

# Human Technopole il nuovo HeadQuarters

architectural competition english summary



This executive summary provides a courtesy translation in English of the main points of the Request For Tenders (RFT) and associated documents, the originals being in Italian. The following has no legal value with respect to the competition itself. The procurement process will be carried out exclusively pursuant to the content of the official RFT documents, which are in Italian and available on the websites [www.arexpo.it](http://www.arexpo.it) and [www.headquartersht.concorrimi.it](http://www.headquartersht.concorrimi.it).

In the event of any discrepancy of interpretation between this summary in English and the official RFT documents in Italian, reliance shall be placed exclusively on the latter.

## BACKGROUND INFORMATION

Arexpo S.p.A. (Arexpo) is a public corporation owned by the Italian Ministry of the Economy and Finance, the Region of Lombardy, the Municipality of Milano, the Municipality of Rho, the Metropolitan City of Milano, and Fondazione Fiera Milano. Arexpo was created in order to assemble the site needed for Expo Milano 2015 and make it available to Expo 2015 S.p.A., and also to promote and redevelop the Expo Milano 2015 site (hereinafter also "Site") after the conclusion of the 2015 Universal Exposition also known as "Expo Milano 2015".

Upon conclusion of the Expo event, Arexpo initiated a technical and financial process with the objective of regenerating the Site by leveraging the public legacy of the Universal Exposition to develop a vibrant, innovative urban district. Pursuing these objectives, the Expo Milano 2015 Site will be transformed into **MIND – "Milano Innovation District"** a city of the future with a strong focus on the future of health.

The Innovation District will be a **hub for excellence in the fields of life sciences/healthcare, biotech/pharma, agri-food/nutrition, and data science/big data**. It will be a new generation science and technology district featuring outstanding architecture that will draw in investments and generate economic and social benefits for the local area and the entire country through scientific research, cultural and residential services, sports and recreation facilities, and light manufacturing and service sector industries.

Situated at the heart of MIND, the **Human Technopole** (hereafter also "HT") is a **multidisciplinary scientific research center working to advance human health and wellbeing**. The initiative is rooted in the decision taken by the Italian government to develop a part of the Site as an interdisciplinary life sciences research center after the closure of Expo Milano 2015. Long-term funding was thus allocated to its development and operation.

HT's overarching goal is **to develop innovative strategies to promote human health through a multidisciplinary and integrated approach to the study of human biology**. This will be done by combining basic and translational research in a number of different fields, including genomics, computational biology, structural biology, neuroscience, data and decision sciences, and others.

As part of the implementation of a government directive, Fondazione Human Technopole (hereinafter also "Fondazione HT") and Arexpo have signed a memorandum of understanding establishing Arexpo, pursuant to Italian Regional Law no. 10 of July 24, 2018 (L.R. 10/2018), as auxiliary Contracting Authority as regards to the procurement process for the design of the building that will host the new HT Headquarters.

The design competition was thus structured with the goal of providing Fondazione HT with a functional, iconic and flexible headquarters. The outcome of this two-stage competition will be a "Progetto di fattibilità tecnica ed economica" (equivalent to a Preliminary Design).

## 1. CONTENTS OF THE REQUEST FOR TENDERS

### 1.1. SUBJECT OF THE DESIGN COMPETITION

Arexpo S.p.A., as auxiliary Contracting Authority for Fondazione Human Technopole pursuant to Article 3, Subsection 1, Letter m), nos. 2, 3 and 4 of Italian Legislative Decree no. 50/2016, announces the international design competition titled "Human Technopole: the new Headquarters" for the design of the new headquarters of Fondazione HT, located on the former Expo Milano 2015 Site in the Municipality of Milan (now named MIND – Milano Innovation District) on Via C. Belgioioso. The purpose of the competition is to acquire a Preliminary Design ("Progetto di fattibilità tecnica ed economica").

The overall estimated cost for the production of the works described in the plan is **94,518,517 euros**, of which 92,213,188 euros is allocated to construction costs and 2,305,329 euros is allocated to non-reducible health and safety costs, excluding VAT. The maximum estimated time period for the construction of the building is 1,100 consecutive days. Said costs and time period are maximums that may not be exceeded during the development process. The costs are covered by the sums available to Fondazione HT.

The Contracting Authority will grant the subsequent design phases (definitive and detailed design) to the winner of the competition via a negotiated procedure pursuant to Article 63, Subsection 4 of Italian Legislative Decree no. 50/2016.

## 1.2. PROCEDURE TYPE

The design competition will be an open public tender procedure pursuant to Article 60 and Article 152, Subsection 1, Letter a) of Italian Legislative Decree no. 50/2016 and is organized into two stages:

1. Stage One is an anonymous procedure to select the **seven (7) best design proposals**, which will be admitted to Stage two;
2. Stage Two is an anonymous procedure to select the best design proposal from those selected in Stage One.

To ensure anonymity and fair and equal conditions to participants, competition procedures and relations between the Contracting Authority and the candidates will be conducted exclusively by a digital platform, as provided via the website [headquartersht.concorrimi.it](http://headquartersht.concorrimi.it) and in accordance with the instructions provided on said website.

## 1.3. ELIGIBILITY: CANDIDATE REQUISITES

The competition is open to all parties – either individually or organized in associations – described in Article 46, Subsection 1 of Italian Legislative Decree no. 50/2016 as currently amended, and possessing, as of the date of publication of this Request for Tenders in the Official Journal of the European Union (OJ), the requisites provided in Italian Ministerial Decree no. 263/2016 and not subject to the exclusion clauses in Article 80 of Italian Legislative Decree no. 50/2016 as currently amended.

Given the nature of the competition, participants selected for Stage Two are expected to have significant levels of experience and/or specialization in the relevant fields.

Participants selected for and admitted to Stage Two of the competition must demonstrate, under penalty of exclusion, possession of the qualifying requisites and professional technical capabilities specified in Article 83 of Italian Legislative Decree no. 50/2016 and in the ANAC Guidelines no. 1 of 2016 as currently amended and parametrized on the basis of the cost of definitive and detailed design, which will be assigned to the winner of the competition pursuant to Article 63, Subsection 4 of Italian Legislative Decree no. 50/2016. Said requisites and capabilities are listed herein below.

### Economic-financial requisites

Overall revenues for engineering and architecture services for the best three years of the last five years, for which results are available, preceding the publication date of the Request for Tenders, must have been at least **10,096,052 euros**, corresponding to **twice the cost for definitive and detailed design services** object of the procedure and indicated below and in the RFT (Chapter II, Article 3).

Estimated cost for definitive and detailed design services:

**Definitive design: 3,082,478 euros**, plus VAT and accessory costs, if due

**Detailed design: 1,965,548 euros**, plus VAT and accessory costs, if due

**Total: 5,048,026 euros**, plus VAT and accessory costs, if due

### Technical and organizational requisites

- a) List of engineering and architecture services provided in the ten years preceding the date of publication of the RFT and relating to the services belonging to each of the categories and IDs indicated in the RFT (Chapter II, Article 3), where the overall amount, for each category and ID, must be at least **twice the estimated costs of work** for the respective category and ID;
- b) Prime engineering and architecture services provided in the ten years preceding the date of publication of the RFT, relating to the services belonging to each of the categories and IDs indicated in the RFT (Chapter II, Article 3), and characterized by dimensions and technical characteristics analogous to those outlined in the RFT, for an overall amount **equal to at least 0.80 times the estimated cost of work** to which the services refer, calculated for each category and ID;
- c) Annual average number of technical personnel engaged over the past three years of at least **twenty-two (22)**; the ANAC Guidelines no. 1 as currently amended are applicable here.

### Team composition

In order to effectively address the complexity of the requested services, the design team must be composed, at least as regards the professional figures contained therein, of persons holding a university degree or diploma (“geometra”) and registered with the appropriate professional order as indicated in the RFT (Chapter II, Article 3).

#### 1.4. INCOMPATIBILITY AND EXCLUSION

Reasons for excluding a participant are provided in Article 80 of Italian Legislative Decree no. 50/2016 as currently amended.

Reasons for deeming a participant incompatible are detailed in the RFT (Chapter II, Article 4).

#### 1.5. REQUESTS FOR CLARIFICATION – OPTIONAL SITE VISIT

Prospective competition participants may submit requests for clarification to the Contracting Authority as described in the RFT (Chapter II, Article 9) exclusively via the electronic form provided on the website [headquartersht.concorrimi.it](http://headquartersht.concorrimi.it).

Participants have the option of visiting the Site and inspecting the project area. The timeframe and procedure are described in the RFT (Chapter II, Article 9).

#### 1.6. STAGE ONE – SUBMISSION REQUIREMENTS

The design proposal required for participation in Stage One of the competition shall be composed of the following deliverables:

- **illustrative technical report** in UNI A4 format as a PDF file with a suggested total of 20 pages;
- **three (3) project drawings/diagrams** in UNI A1 format as PDF files.

The procedure and deadlines for participating in Stage One of the competition are set forth in the RFT (Chapter II, Article 11).

#### 1.7. STAGE TWO – SUBMISSION REQUIREMENTS

The design proposal required for participation in Stage Two of the competition (technical and economic feasibility study) comprises the following deliverables:

##### Scope 1: the HT Campus

- a) **three (3) project drawings/diagrams** in UNI A0 format as PDF files;
- b) **a project overview report** in UNI A4 format preferably not exceeding 12 pages as a PDF file.

##### Scope 2: the New Headquarters Building

- a) **ten (10) project drawings** in UNI A0 format as PDF files;
- b) **illustrative technical report** in UNI A4 format with a suggested total of 30 pages as a PDF file.

##### Deliverables regarding both Scopes

- a) **Preliminary timeplan** for full project in UNI A3 format not exceeding 5 pages as a PDF file;
- b) **Cost estimate report** in UNI A4 format preferably not exceeding 5 pages as a PDF file;
- c) **Functional programme** report in UNI A4 format preferably not exceeding 10 pages as a PDF file;
- d) **Summary of documents illustrating the proposed design** in UNI A3 format as a PDF file.

The procedure and deadlines for participating in Stage Two of the competition are set forth in the RFT (Chapter II, Article 13).

## 1.8. JURY

The Jury for Stages One and Two is one and the same and is composed of five (5) members:

- Prof. Giovanni Azzone (President);
- Prof. Irene Bozzoni;
- Prof. Ennio Macchi;
- Eng. Alberto Sanna;
- Arch. Ekaterina Golovatyuk.

Two (2) alternate jury members have been named to take the place of any of the other jury members as necessary:

- Prof. Giovanni Lozza;
- Arch. Pierpaolo Danelli.

## 1.9. STAGE ONE EVALUATION PROCESS AND CRITERIA

The Stage One selection process to determine which proposals will be admitted to Stage Two of the competition involves an assessment of the following invariant criteria. Any proposal not meeting these criteria will be excluded:

- i. correspondence to Functional programme and specific technical requisites (Chapter 6 of the "Documento di Indirizzo alla Progettazione");
- ii. observance of maximum overall preliminary construction costs per Article 1 of the RFT;
- iii. observance of preliminary construction timeplan as laid out in the "Documento di Indirizzo alla Progettazione" (Chapter 5, Section 6) and in Article 1 of the RFT;
- iv. observance of the rules and constraints in Chapter 7 of the "Documento di Indirizzo alla Progettazione".

The Stage One selection process also involves assessment of the following criteria:

**Criterion a) the HT Campus (Scope 1), 30 points**, subdivided as follows:

- a.1 Urban Design and "Common Ground": 10 points;
- a.2 Campus and Integration: 5 points;
- a.3 Landscape and Open Spaces: 10 points;
- a.4 Mobility and Pathways: 5 points.

**Criterion b) the New Building (Scope 2), 70 points**, subdivided as follows:

- b.1 Iconic Value and Architectural Identity: 15 points;
- b.2 Functionality and Organization: 15 points;
- b.3 Flexibility and Adaptability: 25 points;
- b.4 Environmental Sustainability and Energy Efficiency: 15 points.

As stated above, proposals failing to meet the invariant criteria will be excluded from the competition.

## 1.10. STAGE TWO EVALUATION PROCESS AND CRITERIA

The proposals admitted to Stage Two of the competition will be judged on the basis of the invariant criteria applied in Stage One and on the basis of the following criteria:

**Criterion a) the HT Campus (Scope 1), 30 points**, subdivided as follows:

- a.1 Campus and Integration: 10 points;
- a.2 Landscape and Open Spaces: 10 points;
- a.3 Mobility and Pathways: 10 points.

**Criterion b) the New Building (Scope 2), 70 points**, subdivided as follows:

- b.1 Iconic Value and Architectural Identity: 10 points;
- b.2 Functionality and Organization: 15 points;
- b.3 Flexibility and Adaptability: 15 points;
- b.4 Environmental Sustainability and Energy Efficiency: 10 points;
- b.5 Construction Technology and Construction Time: 10 points;
- b.6 Durability and ease of Maintenance: 10 points.

**1.11. ANNOUNCEMENT OF THE WINNER, AWARDS, AND COMPLETION OF THE TECHNICAL AND ECONOMIC FEASIBILITY DESIGN**

When the Jury has reached its decision, the Contracting Authority will meet in public session to announce the winner according to the procedures specified in the RFT (Chapter III, Article 19).

The winner of the competition will receive an award of **600,000 euros** (exclusive of VAT and applicable taxes) from Fondazione HT.

Pursuant to Article 152, Subsection 5 of Italian Legislative Decree no. 50/2016 as currently amended, with this payment, ownership of the winning design proposal is transferred to Fondazione HT.

The participant finishing in second place will be awarded **120,000 euros** (exclusive of VAT and applicable taxes).

The participant finishing in third place will be awarded **80,000 euros** (exclusive of VAT and applicable taxes).

Each of the remaining participants in Stage Two will receive an award of **50,000 euros** (exclusive of VAT and applicable taxes).

Within sixty days of the announcement of the winner by the Contracting Authority, the winner of the competition shall complete their proposal with all deliverables required for the technical and economic feasibility plan pursuant to Italian Presidential Decree no. 207/2010 ("Progetto di fattibilità tecnica ed economica").

**1.12. ASSIGNMENT OF FURTHER DESIGN PHASES**

The Contracting Authority will assign further design phases (definitive and detailed design) to the winner of the competition via a negotiated procedure pursuant to Article 63, Subsection 4 of the Italian Legislative Decree no. 50/2016 as provided in the RFT (Chapter III, Article 24) and in the contract template annexed to the RFT.

**1.13. PUBLICATION OF THE REQUEST FOR TENDERS – PROJECT OFFICER (R.U.P.) – LANGUAGE AND SYSTEM OF MEASUREMENT**

The Request for Tenders is published as required by law and also on the website of the Contracting Authority ([www.arexpo.it](http://www.arexpo.it)) and on the website [www.headquartersht.concorrimi.it](http://www.headquartersht.concorrimi.it).

The Project Officer (Responsabile Unico del Procedimento – RUP) is the engineer Alessandro Molaioni.

The official language of this competition is Italian. Requests for clarification and competition deliverables must be written in Italian or accompanied by a sworn Italian translation under penalty of exclusion from the competition.

The decimal-based metric system shall be used for all competition documentation and designs.

## 2. SUMMARY OF DESIGN BRIEF

### 2.1. THEMES AND OBJECTIVES OF THE COMPETITION

Fondazione HT's new headquarter should include **research laboratories, shared service facilities (such as Imaging and Animal facilities) and support labs, common areas, canteen, meeting and seminar rooms, and administration offices.**

In addition to meeting all the technical and functional requirements to enable HT's scientific activities, the building design should reflect HT's 'openness', for example by featuring **spaces and solutions that promote chance meetings, exchange and interactions among staff.**

In view of HT's plans **to attract national and international partners and to engage in technology transfer**, a relatively small portion of space should be planned for visitors, training labs, joint laboratories and start-up companies at very early stages. Additional spaces should serve to host training activities, such as the organisation of courses and conferences, and outreach, dissemination and educational programmes that HT will engage in.

The New Building should be designed according to the following general guiding principles:

- create **innovative architecture** and quality urban design by integrating the buildings into the MIND urban fabric;
- provide MIND with a new place of great **urban quality**, expressing **a clear identity** as a campus for future research, inspired by the most advanced scientific and technological models;
- create a place of knowledge and research directly **integrated into the Innovation District** and its ecosystem;
- create an **innovative and modern work environment** that can support, train, and sustain talents and figures of scientific excellence;
- create quality facilities for study and research suitable for meeting contemporary needs and standards through the use of **new technologies and new spatial configurations** in accordance with the new modes of study and research;
- create **flexible spaces**, reducing structural constraints to facilitate possible future conversion and adaptation;
- **build in an innovative way**, minimizing construction time and costs, partly by leveraging prefabrication technologies, presenting cutting-edge solutions to industry and the manufacturing market in an ecologically sustainable manner, with **strong attention to environmental and energy aspects**;
- ensure the **health and wellbeing of occupants** through design that improves physical health and mental wellbeing and thus the productivity of the building users.

The objectives set forth by Fondazione HT with this competition not only regard the creation of a functional building with a strong architectural identity but also its integration into the urban fabric of the MIND district, helping to further characterize and enhance the identity of the district itself.

The outcome of the competition will be a project that is capable of addressing the themes and responding to the above objectives with solutions and proposals focusing on the following domains of development.



## 2.2. SCOPES OF INTERVENTION

### Scope 1: the HT Campus

**Scope 1**, as illustrated in the site plans in Annexes 9.4 and 9.5 to the "Documento di Indirizzo alla Progettazione", has an area of approximately **22,150 sqm**.

The objective for Scope 1 is **to propose an innovative concept for the creation of a real "campus"** having its own strong identity but also integrating well into the context of the MIND innovation park, capable of creating close relations between the existing structures (Palazzo Italia, Cardo Nord Ovest and "US6") and the New Building, ensuring the functionality of the district in terms of logistics, accessibility, etc.

Within this area, **the design of the external areas that are functionally connected to the New Building** must be developed as well as **the design of the facilities and structures** associated with it, **the physical and functional connections among the other elements of the HT campus, the green areas and the new landscape**, so as to compose an overall framework for synergistic and integrated interaction with the Scope 2 layout.

The proposed design must provide **a description and interpretation of the HT Campus within the urban context of MIND**, interpreting the guiding principles of the Masterplan and, in particular, the theme of "common ground". In keeping with the proposed solutions, it might include the placement of structures built for accessory or ancillary functions with respect to the main building or as campus services.

The usable aboveground areas are identified in the Annexes 9.6 and 9.7.

The works proposed within this Scope must fall within the maximum estimated construction costs defined in the RFT.

### Scope 2: the New Building

**Scope 2 regards the New Building itself.**

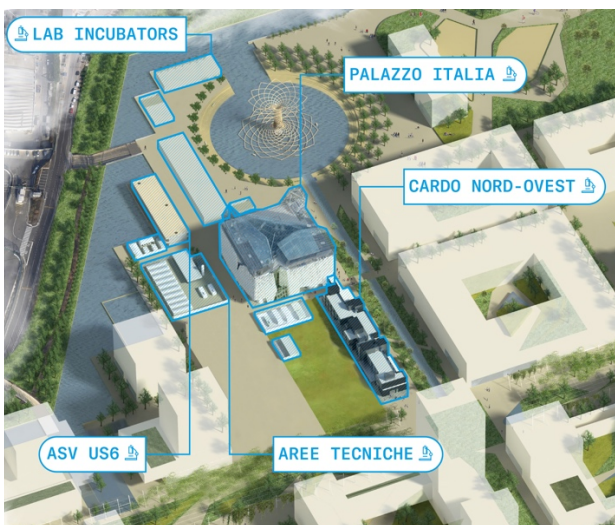
The New Building footprint shall not exceed **6,290 sqm** as illustrated in Annexes 9.4 and 9.5 to the "Documento di Indirizzo alla Progettazione".

The project must be developed in line with the international standards embodied in recently constructed facilities for scientific research and with the design guidelines contained in the "Documento di Indirizzo alla Progettazione".

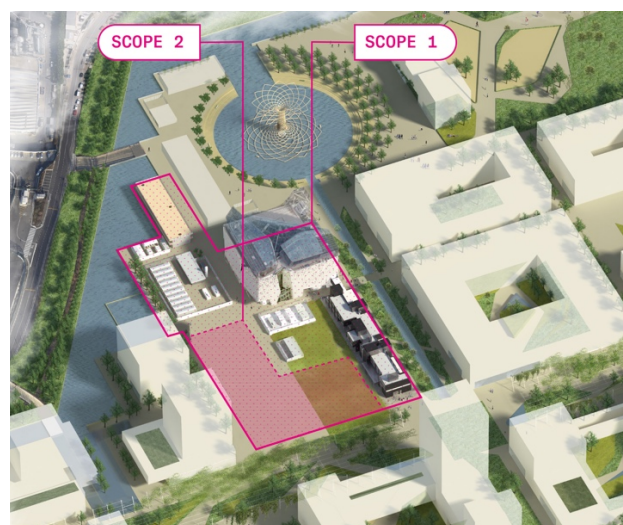
It must seek to express **a recognizable and contemporary architectural and urban identity** that harmonizes with Palazzo Italia, the existing iconic HT building, incorporating **innovative solutions both regarding the flexibility of workspaces and regarding technology, proposing fast and sustainable construction methods that respond to the need for environmental and energy sustainability.**

The design proposal must include **a description and interpretation of the New Building** and, in keeping with the proposed solutions, must specify placement of the functions described in the Functional programme, including plants and equipment (e.g., heating system, utilities rooms).

The cost of works proposed in Scope 2 must fall within the maximum construction costs stated in the RFT.



HT Campus: existing structures and temporary structures



HT Campus: Scope 1 and Scope 2

## 2.3. FUNCTIONAL PROGRAMME AND SPECIFIC TECHNICAL REQUISITES

Chapter 6 of the "Documento di Indirizzo alla Progettazione" ("Programma funzionale e requisiti tecnici specifici") specifies the areas allotted to the individual functions hosted by the New Building. These areas are expressed as **net minimum dimensional requisites** of effective usable floor area, thus excluding external and partition walls.

The proposal must respect said minimum values and floor level or scope location constraints, if specified.

The design proposal may provide for quantities above these minimums but must always aim for the most efficient and effective distribution of functions and the provision of sufficient utility spaces, while remaining within the **overall maximum 35,000 sqm of gross floor area** indicated below and the overall budget specified in the RFT.

The following is a list of the functions which should be hosted by the New Building:

### A. Core Functions

A.1. Primary Laboratories (Researchers), which include:

A.1.1. desks for PhD/Post Doc Researchers and technicians (lab support workstations);

A.2. Support Laboratories, which include:

A.2.1. Imaging Facility (Cryo-EM);

A.2.2. Tissue Cultures;

A.2.3. Kitchen Rooms;

A.2.4. Cold Storage Rooms (+4°C / -20°C);

A.2.5. Cold Storage Rooms (-80°C);

A.2.6. Waste Storage Rooms to collect general, recycled and special waste;

A.2.7. Others: Equipment Room; Instrument Rooms; Core facilities Rooms (i.e. Light Microscopy, Histology Lab, PCR rooms, Mass Cytometry platforms, etc.);

A.3. Animal Facilities, which include:

A.3.1. Main Animal Facility;

A.3.2. Animal Facility expansion area / flexible spaces;

A.4. Offices, which include:

A.4.1. Single Offices (Directors);

A.4.2. Single Offices (Principal Investigators);

A.4.3. Double offices (Senior Staff Scientists);

A.4.4. Multiple Offices;

A.4.5. Meeting rooms, interaction areas, break areas for informal meetings and relax;

### B. Accessory Functions

B.1. Canteen;

B.2. Company Services (including rooftop cafeteria);

B.3. Car Parking;

### C. Technical Spaces

C.1. Energy Production Unit;

C.2. Dedicated Storage Rooms, which include:

C.2.1. Storage for supplies;

C.2.2. Housekeeping closets rooms;

C.2.3. Waste Storage Rooms to collect general, recycled and special waste;

C.3. Atriums, Connectives, Corridors, Toilets, technical rooms, etc.

## 2.4. DESIGN BRIEF AND KEY OBJECTIVES

### Urban Design and “Common Ground”

The proposed design must provide high quality urban design and general configuration of the HT Campus, incorporating and integrating it physically and functionally with the other HT buildings as well as into the MIND urban plan in harmony with the overall Masterplan.

The design must successfully interpret the guiding principles of the MIND Masterplan, and in particular the part defined as “Common Ground” (ground floor permeable to circulation and usage flows, spaces that can be used for different or overlapping functions, accessible internal areas).

### Functional Integration of HT Campus Elements

The proposed design must embody an innovative interpretation of the concept of campus, proposing a clear and recognizable identity for the entire project area, ensuring clear functional and architectural integration and physical connection between the New Building and existing buildings.

### Landscape and Open Spaces

In keeping with the objective in the MIND Masterplan of creating a quality landscape, the project shall define a new concept of landscape that achieves integration between open and built spaces, characterizing itself as a connective element between functions and the spaces within and outside the HT Campus.

### Mobility and Pathways

In keeping with the strategy of public and private accessibility embodied in the MIND Masterplan, the proposed design shall provide innovative mobility solutions on the HT Campus in terms of mobility modes, flow efficiency, pathway functionality, and placement of access points, idle spaces, and logistics facilities.

### Iconic Value and Architectural Identity

The proposed design must respond to the expectations of Fondazione HT to create a building of unquestionable iconicity, ensuring the uniqueness, recognizability, and identity of the building in relation to the strategic activity that will be carried out there and the existing Palazzo Italia building.

The project must be characterized by high architectural quality and a clear and recognizable architectural identity expressed via morphological, compositional, and material aspects. It must mesh with a pre-existing context and the identity of the new HT Campus while achieving a high level of technical and constructional feasibility (in relation to construction time and costs, without exceeding the budget specified in the RFT).

### Functionality and Organization

Considering the special and particular functions associated with the HT science and research program, the design solution must ensure optimal functional distribution as per Functional programme objectives, with particular attention to horizontal and vertical circulation and the integration of laboratories and offices, as well as ensuring optimal fitting out and ergonomics.

### Flexibility and Adaptability

Considering the fast pace of scientific and technological progress, particularly in the disciplines addressed by Fondazione HT research, one of the main prerequisites of the New Building is functional and organizational flexibility of the spaces and adaptability of the architectural “organism”.

The proposed design must thus ensure the highest possible degree of functional and organizational flexibility, ensuring an architectural solution that can adapt or be adapted to possible future reconfigurations and expansions as demanded by the activities performed therein and respond to any contingency needs that may arise over time.

### Environmental Sustainability and Energy Efficiency

The proposed design must fully embrace the challenges of creating an architectural complex which not only respects the minimal requisites established by law in terms of energy efficiency but also has a limited environmental impact and is capable of maximizing, over its entire lifecycle, its energy efficiency and environmental sustainability.

### Construction Technology and Timeplan

The design solution must involve the use of cutting-edge materials and innovative yet proven construction technologies able to ensure an industrialization of the construction process, also resorting to forthright use of prefabricated elements, modularity, and construction efficiency with a view to reducing construction time and costs, in any case remaining within the budget indicated in the RFT.

### Durability and Maintainability

The project must be able to guarantee maximum durability and ease of maintenance, with particular attention to the solutions adopted to optimize and reduce ordinary and extraordinary operation and maintenance costs (accessibility, ease of inspection and replacement of individual plant and equipment components, ease of cleaning and sanitization of individual construction elements, etc.).

## 2.5. CONSTRAINTS AND RULES

### 2.5.1. Constraints

There are a number of constraints applicable to Scopes 1 and 2 (limits, easement, infrastructural constraints, interference constraints) which must be observed. The principal ones are listed below. Please refer to Chapter 7 of the "Documento di Indirizzo alla Progettazione" for a complete list.

#### Minimum distances:

Project buildings and structures must respect the following minimum setbacks:

- 15 meters from gas cannister storage facilities;
- 2 meters from subsurface cable ducts;
- 5 meters from the perimeter canal to allow canal access and maintenance.

#### Setbacks from existing buildings

Although the project is part of the Programma Integrato di Intervento (PII – Integrated Development Plan), as a precautionary measure, the buildings and structures must respect the following minimum setbacks (pursuant to Article 86, Subsections 3, 4, and 5 of the "Regolamento Edilizio" (City of Milan Building Code) as indicated in Annexes 9.6 and 9.7:

- 10 meters between windowed walls and walls of adjacent buildings, except as provided by Article 11 of Italian Legislative Decree no. 115/2008;
- The buildings must be designed to ensure adequate sunlight access to pre-existing structures ("60 degrees" rule).

#### Fire prevention

The project must be compatible with the fire prevention plan that has already been approved by the relevant authorities for existing structures (Annexes 3.6 and 3.7 of the "Documento di Indirizzo alla Progettazione").

#### Urban planning constraints

See Annexes 7.10 and 7.6.4 (Tav. 04) of the "Documento di Indirizzo alla Progettazione" for urban planning constraints.

#### Interferences and underground utilities

There are a number of instances in Scope 2 involving possible interference of the construction of the New Building with existing utilities infrastructure. Any necessary relocation or reconfiguration of said infrastructure to eliminate issues of interference shall be resolved in the proposed design. As illustrated in the site plan contained in Annex 5.2 to the "Documento di Indirizzo alla Progettazione", Scope 2 contains a number of indispensable utility systems which may not be altered and must remain operable for the entire duration of the worksite:

- Medium voltage power lines supplying the entire Campus;
- Subsurface utilities along the secondary routes;
- Subsurface utilities along the tertiary service routes;
- Blackwater sewer system.

The costs for work to resolve interferences and ensure continuity of service of the above utilities are included in the overall project budget, over and above construction costs.

#### Public areas

The area identified in the site plan in Annex 9.8 to the "Documento di Indirizzo alla Progettazione" (**the piazza in front of Palazzo Italia**) is zoned for public use.

The proposal must also provide for another area for public use of at least **7,000 sqm** to be located in Scope 1 and/or Scope 2.

## 2.5.2. Rules

### Overall Gross Floor Area

The proposal must provide a building with an **overall Gross Floor Area (GFA) no greater than 35,000 sqm**, where GFA is the sum of all floor areas (including partition walls) contained within the building measured to the external face of the external walls.

The GFA must include the heating plant and all utilities rooms.

### Typology

The proposal must regard **a single building**.

While complex morphologies are accepted, the building must be one contiguous architectural unit.

External connections to this building are allowed provided that they are necessary to interconnect different elements of the building itself or to connect the building with other buildings on the Campus (Scope 1).

### Maximum aboveground height and underground depth

The building may not exceed a total aboveground height, including all utility rooms and plants, of **70 meters**.

The building may have only one underground level. The underground floor should not be more than 5 meters below ground level.

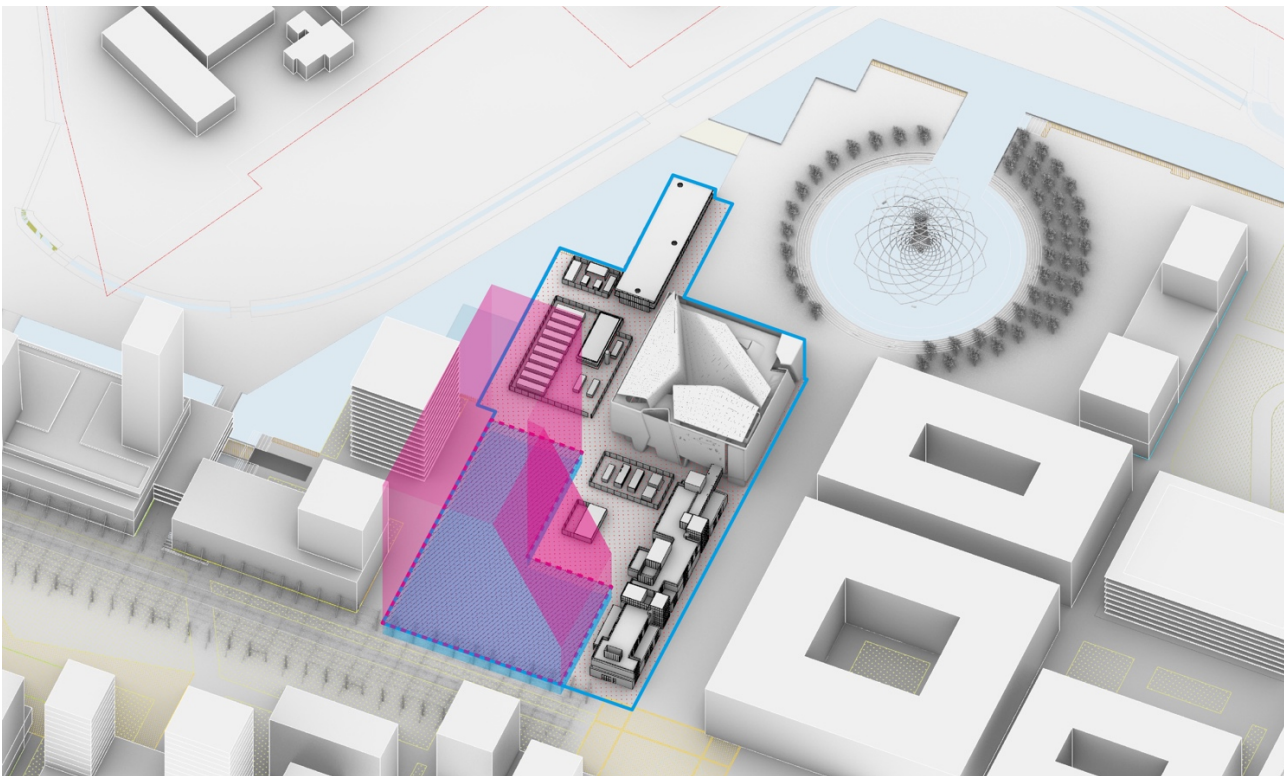
### Floor to ceiling height

Stories may vary in height **from 4 to 6 meters** (floor-to-ceiling height).

### Occupied area and silhouette limits

The maximum occupied areas (defined as the projection onto the ground of the outermost perimeter of the building as seen in a top view. For the aboveground floors, the occupied area corresponds to the shadow of the building when the sun is at its zenith) of the aboveground and subsurface portions of the building are specified in Annexes 9.6 and 9.7 to the "Documento di Indirizzo alla Progettazione".

No part of the building may project beyond the limits of the project areas in each Scope. The projection onto the ground of any protruding elements of the building must fall within the confines of the assigned lot.



The magenta volume identifies the maximum aboveground envelope for the building, whereas the blue volume identifies the maximum footprint for the level below ground.