cui necessitano.

The world's leading producer of legumes is Italy, with 17 million tons. Legumes self-produce the fertilizers they require.

Photo by Pietro Baroni, 03.2015  
view on information panels of the thematic exhibition and a green part of the exhibition



Photo by Daniele Mascolo, 05.2015  
customization of Zambia Pavilion



# SPICES Cluster. Development of the architectural concept of the thematic exhibition



## THE SPICES CLUSTER: THE WORLD OF SPICES / SPICE VOYAGE



### THEME OVERVIEW

The history of the spice trade is a tale of explorations and myths. The value of this product was given by its rarity and its legendary features: medical qualities, cooking usage and even magical powers. Spices have been for centuries the engine of the geographical definition of the globe: unnecessary yet precious, the discovery of their origins took Europeans more than 17 centuries. From the Egyptian expedition to the land of Punt to the Dutch East India Company, explorers traveled great lengths and risked their lives in order to access the great wealth guaranteed by spices. This commerce put in contact different cultures and was the reason for the spreading of religions such as Islam or for the development of great commercial civilizations like the Venice republic or the Portuguese kingdom. Spices lead to important

technological evolutions and highly influenced the shape of the European as well as the Arab and Oriental cities.

### THE SPICES CLUSTER ARCHITECTURAL CONCEPT

Spice Voyage offers the visitor an experience of a journey into a contemporary connected world. A knowledge journey through a sequence of 'experiential zones', with tasting points, installations, technological displays and events, revealing, how different cultures cultivate, prepare and use spices in food, medicines and socio-cultural rituals.

## CLUSTER PROJECT WORKING GROUP

### EXHIBITION CONTENT

Università IUAV di Venezia

### SCIENTIFIC RESPONSIBLE AND RESEARCH

COORDINATION: Benno Albrecht

RESEARCH: Benno Albrecht, Silvia Dalzero, Jacopo Galli, Nicola Pavan

### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy

DESIGN CREDITS: Michele Brunello

CONTRIBUTORS: Silvia Bertolotti, Guadalupe Ciocchetto, Giulia Dogliotti, Corrado Longa, Monia Muraro, Pierluigi Salvadeo, Massimiliano Savino

### EXPO 2015 S.p.A.

### COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:

Thematic Space Department

DIRECTOR: Matteo Gatto

ARCHITECTURE COORDINATOR: Marco Chioldi

CONTRIBUTOR: Michele Di Santis

EXHIBITION DESIGN COORDINATOR:

Luca Molinari

CONTRIBUTORS: Dominika Sobolewska, Alessandro Benetti, Milena Sacchi

CONTENT DEVELOPMENT COORDINATION:

Department of International Affairs

PROJECT MANAGER AND SCIENTIFIC COORDINATOR: Filippo Ciantia

### CONTRIBUTORS (COUNTRY OFFICERS):

Barbara Borra, Veronica Corallo, Mohamed Elshirny, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquerel, Paolo Sabatini, Chiara Loreta

### ENGINEERING:

Fiera Milano S.p.A.

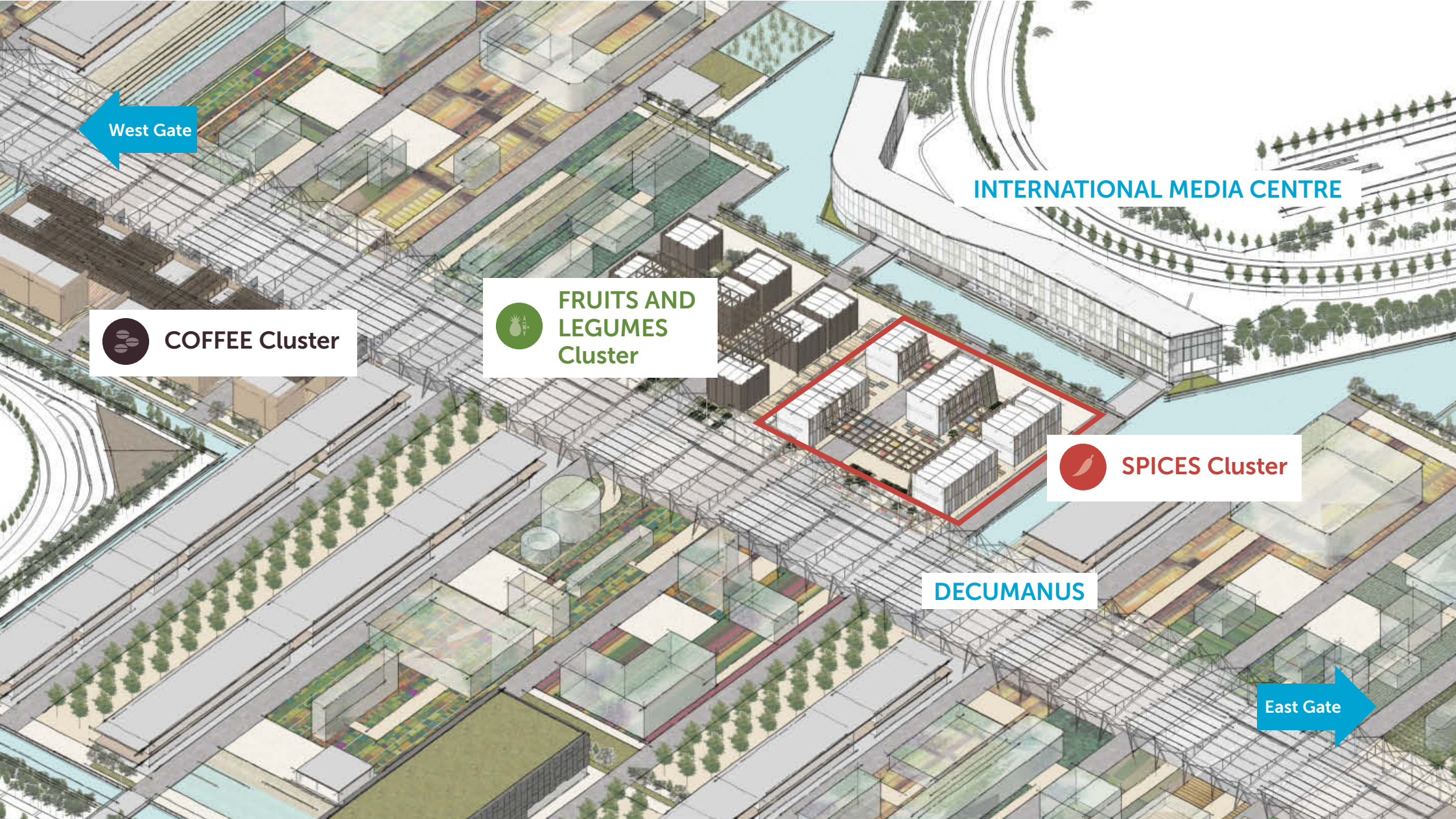
SCHEME DESIGN: Francesco Mazullo

DESIGN COORDINATOR: Maurizio Salvi

CONTRIBUTORS: Livia Livini, Anna Gatti

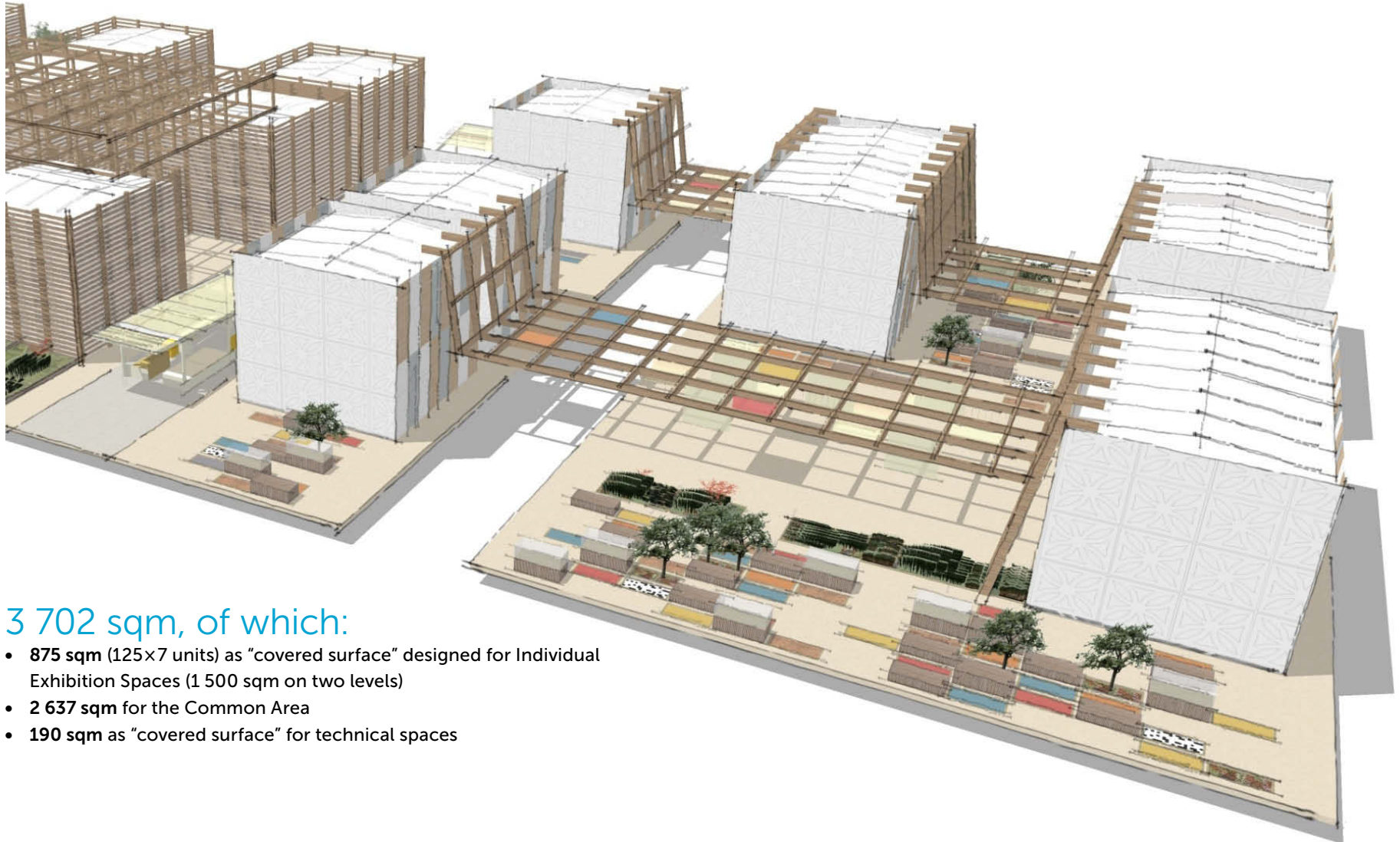


SPICES Cluster.  
Location on the Expo site and situational context





## SPICES Cluster. Spatial parameters



### 3 702 sqm, of which:

- 875 sqm (125x7 units) as "covered surface" designed for Individual Exhibition Spaces (1 500 sqm on two levels)
- 2 637 sqm for the Common Area
- 190 sqm as "covered surface" for technical spaces



-  KIRIBATI
-  NAURU
-  NIUE
-  MARSHALL ISLANDS
-  PAPUA NEW GUINEA
-  SAMOA
-  SOLOMON ISLANDS



Photo by Pietro Baroni, 03.2015  
view of one of the front facades of the Spice Cluster and the thematic exhibition



# SPICES Cluster. Photo documentation



Photo by Pietro Baroni, 03.2015  
view of the frontal fasades of the Cluster and the Alex Webb's photo exhibition







Photo by Pietro Baroni, 03.2015  
view on thematic exhibition



Photo by Pietro Baroni, 03.2015  
view on infographic panels with different structures



### THE BIO-MEDITERRANEUM CLUSTER: HEALTH, BEAUTY AND HARMONY / THE WHITE DREAM



#### THEME OVERVIEW

Mediterranean food is one of those cultural elements that have felicitously helped to preserve the special nature of the Mediterranean, mostly a food-based landscape. In the Mediterranean, the meal is not merely an act of nourishment, but involves many aspects of the cultural and social life, raised to the level of sanctity. The Mediterranean is the region where three continents meet, Europe, Africa and Asia, a dynamic interface and a melting pot of civilizations. It is a region of incomparable lands where histories, societies and natural environments are closely blended. There are about thirty States situated around this quasi-lake, with more than 450 million inhabitants, a third of whom dwell on the coasts. This is an enormous population in comparison with the tiny size of the sea (0.7% of the total surface area of oceans and seas). All the countries of the Mediterranean basin share ways of being and lifestyles.

#### THE BIO-MEDITERRANEUM CLUSTER ARCHITECTURAL CONCEPT

The cluster is inspired from the image of the Mediterranean city. Colours, flavours and smells create a unique cultural experience capable of synthesizing, in few minutes, the emotions and the elements of the Mediterranean spirit and culture.



### CLUSTER PROJECT WORKING GROUP

#### EXHIBITION CONTENT

Il Università degli Studi di Napoli  
**SCIENTIFIC RESPONSIBLE:**  
 Cherubino Gambardella

#### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy  
**DESIGN CREDITS:** Stefano Guidarini, Camillo Magni, Cherubino Gambardella, Lorenzo Capobianco, Simona Ottieri  
**CONTRIBUTORS:** Vittorio Di Gioia, Gianluca Ferriero, Maria Gelvi, Concetta Tavoletta Luca Varvello, Francesco M.G. Vozza

#### EXPO 2015 S.p.A.

**COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:**  
 Thematic Space Department  
**DIRECTOR:** Matteo Gatto

**ARCHITECTURE COORDINATOR:** Marco Chiodi

**CONTRIBUTOR:** Michele Di Santis

**EXHIBITION DESIGN COORDINATOR:**  
 Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska, Alessandro Benetti, Milena Sacchi

**CONTENT DEVELOPMENT COORDINATION:**  
 Department of International Affairs

**PROJECT MANAGER AND SCIENTIFIC COORDINATOR:** Filippo Ciantia

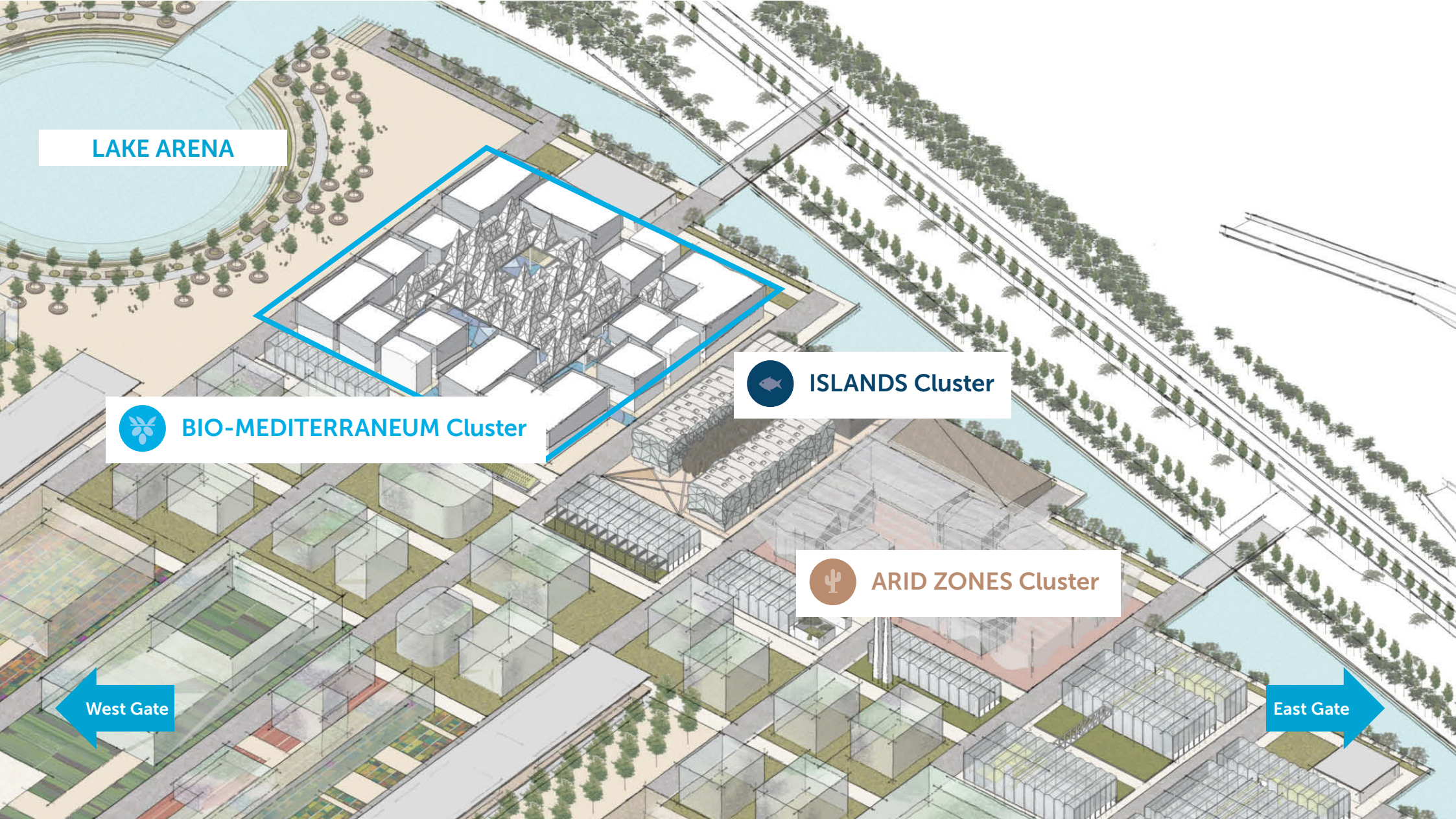
**CONTRIBUTORS (COUNTRY OFFICERS):**Barbara Borra, Veronica Corallo, Mohamed Elshimy, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquerel, Paolo Sabatini, Chiara Loreta

**ENGINEERING:**  
 Fiera Milano S.p.A.

**SCHEME DESIGN:** Francesco Mazullo  
**DESIGN COORDINATOR:** Maurizio Salvi  
**CONTRIBUTORS:** Livia Livini, Anna Gatti



# BIOMEDITERRANEUM Cluster. Location on the Expo site and situational context



LAKE ARENA



BIOMEDITERRANEUM Cluster



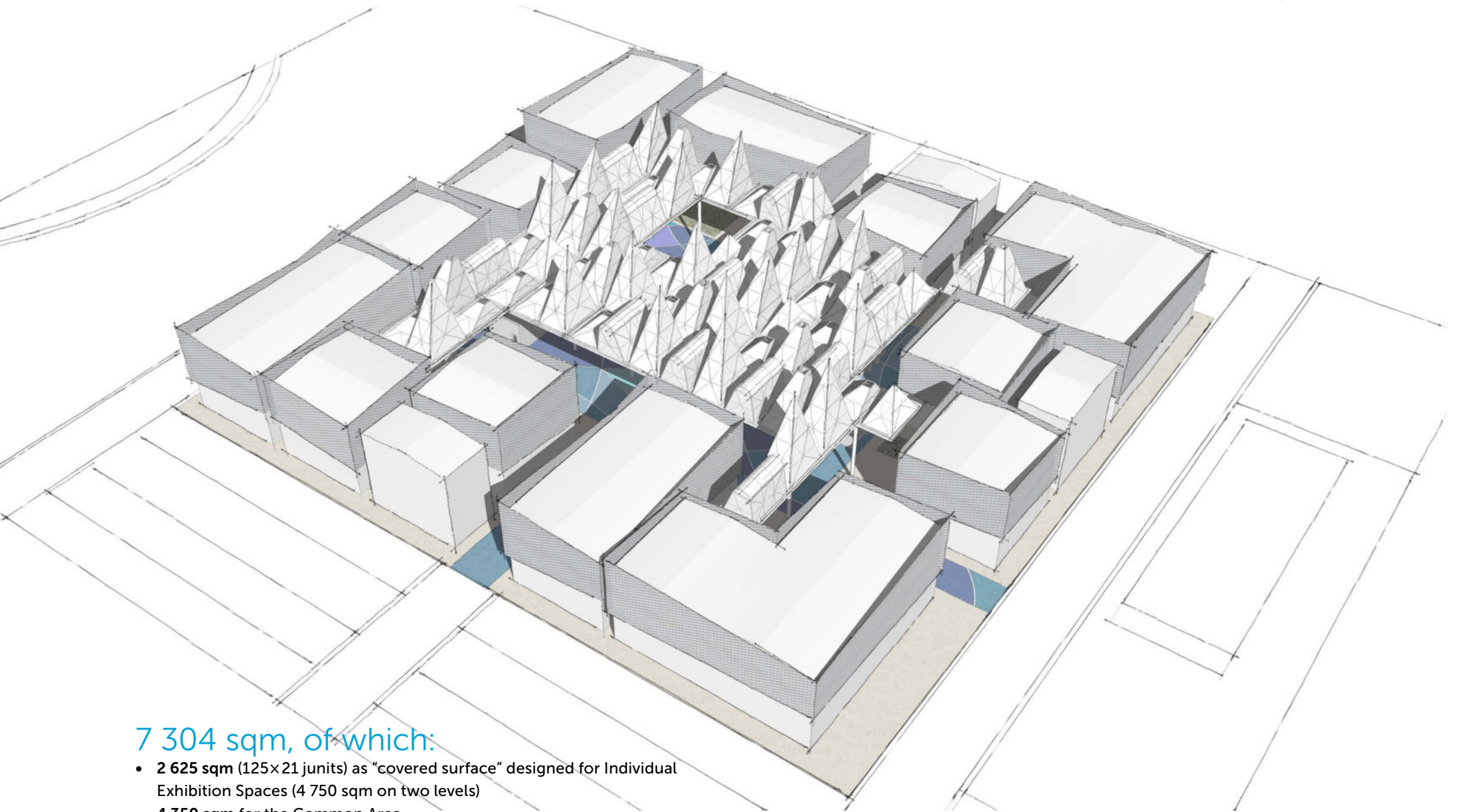
ISLANDS Cluster



ARID ZONES Cluster

West Gate

East Gate



**7 304 sqm, of which:**

- **2 625 sqm** (125x21 units) as “covered surface” designed for Individual Exhibition Spaces (4 750 sqm on two levels)
- **4 350 sqm** for the Common Area
- **330 sqm** as “covered surface” for technical spaces



# BIOMEDITERRANEUM Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster

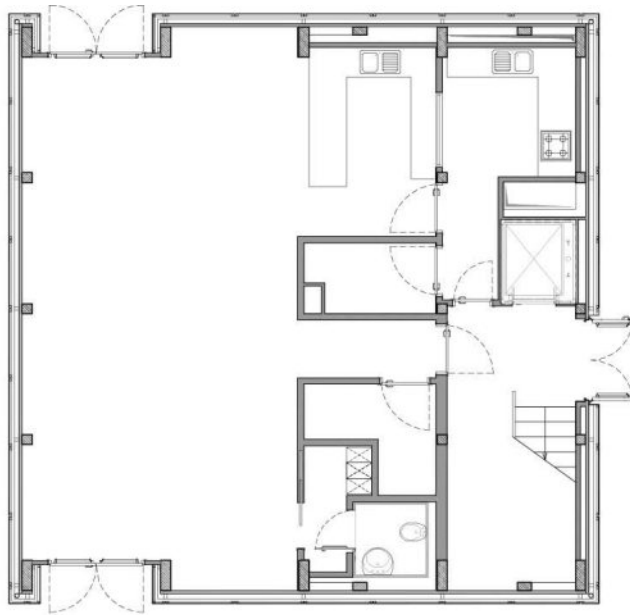




Photo by Daniele Mascolo, 05.2015  
view of the Cluster from the side alley

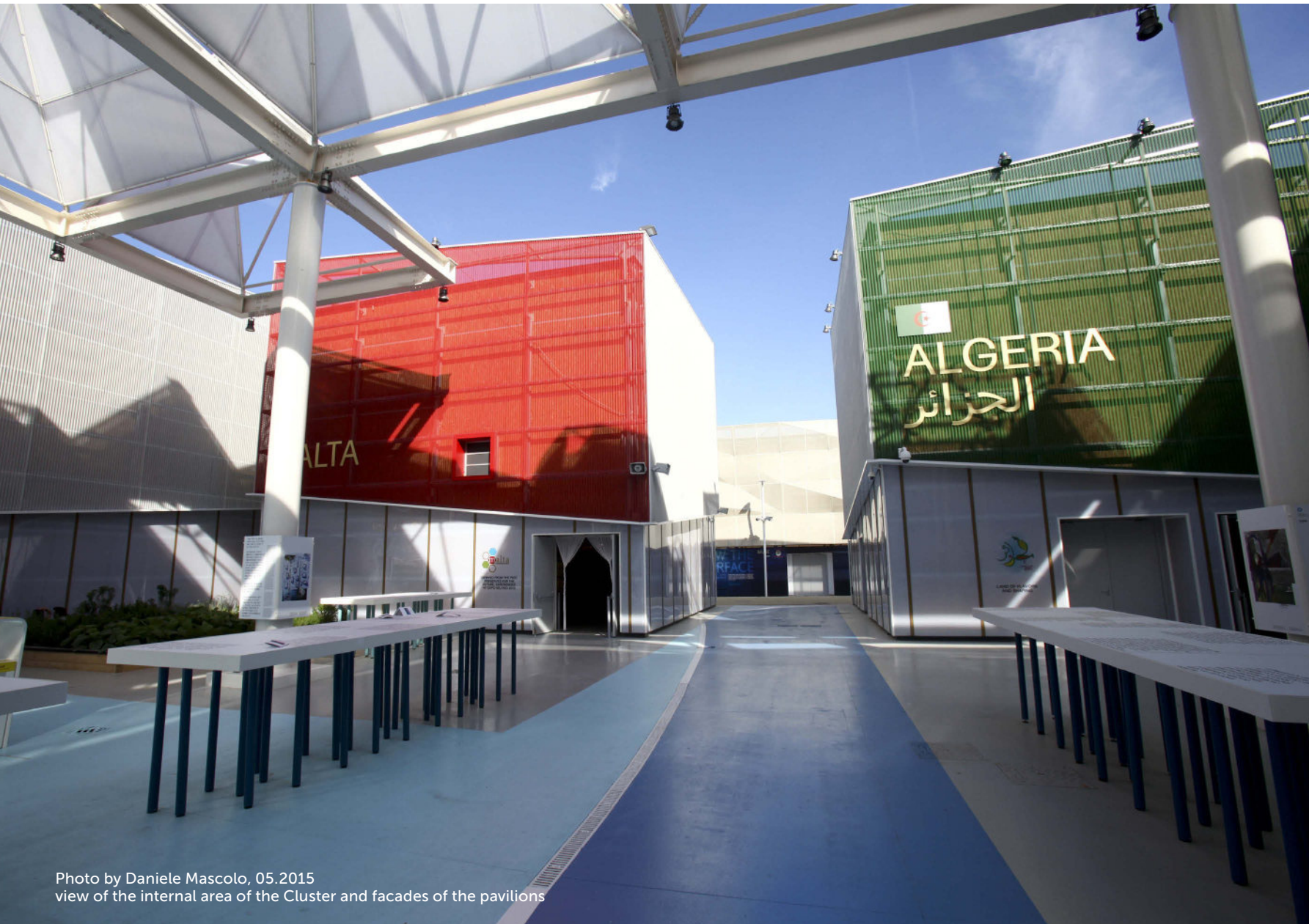


Photo by Daniele Mascolo, 05.2015  
view of the internal area of the Cluster and facades of the pavilions



Photo by Daniele Mascolo, 05.2015  
view of the thematic exhibition





Photo by Pietro Baroni, 03.2015  
view of the facades of the pavilions of Serbia and Algeria



# MONTENEGRO CRNA GORA

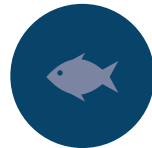
SCIANNA  
THE MEDITERRANEAN  
MARKET



Mediterraneo, un mare di storie  
Mediterranean, a sea of stories  
Ferdinando Scianna - Magnum Photos

RITI  
RITUALS

Photo by Pietro Baroni, 03.2015  
view of the photo exhibition of Ferdinando Scianna



### THE ISLANDS, SEA AND FOOD CLUSTER: ISLANDS, SEA AND FOOD / RHYTHM OF DISCOVERY



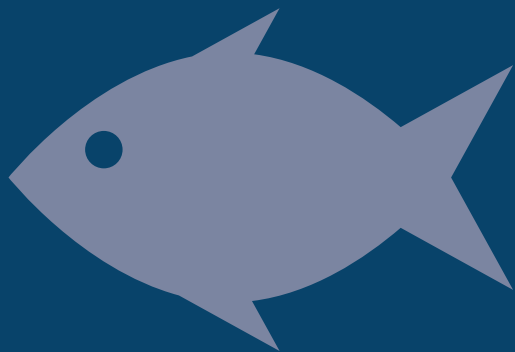
#### THEME OVERVIEW

Island countries are extremely varied in terms of dimensions and natural resources. Some depend on the agricultural sector, on forestry and fishery; others rely mainly on the touristic sector. Fishery offers good income opportunities. The consumption of fish in the island countries is very high, and fish export in several cases represents the 70% of total export. The pattern of agriculture varies between the islands depending on climatic conditions for producing particular crops. The growth of coastal flooding, soil salinity and erosion may contaminate and reduce the productive agricultural surfaces and harm the food security of the population. Agricultural production depends largely on summer precipitations. To solve the obstacles to the development of the rural sector investments need to be directed to the recovery and the construction of rural infrastructures like water

management systems, rural transportation, warehousing and cereals processing. Also diversified agricultural systems will have more possibilities of resisting in scenarios of climate change.

#### THE ISLANDS, SEA AND FOOD CLUSTER ARCHITECTURAL CONCEPT

Rhythm of discovery is a journey through which people are involved in experiencing islands through senses. The idea is "feeding the soul". It is explored and materialized through the sounds exploiting nature's potential, and by involving the visitors in an intriguing experience with the landscape.



### CLUSTER PROJECT WORKING GROUP

#### EXHIBITION CONTENT

Università di Lingue e Comunicazione, IULM, Italy

**SCIENTIFIC RESPONSIBLE AND RESEARCH COORDINATION:** Vincenzo Russo

**RESEARCHERS AND CONTRIBUTORS:** Daniela Agrimi, Maria Tilde Bettetini, Ada Cattaneo, Guido Cornara, Massimiliano Falcone, Barbara Ghiringhelli, Marco Giudici, Bursi Giulio, Marco Maggioli, Sergio Marelli, Vincenzo Russo, Vincenzo Trione

#### ARCHITECTURAL CONCEPT AND DESIGN UPDATE

Politecnico di Milano, Italy

**DESIGN CREDITS:** Marco Imperadori, Valentina Gallotti, Giuliana Ianaccone

#### EXPO 2015 S.p.A.

**COORDINATION OF THE RESEARCH ACTIVITIES AND THE DESIGN PROCESS:**

Thematic Space Department

**DIRECTOR:** Matteo Gatto

**ARCHITECTURE COORDINATOR:** Marco Chiodi

**CONTRIBUTOR:** Michele Di Santis

**EXHIBITION DESIGN COORDINATOR:**

Luca Molinari

**CONTRIBUTORS:** Dominika Sobolewska, Alessandro Benetti, Milena Sacchi

**CONTENT DEVELOPMENT COORDINATION:**

Department of International Affairs

**PROJECT MANAGER AND SCIENTIFIC**

**COORDINATOR:** Filippo Ciantia

**CONTRIBUTORS (COUNTRY OFFICERS):** Barbara Borra, Veronica Corallo, Mohamed Eishimy, Beatrice Gemma, Chiara Lamera, Simone Mancini, Severine Pesquerel, Paolo Sabatini, Chiara Loreta

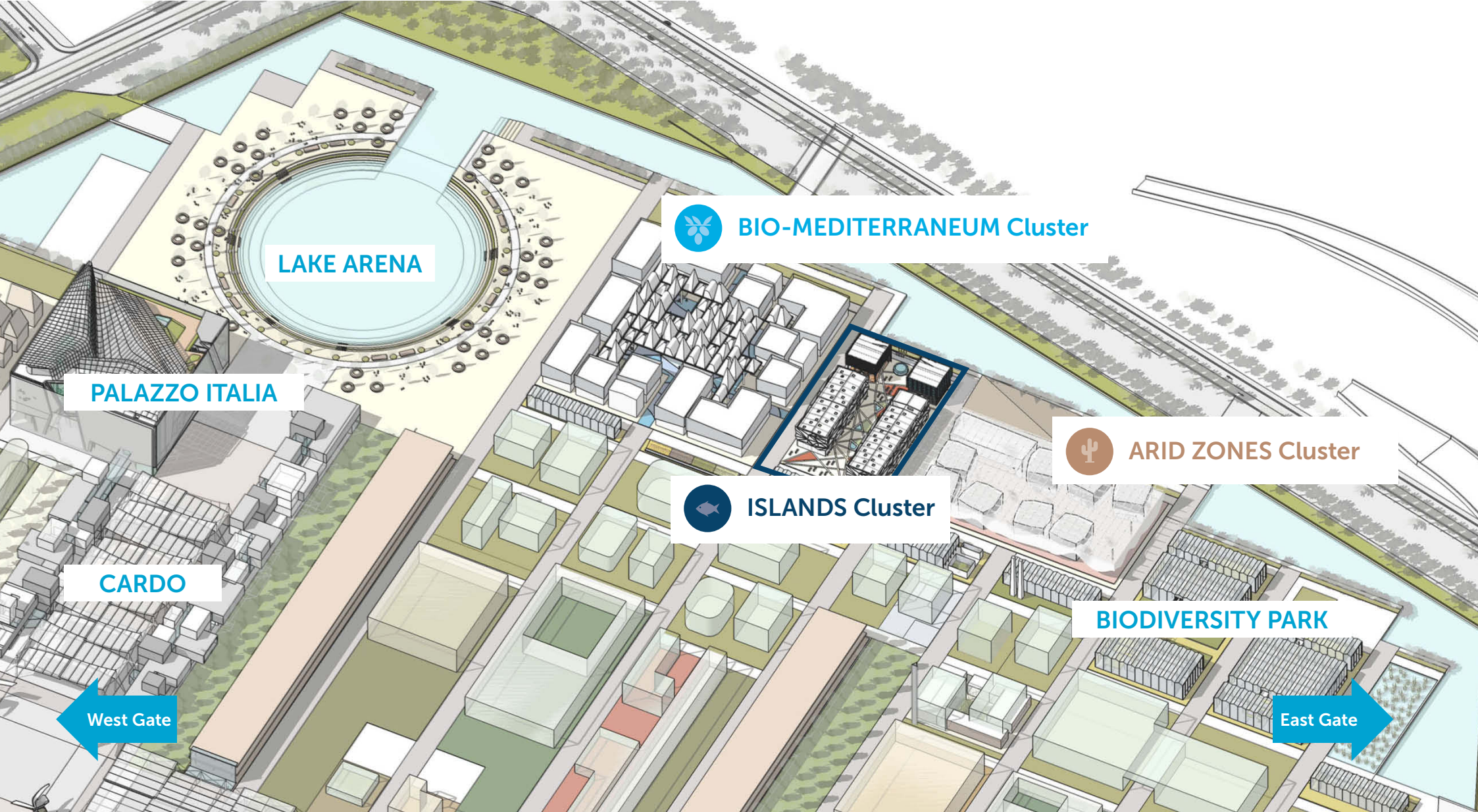
**ENGINEERING:** Fiera Milano S.p.A.

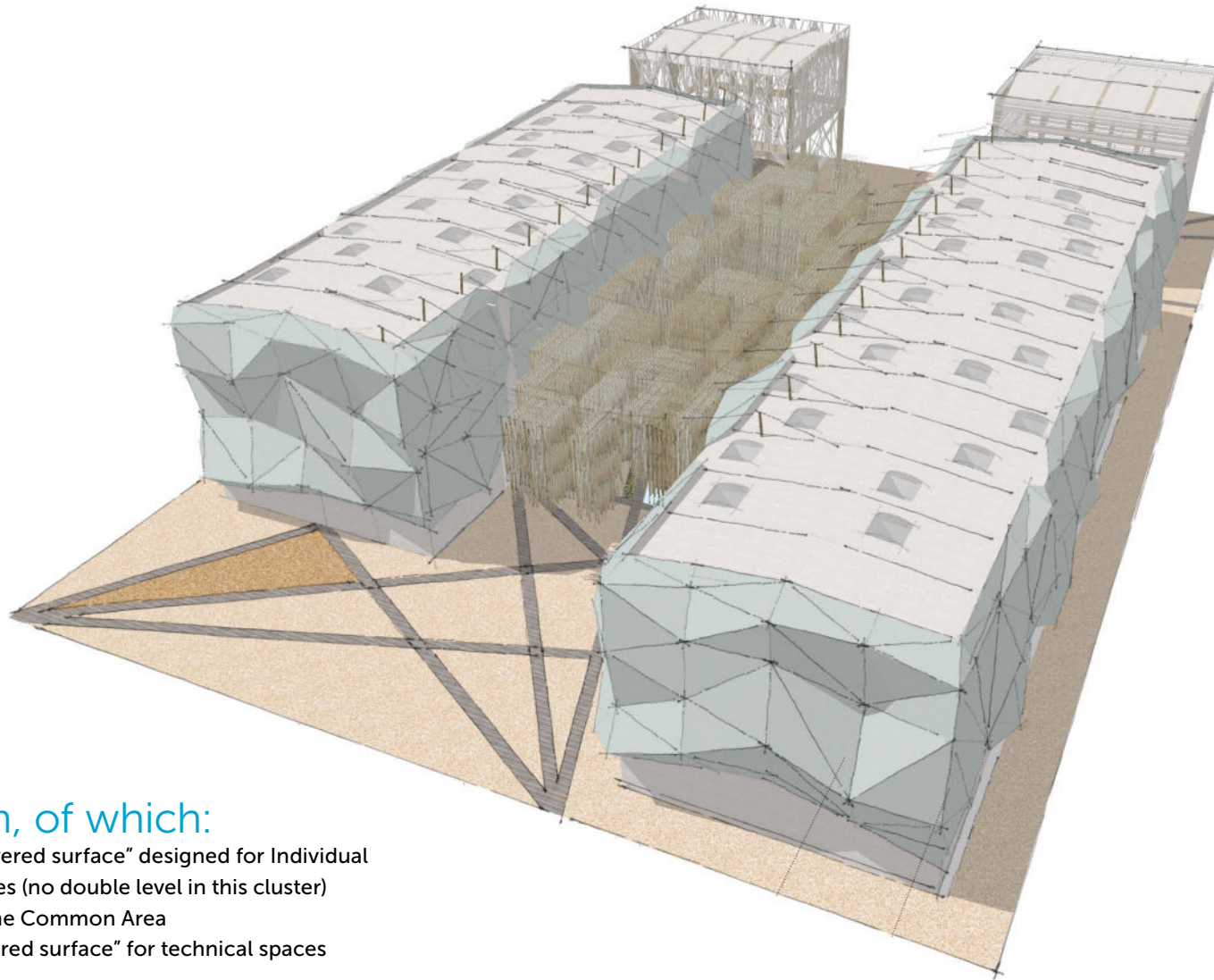
**SCHEME DESIGN:** Francesco Mazullo  
**DESIGN COORDINATOR:** Maurizio Salvi  
**CONTRIBUTORS:** Livia Livini, Anna Gatti





# ISLANDS Cluster. Location on the Expo site and situational context





**2 535 sqm, of which:**

- **750 sqm** as "covered surface" designed for Individual Exhibition Spaces (no double level in this cluster)
- **1 720 sqm** for the Common Area
- **65 sqm** as "covered surface" for technical spaces



# ISLANDS Cluster. Guidelines for customization of the pavilions for the countries grouped within the Cluster

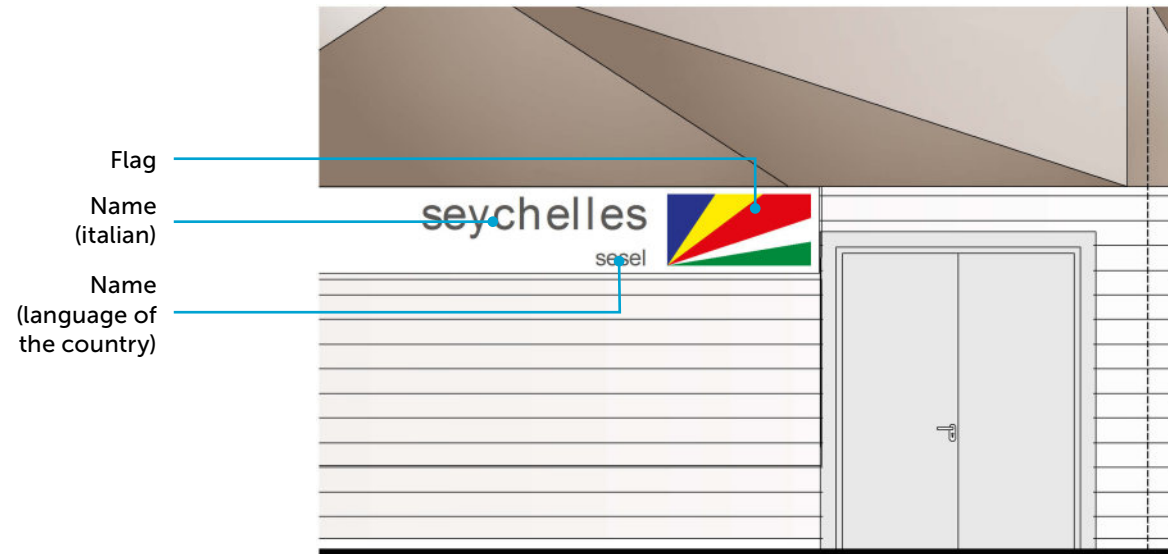
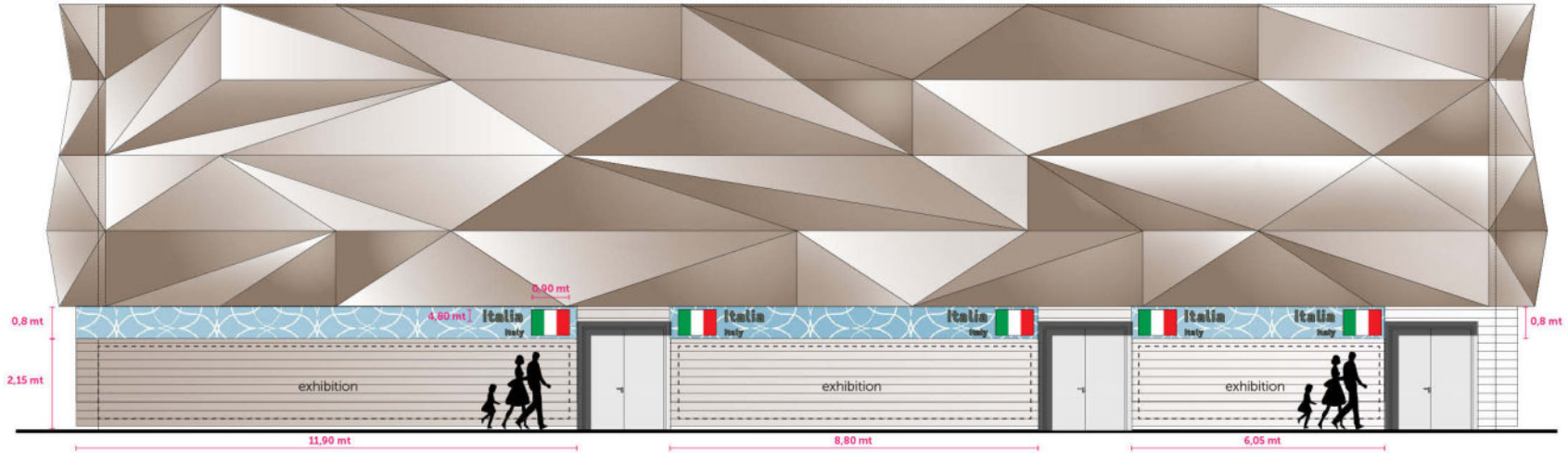




Photo by Daniele Mascolo, 05.2015  
view of the entrance zone of the Cluster



# ISLANDS Cluster. Photo documentation



Photo by Pietro Baroni, 03.2015  
view of the entrance zone of the Cluster and photo exhibition of Alessandra Sanguinetti







Photo by Pietro Baroni, 03.2015  
view of the elements of the thematic exhibition  
(panels with infographics)



Photo by Pietro Baroni, 03.2015, view of the facade of the Guyana pavilion with elements of the thematic exhibition (infographics) and one of the photos of Alessandra Sanguinetti



Photo by Pietro Baroni, 03.2015  
view of the entrance zone of the Cluster and photo exhibition of Alessandra Sanguinetti

Mitsuhara  
Alessandra Sanguinetti  
Santoboni



## Theme of the research:

*Distribution of the services and commercial areas on the Expo 2015 site.*

Dominika Sobolewska – Politecnico di Milano / ASP Wrocław  
In collaboration with Marco Gianni  
09.2014–01.2015

My short period of work in the Department of Distribution of Commercial and Space Services was a period of dynamic work, permanent meetings and visits to the Expo2015 construction plan. Although I worked there for only 4 months, I found that the experience gained during this period is worth to be documented. Certainly the character of my duties there differed from those performed during the exhibitory declination of Clusters. The main focus here was on continuous contact with external partners and mediating in negotiations between them and particular Expo bodies. My task in co-operation with architect Marco Gianni was to coordinate the distribution of allotments and service spaces at the Expo to make them available to potential commercial partners and public institutions. My main concern was finding a location for individual visitors in terms of their needs and confronting the expectations of individual partners with the executive capabilities and architectural restrictions of Expo 2015. It was the time of keeping a constant contact with Operations Department, Department for Marketing, Construction and International Matters, which was an amazing lesson in the multi-directional verification of the potential of each area. The exchange of information between the various authorities was extremely fast. Each time we consulted with people responsible for other aspects of the allotments analyzed (such as visitors flow, adaptability or availability of emergency services infrastructure), provided me

with valuable information, creating new insights into the organization and management of space.

As part of my work for the Department of the Architecture of Services (ASV), I dealt with 3 categories of lease areas for Expo 2015.

These were:

- service and trade pavilions ASV A, B2, C1, F2, G1, G2, H1, H2
- free construction plots on Expo 2015 area
- open space along Cardo and Decumano routes

During this period, I had the opportunity to mediate in cooperation with companies / institutions such as UN, Ferrero, Fiat, Technogym, Manpower, World Expo Museum, Trenitalia, COIN, Identita "Golose", Corriere della sera, Luis Vuitton and Unilever. In addition, I prepared an offer for the Food Truck initiative and I represented the interests of Expo 2015 while selecting locations for Dante Ferretti's scenography, sculptor Emilio Isgrò and spatial installation of architect Daniel Libesking.

Although I consider this activity to be one of the most difficult during my stay at Expo 2015, I think it was extremely valuable from the point of view of developing negotiation skills and finding compromises for difficult-to-reconcile visions.

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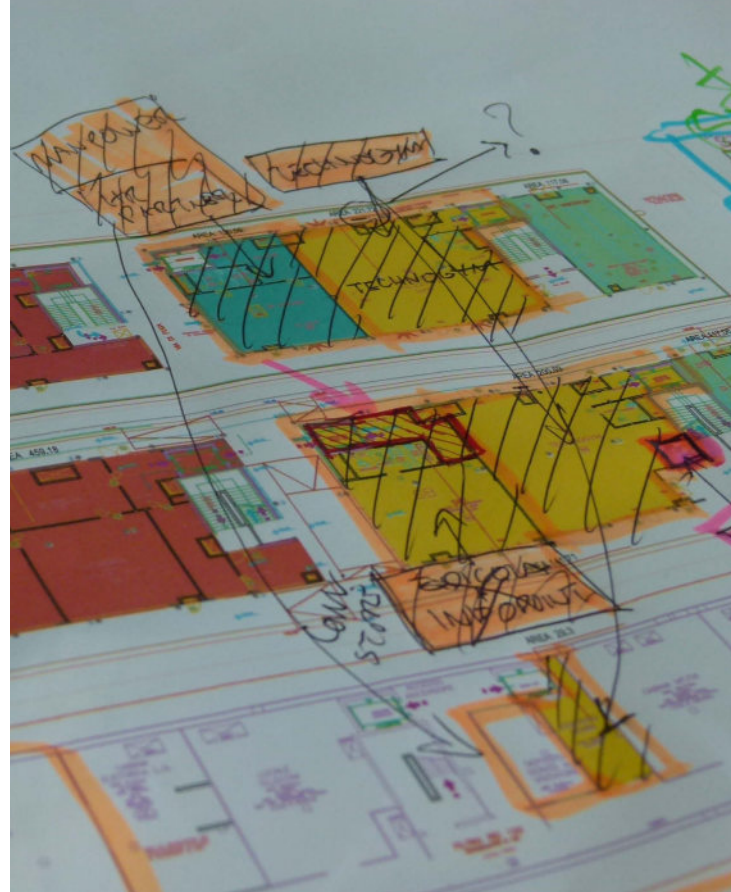
## An interview with me available as the tab Expo People from July, 2014



"Le architetture di servizio di Expo 2015 offriranno tutto ciò che è necessario ai visitatori: bar, ristoranti, accoglienza, servizi per la sicurezza. In queste settimane siamo impegnati nella progettazione dei dettagli dell'allestimento degli interni".

Dominika, direzione Aree Tematiche

"Expo 2015 service areas will offer to the visitor whatever he/she may need: bars, restaurants, welcoming areas, security services. In these weeks we are designing the details of the interiors setting".



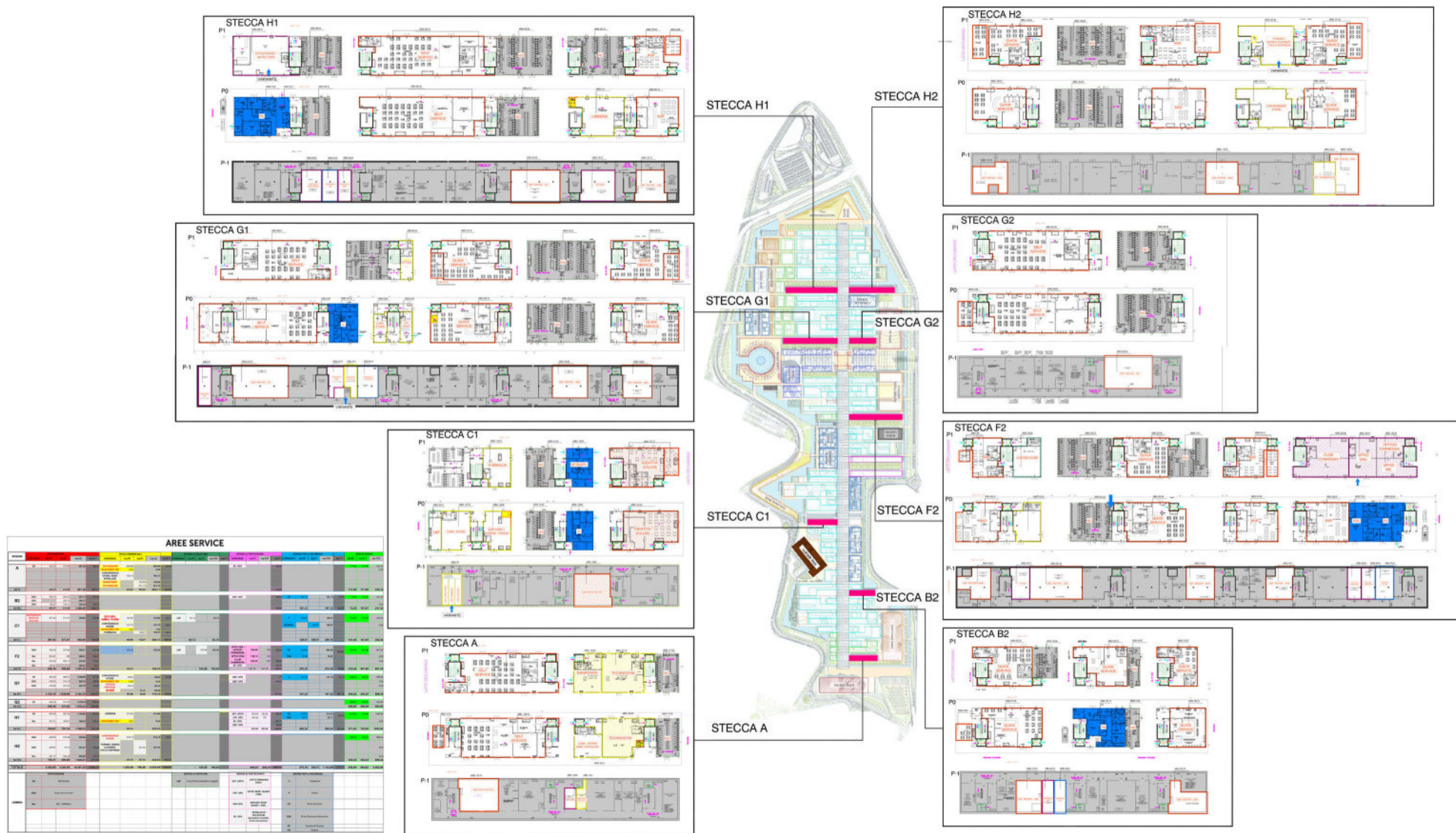
Elaboration of the maps of the services areas, 2014



Visualisation and photos of realisation of service-commercial pavilions, so-called ASV (Aree di Servizio)



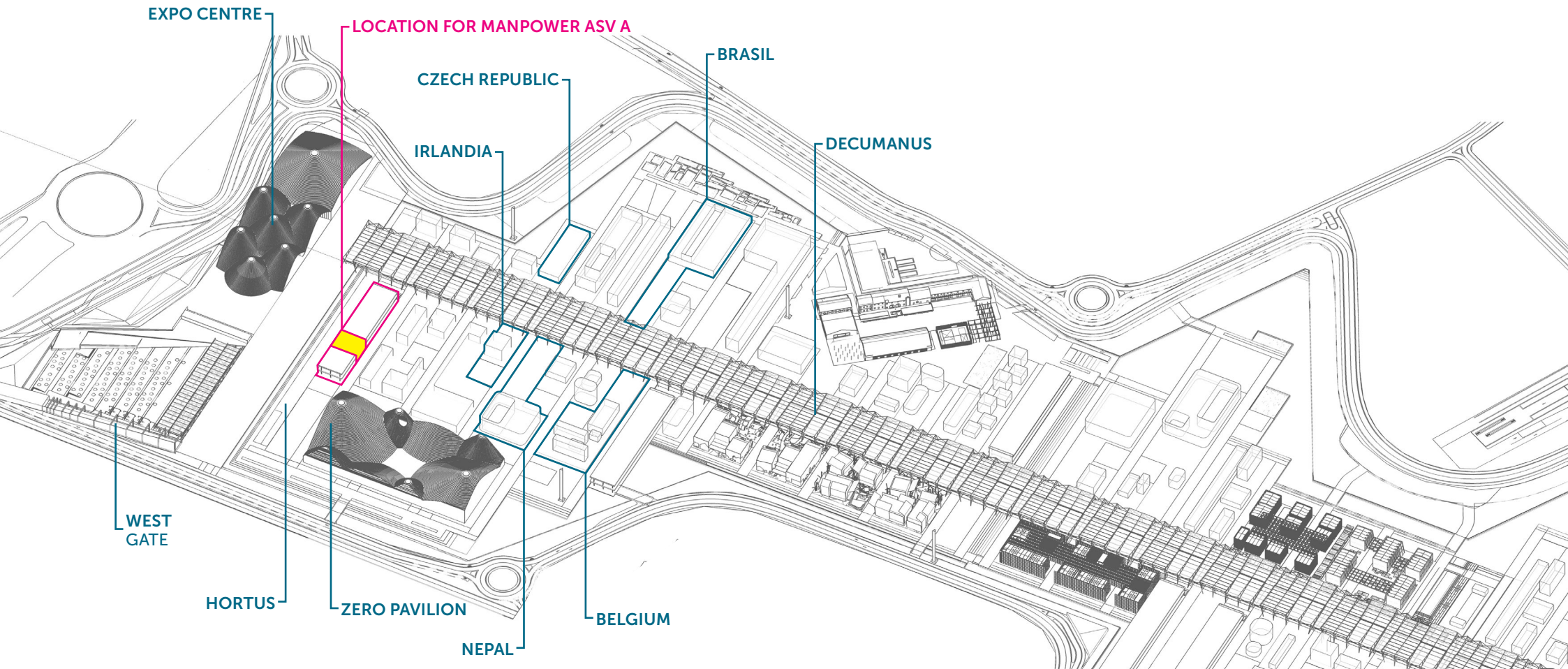
# Map of the Areas of Services (ASV) with table specifying the availability and size of individual service spaces



Map with information table updated daily, showing the scope and specificity of rooms in the following pavilions: ASV A, B2, C1, F2, G1, G2, H1, H2

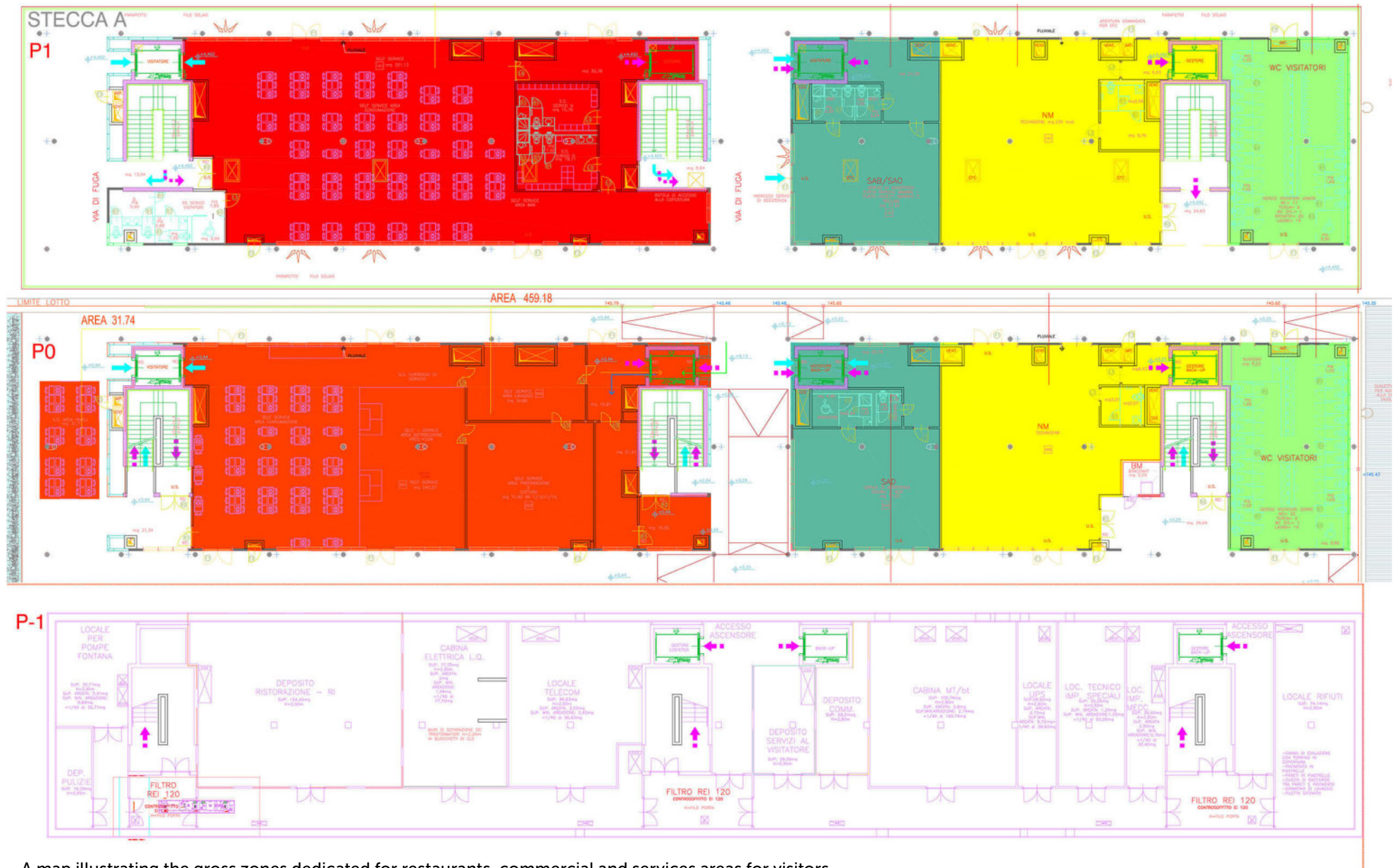


# Distribution of the services and commercial areas in ASV A. Study Case of Manpower



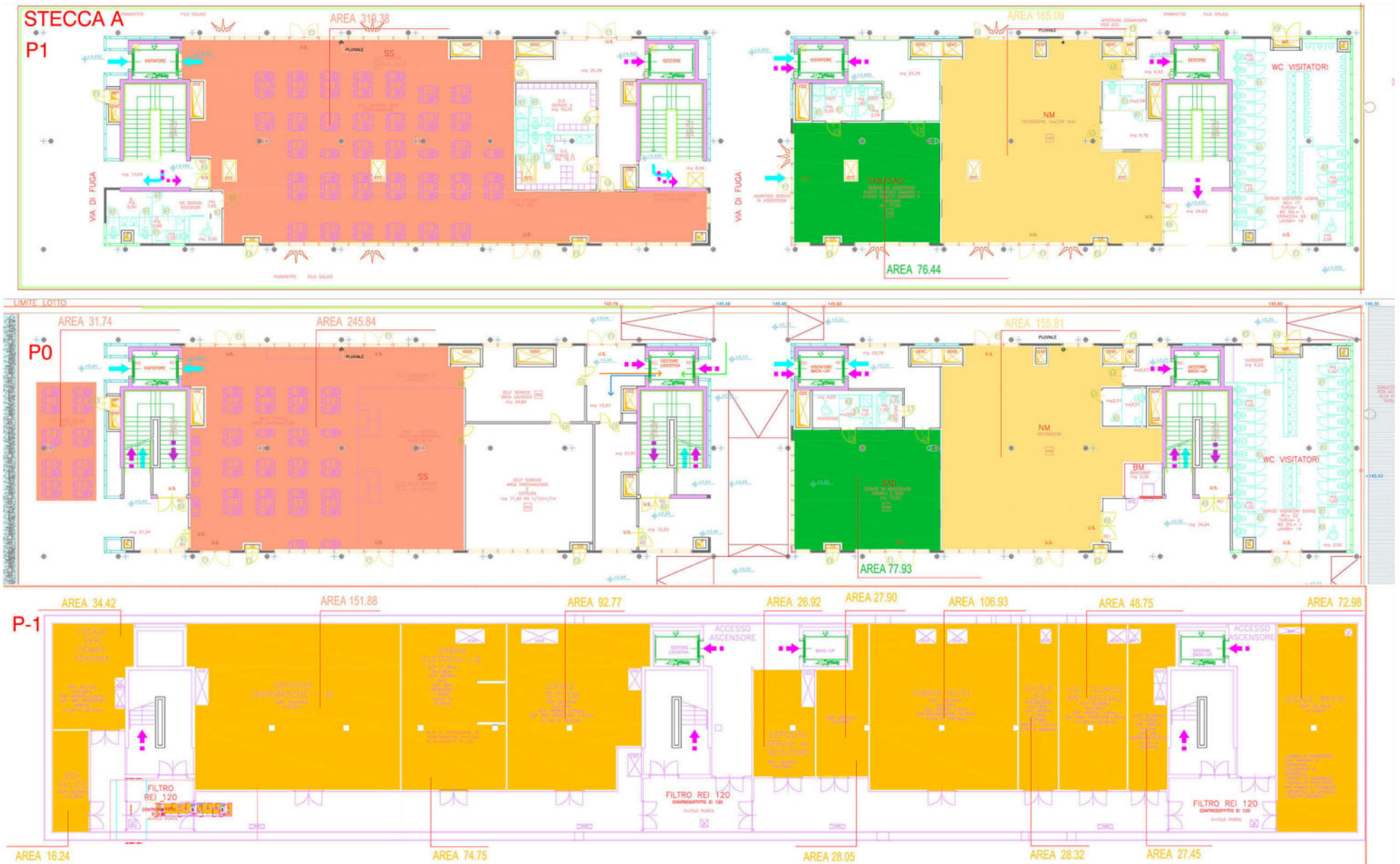
Pavilion A due to its location near the Western Entrance, Decumanus, Zero Pavilion and Expo Center is a strategic location both in terms of the visibility and the flow of visitors.

# Map of areas of services (ASV) – pavilion A



A map illustrating the gross zones dedicated for restaurants, commercial and services areas for visitors

# Map of areas of services (ASV) – pavilion A



A map illustrating the net zones dedicated for restaurants, commercial and services areas for visitors

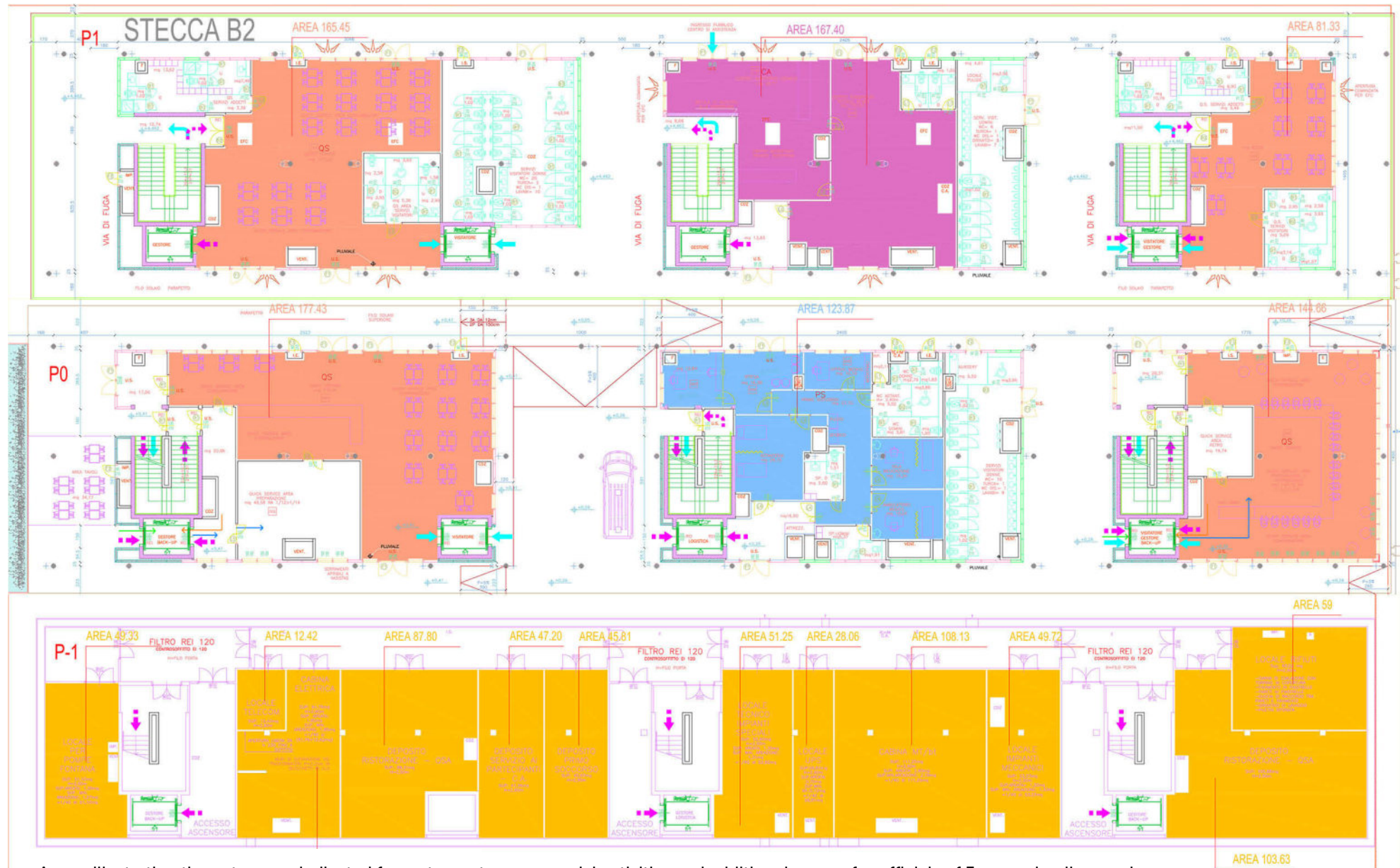


# Map of areas of services (ASV) – pavilion B2



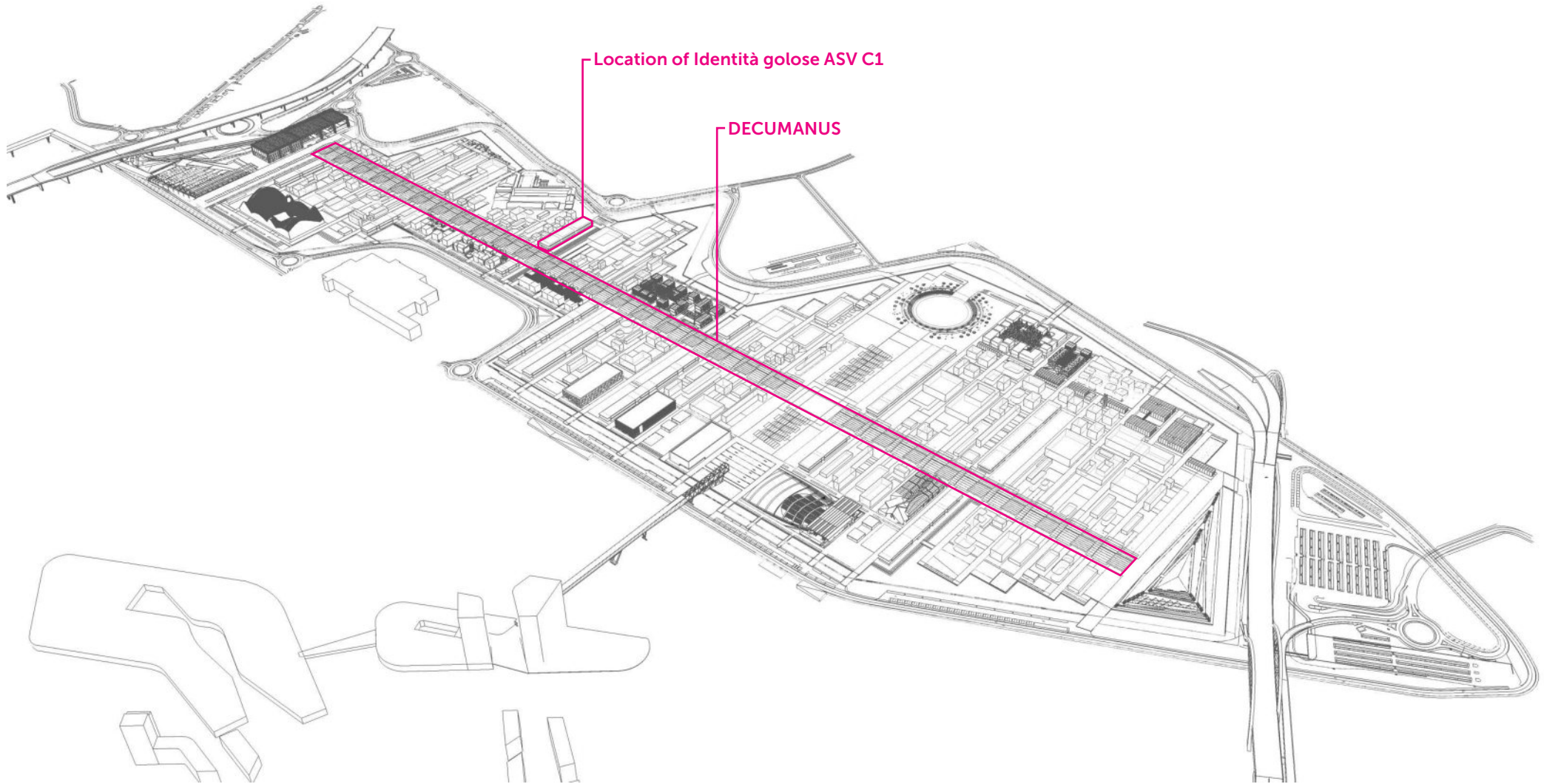
A map illustrating the gross zones dedicated for restaurants, commercial activities and additional spaces for officials of Expo and police services

# Map of areas of services (ASV) – pavilion B2



A map illustrating the net zones dedicated for restaurants, commercial activities and additional spaces for officials of Expo and police services

# Distribution of the restaurant areas in pavilion C1 Study Case of Identità'golose.





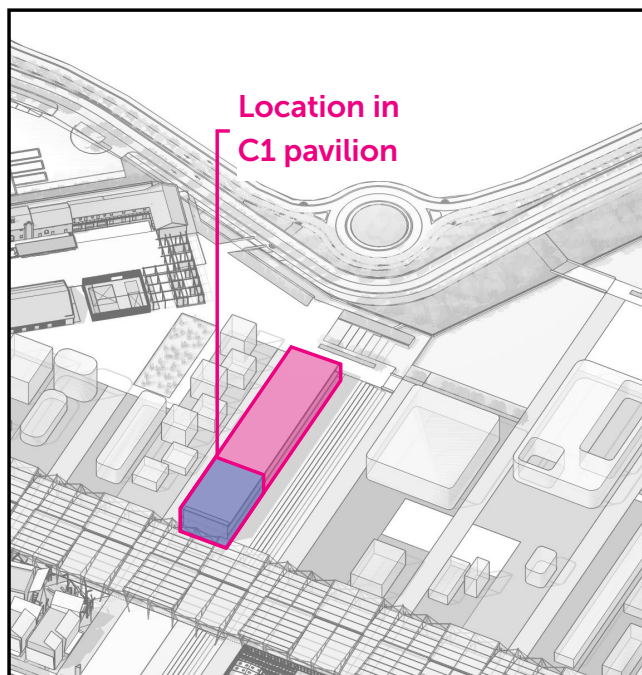
A map illustrating the gross zones dedicated for restaurants, commercial activities and spaces for police and sanitary services



# Map of areas of services (ASV) – pavilion C1



A map illustrating the net zones dedicated for restaurants, commercial activities and additional spaces for officials of Expo and police services

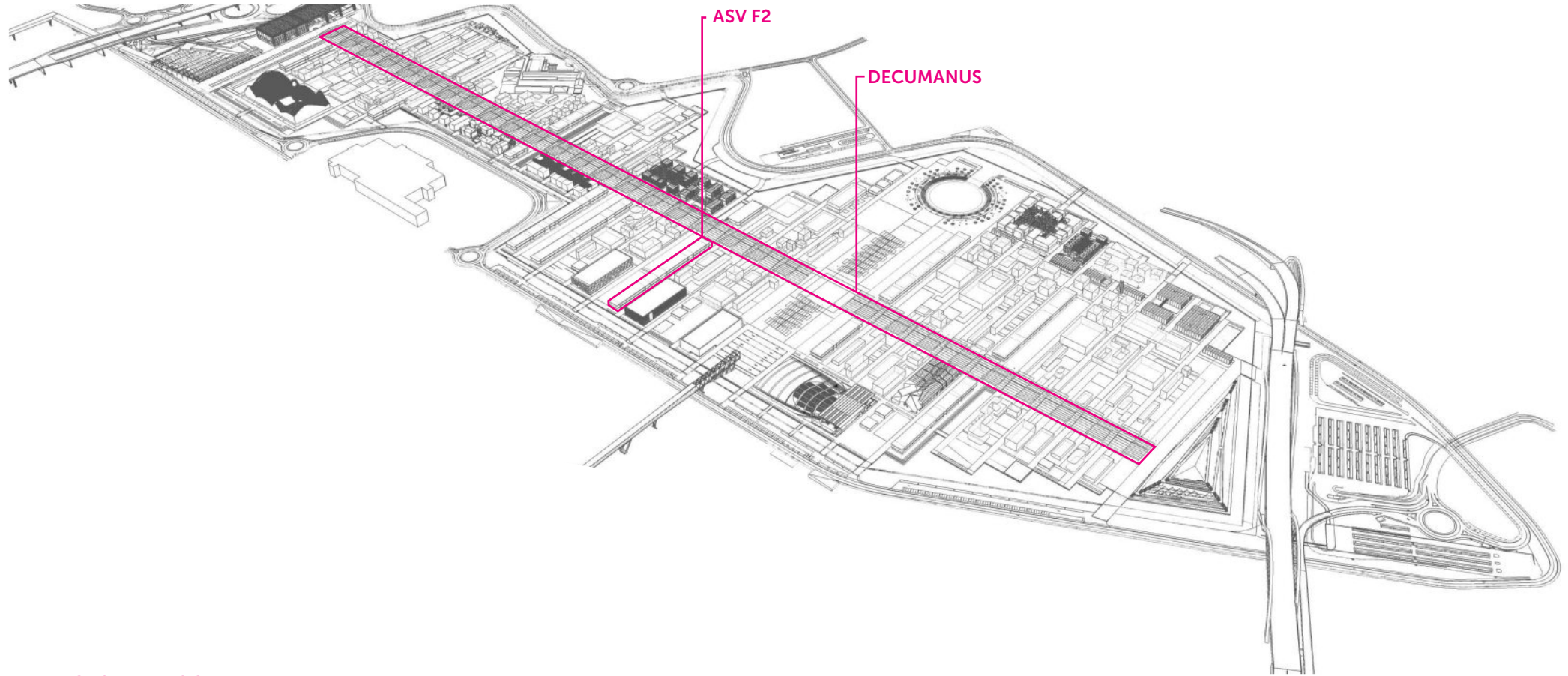


	P. 0.	P. 1.	AREA FOR TABLES P. 1.	P. -1.
sqm (sales area)	141,4	132,04	50,85	–
sqm (gross)	280,58	226,21	50,85	–
sqm warehouses	–	–	–	143,95

# Map of gross and net areas of services (ASV) – pavilion F2

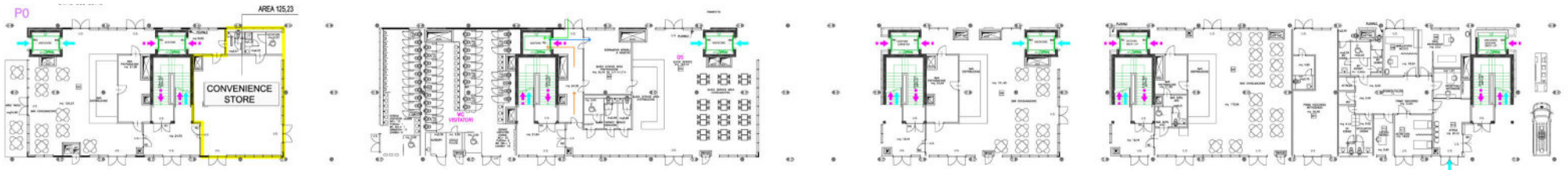


# Distribution of the commercial areas in ASV F2. Study Case of Convenience Store

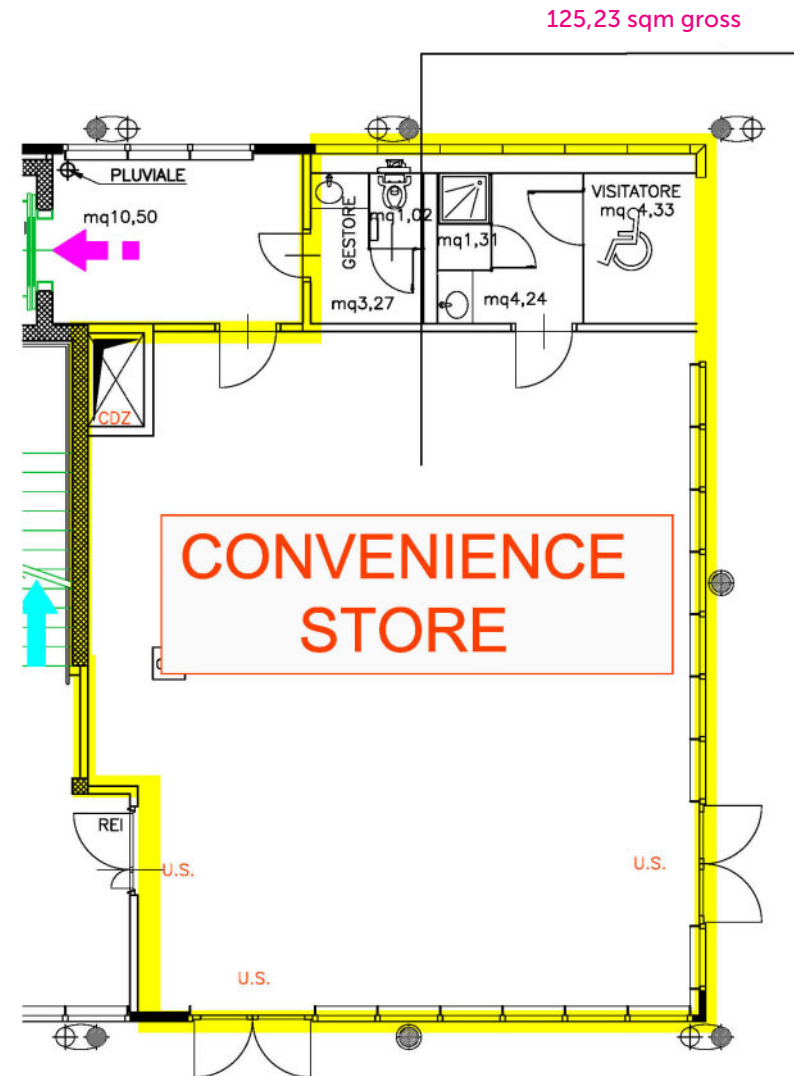
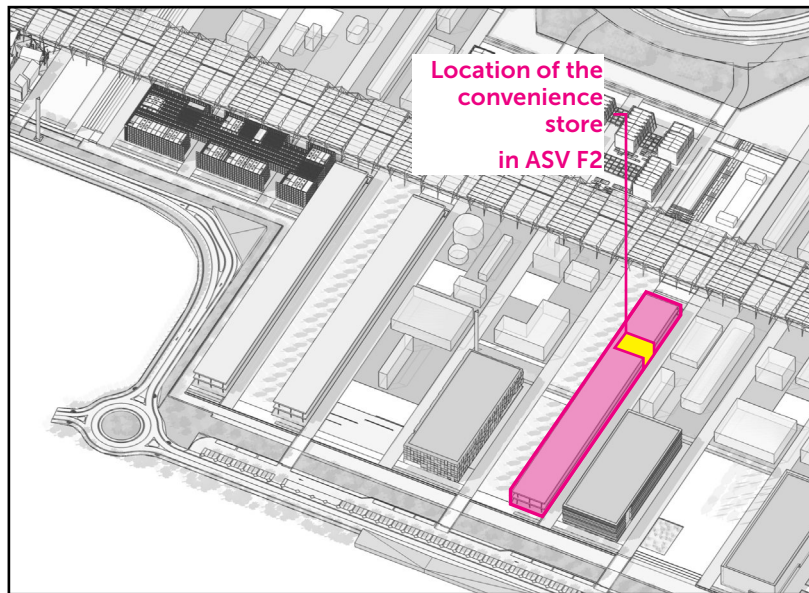


## GROUND FLOOR

DECUMANUS

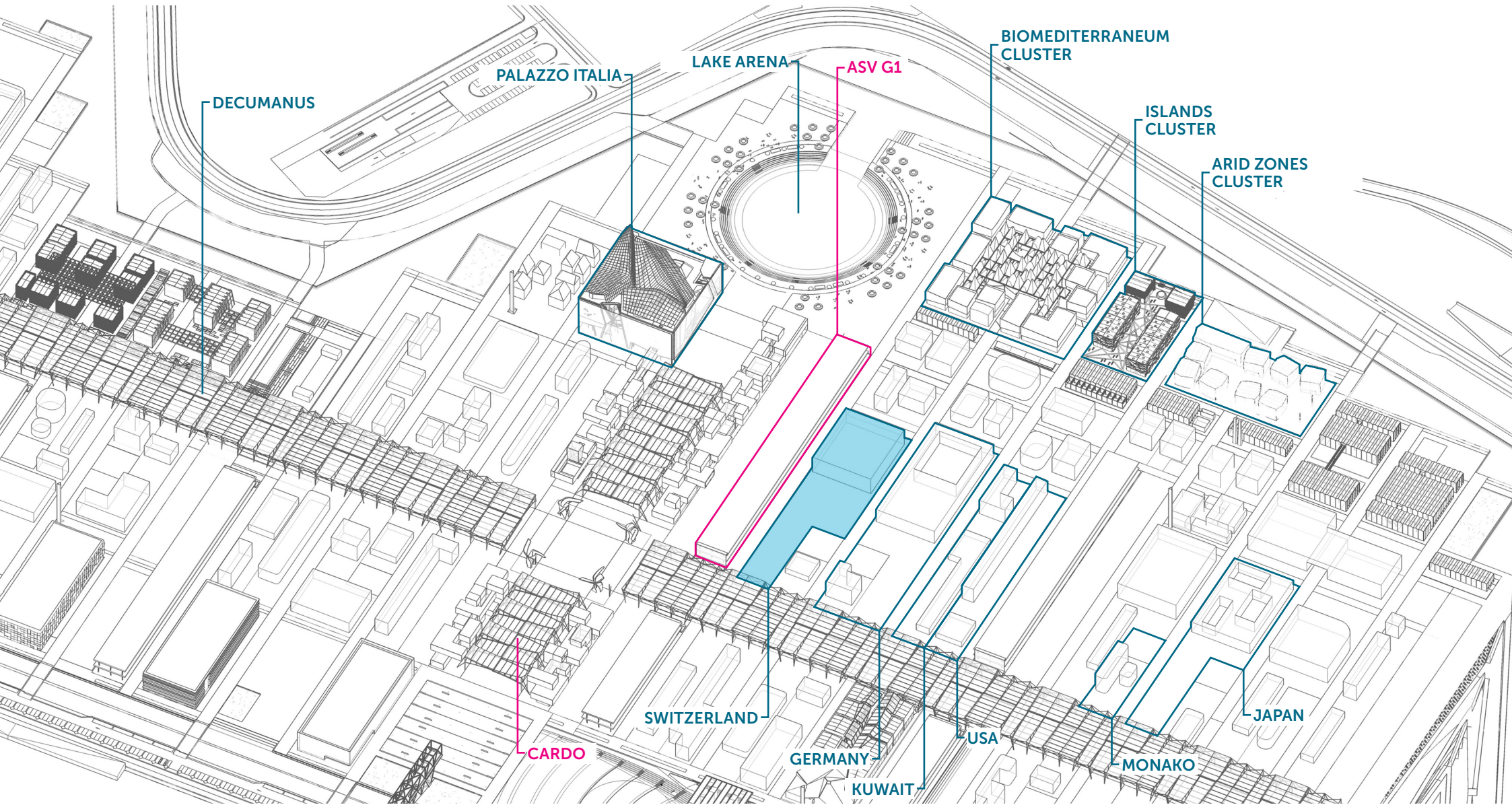


# Distribution of the commercial areas in ASV F2 Study Case of Convenience Store. Top view and parameters

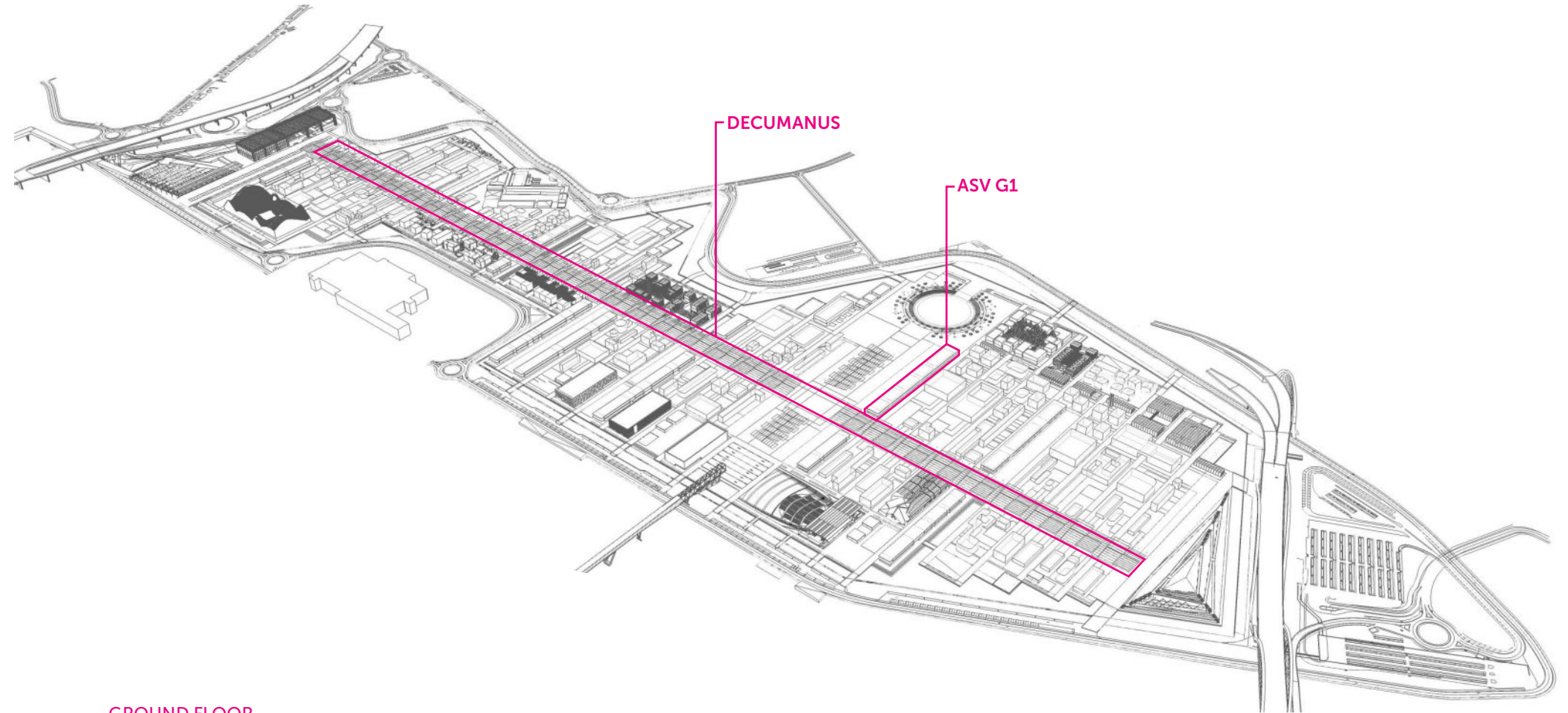


	P. 0.	P. 1.	P. -1.
sqm (gross)	125	-	-
sqm warehouses	TBD	-	-

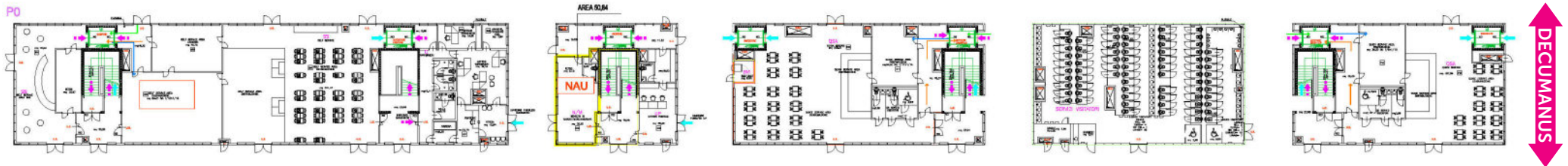
# Distribution of the commercial areas in pavilion G1. Study Case of NAU. Situational context



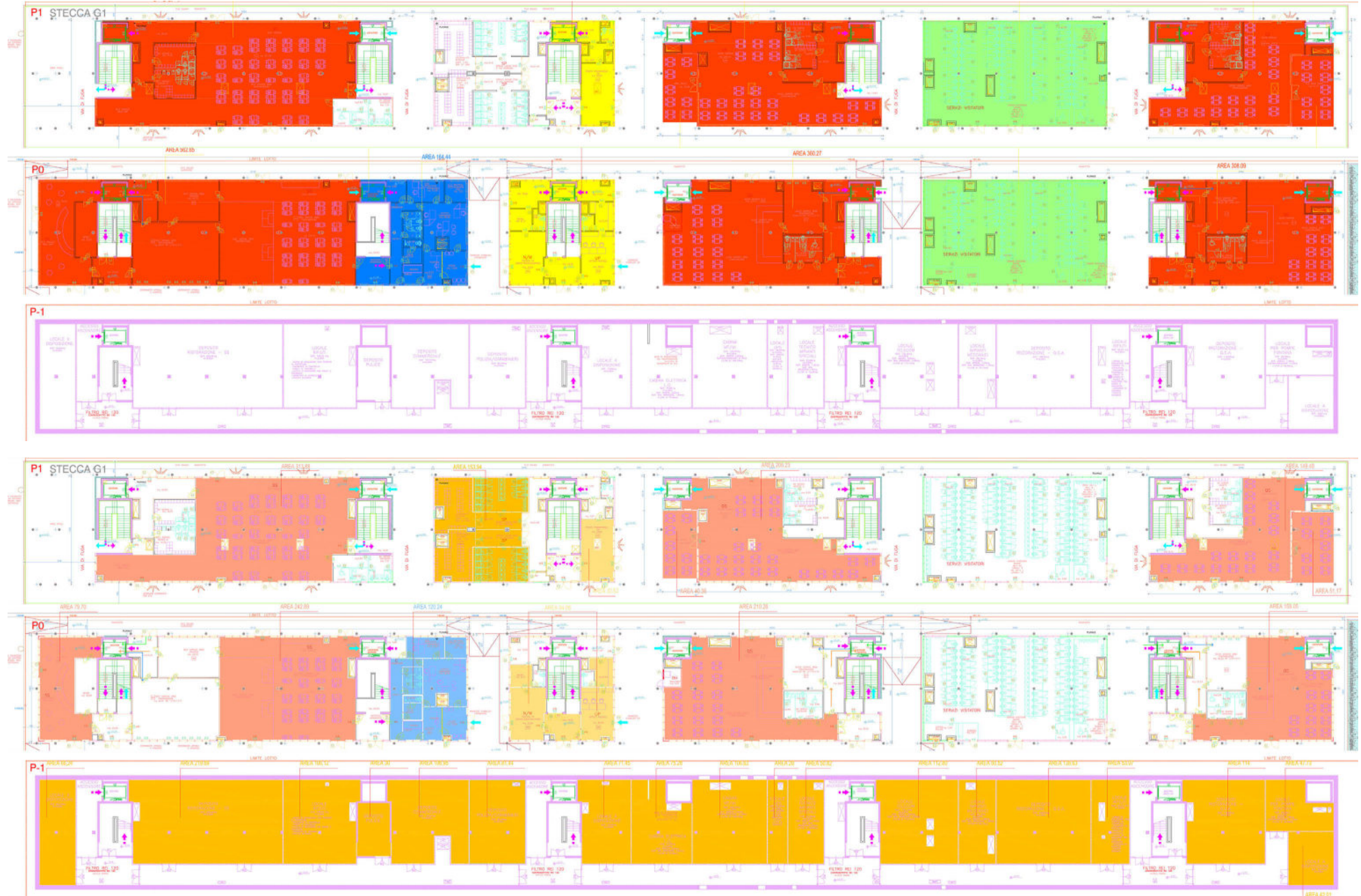
# Distribution of the commercial areas in pavilion G1. Study Case of NAU



## GROUND FLOOR

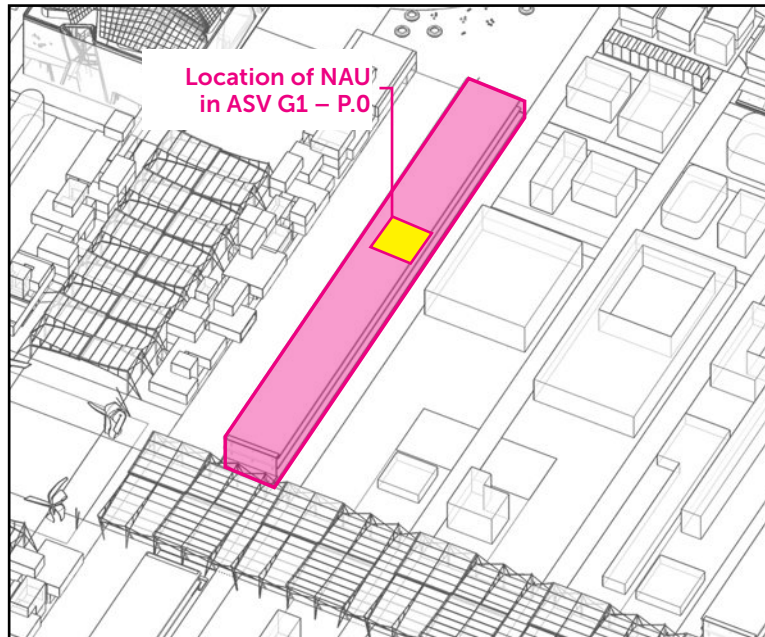


# Map of gross and net areas of services (ASV) – pavilion G1

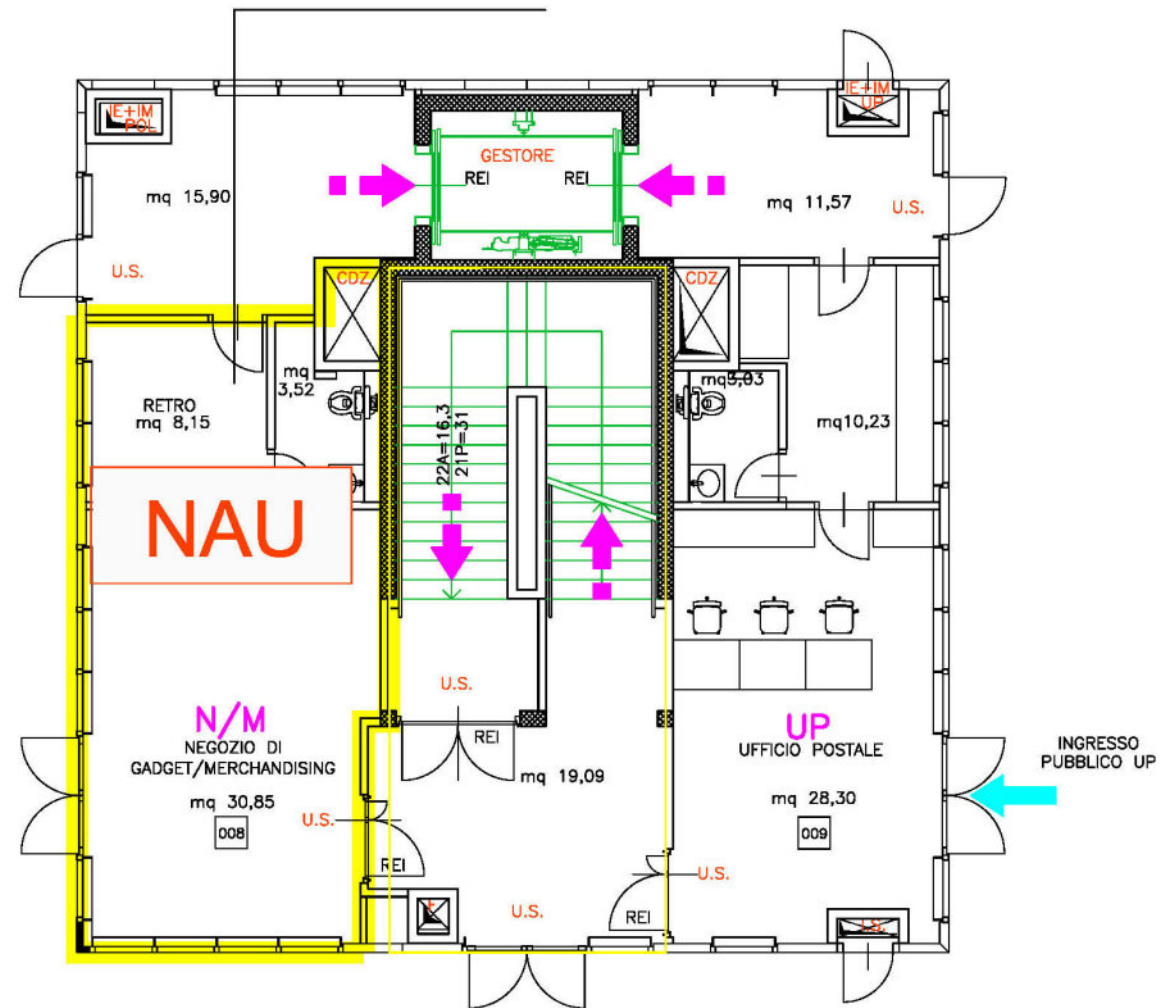




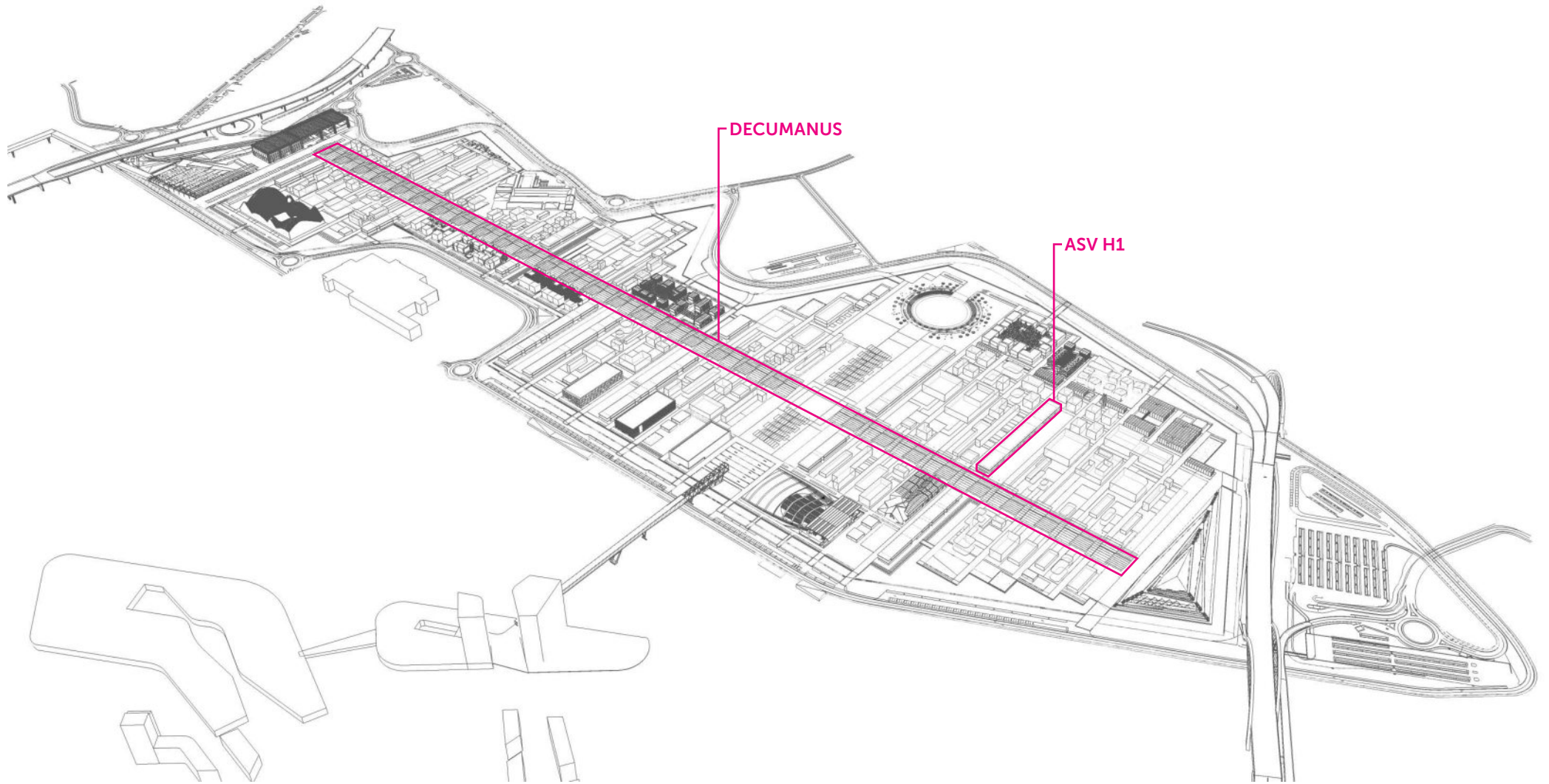
# Distribution of the commercial areas in pavilion G1. Study Case of NAU. Top view and parameters



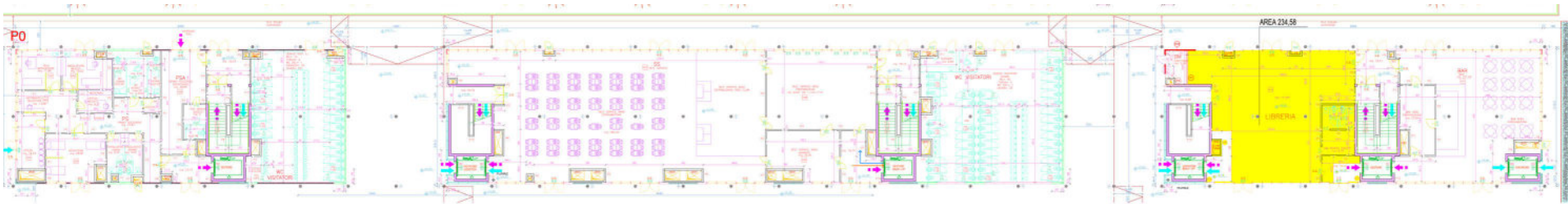
50,84 sqm gross area



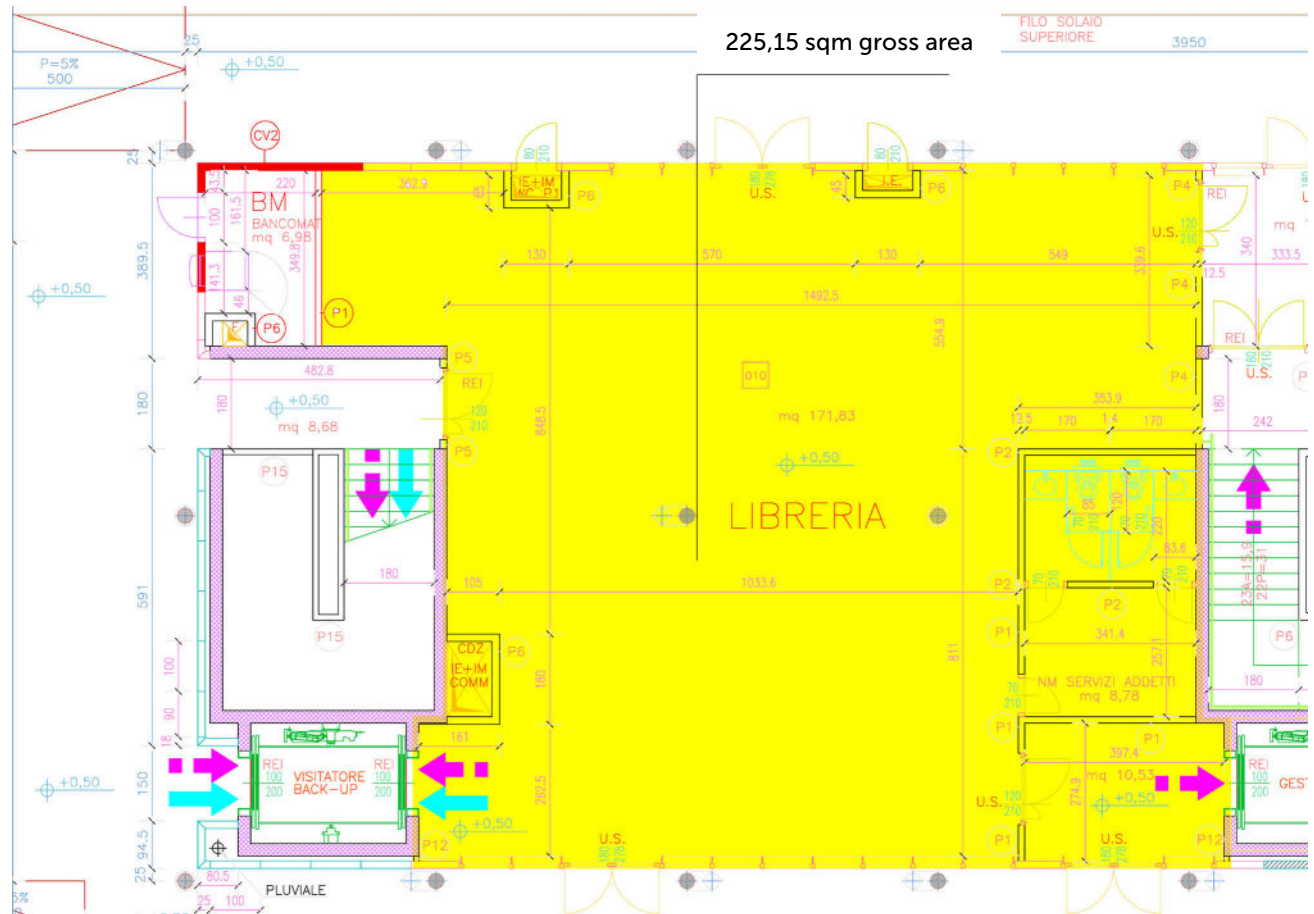
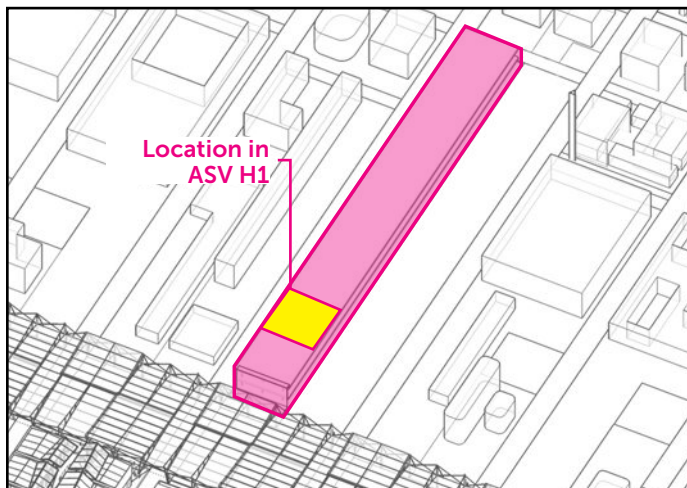
	P. 0.	P. 1.	P. -1.
sqm (gross)	50,84	-	-



# Distribution of the commercial areas in pavilion F1. Study Case of Library. Top view and parameters

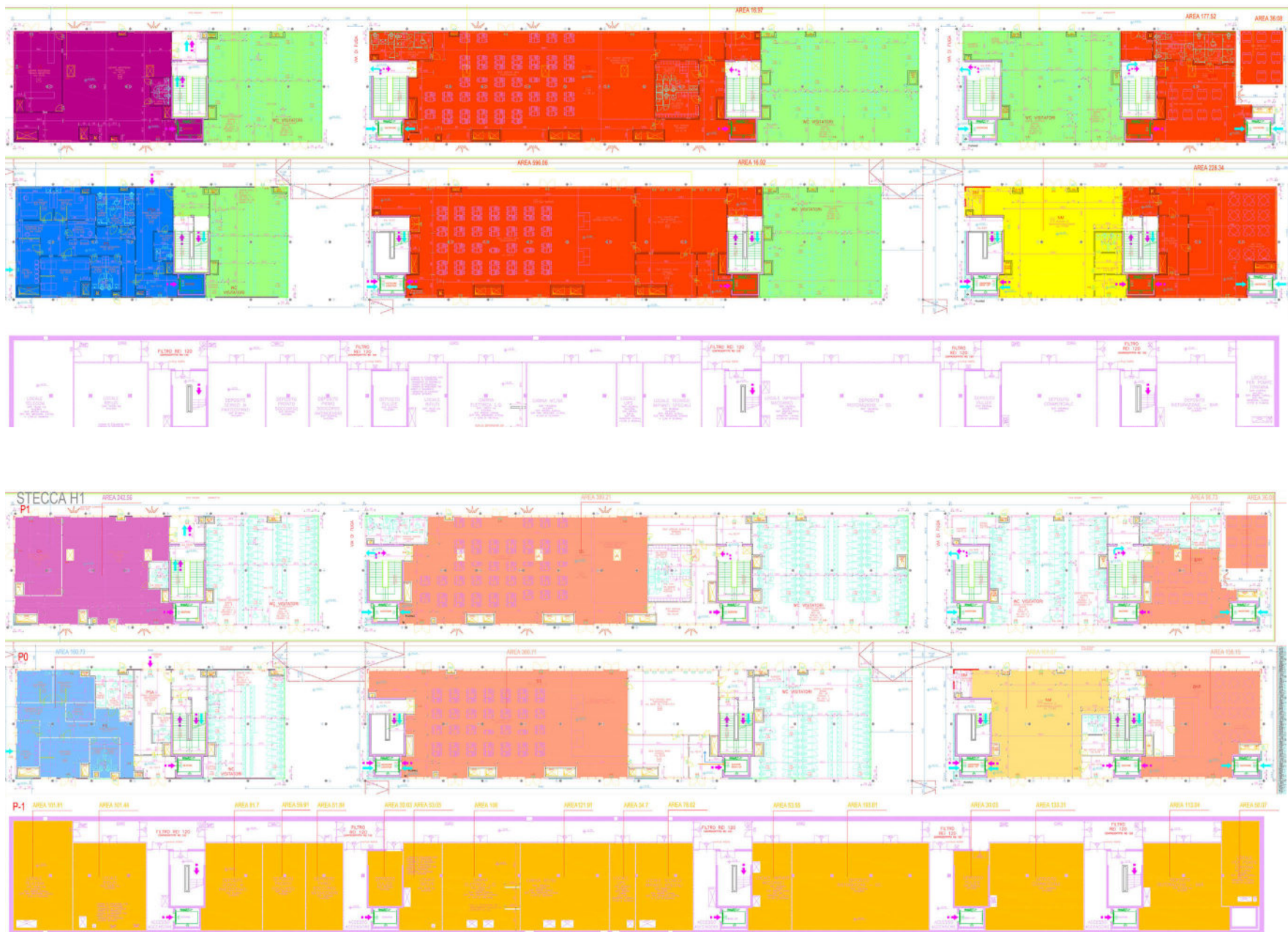


P-1

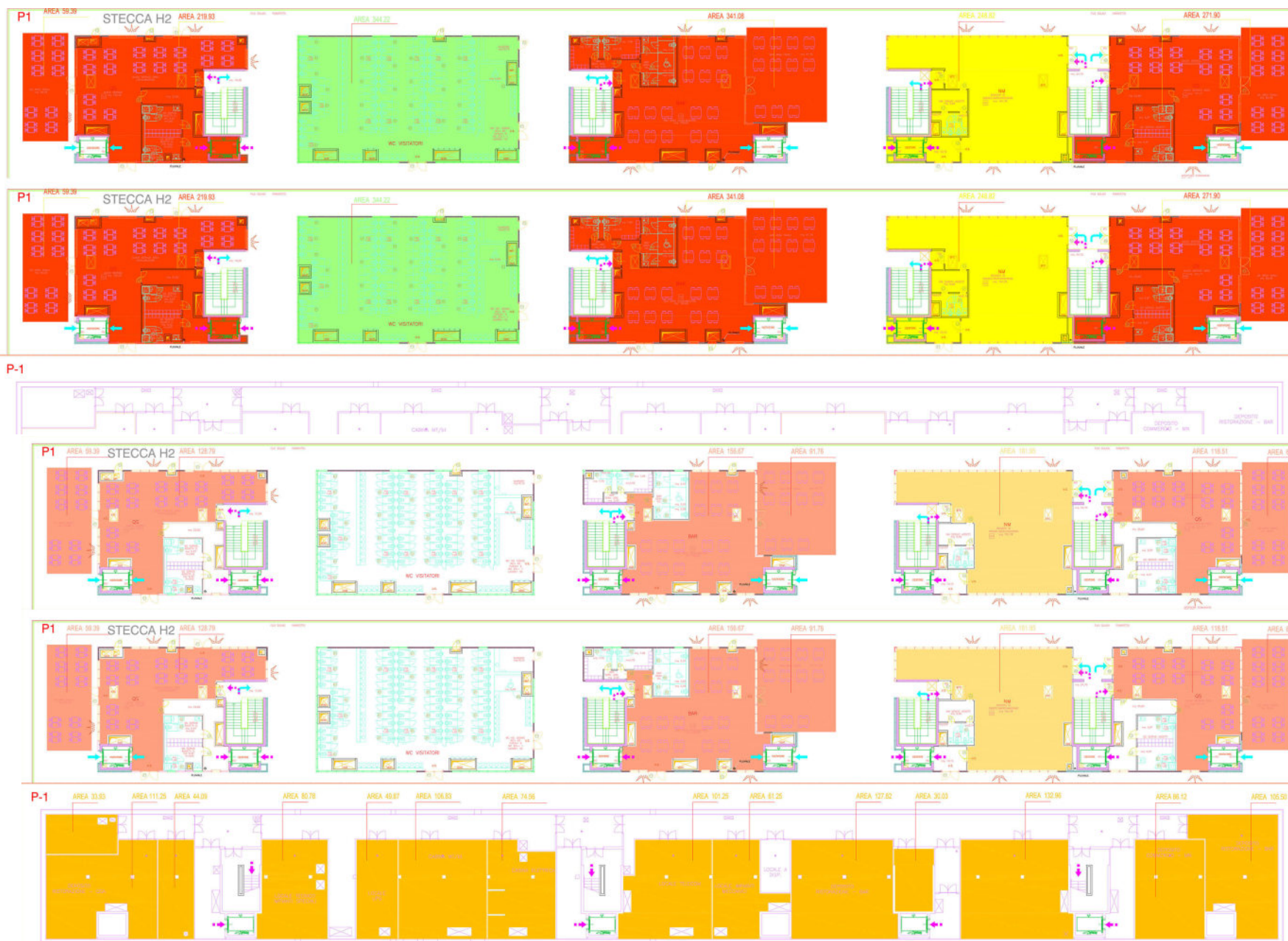


	P. T.	P. -1.
sqm (sales area)	181,67	-
sqm (gross)	225,15	-
sqm warehouses	-	133,31

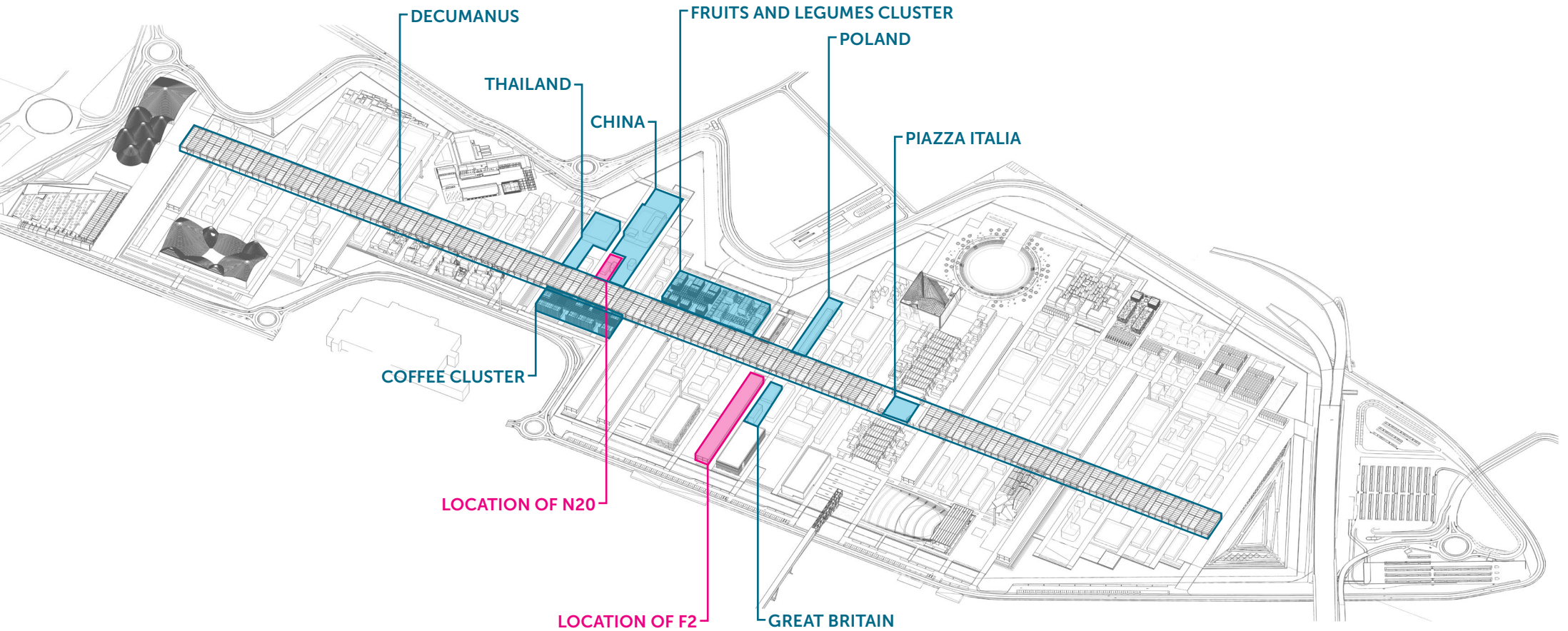
# Map of gross and net areas of services (ASV) – pavilion H1



# Map of gross and net areas of services (ASV) – pavilion H2



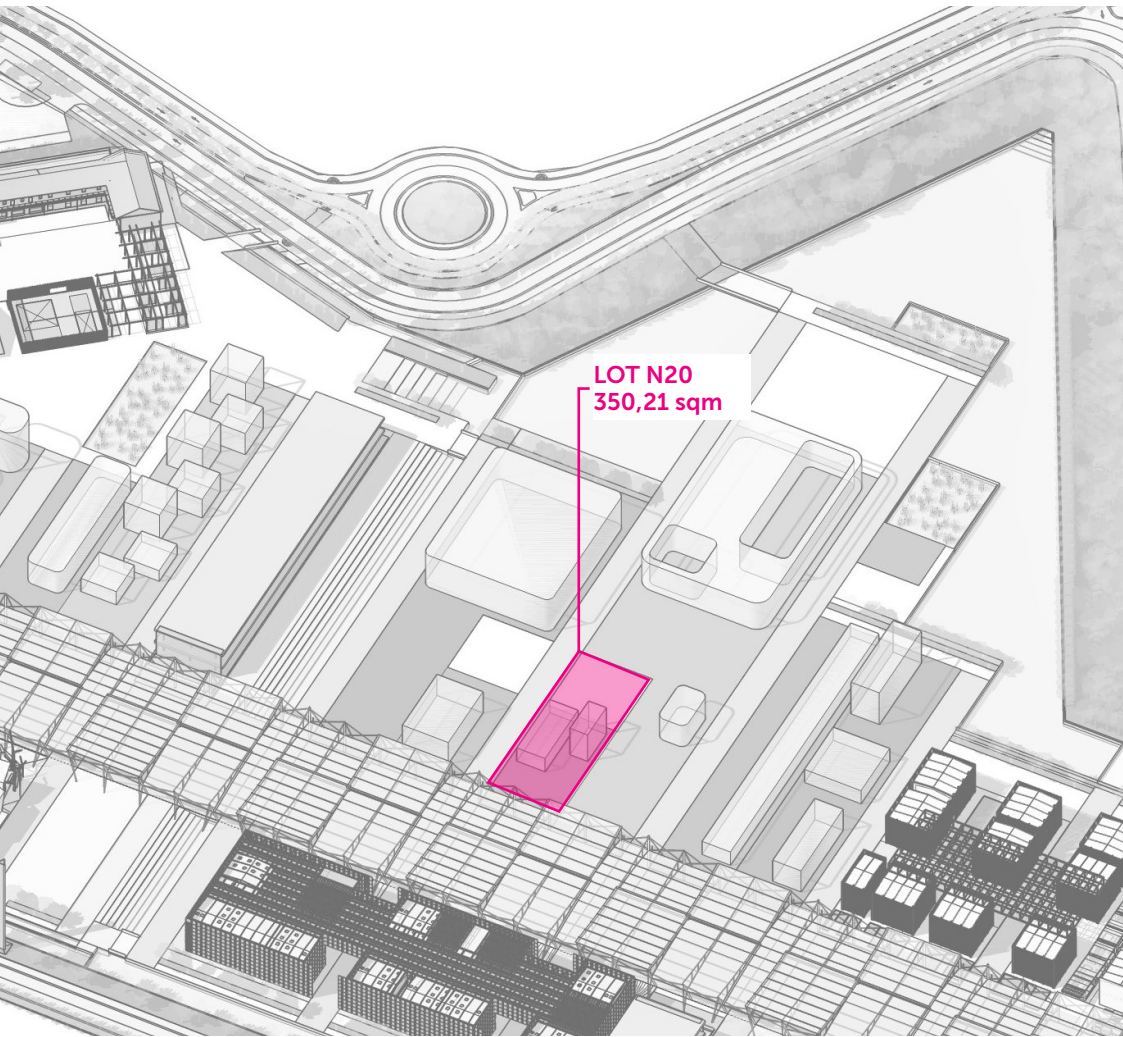
# Distribution of the services areas. Study Case of World Expo Museum (China). Situational context of the two of potential locations



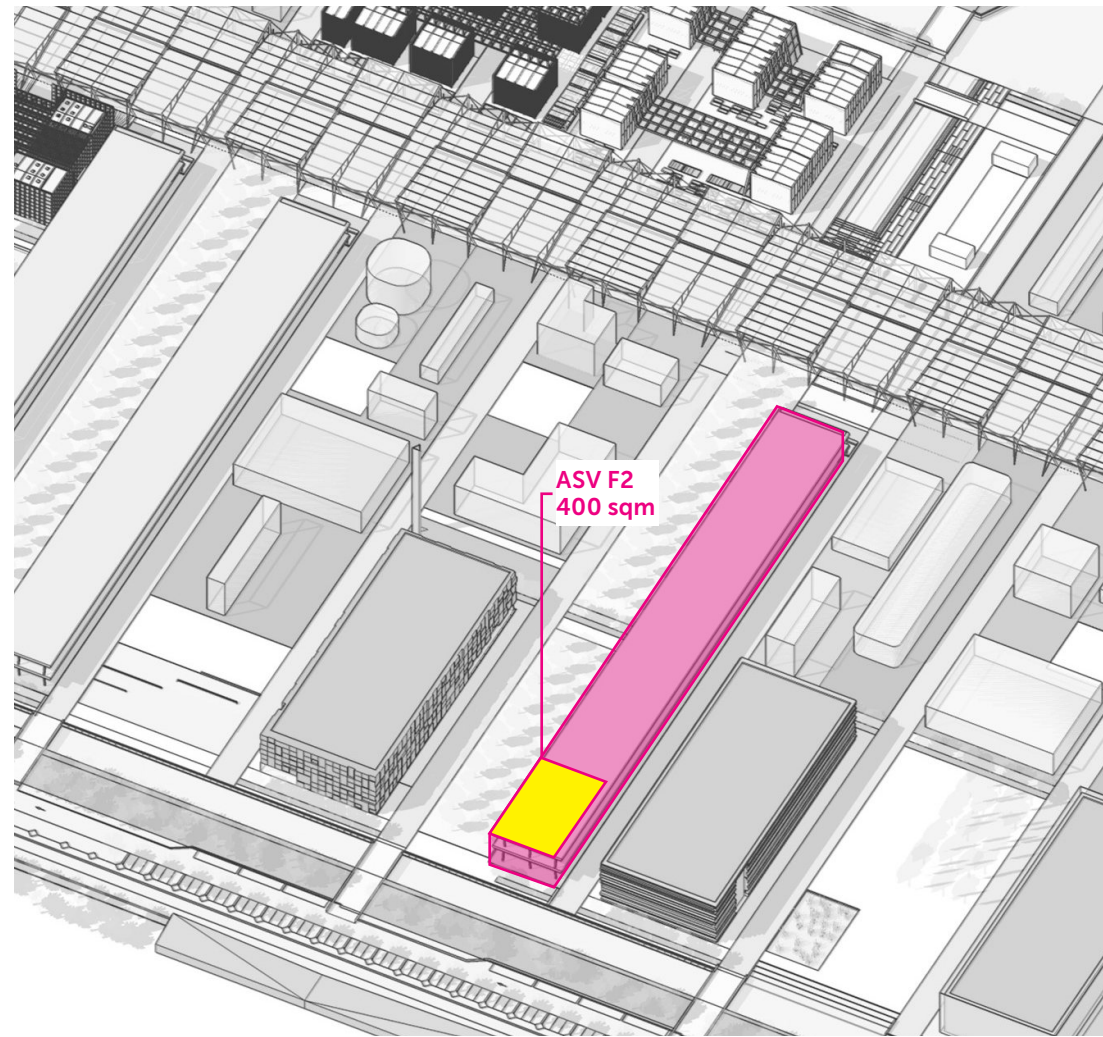
# Distribution of the services areas. Study Case of World Expo Museum (China). Situational context of the two of potential locations



OPTION N° 1

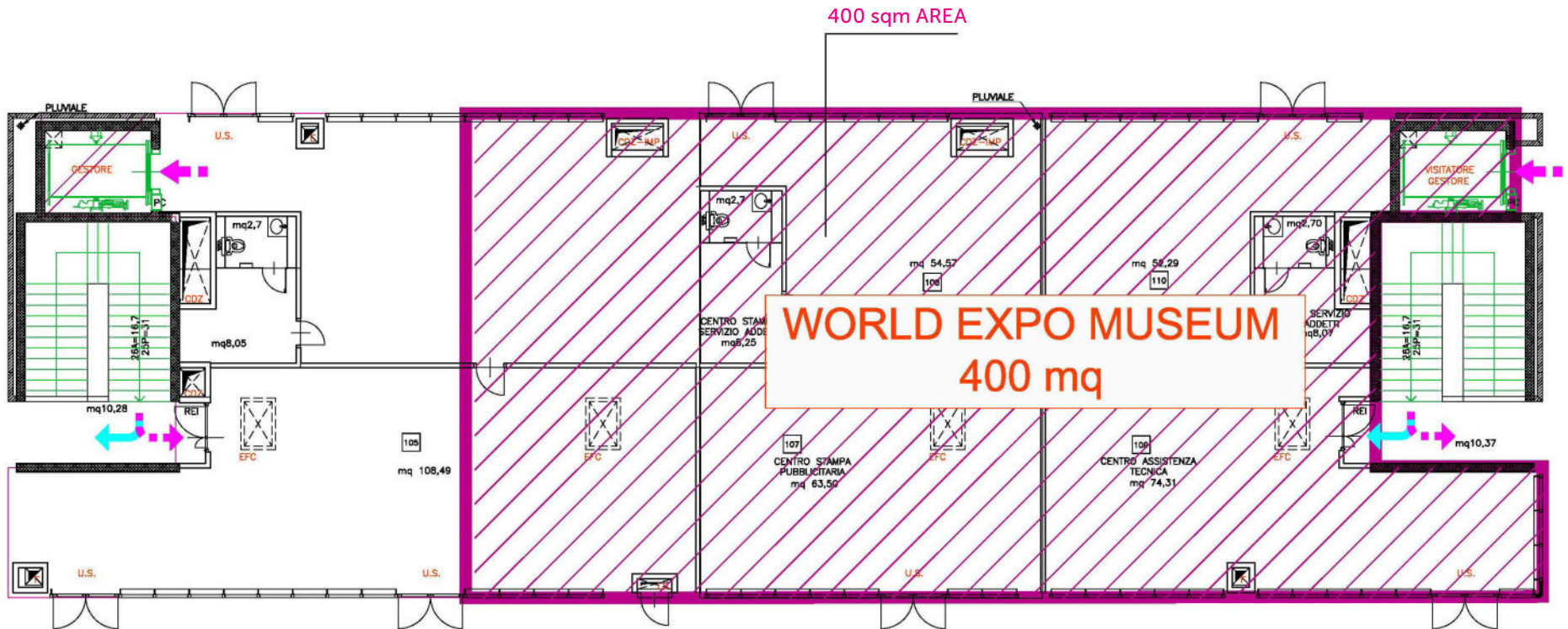
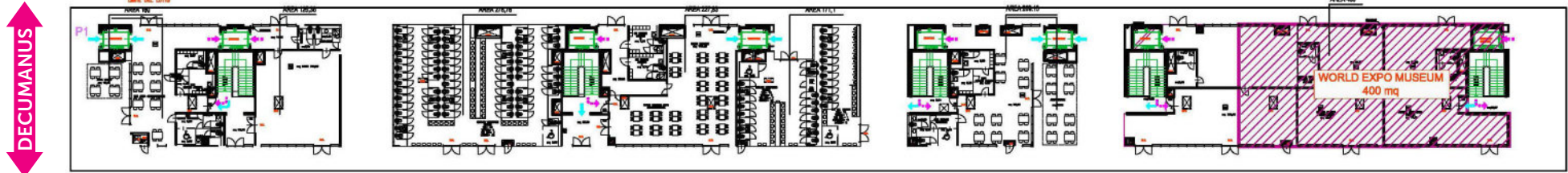


OPTION N° 2



Both lot N20 and F2 Service Area are facing the Decumanus, the main communication route of Expo. Being located in the middle of its main axis they are one of the cornerstones of Masterplan. They are both in the immediate vicinity of the Cluster Fruits & Spices. Besides F2, it is placed in the near distance from Piazza Italia while N20 is just in front of the Caffè Cluster.

## ASV F2 – 1<sup>ST</sup> FLOOR







Meeting with representatives of World Expo Museum (02.2014)

093 16/10/2014



MILANO 2015



**SPONSOR & PATNERS AREE CORPORATE**

<b>LOTTE</b>	<b>N3 (522 m<sup>2</sup>)</b> NETAL	<b>NE6 (1269 m<sup>2</sup>)</b> SHANGHAI	<b>PIAZZETTE</b>	<b>INSTALLAZIONI</b>	<b>1</b> PADIGLIONE D GENERALI
<b>R1 (129 m<sup>2</sup>)</b> ENEL	<b>N4 (522 m<sup>2</sup>)</b> NETAL	<b>NE8 (1159 m<sup>2</sup>)</b> ZOOHCO	<b>PN6</b> UNILEVER	<b>TESTATE STECCHE</b>	<b>2</b> CASCINA TRIUZZA
<b>C2</b> UNIPOL (DEBITTI/DEPOSITARI)	<b>NE1 (959 m<sup>2</sup>)</b> VANKE	<b>NE10 (1390 m<sup>2</sup>)</b> FEDERALMENTARE	<b>PN10</b>	<b>ASV G1 (21-24 m<sup>2</sup>)</b>	<b>3</b> CHILDREN PARK
<b>F1</b> INTESA SANPAOLO	<b>NE2 (1619 m<sup>2</sup>)</b> S&P	<b>LAKE ARENA</b>	<b>PS4</b> UNILEVER	<b>ASV F2 (21-24 m<sup>2</sup>)</b>	<b>4</b> DANSEHA F1
<b>HORTUS H3 (5540 m<sup>2</sup>)</b> HUNTER & SPORT	<b>NE3 (959 m<sup>2</sup>)</b> COCA COLA	<b>N20</b> CORNICE DELLA SERRA	<b>PS5</b>	<b>ASV G2 (21-24 m<sup>2</sup>)</b>	<b>5</b> PIAZZA VIE ACQUA
<b>N1 (522 m<sup>2</sup>)</b> INTESA SANPAOLO	<b>NE5 (959 m<sup>2</sup>)</b> ETHIO	<b>S1 (1490 m<sup>2</sup>)</b> RIP	<b>S39</b> BIRRA MORETTI	<b>ASV H1 (21-24 m<sup>2</sup>)</b>	<b>6</b> LAKE ARENA
<b>N2 (522 m<sup>2</sup>)</b> NETAL				<b>ASV H2 (21-24 m<sup>2</sup>)</b>	<b>7</b> S&S
					<b>8</b> PIAZZA EGGIO EST
					<b>PIAZZA SEME</b> IGGRO GRADONATA
					<b>TECHNOVILL</b>

**SPONSOR & PATNERS CLUSTER**

<b>RISO</b>	<b>ISOLE</b>
<b>CAOAO</b>	<b>ZONE ARIDE</b>
<b>FRUTTA/SPEZIE</b>	<b>CEREALI &amp; TUBERI</b>
<b>CAFFÈ</b>	<b>FRUTTE VERDELLI</b>
<b>BIO-MEDITERRANEO</b>	

**SPONSOR & PATNERS AREE TEMATICHE**

<b>PADIGLIONE ZERO</b>	<b>FUTURE PLAZA</b>
<b>CHILDREN PARK</b>	<b>BIODIVERSITY PARK</b>
<b>CHILDREN FOOD</b>	<b>COLLINA MEDITERRANEA</b>
<b>ARTS &amp; FOODS</b>	<b>ARTS &amp; FOODS</b>
<b>FUTURE MARKET</b>	

**CHIOSCHI & BAR**

<b>CHIOSCO CH1</b>	<b>CHIOSCO CH8</b>
<b>CHIOSCO CH2</b>	<b>CHIOSCO CH9</b>
<b>CHIOSCO CH3</b>	<b>CHIOSCO CH10</b>
<b>CHIOSCO CH4</b>	<b>TASCA SUD</b>
<b>CHIOSCO CH5</b>	<b>US6</b>
<b>CHIOSCO CH6</b>	

**AREE EVENTI**

<b>STRUTTURE</b>	<b>S 07</b>
<b>OPEN AIR THEATRE</b>	<b>PIAZZETTE</b>
<b>AUDITORIUM</b>	<b>PS2</b>
<b>CONFERENCE CENTRE</b>	<b>PS3</b>
<b>LAKE ARENA</b>	<b>PS6</b>
<b>OPEN PLAZA</b>	<b>PS7</b>
<b>PIAZZA GRADONATA</b>	<b>PS9</b>
<b>LOTTE</b>	<b>PN5</b>
<b>N E7</b>	<b>PN7</b>

**STREET FOOD**

<b>PIAZZETTE</b>	<b>PN1</b>	<b>PN2</b>	<b>PN3</b>
	<b>PN8</b>	<b>PN9</b>	<b>PS1</b>
	<b>PS3</b>	<b>PS8</b>	
<b>UNITA DI SERVIZIO</b>	<b>US1</b>	<b>US2</b>	<b>US3</b>
	<b>US4</b>	<b>US10</b>	<b>US11</b>
	<b>US15</b>	<b>US14</b>	<b>US16</b>

**ALTRI EDIFICI**

<b>EXPO CENTRAL</b>	<b>NE4</b>
	<b>NE9</b>
<b>US5</b>	<b>US11</b>
<b>US7</b>	<b>US12</b>
<b>US8</b>	<b>US13</b>
<b>US9</b>	<b>US14</b>
<b>US12</b>	<b>US15</b>

**AREE SERVICE**

<b>ASV A</b>	<b>1.844.63 Mtg</b>
<b>ASV B1</b>	<b>1.537.26 Mtg</b>
<b>ASV C1</b>	<b>1.548.81 Mtg</b>
<b>ASV F2</b>	<b>1.844.63 Mtg</b>
<b>ASV G1</b>	<b>1.192.61 Mtg</b>

**LEGENDA** ● STREET FOOD ● LOTTE CORPORATE ● CLUSTER ● AREE TEMATICHE ● ALTRI EDIFICI ● AREE EVENTI ● INSTALLAZIONI FERRARIO ● CHIOSCHI ● AREE SERVICE ● PARTECIPANTI □ APERTE □ TRATTATIVA AVANZATA □ CONFIRMATI ● RISTORAZIONE ● SPAZI COMMERCIALI ● SERVIZI AI VISITATORI ● WC ● SERVIZI AI PARTECIPANTI ● SICUREZZA ● LOCALI SERVIZI ● ANTENNA TELECOM ● EVENTI ● INFOPOINT ● BANCOHAT ● STREET FOOD



During the work on the distribution of the services and commercial areas in Expo site



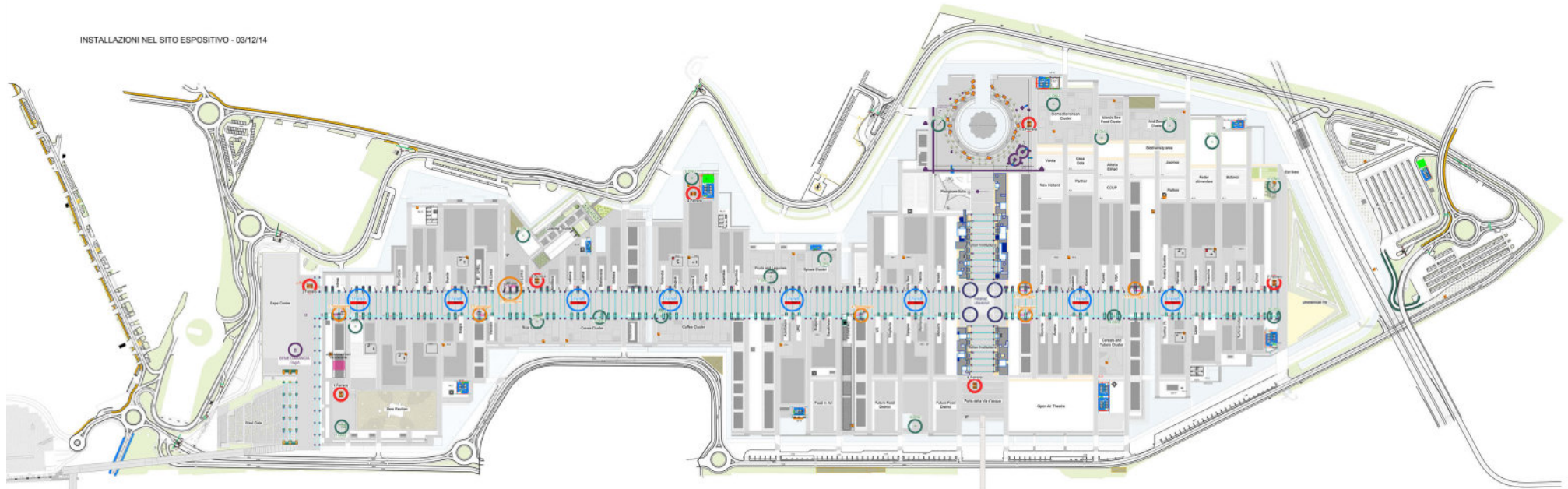
Site visit in ASV



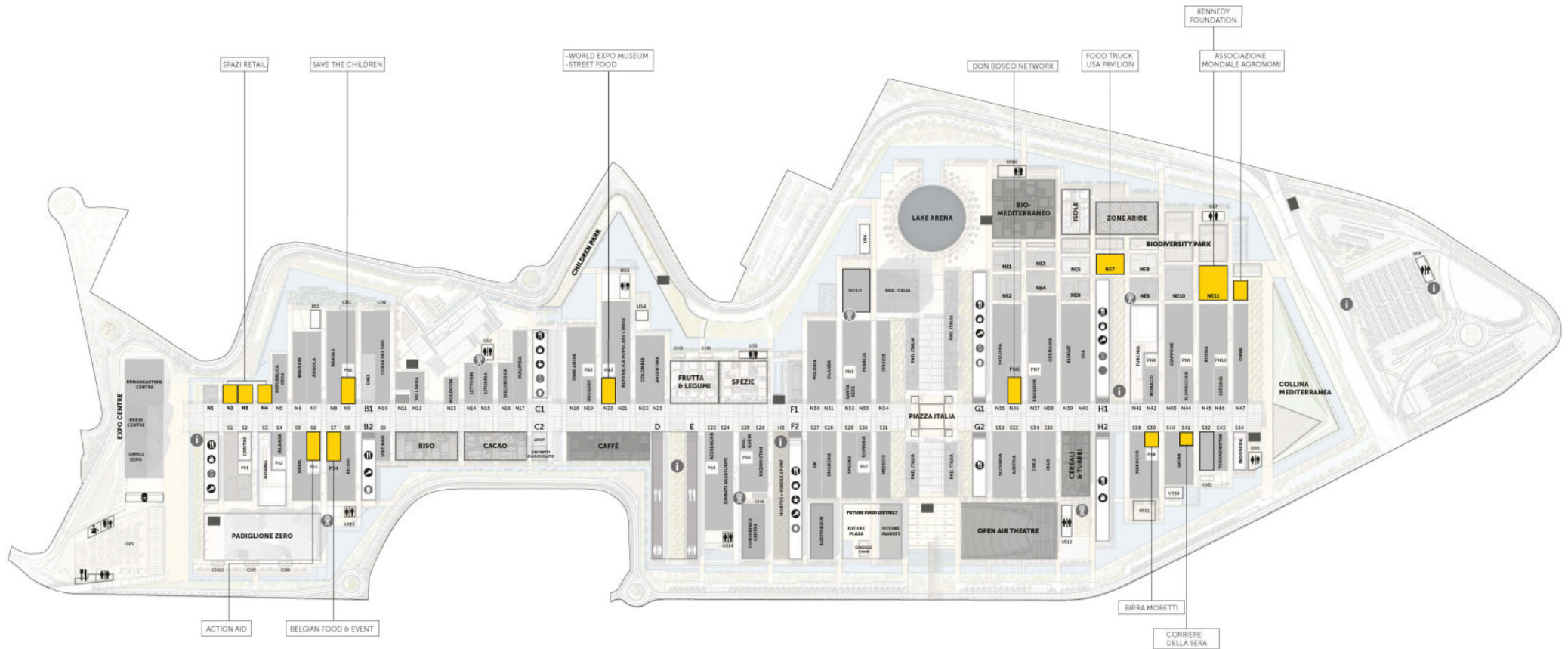
# Map showing the location of individual installations and promotional stands at the Expo site



INSTALLAZIONI NEL SITO ESPOSITIVO - 03/12/14

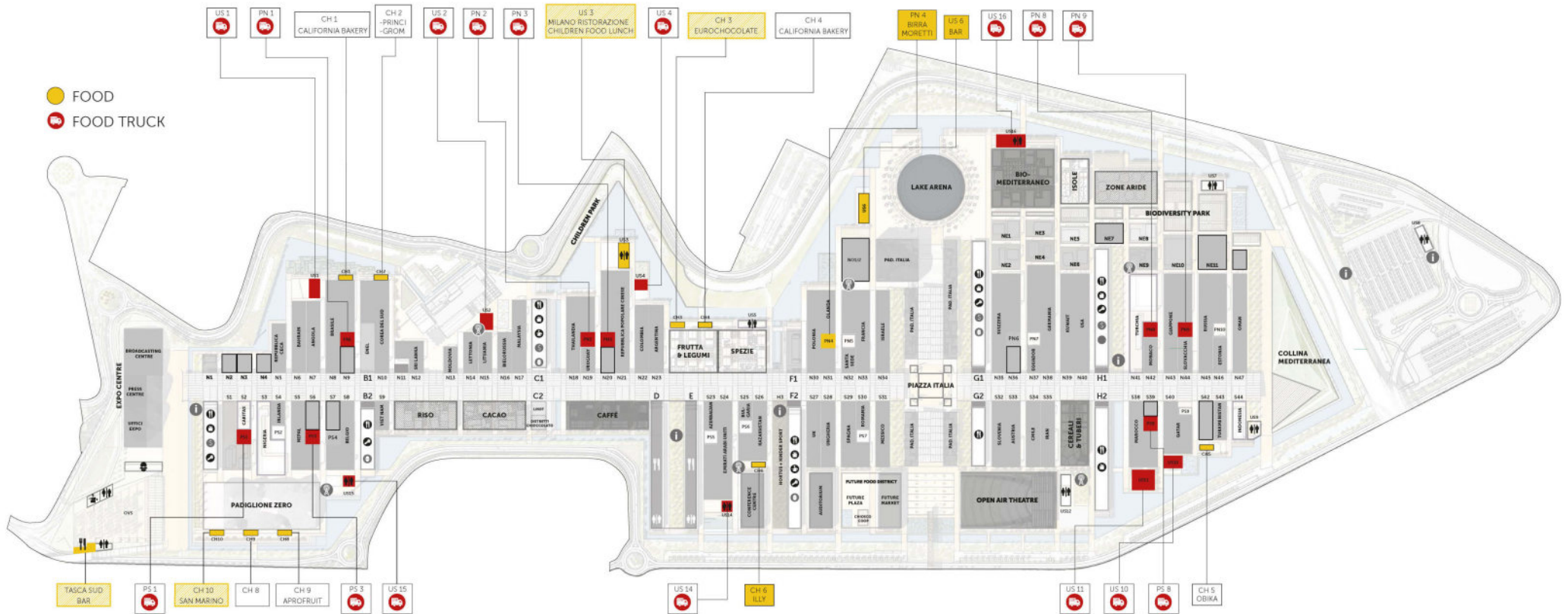


POD FERRERO	ISOLE TECHNOGYM 300 x 700 x 70 max 360 cm + pedana 300 x 700, H: 10cm	INSTALLAZIONI ONU 300 x 300 x 3 max 100 cm	SCENOGRAFIE FERRETTI 400 x 600 x 6 max 100 cm Pavimentazione: Tappeti riciclabili dal Disarmo/Recovery	INSTALLAZIONE SEME D'ARANCIO / Isgrò 300 x 300 x 4 max 700 cm Pavimentazione: Tappeti riciclabili dal Disarmo/Recovery	INSTALLAZIONI LIBESKIND	ALTRE INSTALLAZIONI
 <p>Il Pod Ferrero è un'installazione modulare in alluminio anodizzato, composta da pannelli di 120x120 cm, che può essere configurata in diverse forme e dimensioni. È adatta per eventi, fiere e manifestazioni.</p>	 <p>Le Isole Technogym sono installazioni modulari in alluminio anodizzato, composte da pannelli di 300x700 cm. Sono ideate per ospitare attrezzature sportive e attività fitness.</p>	 <p>Le Installazioni ONU sono strutture modulari in alluminio anodizzato, composte da pannelli di 300x300 cm. Sono progettate per ospitare attività di lavoro e incontri.</p>	 <p>Le Scenografie Ferretti sono installazioni modulari in alluminio anodizzato, composte da pannelli di 400x600 cm. Sono ideate per creare ambienti scenografici e di spettacolo.</p>	 <p>L'Installazione Seme d'Arancio è una struttura modulare in alluminio anodizzato, composta da pannelli di 300x300 cm. È progettata per ospitare attività di lavoro e incontri.</p>	 <p>Le Installazioni Libeskind sono strutture modulari in alluminio anodizzato, composte da pannelli di 300x300 cm. Sono ideate per creare ambienti di lavoro e incontri.</p>	 <p>Altre Installazioni includono: ATM ISP (300 x 400 x h. max 450 m), #Wall Samsung (95 x 700 x h. max 300 m), Casa dell'Acqua PICCOLA n.30, Casa dell'Acqua GRANDE n.2.</p>

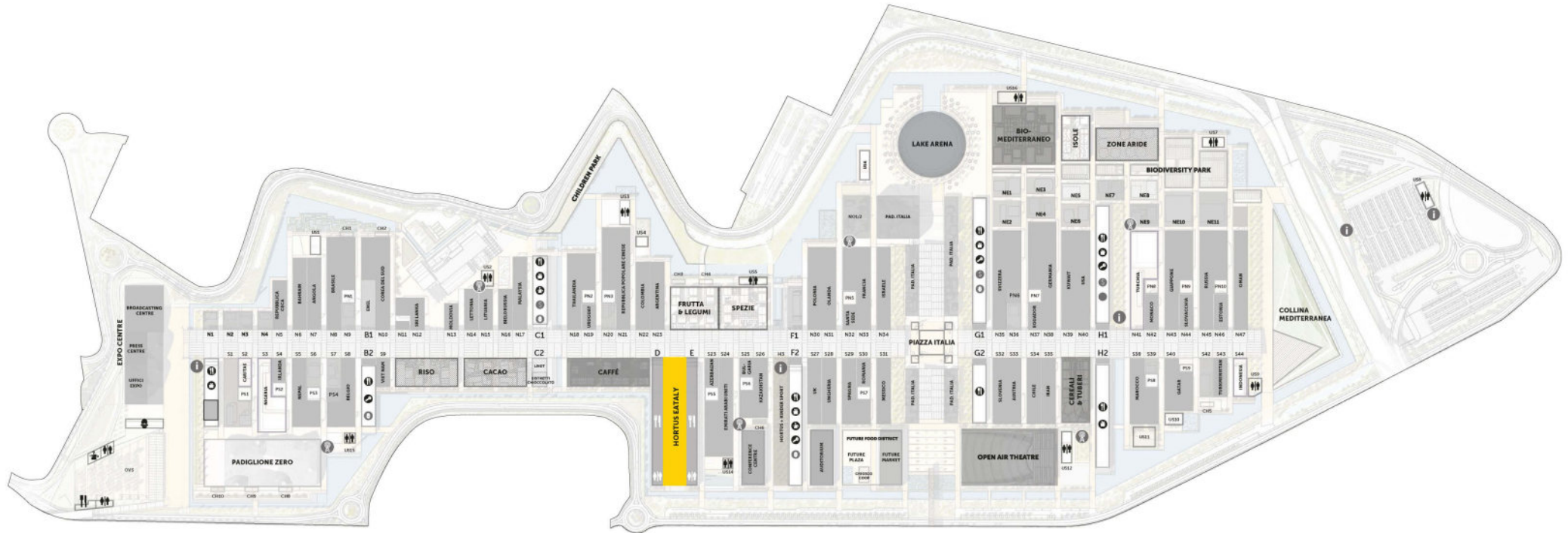


● LOTTI OPZIONATI

# Proposition of the placement The Food & Food truck



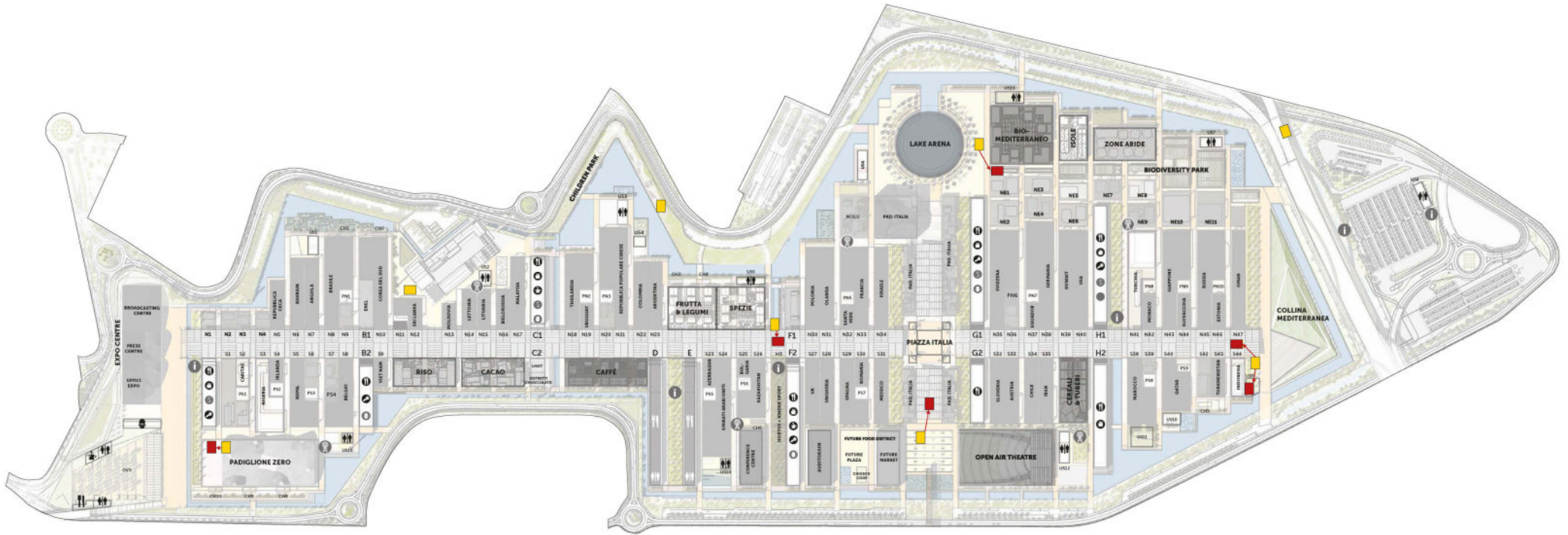
# Proposition of the location for hortus Eataly



 HORTUS EATALY

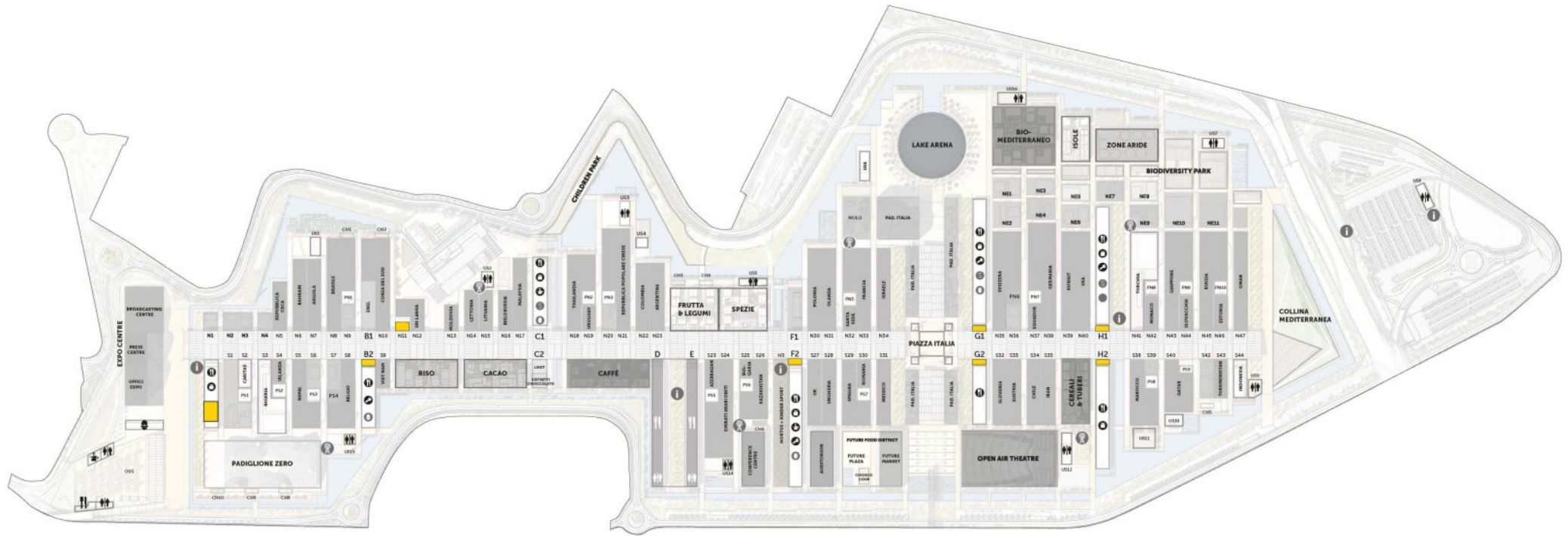


# Proposition of the distribution of exhibition and promotional stands for Ferrero

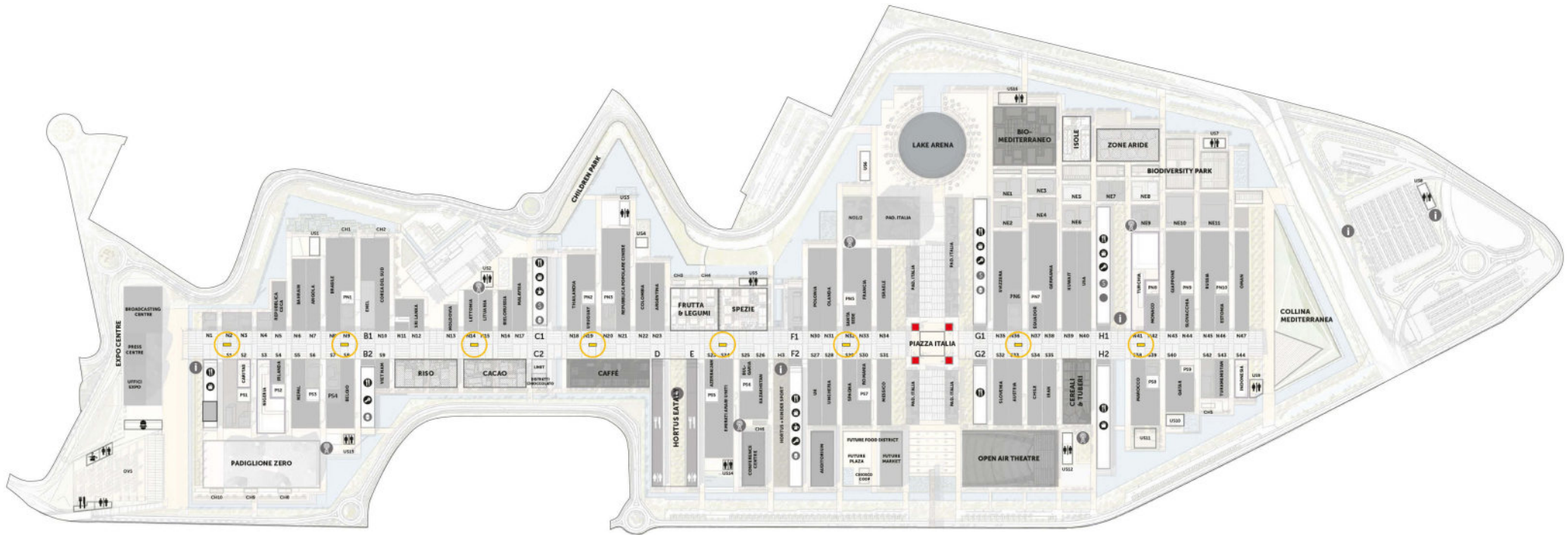


- FERRERO POSIZIONAMENTI DEE
- FERRERO POSIZIONAMENTI DIC

# Proposition of the distribution of exhibition and promotional stands for Technogym



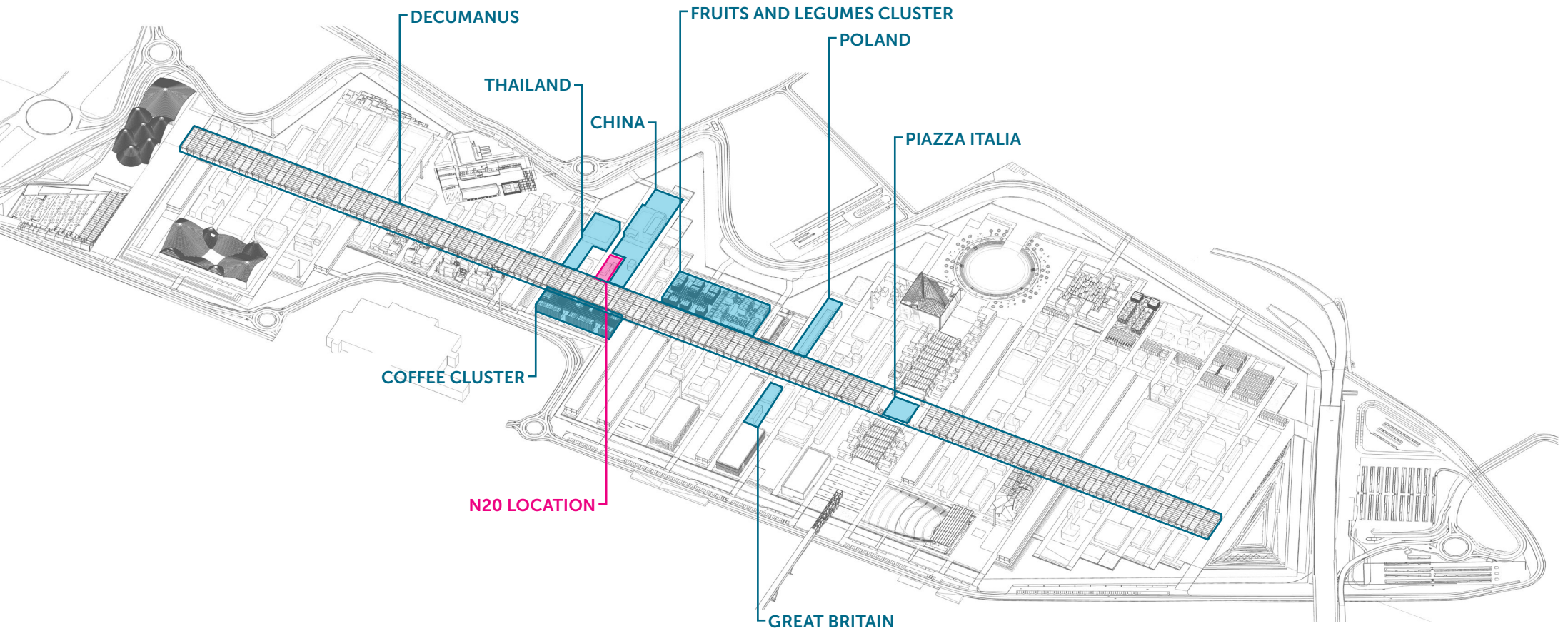
# Proposition of location for installations of Ferretti and Libeskind



● SCENOGRAFIE FERRETTI

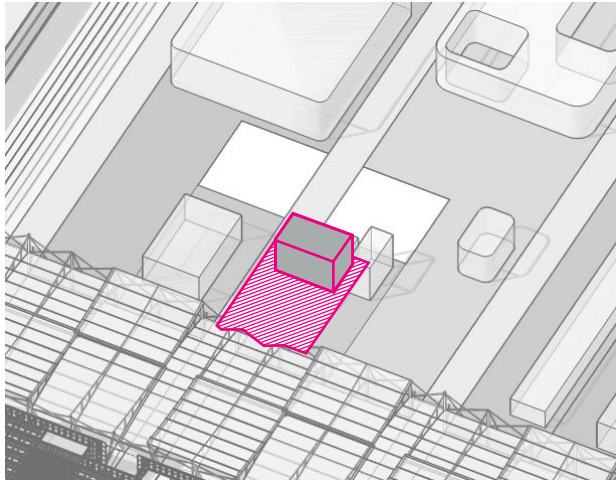
● INSTALLAZIONI LIBESKIND

# Distribution of the commercial areas on the lot N20. Study Case of Corriere della Sera.

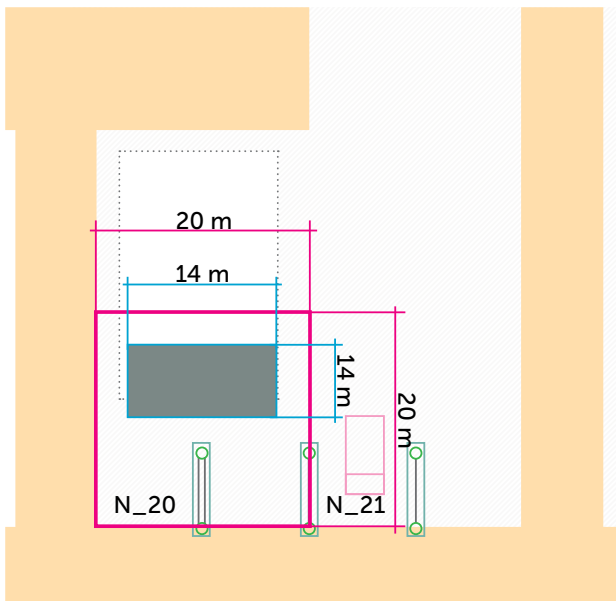


# Distribution of the commercial areas on the lot N20. Study Case of Corriere della Sera. Technical data and suggested architectural solutions

Lot N20 + built up area



Examples of architectural solutions



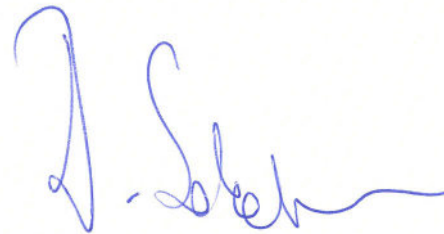
DECUMANUS

# CONCLUSIONS

The two-years of design research at Expo 2015 and the cooperation with Politecnico di Milano were a turning point in my artistic resume. Due to their scale, they have greatly changed the direction of my activity, providing a new perspective on the whole of my actions. They became a multidimensional source of inspiration in today's initiatives not only in the field of design work, but also in didactic activities and in the private life. Collaboration practices from Expo have taught me to integrate a variety of roles, to combine different visions, and to be ready for spontaneous challenges.

After completing my research activity in Milan, I became a mother. At the same time, working with the Joint Research Centre, I tried to draw inspiration from the new situation, which taught me self-discipline and careful selection of design tasks.

In my artistic and academic work of today, I am trying to combine all the experiences I have gained after my PhD. Relying on the power of the intellectual digestion, I believe that the newly created points of view and the opening for changes are the engine of broadly understood progress.

A handwritten signature in blue ink, appearing to read 'D. Sobchik', written in a cursive style.

Presented photo and graphic material comes mostly from the author's archive.

Some of them were made during the research conducted at Expo 2015 in the period 2013–15.

The photographic documentation for Clusters and some of the visualizations used in the catalogue come from the Expo 2015 database. They are publicized in courtesy and with full approval of post-Expo 2015 directorship (today's Arexpo S.p.A.)