International design contest

Cavallerizza Reale di Torino.

2.2. UMI 5, UMI 10 and UMI 11 design guidelines



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Introduction.

1.1 The new Cavallerizza Reale cultural hub

The Compagnia di San Paolo Foundation (hereinafter also referred to as CSPF), together with the City of Turin (hereinafter also referred to as "the City" or "the Municipality"), the University of Turin (hereinafter also referred to as "UniTO") and CDP Immobiliare SGR S.p.A. (hereinafter also referred to as "CDPI SGR") intends to take up the challenge of creating a cultural hub of international standing in the heart of the city, equipped with advanced technologies and guided by the principle of sustainability.

The restoration and conservative redevelopment work, which is intended to transform the *Cavallerizza Reale* into a cultural hub, aims to achieve three substantial positive effects for the local area:

- To restore an important historical and green area of the city for public use.
- To create a new venue for education, art, music and various forms of cultural expression.
- To develop a monumental area, recognised as a UNESCO World Heritage Site, as a new tourist attraction.

The *Cavallerizza Reale* unitary project consists of a set of organic and integrated activities that involve designing the complex as a whole and developing a cultural innovation strategy.

The eight sections of the project are summarised below:

- The Ala del Mosca [Mosca Wing] will house the new headquarters of the Compagnia di San Paolo Foundation. A
 multifunctional and contemporary working structure, including a ground floor area interacting with the remaining parts
 of the complex, the city and its inhabitants, making the monumental spaces usable for cultural and service activities.
- 2. The *Pagliere* [Hay Store] will be a local cultural hub of national and international standing within the surrounding district of museums and cultural venues, acting as a driving force for the *Cavallerizza Reale*'s cultural system and the initiatives taking place within it.
- **3.** As part of the broader objective of increasing the city's venues for academic activities, the *Corpo delle Guardie* [Guard Corps] building will allow the University of Turin to increase its visibility externally and to add to its *Aula Magna* [Great Hall] new spaces intended to provide a link between training and work; flexible spaces for the post-graduate school, including laboratories, teaching rooms, offices, co-working spaces and rooms for conferences and seminars that can be used with more flexible opening hours and by a range of different users.
- 4. The system of outdoor and indoor public spaces must integrate with all the other functions of the complex: (i) the Galleria Espositiva [Exhibition Gallery] which, in addition to leading through to the Giardini Reali [Royal Gardens] from Via Verdi, will be an important public space crossing the Cavallerizza Reale complex, intended to host contemporary art exhibitions, shows and events related to the world of design, fashion, photography, painting and art in general; (ii) the Salone delle Guardie [Hall of the Guards] will be a welcoming cultural meeting place, closely connected to the external area of the Cortile delle Guardie [Courtyard of the Guards]; (iii) Piazzetta Vasco and the Passaggio Chiablese: a new urban architectural complex consisting of a linear connection between Via Verdi and Via Rossini, equipped to host outdoor exhibitions and an experimental model of green and public space design.
- 5. Part of the *Accademia Militare* [Military Academy] complex will be dedicated to hospitality. The structure will host artists, students, theatre companies and musicians involved in the cultural programme of activities taking place at the *Teatro Regio* [Royal Theatre] and the *Teatro Stabile* [Stabile Theatre].
- 6. Centrally located within the *Cavallerizza Alfieriana*, the Theatre will become a multipurpose structure equipped with innovative venues and services, hosting music and performing arts shows in close contact with the Teatro Regio, the Teatro Stabile and other cultural, artistic, theatrical and music venues in the area, as well as being used as an exhibition space.
- 7. Part of the complex overlooking *Via Verdi* is expected to host the *Polo delle Arti* [Arts Hub], an area dedicated to Turin's Albertina Academy of Fine Arts and the "Giuseppe Verdi" Conservatoire of Turin. Hundreds of young artists involved in training, multidisciplinary experimentation and artistic performances as an expression of jazz, electronic, chamber music, visual arts, sculpture, set design and dance in all its forms.
- 8. In order to promote public use of the entire Cavallerizza Reale complex, a link between the green area of the adjacent Giardini Reali Alti [Upper Royal Gardens] is also envisaged. In agreement with the Musei Reali [Royal Museums], these will be accessible from various entry points and all areas of the gardens will be open to the public.



Figure 1. The Cavallerizza Reale cultural hub - proposed development

1.2 The Zona di Comando [Command Area]

Below is an extract from the technical and property data sheet attached to the announcement of sale¹ of the area in question. Further historical details regarding the historical evolution of the *Zona di Comando* and the *Cavallerizza Reale* complex can be found in the Unitary Redevelopment Plan attached to the competition announcement.

In the 1680s, the expansion of the city of Turin towards the Po allowed the Crown to take over new areas of land, close to the complex of ducal palaces, to be used as the seat of government activities. The imposing project, designed by the count and architect Amedeo di Castellamonte, involved adding a large theatre, an academy to provide education for the nobility and a stable with riding school to the complex of existing buildings. The new architectural complex was intended to connect the historic command area with a series of distinct but adjacent and communicating buildings, supported by the axis of a Grand Gallery, dedicated to the glory of Charles Emmanuel II, a symbol of the magnificence of the ruling dynasty.

As the duke died in 1675, construction work on the majestic gallery that had begun in 1674 immediately ceased. Construction of the Royal Academy, however, together with the Mint factory located further east, did begin and the buildings were inaugurated in 1680. The palace, which was intended for the education of court pages and children of the Piedmontese and foreign nobility, surrounded a vast courtyard with a double row of arcades on three sides, supported by coupled columns, connected on the east side with one of the four rows of stables arranged in a cross, used both by academics and the court itself. The sumptuous palace was destroyed during World War II and completely demolished to make way for the new Teatro Regio. Only a few columns and capitals from the arcades remain, recomposed on the edge of the small square opening onto Via Verdi.

From the start, Amedeo di Castellamonte's drawings included a riding school and a stable "to be built in the shape of a cross" next to the Royal Academy. The work was carried out at the same time as the construction of the Military Academy, which meant that the transversal connecting arm was already operational by 1680. The other three arms, which completed the cross as planned, together with the buildings enclosing the complex on Via Verdi, were built later, between 1680 and 1686.

"The area of the Royal Academy and the royal stables and riding schools has long lent itself to glorifying the "unitary project" embodied by the complex designed by Castellamonte, which was intended to become an important element of the government complex extending from the Royal Palace almost to the Po. In fact, the first plan for the area formed a harmonious and integrated whole with the other royal and government buildings and spaces, and there is no doubt that, despite its only partial completion, the large cross designed by Castellamonte has always been regarded as an implicit part of the architectural plans, a grand design that no one wanted, or dared, deny until the mid-eighteenth century".²

Not until 1698 was the wall structure of the Cavallerizza, until then located on the rampart of the Bastion Verde, completed to match the bastion front and transferred to the neighbouring "Castellamontiane" stables. However, the 1705 siege of Turin forced the city to direct forces and capital to constructing and strengthening the defensive structures and, consequently, all the most important construction sites involved in the eastern expansion of the city were suspended. Therefore, implementation of the Castellamonte plan also slowed down until 1730, when work resumed with the new plan drawn up by Filippo Juvarra.

¹ Call for tender by public auction for the sale of five properties owned by Società Cartolarizzazione Città di Torino of 23 April 2021.

² Piccoli E., Indagine Storico-critica, in M. Robiglio (a cura di) «Cavallerizza Distretto Culturale. Masterplan per la riqualificazione, valorizzazione e conservazione ad uso pubblico del complesso della Cavallerizza Reale in Torino», pages 24-38.

The stables underwent a few modest interventions between 1711 and 1726 and were excluded from Juvarra's operational reorganisation plan of the command area, but were largely rebuilt starting in 1740 to a plan draw up by the First Royal Architect Benedetto Alfieri. The current conformation of the Cavallerizza, a place intended for the royal court's equestrian exercises and shows, was established and included in the so-called "command area" between 1740 and 1742.

The new Cavallerizza became the eastern arm of the cross designed by Castellamonte, which was demolished to allow a much more stately and representative space to be created: the intention was for a two-storey building with a single nave to be developed eastwards and to be almost double the width of the pre-existing structure and over 73 metres long. Construction was to begin at the Rotonda Castellamontiana structure, which the royal architect decided to keep but transformed radically by modifying the atrium on the ground floor and building a chapel on the upper floors for the Academy to use, and end at the Mint, with a semicircular track of ups and downs to slow down the momentum of the competitors on horseback in Saracen tournaments, which however was never built. Upstairs were the apartments to accommodate pages, the head squire, the master and waiters.

The completed portion corresponds to approximately half of what was expected: the upper floor, intended for accommodation, was never built and the temporary infill wall of the east facade is still visible today, beyond which the Alfieri project should have been completed. The so-called "Command Area", a complex of unquestionable architectural, historical and symbolic value, has been listed as a UNESCO World Heritage Site since 1997.

The "Complex of the Cavallerizza is included in this Zona di Comando, which consists of a Baroque architectural complex combining the "State Secretariats", the Teatro Regio, the State Archives, and the complex of the Upper Royal Gardens, extending from the Bastion Verde to the San Maurizio Bastion, the outdoor areas of today's Piazzetta Mollino, together with the complex of the "Cavallerizza Reale", the "Stables and the Rotonda Castellamontiana", of the "Royal Mint", located on the islands of Santa Lucia and San Guglielmo.



Figure 2. General overview of the "Command Area"

1.3 The Cavallerizza Reale and recent developments

On 3 February 2020, CDP Immobiliare SGR, the Compagnia di San Paolo Foundation, the University of Turin, the consortium of the Albertina Academy of Fine Arts in Turin and the "Giuseppe Verdi" State Conservatoire informed the City of Turin of their interest in carrying out a redevelopment project of the *Cavallerizza Reale* complex referred to in the introduction to this document.

On 8 February 2021, the City Council approved the Unitary Redevelopment Plan (PUR) and on 3 March 2021 the Framework Agreement was signed between the City of Turin, Società Cartolarizzazione Città di Torino - CCT srl and CDP Immobiliare SGR. (**ANNEX A** and **ANNEX B**).

On 19 October 2021, Compagnia di San Paolo and the University of Turin were provisionally awarded the property units called: *Ala del Mosca* (Mosca Wing), *Pagliere* [Hay Store] and *Corpo delle Guardie della Cavallerizza Reale* [Corps of the Royal Horse Guards], as part of a public sale which was completed on 9 December 2021.

The final award was followed by the signing of the deed of sale and a subsequent deed of division which assigned Compagnia di San Paolo ownership of the *Ala del Mosca*, the *Pagliere*, *Piazzetta Fratelli Vasco* and the *Passaggio Chiablese*, while the University of Turin took ownership of the *Corpo delle Guardie*, as described in greater detail in the following paragraphs of this document.

Following its successful chase of part of the complex, the Compagnia di San Paolo Foundation intends to start a major redevelopment project for the properties it owns which, in compliance with the general principles identified by the Unitary Redevelopment Plan (PUR), will guarantee the conservation and enhancement of the historical and architectural heritage, particularly by creating cultural venues that are respectful of the existing construction.

1.4 Scope of the work and purpose of the competition

As defined by the Unitary Redevelopment Plan approved by the City of Turin, a graphic extract of which is shown below, the entire complex of the Cavallerizza Reale is divided into 11 so-called "Minimum Intervention Units" (outdoor areas and/or complexes of one or more buildings associated with a particular function.



Figure 3. The "Minimum Intervention Units" identified in the Unitary Redevelopment Plan



Figure 4. The main buildings of the Cavallerizza Reale complex

The two-stage design competition launched by Compagnia di San Paolo concerns both the properties it owns and some portions of the properties owned by the University of Turin, the Fondo Investimenti per la Valorizzazione (FIV) - Comparto Extra, managed by CDPI Immobiliare SGR S.p.A. and the City of Turin.

The area covered by the competition is divided into two "perimeters" as identified and described below.

PERIMETER 1 - Technical-economic feasibility project

The area identified by the red perimeter consists of two areas, the design of which must be understood as unitary:

- Area 1 (with yellow background), within which the construction of the new CSP headquarters and the Cultural Hub is planned, in addition to the urbanization works related to the recovery of the UMI 5;
- Area 2 (with green background), within which the establishment of cultural activities is planned for the disposal of institutions and associations whose realization in part is due to the urbanization works related to the recovery of UMI 1-2 and UMI 7 (see the ATTACHED FRAMEWORK AGREEMENT).

For the two areas, the elaboration of a single project of a level equal to a simplified technical-economic feasibility project (SIMPLIFIED PFTE) and overall of all the following Sub-areas is required.



Figure 5. PERIMETER 1

Area 1 consists of two sub-areas (1A and 1B):

- Sub-area 1A consists of all levels (within and above ground) of the buildings "G" Ala del Mosca (surface of approx. 7,228 square meters³), "S" and "T" Pagliere (surface of about 4,535 square meters) and related aptenant areas (porches "Up" "Gp1" "Gp2" "Gs" and Pagliere Passage "Sc" for a total of 1,135 square meters). Within this framework, the design for the construction of the new CSP headquarters (UMI 5) and a cultural Hub/platform (UMI 10) is required, in accordance with the Design Guidelines, with particular reference to chapter 3. Competitors are also required to design the fittings and interior furnishings of the new headquarters of CSP (UMI 5) and the Cultural Hub (UMI 10).
- Sub-area 1B, relating to the design of urbanization works related to the recovery of UMI 5, corresponding to the grounds of UMI 11 *Piazzetta Vasco and Passaggio Chiablese* (surface of about 2,920 square meters) and the inner courtyard of the Ala del Mosca (area of about 630 square meters). The design of the redevelopment of the surface arrangement and urban furniture is envisaged, in accordance with the Design Guidelines, with particular reference to chapter 3.

Area 2 consists of two sub-areas (2A and 2B):

- Sub-area 2A consists of the ground floors of the buildings "M", "N" and "O" identified with the acronyms "Ot", "N" and "Mt" (surface of about 1,705 square meters) and the grounds of the military academy square (UMI4) for an area of about 700 square meters. The restoration and preparation of the former stables and the *Rotonda Castellamontiana* intended for cultural activities is planned, in accordance with the destination expressed by the City (ANNEX TO THE COMPETITION NOTICE).
- Sub-area 2B, consists of the ground floors of the buildings "V", "L" and "I" identified with the acronyms "Vt", "Lt" and "It", as well as the mezzanine floor of the body "I" (total area of approx. 905 square meters) and the internal courtyard of the *Corpo delle Guardie* (surface of about 940 square meters). It is planned to design the redevelopment of the surface arrangement and urban furniture of the courtyard of the *Corpo delle Guardie*, the restoration and preparation of these rooms, including the *Salone delle Guardie* on the ground floor of the "I" body, intended for cultural and support activities and service to the adjacent theater / exhibition space of the *Cavallerizza Alfieriana* (UMI 6) in accordance with the addresses expressed by the City (ANNEX TO THE COMPETITION NOTICE).

With reference to sub-areas 1B, 2A and 2B, the simplified PFTE must be developed taking into account the integration of the compositional and formal language of public spaces (interiors and uncovered) while pertaining to distinct ownership structures. The connections and permeability of public spaces and the passages between the various courtyards on the ground floor and connections with the *Giardini Reali* as specified in table 04.03.a of the PUR must also be favored in order to allow free use by citizens, prefiguring a redevelopment of public spaces in line with the pedestrian vocation of the historic center.

³ This total area does not include the attic, which can be restored in accordance with Piedmont Regional Law no. 16/2018, as amended, as well as the construction of new dormers, as required by the PUR .

PERIMETER 2 - Guidelines

In addition to Perimeter 1, which is the subject of PFTE, areas with blue backgrounds have been identified, for which Competitors are required to develop a project at the level of design guidelines.



Figure 6. PERIMETER 2

Specifically, it is required to define:

- for the "H" building (UMI 6 Cavallerizza Alfieriana) to be used as a theater / exhibition space, special guidelines for the design of the PFTE connection relating to the Cavallerizza Alfieriana referred to in the premise c., being prepared by the Municipality of Turin, with the simplified PFTE referred to in Perimeter 1 in order to guarantee the design homogeneity of the site and a unified approach to the recovery and enhancement of the entire compendium the Cavallerizza Reale in the subsequent design levels, for which reference is made to the of addresses expressed by the City (ANNEX TO THE COMPETITION NOTICE).
- for the buildings "V", "L" and "I", with the exception of the premises on the ground floor and mezzanine referred to in sub-area 2B, intended for service hubs of the University of Turin, special design guidelines for the PFTE connection referred to in premise c. developed by UniTO, with the simplified PFTE referred to in Perimeter 1 in order to guarantee design homogeneity of the site and a unitary approach to the recovery and enhancement of the entire compendium of the Cavallerizza Reale in the subsequent design levels, for which reference is made to the PFTE for the realization of the Hub of services developed by UniTO (ANNEX TO THE COMPETITION NOTICE).

1.5 Purpose of the document

Regardless of the design competition perimeters identified above, following a brief general overview of the complex, this document sets out the design guidelines for the Minimum Intervention Units owned by Compagnia di San Paolo only, as referred to in the aforementioned area 1:

- UMI 5 Ala del Mosca;
- UMI 10 Pagliere;
- UMI 11 Piazzetta Vasco and Passaggio Chiablese

For the guidelines relating to the design of Area 2 and Perimeter 2, please refer to the other documents attached to the Competition Notice.



Current state.

2.1 Identification of the complex

The Cavallerizza complex is an integral part of the residual portion of the architectural complex of the *Zona di Comando* [Command Area] of Turin which, with the exception of the Pagliere buildings, has been listed as a UNESCO World Heritage Site since 1997, as part of the Piedmontese Savoy residences. The complex is located in the historic centre of Turin, in the immediate vicinity of Via Po, which diagonally connects Piazza Castello with Piazza Vittorio Veneto.



Figure 7. Location of the complex in the urban fabric of the historic centre of the city of Turin



Figure 8. Reale Complex



Figure 9. Piedmont Regional Landscape Plan - Sites included in the UNESCO World Heritage Site list - Savoy Residences

2.2 Urban setting

General Regulatory Plan

The existing General Regulatory Plan (PRG) places the complex in question within the Historical Central Urban Area where, as described in article 10 of the Urban Implementation Building Rules of the General Regulatory Plan for Turin, "the work is intended to protect the architecture and environment by correctly identifying the historical values, urban transformations and events that have shaped the city over time".

All the buildings in the complex are classified as "buildings of great prestige", with the exception of the Padiglione Scherma [Fencing Pavilion], which is classified among the "buildings resulting from the nineteenth century construction of the city".



Figure 10. Extract of Diagram no. 3. New General Regulatory Plan (PRG) approved by resolution of the Regional Council no. 3 - 45091 of 21 April 1995, published in Regional Bulletin no. 21 of 24 May 1995 and computerised plan updated to show the changes to the General Regulatory Plan approved as of 31 December 2013



 $\label{eq:Figure11} Figure 11. Extract of Diagram no. 1-Sheet no. 9. New General Regulatory Plan approved by resolution of the Regional Council no. 3-45091 of 21 April 1995, published in Regional Bulletin no. 21 of 24 May 1995 and computerised plan updated to show the changes to the General Regulatory Plan approved as of 31 December 2021$

The *Cavallerizza Reale* complex as a whole is also classified among the "Areas to be transformed in historic central urban area AT" and regulated by schedule 29 of the Urban Implementation Building Rules, Volume II - coordinated text as of 30.06.2021 - which provided in full below.

29 Cavallerizza complex (study perimeter)

The Cavallerizza is part of the larger complex of the Military Academy, partially demolished by bombing and by the establishment, after World War II, of the new Royal Theatre. Its location is a natural continuation of the system of buildings - secretariats, state archives - of piazza Castello.

The General Regulatory Plan intends to redevelop the entire complex by providing for museum, exhibition, cultural, university, residential, hospitality and service sector functions and public facilities. These functions may be supplemented by services for people and businesses.

The area included in the Study Perimeter is subject to the drafting of a "Unitary Redevelopment Plan" approved by resolution of the City Council and establishing the general structure of the complex, the types of work envisaged on the buildings, the minimum intervention units, the specific intended uses, and any other necessary specification, with reference to the indications that emerged in the context of the Conference of Services for the Cavallerizza complex which ended on 14 July 2004.

In the context of the "Unitary Redevelopment Plan", the public use of the Cavallerizza Reale, the Rotonda and the Maneggio Chiablese must be verified for museum, exhibition, university, and cultural functions. These functions of a general nature must be specified at the implementation stage. The residential functions, which cannot be located on the ground floor of the buildings, must not exceed 50% of the overall gross floor area, unless otherwise determined during the examination of the Unitary Redevelopment Plan by the City Council.

The pedestrian connections of Via Roma with Via Rossini and the Royal Gardens must be restored, and a pedestrian connection must be created through the system of courtyards between Piazzetta Mollino and Via Rossini.

The urban areas inside the Cavallerizza complex, accessed from Via Verdi no. 9 and Via Rossini no. 11 (including those giving access to the Rotonda) as registered in the Register of Buildings, page 1247, parcel 111, sub-division 81, must not be removed from the public use. For the Royal Gardens, redevelopment is planned to re-establish the continuity and usability of the entire system of gardens by connecting the Cavallerizza to Piazza Castello and the area of the Palatine Gates with a path along the ramparts.

The implementation work in the Cavallerizza area is subject to prior approval by the Superintendency for the Archaeological, Architectural and Landscape Heritage and the Local Landscape Commission.

Any additional work to that permitted by these Urban Planning Implementation Building Regulations may be approved by the City Council subject to approval by the Superintendency for the Architectural and Landscape Heritage and the Local Landscape Commission. As part of the overall functional reorganisation, the implementation work may include the construction of associated public underground car parks, both inside the complex and outside, along Via Rossini, beneath Piazzetta Rossaro and the surrounding areas. If underground car parks are created inside the courtyards, the original existing paving will need to be restored by repositioning the materials, paying particular attention to the pavements. For Piazzetta Rossaro, surfacing must be provided for the pedestrian square, with appropriate elements of street furniture.

Subject to evaluation by the competent Superintendency, the construction of a new building on the grounds of the original wing of the complex between via Verdi and the rear of the Royal Theatre (Piazzetta Accademia Militare) is allowed. This building must be one floor above ground, with a maximum height of 5 metres and a maximum gross floor area of 500 square metres. The depth of the wing and the alignments must be determined by means of specific drawings submitted to the Superintendency.

Car parks must be provided for the new buildings envisaged and for changes to the intended uses of private businesses (Law 122/1989). These must be built exclusively underground. Public service areas appropriate for the established activities must also be found for the new buildings. suant to article 10, paragraph 37, of the Urban Planning Implementation Building Regulations, as an alternative to disposal, the monetisation public service areas is allowed under article 6 of the Urban Planning Implementation Building Regulations.

The implementation work on the Cavallerizza complex is part of a broader project perimeter (represented in the General Regulatory Plan diagram to a scale of 1:1000) which, in addition to the Cavallerizza buildings, includes part of the Royal Gardens bounded by the ramparts.

With the exception of the work planned suant to article 81 of the Presidential Decree no. 616/1977, as amended, the project will be carried out in parts (minimum units of intervention) by means of building permits granted by agreement or accompanied by a unilateral deed of undertaking."

[*] Variant note: id 418, var. no. 217 - redevelopment of the Cavallerizza Reale complex, approved on 01/31/2011, mecc. 1008880/009

In Municipal Council Resolution 2019 06671/09 of 30 December 2019, the City of Turin took note of the proposal for the Unitary Redevelopment Plan (PUR) presented by CDP Immobiliare SGR S.p.A. on 19 December 2019 relating to the *Cavallerizza Reale* complex, in accordance with the provisions of the current PRG.

In a subsequent resolution of the City Council of 8 February 2021, No. 78/2021, the City approved the Unitary Redevelopment Plan on 30 September 2020 and the subsequent supplement of 5 November 2020, relating to the Complex, with the associated Framework Agreement Plan.

The PUR attached to these Guidelines is implemented through building permits associated with Agreements or Unilateral Deeds of Undertaking relating to one or more Minimum Intervention Units (UMIs) consisting of outdoor areas and/or complexes of one or more buildings with functions strictly linked to unitary intervention projects as identified in the PUR itself.

Note that the city council is preparing a variant to the PRG intended to eliminate the obligation to find parking spaces for changes in the use of private properties introduced following the approval of Variant no. 217 in 2011 relating to AT schedule no. 29.

Framework agreement

On 3 March 2021, Società Cartolarizzazione Città di Torino, the City of Turin and CDP Immobiliare SGR S.p.A. signed the framework agreement attached to these Guidelines, which governs:

- the general structure of the property complex as a whole;
- the implementation of the PUR through building permits relating to one or more Minimum Intervention Units (UMIs);
- the undertaking given by the Implementing Parties to carry out the building work required subject to the binding opinions of the relevant Superintendency suant to Article 21 of Legislative Decree 42/2004 and the Local Landscape Commission;
- the intended uses, ensuring the public function of some portions of the Complex.

In chasing part of the complex, the owner is therefore committed:

- to transfer and/or submit for public use to the City of Turin the areas and portions of the buildings intended for public functions;
- to carry out urbanisation works on areas and/or portions of public buildings or buildings intended for public functions, partly by deducting any urbanisation costs due, partly by and at the expense of the Implementing Parties;
- to carry out the building work as governed by the PUR and the Agreement itself.

Acoustic zoning plan

According to the Acoustic Zoning Plan, the property is included in Phase IV, class III - Mixed-type areas, with an absolute daytime noise level of 60 dBA and absolute night-time noise level of 50 Db.

The area includes zones pertaining to the road transport infrastructure of via Verdi, via Fratelli Vasco and via Rossini. With regard to potential reuse of the area, checks will need to be carried to verify consistency with the Acoustic Classification Plan of the Municipality of Turin or in any compatibility suant to the criteria set out in DGR 85-3892 of 06 August 2001 "Regional Law 52/2000, article 3, letter A. "Guidelines for the acoustic classification of the territory", as amended.

Commerce plan

The property is included in the commercial cluster of the main historic centre type A1.

2.3 Restrictions suant to Legislative Decree 42/2004

The *Cavallerizza Reale* complex is subject to Restriction Decree no. 9603 of 1 August 2005 issued by the Regional Directorate for the Cultural and Landscape Assets of Piedmont (**ANNEX C**).

With the same Decree, the regional government - in declaring the property in question of particularly important interest suant to art. 10, paragraph 3, letter a) because: "it forms part of the eighteenth-century outbuildings of the Royal Palace of Turin complex, the seat of the Savoy and later Italian monarchy until the capital of the Kingdom of Italy was transferred from Turin to Florence" - authorised the sale of the property in question which led to it being awarded to Compagnia di San Paolo and the University of Turin.

The authorisation to sell the property also included binding requirements for the conservation of the property as summarised below:

- The conservation of the property must be guaranteed by carrying out appropriate maintenance, restoration and recovery works, the plans for which must be submitted for approval by the Superintendency for Architectural and Landscape Heritage for the purpose of issuing the permit, suant to article 57(3) of Legislative Decree 42/2004. In particular:
- Consideration may be given to the construction of new structures connecting the former Academy and the end of Via Verdi, as long as they are of modest height, consistent with the historical boundaries and take into account the pre-existing structures;
- The design choices for the organisation and arrangement of the spaces relating to internal paths, as well as the solutions for retail, catering or other outlets, must be agreed by drawing up "unitary guidelines" agreed with the Superintendency for Architectural and Landscape Heritage, so that the "monumental compatibility" of such things as shop signs, shop windows, lighting fixtures, curtains, and any outdoor areas is guaranteed;
- Guidelines must also be drawn up for solutions relating to treatment of the elevations of various buildings so that a compliant solution is guaranteed even if work is carried out at different times or by different entities;
- The complex in question cannot be allocated to incompatible uses but can be allocated to house:
 - Dwellings,
 - University public services,
 - Cultural, exhibition and museum activities,
 - Service sector activities,
 - Commercial and handicraft activities as long as they are non-invasive, respectful of the historical context and not such as to require invasive services or technologies,

- Car parks.

Also attached is a letter from the Superintendency, no. 13153 of 31/08/2020, relating to the "preliminary assessment of compatibility" with the PUR. (ANNEX D).

2.4 Environmental and ordnance reclamation

Given that the entire building complex was bombed by the Royal Air Force (RAF) and by the American Air Force (USAAF) during the Second World War, the presence of unexploded ordnance that may require a specific risk assessment and intervention suant to Legislative Decree 81/2008 and Law 177/2012 cannot be entirely ruled out.

Neither can the presence, either above or below ground, of polluting substances that may require reclamation work suant to Legislative Decree 152/2006, as amended. In particular, a wall was detected under the ground of Piazzetta Vasco behind which the presence of one or more tanks cannot be ruled out. These may require safety and/or environmental reclamation work to be carried out.

Since the area occupied by UMI 6 (*Cavallerizza Alfieriana*) was used as a garage by the State Police, it is highly probable that under the ground, as well as in the neighbouring UMI 11 - *Piazzetta Vasco*, there are one or more tanks used to refuel police vehicles. The integrity and tightness of these tanks have not been verified. If deteriorated, they may have polluted part of the surrounding subsoil, thus requiring reclamation work and removal of the tanks, along with safety and/or reclamation work on the surrounding environment.

Based on the plans currently on file, the presence of additional underground tanks connected to a central heating plant located in the basement below UMI 11 cannot be ruled out either.

A buried tank was found under z 11, located under the surface of *Piazzetta Fratelli Vasco*, probably used to contain liquid fuel (diesel) for heating. This was subsequently removed and subject to a reclamation procedure completed as per executive decision of the "Environment Area - Technical Environmental Compliance Service of the City of Turin" chronological no. 203, file no. 2014 43611/126 of 09.26.2014.

Preliminary environmental investigation activities are currently under way relating to the buildings and subsoil of the courtyard of the *Ala del Mosca*, *Passaggio Pagliere*, *Piazzetta Vasco* and *Passaggio Chiablese*.

The results and a descriptive technical report on the results of the environmental investigations carried out will be made available to designers.

2.5 Legal status of the property

As stated in the introduction, on 19 October 2021, Compagnia di San Paolo and the University of Turin were provisionally awarded the portions of the *Cavallerizza Reale* complex known as *Ala del Mosca, Pagliere and Corpo delle Guardie,* as part of a public sale procedure which was finalised on 9 December 2021.

The deed of sale in undivided shares was signed between CCT (vendor) and Compagnia di San Paolo with the University of Turin (buyers) on 21 December 2021, subject to the Ministry and the other Entities entitled not exercising their right of pre-emption, which was confirmed by a subsequent deed ascertaining the fulfilment of the condition precedent on 22 February 2022.

On 22 April 2022, the deed of division was therefore signed between Compagnia di San Paolo and the University of Turin, which assigns the former ownership of the *Ala del Mosca, Pagliere, Piazzetta Fratelli Vasco* and *Passaggio Chiablese,* and the latter ownership of the *Corpo delle Guardie,* as described below with reference to the UMIs identified by the PUR.

Compagnia di San Paolo is therefore currently the owner of the following Minimum Intervention Units:

- UMI 5 Ala del Mosca and the respective courtyard spaces;
- UMI 10 Pagliere and the respective courtyard spaces;
- UMI 11 Piazzetta Fratelli Vasco and Passaggio Chiablese

The remaining UMIs are distributed as follows:

- The University of Turin owns UMI 7 Corpo delle Guardie and respective courtyard spaces.
- The City of Turin owns UMI 6 Cavallerizza Alfieriana, UMI 8 Maneggio Chiablese, UMI 4 Piazzetta Accademia Militare.
- Fondo Investimenti per la Valorizzazione (FIV) Comparto Extra managed by CDP Immobiliare SGR S.p.A. owns the following:
 - UMI 1 Accademia Militare and the respective courtyard spaces;
 - UMI 2 Corpi di fabbrica di Via Verdi and the respective courtyard spaces;
 - UMI 3 Rotonda Castellamontiana;
- CCT Cartolarizzazione Città di Torino owns UMI 8 Regia Zecca and respective courtyard spaces.



Figure 12. Complex ownership plan

2.6 Cadastral classification

Below are the details of the various UMIs held at the N.C.E.U. [new urban building registry] as a result of the deed of division signed by Compagnia di San Paolo and the University of Turin, relating only to the Foundation's properties:

UMI 5 - Ala del Mosca

PAGE	PARCEL	SUB- DIVISION	ADDRESS	FLOOR	ZONE	CATEGORY	CLASS	SIZE	CADASTRAL INCOME
1247	111	103	Via Verdi 9	S1-2	1	A/3	3	8 vani	1.177,52
1247	111	104	Via Verdi 9	S1-2	1	A/3	3	8 vani	1.177,52
1247	111	105	Via Verdi 9	S1-2	1	A/3	2	3 vani	379,60
1247	111	113	Via Verdi 9	S1-3	1	A/3	3	4 vani	588,76
1247	111	115	Via Verdi 9	S1-3	1	A/3	3	5 vani	735,95
1247	111	117	Via Verdi 9	S1-3	1	A/3	2	2,5 vani	316,33
1247	111	120	Via Verdi 9	S1-3	1	A/3	3	6 vani	883,14
1247	111	133	Via Verdi 9	S1-4	1	A/3	2	4 vani	506,13
1247	111	136	Via Verdi 9	S1-4	1	A/3	3	5 vani	735,95
1247	111	139	Via Verdi 9	S1-4	1	A/3	3	4 vani	588,76
1247	111	142	Via Verdi 9	S1-4	1	A/3	2	3 vani	379,60
1247	111	151	Via Verdi 9	S1-5	1	A/3	3	5 vani	735,95
1247	111	163	Via Verdi 9	S1-3	1	A/3	2	3,5 vani	442,86
1247	111	164	Via Verdi 9	S1-3	1	A/3	3	5,5 vani	809,55
1247	111	165	Via Verdi 9	S1-3	1	A/3	2	4 vani	216,91
1247	111	166	Via Verdi 9	S1-3	1	A/3	3	4 vani	588,76
1247	111	167	Via Verdi 9	S1-3	1	A/3	3	7.5 vani	1.103,93
1247	111	168	Via Verdi 9	S1-3	1	A/3	3	5.5 vani	809,55
1247	111	169	Via Verdi 9	S1-3	1	A/3	4	8 vani	1.384,10
1247	111	170	Via Verdi 9	S1-3	1	A/3	3	4.5 vani	662,36
1247	111	171	Via Verdi 9	S1-3	1	A/3	3	4 vani	588,76
1247	111	174	Via Verdi 9	S1-4	1	A/3	3	5 vani	735,95
1247	111	175	Via Verdi 9	S1-4	1	A/3	1	2.5 vani	271,14
1247	111	176	Via Verdi 9	S1-4	1	A/3	3	5 vani	735,95
1247	111	177	Via Verdi 9	S1-4	1	A/3	3	5 vani	735,95
1247	111	178	Via Verdi 9	S1-4	1	A/3	2	3 vani	379,60

1247	111	179	Via Verdi 9	S1-4	1	A/3	3	4 vani	588,76	
1247	111	180	Via Verdi 9	S1-5	1	A/3	3	6 vani	883,14	
1247	111	181	Via Verdi 9	S1-5	1	A/3	2	3 vani	379,60	
1247	111	182	Via Verdi 9	S1-5	1	A/3	1	2 vani	216,91	
1247	111	183	Via Verdi 9	S1-5	1	A/3	1	2 vani	216,91	
1247	111	184	Via Verdi 9	S1-5	1	A/3	1	2.5 vani	271,14	
1247	111	185	Via Verdi 9	S1-5	1	A/3	3	4 vani	588,76	
1247	111	186	Via Verdi 9	S1-5	1	A/3	2	3 vani	379,60	
1247	111	187	Via Verdi 9	S1-5	1	A/3	3	5 vani	735,95	
1247	111	188	Via Verdi 9	S1-5	1	A/3	2	3 vani	379,60	
1247	111	190	Via Verdi 7	4	1	C/2	3	406 mq	1.572,61	
1247	111	193	Via Verdi 9	S1-5	1	A/3	3	5 vani	735,95	
1247	111	216	Via Verdi 9	т		F/4				
1247	111	223p	Via Verdi 9			F/1				
1247	111	224	Via Verdi 7/9	S1-T- 1-2-4-5		F/1	٩	Non-rateable communal asset		

UMI 10 - Pagliere

PAGE	PARCEL	SUB- DIVISION	ADDRESS	PIANO	ZONE	CATEGORY	CLASS	SIZE	CADASTRAL INCOME
1247	111	223p	Via Verdi 9			F/1			
1247	112	6	V. Rossini 11	7	1	C/6	6	67 mq	612,47
1247	112	7	V. Rossini 11	т	1	C/6	6	61 mq	557,62
1247	112	10	V. Rossini 11	Т	1	C/6	6	79 mq	722,16
1247	112	11	V. Rossini 11	т	1	C/6	6	67 mq	612,47
1247	112	16	V. Rossini 11	Т	1	C/6	6	64 mq	585,04
1247	112	17	V. Rossini 11	т	1	C/6	6	58 mq	530,19
1247	112	18	V. Rossini 11	т	1	C/6	6	34 mq	421,43
1247	112	19	V. Rossini 11	т	1	C/6	8	30 mq	371,85
1247	112	32	V. Rossini 11	т	1	C/6	6	118 mq	1.078,67
1247	112	34	V. Rossini 11	T-1	1	A/3	4	7.5 vani	1.297,60

1247	112	35	V. Rossini 11	S1-T	1	C/2	3	132 mq	511,29
1247	112	36	V. Rossini 11	T-1	1	C/4	3	340 mq	1.650,60
1247	112	37	V. Rossini 11	T-1	1	B/1	1	2022 mc	2.228,77
1247	112	38	V. Rossini 11	1-2	1	A/3	4	6 vani	1.038,08
1247	112	39	V. Rossini 11	S1-1	1	A/3	4	5.5 vani	951,57
1247	112	41	V. Rossini 11	2	1	A/3	4	4 vani	692,05
1247	112	46	V. Rossini 11	T-1	1	A/3	2	7 vani	885,72
1247	112	47	V. Rossini 11	т	1	C/6	8	34 mq	421,43
1247	112	48	V. Rossini 11	T-1	1	D/1			6.656,00
1247	112	49	V. Rossini 11	т	1	C/6	8	18 mq	223,11
1247	112	50	V. Rossini 11	2	1	A/3	3	4.5 vani	662,36
1247	112	51	V. Rossini 11	3	1	C/2	3	213 mq	825,04
1247	112	52	V. Rossini 11	S1-2	1	A/3	2	5,5 vani	695,93
1247	112	53	V. Rossini 11	S1-T-1-2-3		Non-rateable communal asset			

UMI 11 - Piazzetta F.IIi Vasco and Passaggio Chiablese

PAGE	PARCEL	SUB- DIVISION	ADDRESS	PIANO	ZONE	CATEGORY	CLASS	SIZE	CADASTRAL INCOME
1247	111	89p	V. Rossini 11	S1		F/4			
1247	111	223p	Via Verdi 9			F/1			

2.7 Condition of the property

UMI 5 - Ala del Mosca



Figure 13. Ala del Mosca building

The *Ala del Mosca* building was built starting in 1832 to a design by Carlo Bernardo Mosca as a way of reorganising the area "pertaining to the Royal Stables and the new adjoining Pagliere [hay store]".

The building, which consists of 5 floors above ground - including the attic - and a basement, features a large vaulted hall on the ground floor (around 10 m high at its highest point) currently subdivided into 3 rooms and originally dedicated to stabling horses, accessible from the courtyard in front of the building and from *Piazzetta Vasco* through a large portico.

The upper floors, reachable via a scissor staircase placed perpendicular to the wing of the building in a barycentric position, consist of longitudinal corridors creating a cellular system, with internal stairwells positioned in the main body of the building.

The building, which was conceived and designed with a strong compositional rigour to optimise its functionality, has load-bearing masonry structures and wooden horizontals of a static nature which - at least on the upper floors - appears to be the result of a wider system of repeated wooden trusses intended to support both the horizontals and the wooden roofing structures.

The spaces are divided by wooden or solid masonry partitions of limited thickness, with the exception of the spine walls, which are repeated regularly and mark the interior spaces.

The state of conservation of the building - considering the years of neglect and improper use -, except for the simple finishes, appears to be good, a sign of the solidity and rationality of the design by the architect and engineer Carlo Bernardo Mosca.

















Figure 14, 15, 16, 17, 18, 19, 20, 21. Ala del Mosca building

UMI 10 - Pagliere



Figure 22. Pagliere buildings

UMI 10 - *Pagliere* consists of two parallel buildings facing each other and occupying the north-eastern part of the Cavallerizza Reale complex.

The two buildings in question, as also suggested by their exclusion from the overall registration of the *Zona di Comando* on the list of UNESCO World Heritage Sites, are less significant from an architectural point of view than the remaining part of the monumental complex and the state of conservation appears worse, mainly due to the recent episodes of arson that affected the areas adjacent to Via Rossini in 2014 and 2019, leaving the building largely uncovered.

The two wings of the Pagliere, built between 1846 and 1853 with seventeenth-century materials, have a masonry load-bearing structure, with an arrangement of spaces that shows how the ground floor consisted of storage areas with no internal connections.

The upper floors, initially conceived as rooms without partitions, now have partitions in the south wing to create perimeter compartments connected by a central longitudinal corridor.

It is worth noting that work has begun on the roofs of building "T" of the *Pagliere* (UMI 7), damaged by fire in several areas, for the purpose of securing and preserving the wooden load-bearing structures, as requested by the Superintendency of Archaeology, Fine Arts and Landscape of the Metropolitan City of Turin in its letter no. 21214 of 04/12/2019.



Figure 23, 24, 25, 26, 27, 28. Pagliere buildings

UMI 11 - Piazzetta F.IIi Vasco and Passaggio Chiablese

UMI 11 consists of the connection area, devoid of buildings (with the exception of the underground connection tunnel from the basement of the *Maneggio Chiablese* to the *Cavallerizza Alfieriana*), which winds between the UMIs 5, 6, 7, 8, 9 and 10 and which, starting from the pedestrian and vehicular passage at Via Verdi no. 9, reaches *Piazzetta Fratelli Vasco* and *Passaggio Chiablese*, providing a direct connection with Via Rossini and the neighboring Royal Gardens. The "Cavallerizza Pedestrian Area" was established by decision of the Municipal Council of 4 March 2008, closing the area to vehicles except for public safety, rescue and disabled transport vehicles, with a waiver to allow temporary parking for refuelling, staging and loading/unloading services..



Figure 29, 30, 31, 32. Piazzetta Fratelli Vasco and Passaggio Chiablese



Design instructions.

3.1 Requirements

The Foundation today

Since 1563, Compagnia di San Paolo⁴ has been an agent of sustainable development across different fields for the common good, through interventions, investments and accompanying actions that put the person at the center. If this is the statement that describes the action of the Foundation, it can today be defined as **great**, **philanthropic**, **innovation-oriented**.

- Great as the first for disbursements in Italy and among the 10 largest for capitalization of the Philanthropy Europe Association, the European association of foundations; CSP is endowed with one of the longest institutional histories, as well as a unique and known brand, whose origins are dated back to the late Middle Ages in Turin (1563).
- Philanthropic because it is dedicated to inclusive and sustainable development, to the relationship between the environment and the human community, to culture and to knowledge as a richness for the person and society; and because it always puts the person at the center, with its qualities and specificities, promoting the full development of individual talents and the achievement of the aspirations, autonomy and responsibility of each one, starting from the most fragile, respecting and valuing diversity and recognizing the importance of all the relationships through which people's lives develop; and because it respects and values all diversity, starting from that of gender, declining this approach internally and sharing the attention to the inclusion of diversity also in the collaborations it develops with its partners, promoting projects and helping to create and disseminate strategies and tools based on this transversal objective.
- Innovation-oriented, as it is committed to use, imagine, design and test the most effective strategies, methods and instruments of intervention, in a close dialogue with the best practices and cultures of international philanthropy. It embodies a clear function of agent of development and creation of opportunities in a territorial community.

The Foundation, in line with the Multiannual Programming Document 2021-24, sees the project of its new headquarter as an opportunity for true urban innovation, with repercussions of cultural regeneration and new sociality. The major European foundations increasingly think of their offices as meeting places, activities and exhibitions in constant relationship with the urban surrounding to which they belong.

The ambition of Compagnia di San Paolo, in relation to the centuries-old history of the Foundation and the Compendium of the Cavallerizza Reale, is to offer Turin an **authoritative**, **iconic** and **recognizable** architectural sign, for it to become a reference point for the cultural and tourist activities of the territory.

⁴ <u>www.compagniadisanpaolo.it</u>

The new headquarter in the Ala del Mosca

Organization and relations

Currently about 96 people work in the Compagnia di San Paolo Foundation, distributed between the headquarter in Corso Vittorio Emanuele II n. 75 and the headquarter in Piazza Bernini n.5 in Turin.

The operational structure of the Foundation is attributable to the functions represented in the following diagram:



The Secretary-General heads the Foundation's operational structure and is supported by the Secretariat.

The **President** is the legal representative of the Foundation and directs the work of the General Council and the Management Committee. The **Corporate Bodies** guide the Foundation and are composed of the General Council which is the steering body (17 members), the Management Committee (5 members) which has all the powers for the ordinary and extraordinary administration of the Foundation, the Board of Auditors (3 members) which is the control body.

The **Secretariat of the Corporate Bodies** manages the documentation and information flows relating to the Collegial Bodies. **Communication** takes care of external and internal communication and manages institutional events.

The Planning, Research and Evaluation Department coordinates strategic planning.

The Operations Department oversees the administrative and organizational aspects using the activities of the Internal Audit, Cost Management, Human Resources and Organization, Administration, Budget and Financial Reporting offices and the Secretary's Office.

The **Chief Financial Officer** is responsible for the foundation's asset management, coordinating the activities of the **Finance Department** and the **Impact Innovation Department**.

The organizational model of Compagnia di San Paolo is inspired by European planning practices, which at the same time emphasize the coherence, integration and flexibility of the action within an organizational system, in which the intentional focus (i.e. with a specific mission) of each operating unit contributes to the suit of the underlying objective. The "underlying objective" generates missions that in turn develop coherent mission projects.

Strategic alignment with the United Nations 2030 Agenda.



Distribution of resources allocated in 2021 by SDG, a model for the plan

In the declination of CSP, which has developed its own lexicon, the "sustainable development of territories for the common good" appears as a "grand challenge", sued through the three Objectives that identify (in the light of the 2030 agenda) three key dimensions: Culture, People, Planet. The Objectives are sued through fourteen Missions, each of which manages thematically and finalist-consistent project portfolios (**ANNEX E**).

Below is a focus on the institutional area:

- The Culture Goal is divided into four working groups, dedicated to four Missions: Building capacity to attract, Developing skills, Preserving beauty, Encouraging active participation.
- The People Goal is divided into five working groups, dedicated to five Missions: Reinventing dwelling systems and regenerating neighbourhoods, Promoting decent work, Educating for collective development, Rediscovering community, Working together for inclusion.
- The Planet Goal is divided into five working groups, dedicated to five Missions: Harnessing the value of research, Boosting innovation, Fostering international opportunities, Promoting well-being, Protecting the environment.


Political agenda and civic commitment

Clear, targeted objectives

Concept

In March 2020, the Covid-19 emergency overwhelmed the entire country system, significantly changing the way people work and determining a substantial evolution of work spaces. In the last ten years the concept of the office has evolved towards a model focused on flexibility: the agile organizational model, declined in *smart working* at the management level and in *activity-based working* at the spatial level, has replaced the traditional one characterized by control, fixed schedules and assigned workstations. This phenomenon has been exponentially accelerated by the Covid-19 pandemic, which has led to a leap forward of at least 5 years.

The new headquarter of the Foundation will have to assume an identity role, where to promote the sense of belonging, engagement, socialization and relationship. The design of the spaces must, therefore, necessarily evolve to adapt to new methods of working: the environments will have to combine appearance and dimensions trough a lens of sharing, informality and welcoming design, which stimulates interaction and socialization and the spontaneity of relationships between colleagues.

It is in this perspective that the offices will have to be rethought with a completely new and *worker-centric* purpose. People want to work where they feel most productive, comfortable and safe, expecting to spend most of their time in the office, but with the freedom to choose whether to work from home or from anywhere else depending on the activity they have to do. Thus the office is entirely re-imagined no longer as a static place to carry out one's daily work activity but as a space for socialization, sharing and group work, where it is possible to go when you need moments with your colleagues to exchange ideas, innovate and feel part of a community.

With this in mind, Compagnia di San Paolo is thinking of a new headquarter in which all the work spaces are designed for employees; it must convey the strong message that the Foundation carries out in its daily commitment: to put the person at the center with its qualities and specificity respecting and appreciating diversity. The new headquarter will have to be the central piece of the work experience in a building where history is breathed but that inevitably looks at future and innovation by offering as many experiences as possible.

The design of the working spaces must take into account the 5 following guidelines:

1. Diversification of space

New offices must be part of a wider work experience at the level of places and modalities of work; each user will have different options and will be able to choose the best one according to the activity to be carried out. We can no longer think of a single undifferentiated environment for all activities, the spaces must be diversified: for creative experiences stimulating spaces and positive contamination are required, for activities that require concentration quiet environments that guarantee sound insulation from external disturbances are necessary and for collaborative activities spaces are needed that facilitate the interaction and participation of all, as well as the reduction of rigid and formal environments in favor of informal collaboration areas, break areas and lounge areas. In designing the environments, the three modes of use also allow a spatial diversification. *Public* spaces are places of maximum interconnection in which informal meetings take place and where it is also possible to carry out individual work of concentration and *private* spaces, offices or workspaces assigned, are places suitable for individual work.

2. Spaces for collaboration

The project will have to rethink the weights of the spaces in favor of positive dynamics that strengthen *teamwork*. Workspace design will see less space allocated to individual workstations in favor of workspaces dedicated to collaboration, idea sharing, and learning. The design of the office will be based on shared spaces with a wide range of furnishing choices to facilitate formal and informal group work, mentoring and occasional chatting with colleagues to bring ideas to life, well-equipped meeting rooms and workspaces that foster interaction.

3. The quality of the space

The design of the new headquarter will have to put the well-being of users first and create healthy work environments. In addition to the diversification of spaces, the quality and quantity of air, acoustic comfort, thermal comfort, light, the use of greenery within workspaces to establish daily connections with nature, a design strategy that promotes physical activity will be all aspects to be privileged. The quality of indoor space, based on the principles of biophilic design, affects not only the well-being of people, but also their productivity. The goal is to create an environment that encourages psychological and mental well-being (wellness and well-being), through the organization of spaces and furnishings also with the inclusion of natural and artistic elements, the choice of colors based on the specific function and the use of ergonomic and customizable components.

4. Flexibility

The design of the office will need to be able to absorb potential new emergencies, different ways of working and increasing employment. Modular and flexible furnishings will have to become an increasingly used solution to easily change the configuration of meeting areas and accommodate smaller or larger groups. The furnishings will be chosen to support desk-sharing, including lockers for sharing documents and lockers for storing personal items, and a considerable emphasis will be placed on mobility to allow employees to work anywhere.

5. Opening to the territory

The new headquarter in the Ala del Mosca will have to have its own recognizability and identity, becoming a reference point for the city. Its image must recall a place that is open open to the neighborhood and the city, culturally alive, whose purpose will be to bring citizens closer to the world of the Foundation and to the satellite cultural realities.

Functional program

The Foundation intends to move it headquarter in the Ala del Mosca building, which will have to be able to accommodate about 130-150 people, a variable number due to a possible increase in staff over the years compared to today's situation must be contemplated. For this reason, it is required that the configuration of the spaces is sufficiently flexible to allow the insertion of new resources without having to distort the planimetric system of the offices. It is assumed, therefore, that the project can highlight the ability of the building to incorporate and adapt to changes.

The various parts that will compose the complex must be clear and easily identifiable: the ground floor as a place that opens to the public and in dialogue with the rest of the compendium and with the city; the upper floors are home to the offices of Campagna di San Paolo Foundation. The accesses and paths must be designed in such a way as to facilitate the orientation and movement of different categories of users, whether they are visitors or employees. Pedestrian access to the various activities must be independent. The porches on the ground floor must be a filter between the public outdoor spaces, adjacent to the building (the inner courtyard, the Vasco square and the Chiablese passage) and the large vaulted living room on the ground floor. It should be noted that, in any case, the distribution structure of the ground floor must guarantee the maximum functionality of the tertiary activities of the upper floors (accesses, reception spaces, vertical connections, etc.).

The functions to be provided for in the new complex are listed below.

On **the ground floor** of the Ala del Mosca, around the actual work areas, the Foundation would like to include functions at the service of internal and external users. The entire ground floor must be permeable towards the outdoor spaces, filtered by the porch, and towards the high Giardini Reali.

Multipurpose room

The project must include a multi-purpose room for meetings and activities related to a cultural promotion function such as conferences, presentations, screenings, small concerts, also open to the public, as well as a representative hall for the Compagnia San Paolo Foundation for initiatives and events.

It is desirable that the hall, with the flexible configuration for conferences and events, has a capacity of about 150 people. The set-up must be based on maximum modularity and variable set-up geometry for different types of activities, equipped with advanced technological equipment (conference calls, recordings, projections in various formats, simultaneous translation, broadband, etc.). A space for the possible storage of furnishings and materials must be provided. The room must be equipped with a control room. The room must have an area for refreshments and coffee breaks as well as a service space for catering.

The spaces must be in connection with the offices of the Company and at the same time autonomous for openings on days and times other than those of the offices.

Cafeteria / Light catering

It is to be envisaged the location of a cafeteria that can carry out both a bar service and a light catering service available to the public that passes through the Cavalleria compendium, users of the activities of the Pagliere and the staff of Campagna di San Paolo. To make this function consistent with the cultural vocation, assigned to the other spaces of the Cavallerizza, it is suggested that the philosophy of the cafeteria, the preparation and the offer have a socio-cultural imprint, enhancing the themes of sustainability and also promoting some initiatives that link culture to food (e.g., literary coffee).

The cafeteria will have to provide a work area, in addition to the counter area also a kitchen and the necessary service rooms and a consumption area for customers and toilets. To be evaluated the possible extension of the cafeteria to the porticoed spaces and, possibly, to the adjacent gardens.

The spaces will be autonomous for openings on days and times different from the surrounding activities (ANNEX F).

Exhibition space

There will be a function of *temporary cultural showroom* intended as an exhibition space available both to Compagnia di San Paolo, and to the institutions and cultural realities of the territory, as a showcase open to the public (citizens, visitors, tourists) to exhibit and show documents, works and initiatives useful to testify significant aspects of the city's cultural activity (e.g. not exhaustive: from the representation of the Foundation's projects, to the description of the evolutions of the Cavallerizza compendium, to the antenna and reverberation action for events and initiatives of significant importance underway in the city at other cultural places).

A location that maximizes visibility and accessibility and the possibility of a flexible and reconfigurable space according to needs is recommended. If there are the conditions in terms of available space, this function can be allocated alternately in the Pagliere building.

Advanced reception

There is an area, on the ground floor of the building, for the reception service of employees and guests, as well as the control of entrances, and the reception of mail and goods. The area must accommodate 4 workstations and have a dressing room and a utility room for the storage of material.

On **the upper floors** of the Ala del Mosca (mezzanine floor, first floor, second floor, third floor and attic) will have to be organized the offices of the Foundation.

In the configuration of the spaces for the headquarter, two macro-categories of environments are to be considered: the **work areas**, the collaborative **shared areas** and the *Formal meeting rooms* for the statutory bodies of the Compagnia di San Paolo.

All competitors who will access the second phase of the competition, will be provided with further specifications regarding the characteristics of the workspaces, as well as indications about the number of users, current and future, the work areas for exclusive use and the collaborative areas.

Within the overall reconfiguration of the Ala del Mosca, to complement the office space, additional areas are to be provided for the following functions:

Private dining room with service area

A room for 6-8 people to welcome guests for a business lunch. It must be accompanied by a service space for catering and food preparation/storage.

Wellbeing spaces

A multifunctional space is planned, open to users of the Foundation and users of the other bodies that inhabit the compendium. Due to the sizing is to be considered the simultaneous presence of about 15 people. The wellbeing spaces will have changing rooms, toilets with showers.

Baby parking / Nursery

The Compagnia di San Paolo intends to offer its employees a *baby parking service*, possibly extendable to employees / users of the other areas of the compendium, with a presence of about 20 children. All the necessary spaces (differentiated toilets, halls, service rooms) must be provided. The spaces of the *baby parking* / nursery can possibly also be open to external users.

General Services Office

It is a shared office with 4-6 workstations for the outdoor area General Services that will take care of the management of the property. By mean of example, the General Services will have to deal with the management of the general organization, the reception, the catering and the superintendence of the maintenance of the offices.

Ancillary functions

Ancillary rooms must be provided to serve the functions installed in the building, such as, for non-exhaustive example, in a number and size adequate to the functions previously described:

- toilets some of which are equipped with showers in the necessary number and size and positioned according to the proposed project layout with the exception of the specific requests highlighted above;
- rooms for the cleaning service with changing rooms;
- premises for the management of plant maintenance and material storage
- record-keeping archives;
- copy rooms for the placement of photocopiers, printers, scanners and for the storage of office material;
- technical rooms;
- recording studio (audio / video), equipped with lights and background and stage for the production of interviews and videos with chromakey technique;
- data center;
- waste rooms;
- additional premises dedicated to services / activities consistent with the concept.

This mandatory framework is not binding, but can be modified by the designers according to the best subdivision of the spaces, accesses and internal flows of the building in relation to their project proposal.

The cultural platform of the Pagliere

Concept

Compagnia di San Paolo has imagined that the spaces of the Pagliere are addressed to a cultural vocation, able to serve policies and strategies aimed at the different sectors of culture.

In particular, it is envisaged that the aforementioned spaces will be destined to functions that allow to play, as a whole, a role as a platform for cultural transformation for the city and the territory, in order to strengthen the creative and cultural *milieu*, encourage the development and innovation of cultural actors, generate new socio-cultural practices and become a community presidium with cultural leverage.

The Pagliere will be the central component of the platform, enabling its mission as a cultural hub and hosting the main functions and the consequent offer profiles aimed at cultural actors and the community.

For further information, please refer to **ANNEX F**.

Functional program

In the building of the Pagliere, consisting of the S and T bodies, several functions are provided, listed below:

On the ground floor:



1. Function of "design greenhouse" consisting of development activities, laboratory and accompaniment for cultural and creative projects promoted by cultural organizations, in rotation, with the involvement of the community and citizens through participatory practices, with average conspicuous flows regulated and planned. Laboratory spaces are environments that can accommodate more people for meetings, demonstrations, presentations, activities in small groups, training, therefore with the possibility of interior design, ductile and variable use depending on the needs. A very rough estimate hypothesizes that around 8 laboratory spaces of different sizes (between 20 and 40 people) can be obtained, some of which can be agreed with local institutions. It is suggested to evaluate the possibility that some of these spaces can be communicating or, where possible, have mobile partition walls that allow the union of two or more environments increasing the capacity if necessary.

In terms of technologies, it is desirable to have the maximum provision of solutions and technical infrastructures that allow the widest capacity of ITC connections, connections, fittings and uses, as well as a sectioning of the systems is suggested so that each laboratory space is autonomous allowing consumption savings (lighting, heating, refrigeration).

2. Function of showroom and cultural info point available to citizens and tourists to access information and materials on the cultural and touristic offer (metropolitan area, region). This function must be allocated in one or more environments with external access to the clearly visible street and requires the presence of exhibition spaces and a contact desk with the public together with devices that allow independently to obtain news (exhibitors, collectors, monitors, etc.).

On the first floor:



3. Function of "skills accelerator" represented by the hospitality given to subjects outside the Foundation able to offer consulting services for cultural organizations, institutions, local authorities and creative start-ups. For the performance of these services, spaces are provided in the form of individual offices dedicated to the main issues covered by support (legal, credit, administrative, design, etc.), of which 4 or 5 with double workstation, able to receive each at least 2 or 3 users by appointment. To guarantee the range of types of services envisaged, a minimum number of 11 offices is estimated.

In addition, it is planned that there will be a space to provide information services and work orientation for artists, individual cultural operators and students of cultural disciplines, also in this case equipped with a desk for counter activity and range of equipment where one can independently find news (physical and electronic bulletin boards, monitors, binders, etc...). There are also 6 offices dedicated to hosting the functions and employees responsible for the management of the Pagliere (of which 1 single, 3 with double station and 2 open space 4-6 stations); at least 4 meeting rooms of various sizes, to facilitate meetings that require the presence of more people. The set of offices and meeting rooms requires the presence of an exchange point with a desk that allows users to be directed with useful information and one or more waiting areas, together with back-office services (copier / printer, warehouse, etc.). The expected flows are contained as these are services provided on request and by appointment.

On the second floor and in the attic:



4. Permanent hospitality function of offices of bodies of significant cultural institutions active in the territory of the metropolitan city of Turin. The institutions hosted are assumed to be at least 3 and that for each one at least 2-3 offices are needed, with double workstation. Also in this case, *back-office* services must be provided (photocopier / printer, spaces for storing materials, etc.).

In the external area of the Pagliere passage



It is the intention of Compagnia di San Paolo to enhance public spaces (paths, courtyards, Piazzetta Vasco) with micro-activities of artistic and cultural nature at full capacity. The morphology of the area between the two bodies of the Pagliere, in addition to the function of passage (with the reopening on via Rossini) and access to the rooms of the two buildings, lends itself ideally to this type of interventions, which are linked to the functions housed in the structure.

If we proceed to a coverage of the area (proposed hypothesis), also as an element of strengthening the connection between the two buildings, it is suggested to explore the possibility that it is walkable and accessible, in order to increase the space for cultural initiatives.

The open passages of Piazzetta F.lli Vasco and Passaggio Chiablese

The UMI 11 is composed of the uncovered connection area that, starting from the pedestrian and driveway passage near number 9 of via Verdi, reaches the Vasco brothers square - located in front of the building "Ex Maneggio Chiablese" today Aula Magna (assembly hall) of the University of Turin -, the "Ex Cavallerizza Alfieriana" as well as the former Zecca (Mint); Crossing the central square it leads to the Chiablese Passage that allows the compendium a direct communication with Via Rossini and the neighboring Giardini Reali) Giardini Reali.

The redevelopment of the external areas of the UMI 11 and the court of the Ala del Mosca, in compliance with the indications of the PUR and of the resolution G.C. 4 March 2008 n. mecc. 0801158/119, which established the "Pedestrian Area Cavallerizza", must:

- ensure access to all buildings overlooking such an open space and maintain connection with the public spaces of the inner courtyards of the Corpo delle Guardie (Guards Corps) and the Ala del Mosca;
- pay particular attention to the theme of accessibility, prefiguring a redevelopment of public spaces in line with the pedestrian vocation of the historic center, with particular attention to the presence of students (UniTo and Polo delle Arti).

The outdoor public areas of the Cavallerizza Reale complex (squares, green areas) must be conceived as an ideal continuation of the cultural functions outside and will provide for a free use by citizens: a real street of art and culture available to institutions and associations, a meeting point where you can stay, read, study, meet or attend small events and activities.

These spaces must be configured not so much as a place of passage, but as a place of meeting and socialization, safe and easily accessible, a real integral part of the compendium of the Cavallerizza Reale.

The redevelopment of public spaces must provide for the surface arrangement the maintenance and protection of existing cobbled floors, and the identification of elements of urban furniture, greenery and public lighting.

Fixed outdoor furniture solutions must combine aesthetic pleasure and characteristics of robustness, resistance and ease of maintenance.

Taking into account the possible construction of Line 2 of the Metro in the subsoil of the Complex, it may be necessary to carry out limited technical works, even on the surface of unbuilt open spaces, where indispensable for the construction and functionality of the line itself.

3.2 Design objectives

Restoration work

The project must guarantee the conservation of the property, through the implementation of adequate restoration and recovery works, whose interventions must be submitted to the approval of the Superintendence for Architectural Heritage and Landscape for the purpose of issuing the authorization.

Please refer to chapter "05. Indications for recovery and restoration and homogeneous design cores" of the PUR in which the indications are reported, in a general and particular way, aimed at outlining the methodological steps that must be taken in the recovery project of the Cavallerizza Reale. In particular, with respect to the restoration and conservation interventions on the surfaces and decorative artifacts of the architectural complex, specific instructions are defined for the different types of artifacts (brick, stucco and plaster, metal works, wooden materials, stone materials) and each UMI.

It should be noted that with regard to the UMI 5 - Ala del Mosca, the recovery of the attic for housing purposes is to be envisaged, suant to the Piedmont Region Law no. 16/2018 and subsequent .m.i., as well as the construction of new dormer windows on both roofing aquifers, as required by the attached PUR, subject to the authorization of the Superintendence.

Organization of spaces, finishes and furnishings

The design of internal and external architectural solutions must be devoted to the satisfaction of the functional needs related to the intended uses previously described and to the conservation and enhancement of the historical identity of the buildings. The project proposals must comply with the general guidelines of the PUR and be based on the principles of conservation of cultural heritage promoted by the Superintendence for Cultural Heritage, promoting solutions capable of obtaining the necessary prior approval.

Together with the architectural project, the designers are required to define the project relating to the setting up of the offices and the spaces connected to them (multipurpose room, exhibition space, baby parking, etc.). Within the Economic Framework for the realization of the work, a sum has been allocated only for the design of both standard and custom-made furnishings. It will be up to the designer to decide whether to opt for furniture available on the market or design "ad hoc" elements. The set-up must constitute an added value of the project and contribute to define in a more organic way the space and the different envisaged functions. The lighting proposal aimed at ensuring not only the correct amount of light, but also to improve the internal atmosphere of the work spaces, identifying the correct degree of illumination of the various areas, will also be part of the furniture.

The layout of the interior spaces must be designed with the aim of creating current, welcoming, open and functional environments for the different uses of the work spaces and outbuildings. The designers will have to elaborate a proposal for installation taking into account the design principles mentioned below.

Flexibility and modularity

The venue will be characterized by dynamic and flexible spaces, which can be quickly reconfigured to accommodate different types of events and work activities. To easily change the configuration of the workspaces, the fittings should preferably be modular and flexible. These spaces must be easily transformable and reconfigurable to adapt to possible and changing configuration needs of both work environments and those intended for spaces for conferences / meetings / cultural activities, etc ... Specifically, office furniture – and consequently plant equipment – must be able to support desk-sharing and mobility to allow employees to work in any space of the building. All designed solutions must therefore be consistent with this need. Therefore, robust but light, easy to move furnishing solutions are required that allow spaces to be redesigned if necessary. These characteristics are also required for custom-made elements, possibly proposed by the designers. Both standard and custom-designed furnishings must conform to a principle of modularity to allow their composition and decomposition, in order to relocate in environments of different sizes and / or shapes.

Aesthetic quality

To truly become a cutting-edge place to work, collaborate, share and socialize you will have to offer welcoming and comfortable spaces through a wide range of choices of furnishings and fittings. Where compatible with the intended functions, it is important that the proposed solutions incentivise and foster interactivity and interpersonal exchange. From this point of view, the furnishings and finishes play a fundamental function. To achieve this goal, competitors can propose the employment of design elements, both using standard products and tailor-made and *site-specific* solutions, with particular attention to the issues of sustainability of materials, natural or recycled / recyclable, with a view to the circularity of the product and with reference to the overall coherence of the project as a whole from the point of view of values (ESG, SDGs).

Compatibility of the furniture with the technological components

It is required to designers that the proposed furnishing solutions are selected taking into account the need for mobility of users. For example, all workstations will need to be equipped to allow users to connect their devices to the power grid; all workstations for consulting PCs (standing or at the table) must be wired; all shared work rooms (multi-purpose room, meeting rooms, etc.) must be prepared for projection and audio diffusion, etc...

Accessibility of spaces

All interior areas of the buildings will have to be easily accessible, regardless of everyone's abilities. More specifically, the following are some requirements that designers will have to observe:

- access to the headquarter must be easily identifiable from the outside;
- the doors or access gates of each room must be easily maneuverable, with a clear light such as to allow easy transit even by a person in a wheelchair (not less than 80 cm); the door compartment and the spaces in front and behind must be coplanar and sized to easily allow maneuvers with the wheelchair;
- the doors and the windows must be easily usable even by people with reduced or impaired mobility or sensory skills, as well as the opening mechanisms.
- the terminals of the systems (switches, sockets, etc.) must allow easy use even by people with reduced mobility and sensory capacity;
- each floor of the building must be provided with toilets accessible also to disabled people equipped in such a way as to allow the maneuvers necessary for the use of sanitary equipment also to people on wheelchairs;
- the steps of the stairs must have a non-slip tread with a rectangular shape. The handrails must ensure easy grip and must be made of resistant and non-sharp material;
- the arrangement of the fixed furnishings in the different environments must be such as to allow the transit of a person on a wheelchair and the easy usability of the equipment contained therei;
- it is necessary to guarantee the study and consultation tables an easy access by someone on a wheelchair;

Energy and plants

The plant systems serving the building, as a whole, must be consistent with the proposed design solution, guarantee the comfort requirements in the environments according to the different intended uses, as well as guarantee the minimization of energy consumption, in compliance with the budget indicated, the current legislation related to functional and operating safety and the historical-architectural constraints of the building. Each functional unit that is independent (e.g. headquarter, cafeteria, baby parking, etc.) must be equipped with its own energy supply for each type of system to be connected to public networks. If one or more supplies are at the service of several functional units, these must be properly accounted. Energy supplies must be carried out in accordance with the instructions of the public network operators.

The interiors must offer spaces suitable for the functions performed and be equipped with modern technological infrastructures that support and allow the performance of activities in any environment and that are equipped with innovative interactive and instrumental communication systems able to contribute to the simplification of work and processes.

Gli ambienti interni dovranno offrire spazi adeguati alle funzioni svolte ed essere dotati di infrastrutture tecnologiche moderne che supportino e consentano agevolmente lo svolgimento delle attività in ogni ambiente e che siano dotati di innovativi sistemi di comunicazione interattiva e strumentali in grado di contribuire alla semplificazione del lavoro e dei processi.

On **the management level**, the spaces must be designed according to a fully *data-driven* management address, that is, they must be prepared with sensors and devices to allow a systematic and continuous collection of data that, appropriately processed and interpreted, will constitute a support system for asset and facility management for management and decisions (digital twin). The digital twin will allow to read the data (geometries and information contents), analyze the use and wear of the property and cross information deriving from reality (IoT) and the project (as-built model), in order to monitor performance and plan interventions effectively and reduce the dispersion of costs and resources.

The users themselves will be producers of data, which will be collected as part of their multiple interactions with the spaces, services and tools made available.

The implants must be aesthetically non-invasive and in any case compatible with the compositional choices identified.

Below is a brief description of the main design criteria that designers are called to follow.

Building Energy Management System - BEMS

With this technology it is possible to monitor, control and adjust the systems even remotely, thus ensuring maximum control of the comfort conditions inside the building and, at the same time, define and monitor the implementation of energy management strategies and reduce operating costs thanks to the availability of updated information in real time. The BEMS introduces artificial intelligence inside the building and enables innovative ways of automation, management and remote control of the plants. It consists of a hardware part, based on intelligent sensors that control and control the correct functioning of the systems, and a software part that monitors and optimizes energy consumption in real time through the application of artificial intelligence algorithms.

Electrical and lighting systems

The environments being designed must be classified according to current legislation, in order to define protection measures against direct and indirect contacts. The electrical systems must be designed with zone and / or floor architecture, meaning by "zone" the environments and spaces having the same intended use, or functional. The individual zones must be equipped with separate protections on different circuits and distinct, for example, for light circuits and terminal power outlets. The distribution of energy must be designed in order to ensure easy maintainability of the system after its construction, allowing safe access to all the nodal elements, aiming at reducing the disservice in case of failure or malfunction. The project will also have to evaluate the possibility of placing charging infrastructures for mobility and electric micromobility.

Lighting systems must be flexible and innovative; they must be identified using criteria and solutions to reduce energy consumption and foreseeing, compatibly with the constraints of the architectural project, for the greatest possible part, the use of natural lighting.

The lighting requirements, in ordinary operation and in safety, must comply with current technical regulations.

Electronic systems

Electronic systems, such as fieldbuses and control systems, will have to be designed using open systems using standard protocols. Open systems must be able to connect actuators and sensors, including different component manufacturers. The pipelines of electronic systems must be separated from those of electrical systems. The building must be equipped with an anti-intrusion system, providing for the installation of sensors and a video surveillance system, through the installation of cameras. The TVcc system, both for the plant and management aspects, must be designed in accordance with the privacy regulation. Given the intended use of the environments, the project will have to evaluate the possibility of equipping some environments with sound diffusion systems to be used for rehearsals and / or events, as well as radio and television systems and antennas for the distribution of DVB T2 and SAT signals for the premises intended for meeting and / or conference activities.

Connectivity

The area covered by the competition purposes a series of complexities related to the extension, the nature of the building (a building of particular historical interest) and the need to prepare the most modern infrastructure solutions to meet the operational and design needs of the Compagnia di San Paolo group today and in the near future taking into account the evolutionary speed of ICT technologies.

The need for digital tools in every area /local part of the area will require careful design in order to provide high-performance wireless and wired connectivity to every area that can be used by Compagnia di San Paolo staff as well as all other areas, not usable by staff but possible machine-to-machine (m2m) interconnection points. Quality, pervasiveness, performance, safety and flexibility are the key words of the approach to be adopted in the design definition of the integrated data transmission systems (IDT) of the Cavallerizza complex.

The technical guidelines for the construction of structured cabling systems for the buildings covered by the competition, in addition to the technical and performances pecifications of the (passive) products necessary for the construction of a structured cabling network to support the latest generation of electronic communication technologies are described in **ANNEX G**. All components must comply with current regulations regarding safety and electromagnetic emissions/compatibility, as well as comply with the legislation on the emission of hazardous substances from the equipment supplied (Directive 2011/65 / EU, also known as "Restriction of Hazardous Substances" (RoHS 2), transposed by Italian legislation with Law 6 August 2013, No 96 (in implementation of the Rhos 2 Directive on the prohibition of the use of dangerous substances). The systems used must, including all components, subsystems and accessories, comply with the requirements established in Directive 1999/5 / EC, transposed into our system with Legislative Decree 9 May 2001, n. 269 and, therefore, where required must be equipped with the "CE Marking" suant to Article 13 of the aforementioned Legislative Decree 9 May 2001, n. 269. The proposed cables must comply with CPR Regulation (EU) No 305/2011, which lays down harmonised conditions for the marketing of construction products and repeals Directive 89/106/EEC and have been chosen on the basis of the classification of places reported in the CEI 64/8 standard and CEI UNEL 35016 EN 50575, EN 50399 EN 13501.

Energy production and distribution systems

In compliance with the possibility of independently developing the redevelopment of the buildings that compose each UMI, it is in any case the intention of all the owners of the Cavallerizza Reale compendium to evaluate the identification of common energy and environmental strategies to which the entire complex will have to comply in order to make it, on a "neighborhood" scale, an exemplary case of sustainable urban redevelopment.

The theme of energy production and distribution is a central point of the redevelopment interventions and certainly requires the identification of a strategy not only on a building scale but also on a neighborhood scale. To this end, all the contestants who will access the second phase of the competition will be provided with specific strategic guidelines on the specific theme to be placed at the base of the designs of the various lots that make up the complex.

The principles underlying the selection of production systems at the base of the design process are:

- reduction/elimination of climate-changing gas emissions;
- improvement of the air quality of the city center;
- control of noise emissions;
- possibility to exploit the variability of energy tariffs offered by the market;
- protection of the integrity of building products.

On the other hand, it is necessary to consider the boundary conditions of the context, namely:

- constraints on the installation of solar energy production systems;
- wind inapplicability;
- absence of district heating;
- electricity and gas from city networks as the only available energy carriers.

Given this framework, the line of development that appears most promising to optimize the environmental energy sustainability of the complex and maximize the energy efficiency of the conversion systems is to aim at a widespread electrification of energy end uses. This strategy, in addition to being consistent with the concepts and constraints illustrated above, is also one of the guidelines recommended by national and European energy transition policies.

Since locally, for what has already been said, it will not be possible to produce renewable energy, it will be necessary to accompany the growth of the penetration of the RES with a transition that allows to move from the current systems, where we operate with a "generation on demand", to innovative systems that operate according to a scheme of "consumption on demand" in order to better synchronize the end uses (which follow) with the instantaneous generation of energy (which drives). In practice, this is achieved only if energy consumption becomes flexible and if demand becomes "responsive".

To this end, the plant system must meet the requirements of maximum energy flexibility. The "energy flexibility" of a building is commensurate with the amount of instantaneous energy demand that it can shift over time - without compromising the comfort of the occupants and satisfying the technological constraints imposed by the systems. For this purpose, the following schemes are intended to be applied:

- exploit the "thermal mass" of buildings (by storing thermal energy in the structures and in the building envelope, through the so-called "passive storage"),
- implement "shift" and "reshaping" of thermal loads for air conditioning (using, for example, energy storage made ad hoc, through the so-called "active storage"),
- implement electric vehicle charging,
- implement the shift of internal electrical loads (plug loads).

Assuming that district heating, for the area in question, is not only not currently available, but will not be available in the future either, given that the city center is currently excluded from the plans for expansion of the city network by Iren, in the light of the above strategies, the basic choices on which the general concept of the plant system of the Cavallerizza complex will have to be developed are:

- general "neighborhood" network of technological water able to exchange heat with the subsoil and make available for the various buildings / UMI a thermal source for the connection of local energy production systems;
- use, for the various buildings / UMI, of water-cooled groups for the production of thermal and cooling energy in order to guarantee the complete electrification of thermal end uses (no localized emission of pollutants, maximization of opportunities to exploit energy taken from the grid and produced - not on site - by RES) and at the same time allow a generation with high levels of efficiency and limited acoustic impact;
- adoption of cold and hot building/UMI storage to limit the withdrawal of electricity during the hours at higher cost and / or the hours during which electricity is produced in a less sustainable way and at the same time limit the instantaneous withdrawal of thermal energy from the general network of technological water;
- use of plant terminals that allow the exploitation of the thermal mass of buildings to achieve passive accumulation.

Air conditioning systems

In all rooms the thermo-hygrometric and ventilation conditions appropriate to the intended use must be guaranteed according to the regulatory indications and the needs of the property. The design of the structure must comply with current legislation on the containment of the energy needs of buildings. In particular, the plant solution developed must favor the adoption of systems that, with the same environmental conditions of the interior spaces, guarantee the best comfort, the use of low-temperature terminals and the exploitation of the thermal mass of the building. Given the intended use of the rooms and the location of the site, the plant system must guarantee limited noise emissions both to the external and internal environment and in any case comply with regulatory limits. The plant must be divided into homogeneous zones, adopting the same criteria used for electrical systems, and must be equipped with automatic regulation systems able to guarantee a high level of control, energy saving and optimization of management. Particular attention must be paid to the choice of positions and types of components in the field, both with a view to favoring maintenance interventions, and in relation to compliance with the historical constraints of the buildings and the requirements for restoration contained in the PUR. The system must be equipped with remote management systems and remote reading of thermo-hygrometric parameters (temperature, relative humidity, CO2 level) as well as accounting for thermal and electrical consumption for the various users.

Lifting systems for people and objects

The structure must be equipped with lift systems at the service of users and possibly with hoist systems. In any case, priority must be given, during the design phase, to the absence of architectural barriers of all kinds.

Fire protection systems

The structure must be equipped with fire protection and detection systems in accordance with current legislation.

Structural works

As part of the overall redevelopment of the buildings in question, particular attention must be paid to the issue of structural safety both from a static and seismic point of view, assessing the vulnerability of the buildings and implementing the interventions necessary to achieve the performance and safety requirements specified below.

The professionals in charge will have to analyze the problem of structural safety of buildings and carry out the appropriate technical checks of seismic vulnerability according to the new intended uses. The verification must be carried out in compliance with the sector regulations, among which the following are noted, without claiming to be exhaustive:

- D.M. 17 January 2018 Update of the "Technical Standards for Construction";
- Circular of 21 January 2019 Instructions for the application of the update of the "Technical Standards for Construction";
- Guidelines for the assessment and reduction of the seismic risk of cultural heritage-

The vulnerability assessment activity must be implemented through the definition of an analyzes reference model as provided for in par. 8.5 of the D.M. 17 January 2018 and must provide for a cognitive phase aimed at achieving a minimum level of knowledge equal to LC2, as defined in par. C8.5.4 of the Circular of 21 January 2019. The professionals in charge will have to draw up a specific survey plan defining quantitatively and qualitatively the activities to be implemented to achieve the desired level of knowledge.

- On the basis of the acquired knowledge, the overall verification of the building in all its components must be conducted, both with respect to static loads and with respect to seismic loads. The intervention project must allow the achievement of the following minimum performance requirements, even if they are not specifically required by the regulations in force for the specific case in question:
- the adaptation of buildings to static loads;
- the achievement of a minimum value of 0.6 for the parameter ζ_{E} as defined in par. 8.3 of the NTC, corresponding to the ratio between the maximum seismic action bearable by the structure and the maximum seismic action that would be used in the design of a new construction.

All competitors who will access the second phase of the competition will be provided with a report showing the results of a preliminary investigation campaign, currently being carried out, aimed at allowing a first expeditious survey and the evaluation of the general state of conservation of the existing structures.

The assessment of seismic vulnerability and the specific design of the interventions must be carried out only during the subsequent design phases; on the occasion of the drafting of the simplified PFTE object of this competition, a methodological/ qualitative evaluation of the interventions envisaged from the point of view of their contribution to the achievement of the performance requirements is required, it being understood that all the interventions must be approved by the Superintendence of Architecture, Fine Arts and Landscape according to the constraint referred to in par. 2.3 of this document.

Environmental sustainability

General principles of environmental sustainability

Designers are required to adopt solutions that are as energy efficient as possible. With a view to minimizing climatechanging emissions, attention must be paid to the issues of environmental sustainability and the circularity of the phases of the building process, with a specific focus on the selection of materials and plant choices in compliance with the historical constraints of the buildings and the requirements for restoration contained in the PUR, in order to guarantee:

- high content of recovered or recycled material;
- use of renewable materials;
- minimization of the supply distance of construction products, in order to stimulate the circular economy.

The project proposal will have to look for solutions that guarantee the lowest possible environmental impact along the entire life cycle of the buildings. In general, the following aspects must be taken into account in the design of the intervention:

- internal environmental quality;
- natural lighting;
- natural ventilation and air quality in the rooms;
- indoor pollution and healthiness of the environments with the reduction of indoor electromagnetic pollution the reduction of material emissions;
- acoustic comfort;
- thermo-hygrometric comfort.

Designers must provide for the use of high-quality materials, durable and more suitable for various environments, taking into account not only the aesthetic value, but above all the functional one, and considering the intrinsic characteristics of the materials themselves (for example sound absorption) and the best way in which they can be used and associated with the various processes envisaged in order to guarantee high comfort for users.

The project must be able to guarantee maximum durability and optimization of the maintenance of the works.

The designer will in fact have to identify solutions that allow to optimize and reduce the costs of management and ordinary and extraordinary maintenance of the building and its elements, paying attention to ensuring the accessibility and inspection of the individual plant components, the cleanability and sanitizability of the individual construction elements, the substitutability of the technological elements, and that these operations do not involve particularly high costs for the property.

Environmental sustainability protocols

It is the intention of the owners of the compendium of the Cavallerizza Reale to certify the complex with the GBC Quartieri protocol of the Green Building Council Italia. To this end, it will proceed with the registration of the project with GBC Italia and then access the certification procedure.

The GBC Quartieri protocol applies to areas subject to redevelopment, for which it is intended to promote the environmental sustainability performance of the territory, infrastructures and sustainable buildings

With regard to this certification process, the design of the interventions on a neighborhood scale will take into account issues such as:

- public transport and sustainable mobility;
- connection of the area to basic services;
- infrastructure efficiency;
- design and management of green areas;
- water management;
- energy efficiency of the complex;
- selection, use and disposal of materials;
- acoustic impact of the intervention.

The properties of the individual buildings reserve the right to certify the sustainability of the individual redevelopment intervention. Priority is given to suing the double certification according to the GBC Historic Building protocols of the Green Building Council Italia and LEED[®] V4 BD+ C – Building Design and Construction.

The GBC HB and LEED BD+C V4 protocols apply to redevelopment or recovery interventions, involving interventions on air conditioning systems and evaluating possible solutions for improving the performance of the building envelope, compatibly with the needs of safeguarding historic buildings.

The properties also reserve the right to certify the sustainability of individual buildings in terms of healthiness and indoor comfort and well-being in the occupants, with the aim of maintaining these performance requirements not only in the initial phase but also in the operating phase. Clients identify the WELL® protocol developed by the International WELL Building Institute (IWBI) as a tool for achieving this goal. The integration of WELL requirements into building design is therefore considered important.

3.3 Design levels and graphic and descriptive elaborations

The design, starting from the three-dimensional model according to the BIM methodology made available by the property, must be articulated on the following three levels:

1. Simplified technical and economic feasibility project (object of the competition) and subsequent improvements;

- 2. Final project;
- 3. Executive project.

Below is an indicative list of the main design documents required at the expected design levels.

Simplified technical and economic feasibility project

With regard to the design documents covered by this design competition, please refer to the notice of competition.

Final project

The final project, prepared on the basis of the approved technical and economic feasibility project, fully identifies the works to be carried out in compliance with all the existing constraints, the mandatory framework and these guidelines, any further criteria and indications expressed by the Foundation. The final project also contains all the elements necessary for the issue of the required authorizations and approvals by all the bodies in charge, the schedule of the different implementation phases of the intervention, as well as the definitive quantification of the expenditure limit for the realization of the intervention through the use of the regional price list of the Piedmont Region and, where necessary, of other official prices possibly approved by the property.

The final project must indicatively include the following documents, where applicable:

- general report;
- technical reports and specialist reports;
- plano-altimetric surveys and detailed study of urban insertion;
- graphic drawings;
- environmental impact study or environmental feasibility study;
- in the cases provided for by current legislation, land use plan and excavation rocks;
- calculations of structures and installations;
- descriptive and performance specification of the technical elements;
- census and draft resolution of interference;
- list of unit prices and any analyses;
- estimative metric calculation;
- updating of the document containing the first indications and provisions for the drafting of safety plans, aimed at
 protecting the health and safety of the workplace, suant to Legislative Decree 9 April 2008, n. 81 and subsequent
 amendments and additions;
- economic framework, with an indication of the safety costs inferred on the basis of the document referred to in the previous point and the costs of the mitigation and environmental compensation works within the relative expenditure limits, where established;
- work schedule.

Regardless of what is indicated in the above list, to be considered indicative and not exhaustive, the list of the necessary documents during the final design and the respective minimum contents and will be defined punctually when the assignment of the assignment.

Executive project

The executive project is drawn up in accordance with the final project and determines in every detail the works to be carried out, the relative expected cost and the schedule consistent with that of the final project. The executive project must be developed at a level of definition such that each element is identified in form, type, quality, size and price. The project must also be accompanied by a specific maintenance plan for the work and its parts, in relation to the life cycle of the work itself.

The executive project is drawn up in full compliance with the requirements dictated in the enabling titles or during the assessment of urban planning compliance.

The executive project must indicatively include the following documents, where applicable:

- general report;
- specialist reports;
- graphic drawings including those relating to structures and plants, as well as, where provided, the drawings relating to environmental mitigation, environmental compensation, restoration and environmental improvement;
- calculations of the executive design of structures and installations;
- maintenance plan of the work and its parts;
- safety and coordination plan suant to Article 100 of Legislative Decree no. 81 of 9 April 2008, with the relative framework of labour incidence;
- work schedule;
- list of unit prices and any analyses;
- estimative metric calculation and economic framework;
- draft contract and special tender specifications.

Regardless of what is indicated in the above list, to be considered indicative and not exhaustive, the list of the documents necessary during the executive design and the respective minimum contents and will be defined punctually when the assignment of the assignment.

For a more extensive description of the list of the expected documents and their minimum contents for the final and executive design phases, please refer to the legislation for public procurement and to the ministerial decree scheme containing "Definition of the contents of the design in the 3 design levels" suant to art. 23, paragraph 3 of Legislative Decree no. 50 of 18 April 2016, presidential decree no. 207 of 5 October 2010 and Ministerial.M Decree no. 154 of 22 August 2017. Fondazione Compagnia di San Paolo is not among the subjects to which Legislative Decree 50/2016 and related and implementing provisions apply and therefore is not implemented and references to the above rules are to be understood as a receptive reference solely aimed at identifying the contents of the design activity.

3.4 Forms of participation

The Compagnia di San Paolo Foundation promotes communication and sharing of designs and intends to enhance the high symbolic value of the asset object of the competition. In this perspective, it is required that the assignee has proven listening skills and knows how to support the Foundation in communication, sharing and involvement activities, to be carried out in collaboration with Urban Lab Torino throughout the period of transformation of the area.

In more detail, the assignee will have to carry out the following activities, mainly focused on public spaces:ù

- Sharing and informing on proposals for public use/utility, through the involvement of collective subjects, local actors and significant stakeholders of the territory;
- Any dialogue with other participatory processes, of third parties or activated by the client in complementarity, with the same object;
- Listening and possible participatory planning of the parts of public use "of waiting", that is, of the actions to be activated in the times of the construction site, pending the complete construction of the infrastructure and the opening.

All the aforementioned activities must also consider the relationships with the other planned interventions.

For this pose, the contractor must present, within the working group, professionals with complementary skills identified when submitting the offer by attaching the relative professional curriculum. The working group will have to guarantee experience and skills in the following areas of facilitation and accompaniment:

- define and know the constituent elements of the urban context that determine both the physical, environmental and infrastructural dimension, as well as the social dimension, intangible networks, economic and cultural dynamics;
- management of group dynamics;
- structure and manage paths accompanying processes of urban regeneration and social innovation;
- accompany the design through listening and active involvement of people and local stakeholders.

3.5 Financial limits and estimation of intervention costs

The maximum cost of the intervention to be carried out (Economic Framework, including the amount of the works, design costs, construction supervision, testing, safety costs, competition costs and sums available to the Property) is fixed in the amount of approx. € 34.550.000,00 (vat included). Costs related to the analysis, design and implementation of what may be necessary for land reclamation are excluded).

The share relating to the works is defined as approx. € 20.310.000,00 (vat excluded) and is divided as follows:

- € 19,212,075.00 (excluding VAT) as part of the work related to the restoration and redevelopment of the new headquarter of the Foundation *Ala del Mosca* and cultural Hub Pagliere (Sub-area 1A);
- € 1,096,950.00 (excluding VAT), as a portion of the works relating to the surface arrangement of the uncovered areas of Piazzetta Vasco and Chiablese passage in addition to the courtyard of the Ala del Mosca (Sub-scope 1B).

Within the Economic Framework for the realization of the work, a sum is also provided for the design and supply of the furnishings and fittings of the new headquarter of the Foundation; the value of the related works has been quantified based on parametric estimates, respectively in:

■ \notin 3,235,650.00 (excluding VAT), for the furnishings and fittings of the new headquarter of the Foundation (UMI 5) and the Cultural Hub in the Pagliere (UMI 10).

With regard to the aforementioned amounts, the categories that make up the work are listed in the following table that shows the composition of the work and the correspondences between:

- Classification according to Presidential Decree 207/2010
- Classification according to Law 143/1949 and s.m.i. (subsequent amendments and additions)
- Classification suant to D.M. Justice 17/06/2016.

Subscope 1A

AMOUNT OF WORKS	CLASSIFICATION D.P.R. 207/2010	CLASSIFICATION L. 143/1949	CLASSIFICATION D.M. JUSTICE 17/06/2016
97.546,50	OG2	I/d	E.19
8.709.006,00	OG2	l/e	E.22
4.076.556,00	OG2	l/g	S.04
941.214,00	OS3	III/a	IA.01
2.316.225,00	OS28	III/b	IA.02
2.511.952,50	OS30	III/c	IA.04
18.652.500,00	TOTAL AMOUNT OF WORKS		
559.575,00	SECURITY COSTS		
19.212.075,00	TOTAL AMOUNT OF WORKS		
2.588.520,00	-	I/c	E.18
647.130,00	-	I/d	E.19
3.235.650,00	TOTAL AMOUNT OF FITTINGS, EQUIPMENT, FURNISHINGS		

Subscope 1B

AMOUNT OF WORKS	CLASSIFICATION D.P.R. 207/2010	CLASSIFICATION L. 143/1949	CLASSIFICATION D.M. JUSTICE 17/06/2016
846.675,00 €	OG2	I/d	E.19
-	OG2	l/e	E.22
-	OG2	l/g	S.04
127.800,00 €	OS3	III/a	IA.01
-	OS28	III/b	IA.02
90.525,00 €	O\$30	III/c	IA.04
1.065.000,00 €	TOTAL AMOUNT OF WORKS		
31.950,00 €	SECURITY COSTS		
1.096.950,00 €	TOTAL AMOUNT OF WORKS		

3.6 First indications for information management

Since, without prejudice to the design of this competition, all subsequent design phases must necessarily be carried out using BIM methodology, this chapter contains some initial indications in relation to the information management needs of the Foundation.

Before the start of the subsequent design phases, the Foundation will share with the awarded team the service the Specifications for the information management based on which the Information Management Plan (BIM Execution Plan) must be drawn up.

General objectives

The information management of the design and implementation process of the activities covered by this document must be aimed at suing the main objectives set out below:

- fulfilment of the general objectives of the project;
- design quality;
- management of coordination between the various disciplines;
- optimization of the design and construction phases of the works;
- optimization of the management of the health and safety of workers employed on the construction site;
- optimization of *time & cost control* processes;
- digitalization of the management phase of the property.

Level of contractual prevalence

The production, transfer and sharing of the contents of the project takes place through digital information media in a data sharing environment, while the contractual prevalence of the reproduction on paper of all the works object of the assignment remains.

Technical section

Hardware and software

The design team will have to equip itself with hardware suitable for the digital management of information processes related to the different design phases.

The software used must be compatible with the proprietary format defined by the Foundation in the information specifications in relation to the tools already in use and supplied to the same, as well as able to read, write and manage files in open format *.ifc.

The software used must have regular user license agreements.

Protocol for the exchange of model and paper data

INFORMATION MODELS	Proprietary format and open format according to specific indications of the information specifications	
INFORMATION PAPERS	Proprietary format and .pdf, .dwg, .txt, .jpg formats	
VERIFICATION AND ANALYSIS OF GEOMETRIC INTERFERENCES	Proprietary format according to specific indications of the information specifications	
SCHEDULES	$\label{eq:proprietary} Proprietary formataccording to specific indications of the information specifications and format.xml$	

Models shared between the parties must not exceed the size of 150 Mb.

Coordinate system

The information specifications will contain the indications relating to the reference coordinate system to be used for modeling, which will be defined jointly with the other properties of the compendium in order to ensure consistency in the localization, orientation and setting of the different models of future realization.

Level of informational development of graphic models and objects

For the design phases following the competition phase, the creation of a BIM model with increasing detail and the updating of the same as "as-built in progress" must be envisaged. The same model, appropriately generalized, must allow the registration of the data of use and maintenance of the work carried out.

The modeling activities for the creation of BIM models and drawings must comply with the regulatory-technical standards in force regarding information systems and levels of in-depth analysis in the definition of data.

The modeling must take place respecting LOIN levels consistent with the specificity of the elements to be realized and depending on the level of design. The properties associated with the classes of elements and their structuring must be previously proposed by the BIM Manager and approved by the figures specifically appointed for the pose by the Foundation.

Skills and experience of the design team

The design team is responsible for meeting the specific training requirements in the field of BIM information management and is required to undertake sufficient training to effectively meet the requirements of the project. The levels of experience, knowledge and competence of the Successful Bidder must be suitable to meet the minimum requirements necessary to implement a digital management of the project information processes.

Management section

The quantity and quality of the information content of the papers and models must be at least that necessary and sufficient to ensure the objectives of the relevant stages of the process, namely:

- for the final design, the definition of performance at the level of spaces and systems, obtaining authorizations and opinions of entities, compliance with constraints;
- for executive design, definition of technologies, compliance with constraints, planning of execution.

Structuring and organization of digital modeling

In principle and unless otherwise proposed by the design team to be submitted to prior authorization by the Foundation, the virtual model must simultaneously develop the different disciplines involved through strategies such as, by way of example:

- Use of worksets and strategies useful to make several professionals work simultaneously on a single model per discipline;
- Use of a main model (Master) and "n" models linked by discipline, together with the use of copy and control tools;

The models must contain specific references to the aspects of scheduled ordinary maintenance through design parameters that may be modified and / or integrated during the construction phase, in order to anticipate in the design phase the resolution of critical issues typical of the construction site or management of the property.

Protection and security of information content

All project information will be subject to the confidentiality obligations established by the contract of assignment of the assignment.



Technical rules and standards.

Subject to the general rules, the following is an indicative and non-exhaustive list of the main regulatory references with which the design must comply for all the functions of the specific areas.

Reference should also be made, in general, to all the CEI standards relevant to the systems in question (CEI rules for systems and CEI rules for components), ISPESL, UNI, CTI, CEI, CIG, IMQ, ENPI, ASL standards etc...

for electrical and special systems and mechanical systems.

Note that any failure to mention specific technical standards in the list below does not imply that non-compliance with the relevant requirements is allowed.

4.1 Urban planning and construction

- Presidential Decree no. 380 of 06 June 2001 "Consolidated text of legislative and regulatory provisions on building matters";
- Building regulations of the Municipality of Turin approved by City Council Resolution on 20 December 2004, as amended;
- Urban Planning Implementation Building Regulations of the Municipality of Turin Updated on 31 December 2021.

4.2 Architectural barriers

- Ministerial Decree no. 114 of 28 March 2008 Guidelines for overcoming architectural barriers in places of cultural interest;
- Presidential Decree no. 503 of 24 July 1996, as amended, "Regulation laying down rules for the elimination of architectural barriers in buildings, spaces and public services; Fire prevention and safety";
- Ministerial Decree no. 236 of 14 June 1989 "Technical specifications necessary to ensure the accessibility, adaptability and visibility of private buildings and public residential buildings, for the pose of overcoming and eliminating architectural barriers";
- Law no. 13 of 09 January 1989 "Provisions to facilitate the overcoming and elimination of architectural barriers in private buildings".

4.3 Earthquake-resistant structures and protection

- Directorial Decree no. 29 of 12 January 2022 "Implementation methods for urban building management and control procedures for the pose of preventing seismic risk as per Regional Council Decree 10-4161 of 11/26/2021".
- Regional Council Decree no. 10-4161 of 26 November 2021 "Approval of the new simplification procedures for implementing urban building management and control activities for the pose of preventing seismic risk. Revocation of Regional Council Decrees 49-42336 / 1985, 2-19274 / 1988, 61-11017 / 2003, 4-3084 / 2011, 7-3340 / 2012, 65-7656 / 2014, 4-1470 / 2020, 14-2063 / 2020 and replacement of the Annex to Regional Council Decree 5-2756 of 15 January 2021".
- Regional Council Decree no. 6-887 of 30 December 2019 Acknowledgement and approval of the updated seismic classification of the territory of Piedmont, referred to in Regional Council Decree no. 65-7656 of 21 May 2014
- Ministerial Communication no. 7 of 21/01/2019 "Instructions for application of the Updated Technical Standards for Construction";
- Ministerial Decree of 17 January 2018 "Updated Technical Standards for Construction" (NTC 2018);
- Prime Ministerial Order no. 3274 of 20 March 2003 "Initial general criteria for the seismic classification of the national territory and technical regulations for buildings in seismic areas"
- Prime Ministerial Decree of 21 October 2003 "Implementing provisions for article 2(2), (3) and (4) of Prime Ministerial Order no. 3274 of 20 March 2003";
- Law no. 1086 of 5 November 1971 "Rules governing reinforced, normal and pre-stressed concrete and metal structure works".

4.4 Fire prevention

- Ministerial Decree of 15 May 2020 "update of chapter V.6 "Garage activity"
- Ministerial Decree of 14 February 2020 "update of chapters V.4, V.5, V.6, V.7, V.8"
- Ministerial Decree of 12 April 2019 "update of all chapters excluding V.4-V.8."
- Ministerial Decree of 8 June 2016 new chapter V.4 "Offices".
- Ministerial Decree of 3 August 2015 "Technical rules for fire prevention, suant to article 15 of Legislative Decree no.
 139 of 8 March 2006", (Fire Prevention Code);
- Ministerial Decree of 7 August 2012 "Provisions relating to the procedures for submitting applications concerning fire prevention procedures and the documentation to be attached, suant to Article 2(7) of Presidential Decree no. 151 of 1 August 2011;
- Presidential Decree no. 151 of 1 August 2011 "Regulation on the simplification of procedures relating to fire prevention, suant to Article 49(4iv) of Decree-Law no. 78 of 31 May 2010, converted, with amendments, by law no. 122 of 30 July 2010";
- Ministerial Decree of 20 December 2012 "Technical fire prevention rules for active fire protection systems installed in businesses subject to fire prevention controls"
- Ministerial Decree of 13 July 2011 "Technical fire prevention regulations for the installation of internal combustion engines coupled to an electric generating machine or other operating machine and co-generation units serving civil, industrial, agricultural, craft, commercial and service businesses";
- Ministerial Decree of 9 March 2007 "Fire resistance performance of buildings in businesses subject to the control
 of the National Fire Brigade";
- Ministerial Decree of 16 February 2007 "Classification of fire resistance of products and construction elements of construction works";
- Ministerial Decree of 22 February 2006 "Approval of the technical fire prevention regulation for the design, construction and operation of buildings and/or premises intended for offices";
- Ministerial Decree of 10 March 1998 "General criteria for fire safety and emergency management in the workplace";
- Ministerial Decree of 12 April 1996 "Fire prevention technical regulation for thermal plants fuelled by gaseous fuels";
- Ministerial Decree of 30 November 1983 and subsequent amendments, "Fire prevention terms, general definitions and graphic symbols";
- Ministerial Communication no. 9 of 5 May 1998 "Presidential Decree no. 37 of 12 January 1998 Regulations governing fire prevention procedures - Application clarifications";
- Ministerial Decree of 04 May 1998 and subsequent amendments "Provisions relating to the submission and content of fire prevention applications, as well as the uniformity of the related services rendered by the provincial fire brigade commands";
- Reference legislation regarding the type of heating system chosen and the respective fuel.

4.5 Cultural and landscape assets

Legislative Decree no. 42 of 22 January 2004 "Cultural heritage and landscape code, suant to article 10 of law no.
 137 of 6 July 2002", as amended and supplemented".

4.6 Workplace hygiene

- Legislative Decree 106 of 3 August 2009 "Supplementary and corrective provisions of the legislative decree of 9 April 2008, no. 81, concerning the protection of health and safety in the workplace ";
- Legislative Decree no. 81 of 9 April 2008 "Implementation of Article 1 of Law 123 of 3 August 2007 on the protection of health and safety in the workplace";
- Presidential Decree no. 425 of 22 April 1994, as amended, Accessibility of buildings.

4.7 Acoustics

- Legislative Decree no. 42 of 17 February 2017 "Provisions on the harmonisation of national legislation on noise pollution, suant to article 19(2)(a)(b)(c)(d)(e)(f) and (h) of Law no. 161 of 30 October 2014";
- Ministerial Decree of 16 March 1998 "Techniques for detecting and measuring noise pollution";
- Prime Ministerial Decree of 05 December 1997 and Note from the Ministry of the Environment no. 3632/SIAR/98, as amended, "Determination of the passive acoustic requirements of buildings";
- Prime Ministerial Decree of 14 November 1997, "Determination of the limit values of sound sources";
- Law no. 447 of 26 October 1995, as amended, "Framework law on noise pollution";
- Prime Ministerial Decree of 01 March 1991, "Maximum limits for noise exposure in residential and external environments";
- Technical Standard Pr EN 12354 1/2/3, "Estimation of the acoustic requirements of buildings starting from the requirements of the elements";
- UNI EN ISO 717 standard, "Determination of the sound insulation power rating index"

4.8 Safeguarding the environment and resources - MESS

- Ministerial Decree of 11 October 2017, approval of the MESs for the "Awarding of design services and works for the new construction, renovation and maintenance of public buildings";
- Ministerial Decree of 27 September 2017, approval of the MESs "for the chase of light sources for public lighting, the chase of public lighting equipment, the awarding of design services for public lighting systems";
- Ministerial Decree of 7 March 2012 approving the MESs for the "Awarding of energy services for buildings, lighting and power systems, heating/cooling service";
- Intermediate Decree of 11/01/2017 Adoption of minimum environmental criteria for interior furnishings, construction and textile products;
- Organisational Unit Director Decree no. 2456 of 8 March 2017 "Energy Efficiency of Buildings Consolidation Act";
- Ministerial Decree of 26 June 2015 "Adaptation of national guidelines for the energy certification of buildings, Schemes and reference methods for drawing up the technical project report for the pose of applying the specifications and minimum energy performance requirements in buildings. Application of the methods for calculating energy performance and establishing the specifications and minimum requirements for buildings".
- Ministerial Decree of 7 March 2012 "Awarding of energy services for buildings, lighting and power systems, heating/ cooling service"
- Legislative Decree no. 28 of 3 March 2011 "Implementation of Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC";
- Legislative Decree no. 152 of 3 April 2006, as amended and supplemented "Environmental standards";
- Ministerial Decree of 01 April 2004 Guidelines for the use of innovative systems in environmental impact assessments;
- Legislative Decree no. 152 of 11 May 1999 "Provisions on the protection of water from pollution and implementation of Directive 91/271/EEC concerning urban waste-water treatment and Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources", as amended";
- Law no. 36 of 5 January 1994 "Provisions on water resources" and related implementing regulation;
- Presidential Decree no. 236 of 24 May 1988 "Implementation of Directive 80/778/EEC relating to the quality of water intended for human consumption, suant to article 15 of Law no. 183 of 16 April 1987";
- UNI 8199 standard "Measurement and evaluation of the noise produced in environments by heating, air conditioning and ventilation systems".

4.9 Air quality - atmospheric emissions

- Legislative Decree no. 102 of 30 July 2020 "Supplementary and corrective provisions to Legislative Decree no. 183 of 15 November 2017, implementing Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants, as well as for the reorganisation of the regulatory framework of establishments that produce emissions in the atmosphere, suant to article 17 of law no. 170. (20G00120)";
- Legislative Decree no. 46 of 4 March 2014 "Implementation of Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)";
- Presidential Decree no. 74 of 16 April 2013 "Regulation defining the general criteria for the operation, management, control, maintenance and inspection of thermal systems for winter and summer air conditioning of buildings and for the preparation of hot water for sanitary use";
- Legislative Decree no. 250 of 24 December 2012 "Amendments and additions to Legislative Decree 155/2010 implementing Directive 2008/50/EC on ambient air quality and cleaner air for Europe";
- Legislative Decree no. 155 of 13 August 2010 "Implementation of Directive 2008/50/EC on ambient air quality and cleaner air for Europe";
- European Directive 2008/50/EC on air quality;
- Legislative Decree no. 152 of 3 April 2006, as amended and supplemented "Environmental standards" part V, updated by Legislative Decree no.128/2010.

4.10 Electrical and mechanical systems

- Variant V4 to the CEI 64-8 standard in force from 1 June 2017 on "CE marking for electrical cables";
- Legislative Decree no. 102 of 4 July 2014 "Implementation of Directive 2012/27/EU on energy efficiency, which amends Directives 2009/125/EC and 2010/30/EU and revokes Directives 2004/8/EC and 2006/32/EC";
- Presidential Decree no. 74 of 16 April 2013 "Definition of general criteria for the operation, management, control, maintenance and inspection of thermal systems for winter and summer air conditioning of buildings and for the preparation of hot water for sanitary use, suant to article 4(1)(a) and (c) of Legislative Decree no. 192 of 19 August 2005";
- Legislative Decree no. 17 of 27 January 2010 "Implementation of Directive 2006/42/EC on machinery, and amending Directive 95/16/EC on lifts";
- Decree no. 37 of 22 January 2008 "Regulation on the implementation of Article 11(xiv), paragraph 13, letter a) of Law no. 248 of 2 December 2005, reorganising the provisions on the installation of systems inside buildings";
- Presidential Decree no. 462 of 22 October 2001 "Regulation simplifying the procedure for reporting installations and protective devices against atmospheric discharges, earthing devices for electrical systems and dangerous electrical systems";
- Law no. 36 of 22 February 2001 "Framework law on protection from exposure to electric, magnetic and electromagnetic fields";
- Legislative Decree no. 277 of 31 July 1997 "Amendments to Legislative Decree no. 626 of 25 November 1996 implementing directive 93/68/EEC on the CE marking of electrical equipment intended for use within certain voltage limits";
- Regional Council Resolution no. 1715 of 24 October 2016 Amendments to the "Regional technical coordination document for defining the minimum energy performance requirements of buildings" referred to in Regional Council Resolution no. 967 of 20 July 2015
- Decree of 26 June 2015 "Application of the methods for calculating energy performance and establishing the specifications and minimum requirements for buildings".
- Legislative Decree no. 115 of 30 May 2008 "Implementation of Directive 2006/32/EC on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC"

- Legislative Decree no. 311 of 29 December 2006 "Corrective and supplementary provisions to Legislative Decree no. 192 of 19 August 2005 implementing Directive 2002/91/EC on the energy performance of buildings;
- Legislative Decree no. 152 of 3 April 2006 "Environmental standards"
- Legislative Decree no. 192 of 19.08.2005, "Implementation of Directive 2002/91/EC on the energy performance of buildings", as amended and supplemented;
- Law no. 10 of 09.01.1991 "Rules for the implementation of the National Energy Plan on the rational use of energy, energy saving and development of renewable energy sources"
- Presidential Decree no. 412 of 08.26.1993 "Regulation laying down rules for the design, installation, operation and maintenance of thermal systems in buildings for the pose of limiting energy consumption, implementing article 4(4) of Law no. 10 of 9 January 1991";
- Presidential Decree no. 551 of 21.12.1999 "Regulation containing amendments to Presidential Decree no. 412 of 08.26.1993 on the design, installation, operation and maintenance of the heating systems of buildings for the pose of limiting energy consumption"
- Presidential Decree no. 74 of 16.04.2013 "Regulation establishing the general criteria for the operation, management, control, maintenance and inspection of heating systems for winter and summer air conditioning of buildings and for the preparation of hot water for sanitary use, suant to article 4(1)(a) and (c) of Legislative Decree no. 192 of 19 August 2005."
- Ministerial Decree of 10 February 2014 "Templates for air conditioning system booklets and energy efficiency reports suant to Presidential Decree no. 74/2013".
- UNI/TS 11300-1:2014 Energy performance of buildings Part 1: Evaluation of energy need for space heating and cooling
- UNI/TS 11300-2:2019 Energy performance of buildings Part 1: Evaluation of primary energy need and system
 efficiencies for space heating, domestic hot water production, ventilation and lighting for non-residential buildings
- UNI/TS 11300-3:2010 Energy performance of buildings Part 3: Evaluation of primary energy and system efficiencies for space cooling
- UNI/TS 11300-4:2016 Energy performance of buildings Part 4: Use of renewable energy and other generation methods for winter air conditioning and domestic hot water production
- UNI/TS 11300-5:2016 Energy performance of buildings Part 5: Calculation of primary energy and energy quota from renewable sources
- UNI 8065:2019 Water treatment in winter and summer air conditioning systems, for production of domestic hot water and solar thermal systems.

4.11 Connectivity

- Directive 2011/65/EU, Restriction of Hazardous Substances
- Directive 1999/5/EC
- CPR Regulation (EU) No. 305/2011
- Law 186 of 1 March 1968, Provisions concerning the production of materials, equipment, machinery, installations and electrical and electronic systems
- Law 791 of 18 October 1977, Implementation of European Council Directive 73/72/EEC on the safety requirements of electrical equipment designed for use within certain voltage limits;
- Legislative Decree 198 of 26 October 2010 (in force as of 15/12/2010) Implementation of directive 2008/63/CE on competition in the markets in telecommunications terminal equipment, repealing Law 109 of 28 March 1991
- EC 89/336, Guideline for assimilation of statutory requirements of the member countries concerning EMC
- EC 90/683, Guidelines about the technical harmonization guidelines for modules to be used for the different phases of the conformity assessment methods
- IEC 61000 Series
- EC 801-1

- IEC 801-2
- EC 801-3
- EC 801-4
- CISPR 22/G/Sekr 34, Voltage and current interference on data lines
- ISO/IEC 11801-1, Information technology Generic cabling systems Part 2: Generic Cabling
- ISO/IEC 11801-2, Information technology Generic cabling systems Part 2: Generic Cabling for customer premises
- ISO/IEC 11801-6, Information technology Generic cabling systems Part 6: Distributed Building
- ISO/IEC 14763-2, Information technology Implementation and operation of customer premises cabling Part 2: Planning and installation, consolidated edition
- ISO/IEC 14763-3, Information technology Implementation and operation of customer premises cabling Part 3: Testing of optical fibre cabling Planning and installation
- ISO/IEC 30129, Information Technology Telecommunications bonding networks for buildings and other structures
- CEI-306 -2, Telecommunications equipment and telecommunications cabling. Specification for installation, operation and maintenance
- CEI 306-4 EN 50310 "Application of equipotential bonding and earthing in buildings with information technology equipment"
- CEI EN 50173-1 Information technology. Generic cabling systems. General requirements
- CEI EN 50173-2 Information technology. Generic cabling systems. Office premises
- CEI EN 50174-1 Information technology. Cabling installation. Installation specification and quality assurance
- CEI EN 50174-2 Information technology. Cabling installation. Installation planning and practices inside buildings
 CEI 64/8
- EN 50082-1; Electromagnetic compatibility Generic immunity standard Part 1: Residential, commercial and light industry
- EN 50173-1, Information technology Generic cabling systems Part 1: General requirements
- EN 50173-2, Information technology Generic cabling systems Part 2: Office premises
- EN 50173-6, Information technology Generic cabling systems Part 6: Distributed building services
- EN 50174-1, Information technology Cabling installation Part 1: Installation specification and quality assurance
- EN 50174-2, Information technology Cabling installation Part 2: Installation planning and practices inside buildings
- EN 50310, Telecommunications bonding networks for buildings and other structures
- EN 50346, Information Technology Cabling Installation Testing Of Installed Cabling
- EN 55022:2010, Limits and measuring methods for radio interference of information transmission equipment;
- EN 50081-1, EMC generic emission standard
- EN 50081-2, EMC generic immunity standard
- EN 55024-3/4, Noise immunity of information processing devices and facilities

4.12 Sanitary water systems

- UNI EN 806-1:2008. Specifications for installations inside buildings conveying water for human consumption Part
 1: General:
- UNI EN 806-2:2008. Specifications for installations inside buildings conveying water for human consumption Part
 2: Design:
- UNI EN 806-3:2008. Specifications for installations inside buildings conveying water for human consumption Part
 3: Pipe sizing Simplified method;
- UNI EN 806-4:2010. Specifications for installations inside buildings conveying water for human consumption Part
 4: Installation:
- UNI EN 806-5:2010. Specifications for installations inside buildings conveying water for human consumption Part
 5: Operation and maintenance;

- UNI EN 1717:2002. Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow;
- UNI 9182:2010. Hot and cold water supply and distribution installations Design, installation and testing.
- UNI EN 752:2017. Drain and sewer systems outside buildings. Sewer system management
- UNI EN 12056-1:2001. Gravity drainage systems inside buildings. General and performance requirements;
- UNI EN 12056-2:2001. Gravity drainage systems inside buildings. Sanitary pipework, layout and calculation;
- UNI EN 12056-3:2001. Gravity drainage systems inside buildings. Roof drainage, layout and calculation;
- UNI EN 12056-4:2001. Gravity drainage systems inside buildings. Wastewater lifting plants, layout and calculation;
- UNI EN 12056-5:2001. Gravity drainage systems inside buildings. Installation and testing, instructions for operation, maintenance and use.

4.13 Safety

Legislative Decree no. 81 of 9 April 2008 "Safety Consolidation Act".

4.14 BIM design

- Ministerial Decree no. 560 of 01/12/2017 on the methods and timings for the gradual introduction of mandatory specific electronic methods and tools such as modelling for buildings and infrastructure;
- UNI 11337-1:2017 Building and civil engineering Digital management of informative processes Part 1: Models, documents and informative objects for products and processes;
- UNI 11337-4:2017 Building and civil engineering Digital management of informative processes Part 4: Evolution and development of information within models, documents and objects
- UNI 11337-5:2017 Building and civil engineering Digital management of informative processes Part 5: Informative flows in digital processes
- UNI 11337-6:2017 Building and civil engineering Digital management of informative processes Part 6: Guidance for writing the informative specification
- UNI 11337-7:2018 Building and civil engineering Digital management of informative processes Part 7: Knowledge, skill and competence requirements of building information modelling profiles.
- UNI EN 17412-1:2021 Building Information Modelling Level of Information Need Part 1: Concepts and principles.
- UNI/CT 033/GL 05 "Coding of constructive products and processes in building" bim guidance for infrastructure bodies;
- ISO 19650-1:2018 Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) Information management using building information modelling Part 1: Concepts and principles
- ISO 19650-2:2018 Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) Information management using building information modelling Part 2: Delivery phase of the assets.



Annexes.

- ANNEX A Unitary Redevelopment Plan (PUR)
- ANNEX B Template of framework agreement on urban planning
- ANNEX C Restriction and Authorisation for Sale
- ANNEX D SABAP letter relating to the "preliminary assessment of compatibility" with the PUR
- ANNEX E Compagnia di San Paolo Strategic Plan 2021-24
- ANNEX F Feasibility study for the cultural use of the Compagnia San Paolo spaces
- ANNEX G Technical guidelines for structured cabling systems

The Foundation reserves the right to make changes and additions to the tender documentation during the subsequent stages of the competition and/or design work.

International design contest

Cavallerizza Reale di Torino.







