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# NOVARA NEW TEACHING AND RESEARCH HOSPITAL

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# PIEMONTE

## A FUTURE-ORIENTED BUSINESS DESTINATION

### Project organisation – Localisation

The new hospital will be located in the South of the City, between **Piazza "Piazza D'Armi"** (on its northern side), **Via Nuova di P.R.** continuing westwards in **Via Gorizia**, the South ring-road, **Parco Provinciale di Battaglia** in the East

**The total surface** of the area amounts to **324,300 sqm** approximately.

The new facility shall **remove**:

- **Space inadequacy** ;
- Architectural **constraints**;
- **Lack of synergy** between Hospital and University.



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## A FUTURE-ORIENTED BUSINESS DESTINATION

### The Project

**The Square:** *connection and link* among several functions.

**The Hospital:** 711 beds – five floors (three above-ground) – *Eleven* general surgery rooms, *Four* day-surgery rooms and *three* cardiovascular surgery rooms.

**The “House of Mother and Child”:** four floors (two above-ground) - 12 beds for *TIN/TsIN*

**University complex:** *laboratory rooms*, teaching rooms (*40 places*), library and Congress Centre (*400 places*).

### Hospital Park

**Parking:** 3,100 parking lots: 1,700 parking lots for staff and patients (dialysis, disabled, morgue, out-patient) – 1,400 paying parking lots

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## A FUTURE-ORIENTED BUSINESS DESTINATION

### The Project - Facilities

**Seismics:** C-category ground (*coarse-grained average-compact sediments*) – topographical extension factor T1

**Ground features:** superficial layer compressible silts (max-.thickness 8 m),

**Foundations:** foundation linked with intrados

**Supporting structure:** in-situ reinforced concrete

**Decks:** bidirectional concrete slabs lightened with support beams

**Secondary elements**(*shelters, pathway canopies and covers, fire staircases*): *metal*

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## A FUTURE-ORIENTED BUSINESS DESTINATION

### Mechanical facilities (A/C)

The A/C project for the whole complex is traditional and in line with market best practices.

Detailed description:

**Heating system:** through condensing boilers, steam generators and a heat exchanger connected to a co-generation unit. All boilers shall be double-fuel systems (methane and fuel oil). The project shall include a space for future needs / extension.

**Cooling system:** a double-effect absorption cooler and traditional coolers shall be installed on the underground levels. The project shall include a space for future needs / extension.

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### Mechanical facilities (A/C)

In addition the hospital shall be equipped with a **trigeneration system** for the power and hot water (Winter) supply; water is cooled via absorption coolers (Summer).

The complex has been designed according to the minimal environmental criteria and, in particular, shall be equipped with a new-generation BMS (Building Management System) contributing to energy saving and increasing the energy efficiency of the management system.

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# PIEMONTE

## A FUTURE-ORIENTED BUSINESS DESTINATION

### The PPP contract includes the following services:

- Maintenance of **buildings and technical systems**;
- Maintenance and management of the **internal transport systems**;
- Maintenance, use, and management of the **electrical and lighting system**;
- Maintenance and management of the **water supply and sanitation**;
- Maintenance and management of the **A/C systems** (Winter and Summer);
- Maintenance of the **ITC networks**;
- Maintenance of **green areas**;
- Maintenance of all **parking lots (3,100)** and **management of paying parking (1,400)**.

**Excluded** the power, water and energy supply

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