

Ravone-Prati, Bologna

Via Burgatti - Via del Chiù - Via della Volta

The proposed site for transformation is located within the north-west of Bologna, about 3km from the city centre. It consists of areas that have served various purposes over time, including housing and railway infrastructure. The new Metropolitan Railway System (SFM) stop in Prati di Caprara, which is being built right inside the compendium, is the catalyst for the area's development and will serve as an important mobility hub for Bologna, as well as an important urban cycle and pedestrian link. As a result, the project must take into account existing railway infrastructure to propose solutions aimed at urban regeneration as well as maintaining a physical and functional link between the areas to the north and south of the sector. Valuable elements for the competition area, is its proximity to the former military areas of Prati di Caprara, which are undergoing an important process of re-naturalisation, and its belonging to

the broader urban regeneration programme called "City of Knowledge", connecting the main research and innovation poles with the areas undergoing transformation. The expectation of the city lies mainly in the combination of services to be implemented; research and development activities will be able to coexist with areas dedicated to social and cultural innovation. Furthermore, the presence of two important service-providing locations (the UniBo Lazzaretto campus to the north and the Ospedale Maggiore to the south) makes it feasible to provide significant housing and additional personal and sports services geared towards the world of universities, research, and health. By proposing this site, the city hopes to create a central urban hub that can serve as a model for the city's future development in terms of innovation, sustainable mobility, and climate change adaptation.



Plot Area: Overall area of the site is approximately 93,800 sq m (approximately 24,400 sq m to the north of the railway and approximately 69,400 sq m to the south).

Expected Land Use: A maximum of 46,000 sq m of gross floor area is planned, with a functional mix that enhances the area and complies with urban planning, such as offices, commercial, accommodation and residential buildings. Temporary uses can also be used to integrate and develop managerial functions (e.g. services, coworking activities, spaces for the development of cultural and creative industries and, linked to well-being and Industry 4.0 such as bio-tech research activities, wellbeing, life-science, manufacturing). Residential functions (private or collective) can be included, with at least 30% ERS (social housing). The design should be compatible

with the new SFM stop whilst also taking into account railway constraints.

Site Ownership: FS Sistemi Urbani S.r.l., Trenitalia S.p.A., Rete Ferroviaria Italiana S.p.A.

Type of Property transfer intended: The proposed property will be purchased and sold in both its de facto and de jure states, with all applicable building rights, for a base value that is currently being verified and will be disclosed during phase 2 of the competition.

It should be noted that a portion of the areas to be sold is currently occupied and will be vacated with the relocation of the activities currently underway by RFI. A further portion is occupied by private residences which are in the process of being vacated.

Deadline for the submission of the Expression of Interest: 20 September 2022 14:00pm CET.

Presentation of the site and development expectations

The site targeted by the initiative is among the railway areas included in a regeneration process that has been under way for some time with the City of Bologna. Most recently, it was the subject of a **Memorandum of Understanding** signed between the City of Bologna and the FS Group (state-owned railway company) on 25 March 2022, which confirms the common desire to implement the urban redevelopment of the city's railway areas.



This redevelopment is fully in line with one of the main projects promoted by the city authorities called "Città della Conoscenza (city of knowledge)" which sets out three priority areas: science, research and advanced training; innovation and impact on economic development, high quality jobs and international appeal; and knowledge policies. The project improves connections between **major research and innovation hubs** and areas undergoing transformation, such as the proposed site. The development and regeneration of the city's northwest quarter will thus be able to play a pivotal and accelerating role in Bologna's overall attractiveness and transformation, fostering synergies between areas of development and initiatives to enhance the city's scientific, industrial and cultural heritage.

In the areas to the north, the construction of the new headquarters of the university's school of engineering and the Bertalia-Lazzaretto development plan continue. Within the large urban planning area being realised, one of the major university centres of the University of Bologna's "Multicampus" system is under construction. Work on the construction of student halls of residence, student services, lecture halls and departmental offices has been contracted out and will form the second major university campus on via della Conoscenza, in addition to the one built along the Navile canal.

In the areas south of the site, several initiatives are under way to complete the new layout of the area. These include the regeneration of the former "Sabiem" manufacturing area with initiatives by the Opificio Golinelli foundation (design of a new school complex), those carried out by Confindustria (Liceo Steam International) and other research and business development activities already active in the area. Also to the south the former military areas Prati di Caprara have a strong presence, where a major renaturalisation process is underway. Its development is in line with another flagship project organised by the municipal authorities, the "Impronta Verde (green imprint)". The natural features of the

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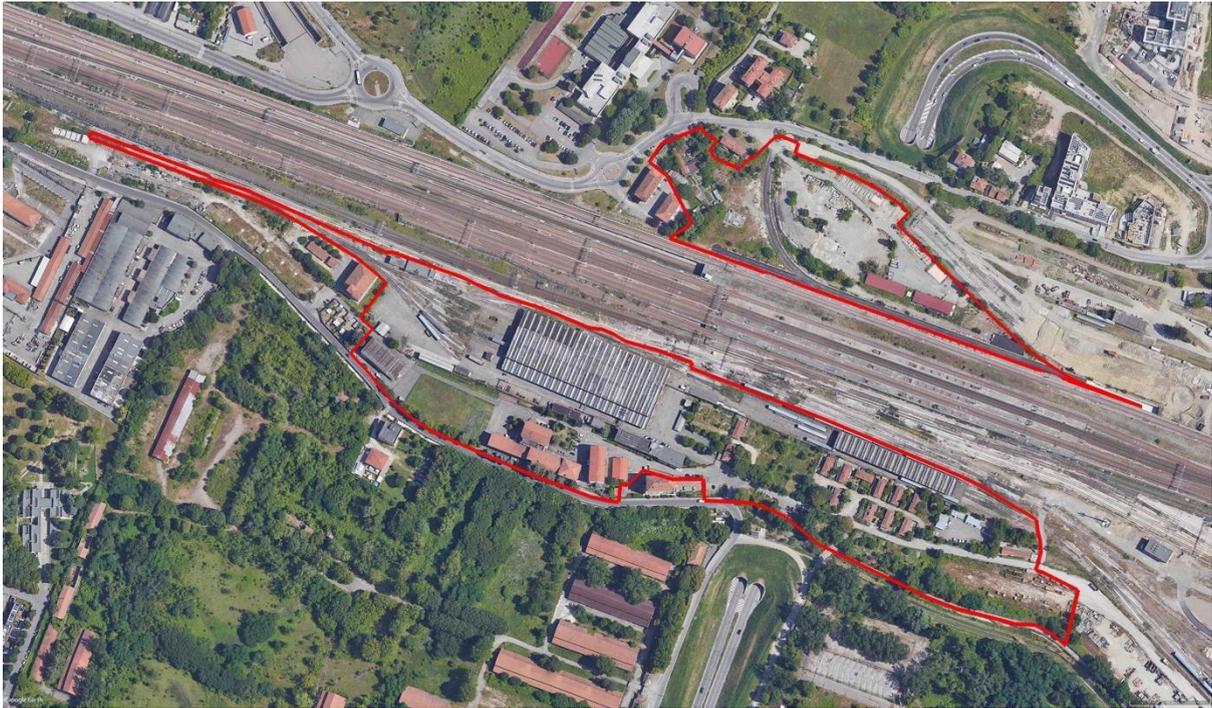
former military areas will be protected and will be made available to citizens, who have been requesting to use them in recent years; any urban transformations will be limited to the rehabilitation of existing buildings on the west side, consistent with the “Città della Conoscenza” project. Therefore, it will also be important to ensure green linking and easy connections between the city centre, the Prati di Caprara green area and the Reno River.



The distance from the centre of the Bologna is offset by excellent accessibility to the north thanks to the Lazzaretto stop on the People Mover line. This connects the area with the high-speed train station and G. Marconi international airport, while to the south, along via Emilia, the construction of the red tramline is planned.

The brownfields regeneration project is structured around the **new SFM stop** and will have to take into account this factual and programmatic context by providing a spatial and functional interpretation, consistent with the strategies, norms and constraints recalled in the following paragraphs and in documentation in the *dataroom*. The works for the construction of the SFM stop are in an advanced stage of design and include improved accessibility to the stop and the implementation of the SFM recognition project. The new stop will have to adopt the role of mobility centre under the metropolitan PUMS (sustainable urban mobility plan): the site design may provide proposals to integrate the stop's proposed access points, helping to **bridge the gap** caused by the railway infrastructure, while also enabling **new urban bicycle and pedestrian connections** between areas to the north (Bertalia-Lazzaretto and UniBo campus) and those to the south (Prati di Caprara, Ospedale Maggiore). The design and implementation of the subdivision will bring about an urban transformation realised with state-of-the-art criteria regarding environmental sustainability and universal accessibility.

Disused areas and buildings can provide opportunities to rethink and experiment with new and different ways of experiencing that part of the city while triggering processes of social innovation. In addition to the above, then, temporary uses can be implemented for the functions to be established, preferably but not exclusively aimed at providing new cultural, recreational, job promotion or social services. This is one of the most interesting ways of organising city life in an original way and anticipating the demands of new, informal, unstructured spaces which are open to transformation over time.



Specific planning rules and regulations

The most important urban strategies of the Urban Plan - PUG (Municipality of Bologna, 2021) for the area of transformation include combatting land take through urban regeneration strategies that relate to man-made soils, developing the urban eco-network, mitigating environmental risks and energy transition and initiating circular economy processes.

The initiative can be implemented through urban densification and replacement intervention, as defined by the [PUG Planning guidance](#), affecting the entire complex including the plots north and south of the railway to be implemented in agreement with the municipality.

In particular, the **sustainability conditions** set forth in the [PUG Planning guidance](#), referred to herein:

- [Action 1.1c - *Encourage urban reuse and regeneration of built-up areas and man-made soils*] New constructions or infrastructure should be located in parts of the subdivision which already have man-made soils and **limit the use of intact soil**.
- [Action 1.1a - *Encourage the rehabilitation and upgrading of the existing building stock*] If the rehabilitation of existing buildings is planned, they must fully meet the minimum performance requirements for **seismic upgrading** and **universal accessibility** stipulated to obtain volumetric incentives.
- [Action 1.2b - *Enhance urban green infrastructure*] Urban initiatives must improve the value of the building impact reduction index (RIE) compared to the current situation, impacting on surface permeability and phytomass (building regulations [RE](#) - Article 28 P4). Urban initiatives must provide public green spaces, environmental compensation and rebalancing measures, and ecological and environmental endowments, as indicated in Action 2.2a - *Encouraging the redevelopment and implementation of urban facilities*.
- [Action 2.1b - *Encouraging the increase of social housing supply*] In order to promote an increase in the social housing supply, it is obligatory to set aside no less than 30 percent of the volume for residential functions (A) for ERS (social housing, as defined

Reinventing Cities

by the PUG in the same Action), if these functions affect at least 25 percent of the total Project Volume (Vt). The implementation of ERS for a volume exceeding 20,000 cubic metres must be supported by a social management system.

- [Strategy 2.2 - *Ensuring a balanced network of quality facilities and services*] Infrastructure for the urbanisation of settlements, including the public parking spaces provided for each use and any upgrades to them made necessary by new demands related to settlements, must be built. Arrangements should be made to: equip the municipality with public facilities areas in the minimum quantities established in Action 2.2a as applied to the functional categories to be established, and to contribute to the construction of public facilities through the payment of the construction contribution referred to in Article 29 of Lr (regional law) 15/2013 and the measures of compensation and environmental and territorial rebalancing and ecological and environmental facilities, referred to in Articles 20 and 21 of Lr 24/2017 if necessary.
- [Strategy 2.3 - *Redesigning spaces and facilities*] In all urban initiatives, spaces – particularly public spaces and public use spaces – should be designed with inspiration from the principles of “universal design” (**design for all**). All urban development involving the establishment of residential functions must ensure that inhabitants can access specific neighbourhood services within a 1,000m radius (barrier-free pedestrian walkway) of each planned dwelling. It is possible to propose measures in parts of the city with high sustainable accessibility and a design that excludes or significantly reduces the use of private motorised vehicles; consistent with this choice, limiting (if not eliminating as such) public parking standards and possibly also private parking may be considered, as provided in Action 2.2a. Street design must also contribute to improvements in urban comfort through careful environmental design.
- [Action 3.1d - *Qualifying the role and recognisability of gateways to the city and implementing a system of mobility centres*] The new SFM stop will be built based on the rationale indicated in the PUMS (point 5.7 of the Report), the metropolitan territorial plan (PTM) (Art. 45) and the guidelines for the design of mobility centres approved by mayor’s deed no. 23/2021. The project should dialogue with the new stop, improve the connectivity of the area and fit into this development framework.

With respect to the establishment of **uses and functions**, the inclusion of manufacturing use (C1) - artisanal industrial production of goods and logistics (C2) is excluded, except for small-scale logistics, the inclusion of which will have to be verified with the Green Logistics certification referred to in the PTM ([PUG Planning guidance](#) - Action 3.2b - 3059). The establishment of trade in large and medium-large facilities (E1, E2) is not allowed, while the provision of medium-small commercial facilities is to be evaluated through specific assessments ([PUG Planning guidance](#) - Action 2.2c - 2110). The inclusion of residential uses (A1) and equipment and services to the population (D2-D7) resulting from specific assessments is allowed.

The inclusion of accommodation uses (B1) is allowed, as a result of specific assessments ([PUG Planning guidance](#) - Action 1.1a-1022)

An indicative list of the main **design constraints** is given below:

- Driveway access for emergency vehicles, now present in the northern portion of the plot and served by a temporary roadway that can be modified to provide access to the high speed rail tunnel (see *dataroom*).
- Present pumping system maintained in the northern district or relocated (see *dataroom*).
- Connection with the so-called “Sussidiaria di Ponente”, a roadway planned by the municipality to bypass the Reno River and cross the Ravone slipway with the construction of an internal roadway in the southern portion of the project.
- Viale Vittorio Sabena railroad road undercrossing tunnel.

Reinventing Cities

- New SFM stop, under design, for which improved accessibility and mixed-mode transportation will be required through the study of access points to the bicycle-pedestrian link between the northern and southern areas and improved modal interchange (see data room).
- Construction constraint to comply with railroad (d.p.r. (presidential decree) 753/80).
- Presence of an artificial watercourse from the Reno canal (so-called “Canaletta Ghisiliera”), partly with active riverbed and partly with tombed channels, with railway undercrossing flanked by an additional watercourse “Rio Ravone”.

It should be noted that checks are ongoing regarding the existence of cultural constraints under Legislative Decree 42/04 for buildings falling within the site. Updates regarding this process will be provided to participants during the competition process.

For a complete and timely review of the zoning regulations and constraints that relate to the site, refer to the municipality's [online maps](#).

City climate priorities and environmental challenges

The municipality requires less energy consumption from non-renewable sources and more energy production and self-consumption from renewable sources by incentivizing the regeneration of the vast existing building stock through its territorial government instruments, particularly the PUG and building regulations. This includes the historical building heritage of interest, to the extent that it is compatible with its preservation and protection. Improved energy performance that meet the requirements of regional and national regulations is to be pursued in the municipal area.

In 2019, the municipality of Bologna joined the “Nuovo Patto dei Sindaci per il Clima e l'Energia (new covenant of mayors for the climate and energy)” by which the signatory cities committed to achieve a 40 percent reduction in greenhouse gases by 2030, while simultaneously addressing climate change adaptation. In April 2021 the municipal council approved the “PAESC - Sustainable Energy and Climate Action Plan”, the implementation of which will achieve a 44% reduction in emissions compared to 2005 by keeping the emission factor of the national energy mix unchanged and a 60% reduction considering a decreasing emission factor in the national energy mix.

With an even more ambitious goal, the authorities have decided to apply for the “EU Mission - 100 Climate Neutral Cities by 2030”, committing to achieve climate neutrality by 2030. In April 2022, the municipality of Bologna was selected from among 100 cities meaning that new initiatives must take the lead to contribute towards this important achievement.

The municipality of Bologna has adopted a strategy for the development of urban green infrastructure (tree balance, green areas and greening of building envelopes) both as a direct emission mitigation measure and for the reduction of energy consumption resulting from the regulation of the urban microclimate and the calming of extreme summer heat phenomena, ensured by green and tree-lined areas through evapotranspiration, shading and the creation of breezes resulting from heat exchange between green and built surfaces.

The PUG identifies open spaces and buildings of public ownership and use as one of the priority areas for the implementation of environmental strategies, and promotes experimentation with innovative technologies and construction techniques in **energy and water conservation**, microclimatic well-being and regulation of natural cycles. Possible techniques include solutions that favour the implementation of nature-based solutions (NBS) as well as seismic safety, always prioritising the best performance level referred to in the building regulations and working towards experimentation and

Reinventing Cities

innovation. The design and implementation of quality public spaces and buildings now represents an unmissable opportunity to help cities adapt to climate change.

Teams should consider the climate challenges identified by the Reinventing Cities competition, with a focus on the following issues:

- The project must provide solutions/features that focus on achieving a **positive energy**, self-consuming, and negative-emissions **urban area**, achieving excellent performance levels ([PUG Planning guidance](#) - Action 1.4a RE - Art. 28 P3). Elements for meeting these requirements may include, by way of example, compact building construction; building orientation to optimise solar energy input; implementation of zero emission buildings (ZEB) i.e. with zero direct or indirect fossil energy consumption, 100% thermal energy, electricity and condominium needs from RES; district-level renewable energy production facilities; proximity of RES energy distribution network interconnected with local/national grid; high levels of charging stations for electric vehicles from RES; presence of bicycle sharing/car sharing services.
- Among the main causes of the “heat island” effect in the city are the high incident solar radiation and high radiation absorption coefficient of materials used in the city built. The PUG foresees that urban planning and building interventions take these factors into consideration by helping to improve thermal comfort conditions during the summer period. The area surrounding the city of Bologna has been subdivided based on similar climatic morphology classes, obtained from the weighted linear combination of four macro-parameters: surface temperature, determined by the optical and emissive properties of surface materials, presence of vegetation, urban morphology (in terms of the ratio of building height to adjacent street width) and building density. The site in question is identified as presenting **medium-to-high microclimatic fragility** and, given the high symbolic value that is considered important to represent with this measure, it is requested to pursue improvements to microclimatic well-being conditions in the urban fabric during the summer period, in particular through ([PUG Planning guidance](#) - Action 1.3cRE - Art. 28 P1):
 - Improvement in the microclimatic well-being index - BM by at least 15% compared with the current situation. The evaluation of the microclimatic well-being index - BM should be carried out by applying ex-ante and ex-post a calculation of the PMV (Predicted Mean Vote) index, regulated by UNI-EN-ISO 7730, or an equivalent index (e.g. PET, PPD) (RE - Appendix);
 - Interventions on external horizontal surfaces with materials that reduce the effect of incident solar radiation by increasing the reflection coefficient (albedo) of surfaces affected by the intervention to values greater than 50% (RE - Appendix).
- As indicated in Action 1.3d of the [PUG Planning guidance](#), in order to reduce the population’s exposure to manmade pollutants and hazards and achieve a suitable acoustic climate primarily by properly siting uses and buildings, residential functions and equipment and collective spaces (public or public use) should be placed in locations most shielded from existing and any planned transportation infrastructure, so as to limit the building of noise barriers. Therefore, functions that are less acoustically sensitive should preferably be located in the area facing the infrastructure, and planted strips should be implemented to help reduce sound levels around buildings.
- As an area potentially affected by flooding, it is necessary to prepare appropriate design measures commensurate with the hydraulic risk assessment so as to reduce the vulnerability of exposed property and people, referred to in the Constraints and Restrictions Document and related [datasheets](#) and the RE - Art. 27 E18.

Language Requirements

The documents required for the first stage – expression of interest – must be written in Italian and should consider using the euro as the currency unit. Submission of an English language version of the documentation will also be allowed, for communication purposes only; the English language document will not be evaluated.

Specific competition procedures

In the first stage, expressions of interest will be judged based on the following criteria for which the following scores will be given:

- Relevance of the project to the specific features of the site (40 points);
- Strategy to minimise emissions and proposed solutions to address the 10 climate challenges (30 points);
- Team suitability (30 points).

Specifically, the expressions of interest will be evaluated by a selection committee based on an investigation carried out by a technical secretariat under the terms described above:

- a) in evaluating each expression of interest the jury will assign for each of the above criteria a value between 0 and 10, expressed without the use of decimal places.
- b) the selection committee will then proceed to assign a final score for each criterion (P_{DEF}) obtained by applying the following formula:

$$P_{DEF} = \frac{V_i}{V_{best}} P_{MAX}$$

where:

V_i = value assigned for each criterion to the expression of interest under consideration;

V_{best} = value assigned for each criterion to the best expression of interest for the same criterion;

P_{MAX} = maximum score of the individual criterion.

N.B. Please note that for the purpose of the final scoring, the quotients and products obtained will be rounded down to the first decimal place where the second decimal place is between 0 and 4, and rounded up where the second decimal place is between 5 and 9.

The property complex may be sold should the eligible parties fail to exercise the preference granted by Article 24 (4) of Law No. 210/85, and to this end this notice serves as a public communication in order to possibly exercise the option provided by the aforementioned provision in favour of the State Administration and, in the alternative, the regions and local territorial bodies.

When the second phase commences the Proprietor shall, at its sole discretion, define the terms and conditions of sale ("Contract Terms"), which shall cover, among other things:

- site selling times and arrangements;
- terms and conditions related to site status;
- procedures for safeguarding the bid.

More information on the Contractual Terms will be communicated in the Rules governing the second phase of the competition.

Provisional Timeline

- Deadline for submission of expression of interest: 20 September 2022
- Date to announce the finalists: November 2022
- Deadline for submission of final proposals: April 2023
- Date to announce the winning project: June 2023