Smart City Roma

Gruppo INWIT

SMART CITY ROMA

BEHIND THE CAPITAL'S CONNECTIVITY

THE CHALLENGE: BRINGING THE FUTURE OF URBAN CONNECTIVITY TO AN "OPEN-AIR MUSEUM"

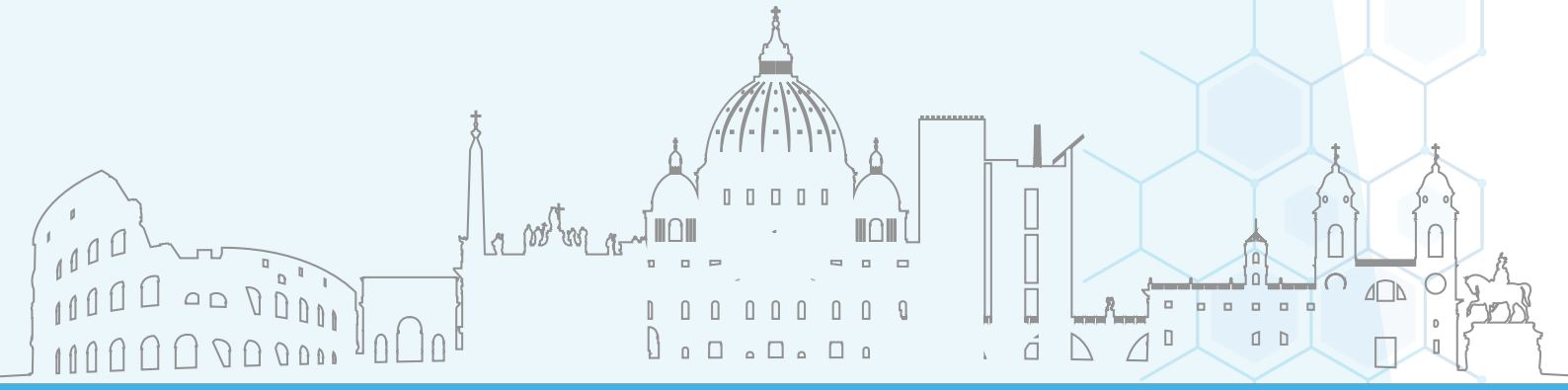
Rome needs connectivity: with **2.75 million official residents** (a figure that exceeds 4.2 million when considering the 121 Municipalities of the Metropolitan City)[1] and one of the world's richest cultural heritages, it attracts **over 22 million tourists** every year[2], plus another 15 million during the Jubilee year[3].

The **"Roma 5G" Project** is the answer: technology at the service of people, a model of urban transformation that combines innovation, heritage, and digital inclusion. It is being implemented by **Smart City Roma**, a company of the **INWIT Group**, Italy's leading tower operator and one of the main digital infrastructure companies.

[1] Source: ISTAT, https//demoistat.it
[2] 2024 Data, ANSA.IT, January 21, 2025
[3] "TOURISM: trends and perspectives – Jubilee Special", Osservatorioturismoveneto.it, December 14, 2024.

THE NUMBERS OF AN URBAN REVOLUTION

A widespread mobile network infrastructure for an always-connected city.



850+ free Wi-Fi hotspots distributed in **100 squares**
1,800+ IoT sensors and **150 probes** for environmental and air quality monitoring
2,000 cameras connected in **5G** for urban security
83 metro stations with **4G/5G coverage** (Lines A, B, B1, C)*
4G/5G indoor coverage in **7 public buildings** of the Municipality of Rome
4G/5G Small Cells (based on operator needs)

*75 existing + 8 to be built

SMART INFRASTRUCTURES THAT RESPECT ARTISTIC HERITAGE

To enable seamless connectivity, we are using **1,000 streetlights** to offer citizens and tourists **free Wi-Fi connectivity** and enhanced security thanks to the cameras. And, through a network of **small cells**, we are optimizing **5G connectivity** with the **minimum visual impact.**

"A giant step forward in the use of the most advanced technologies at the service of the community. A project that shows how public-private collaboration can be useful in creating innovative infrastructures that are fundamental for the growth of Rome." — **Roberto Gualtieri**, Mayor of Rome Capital.

"We are pleased to contribute our expertise in support of all mobile operators, alongside Roma Capitale, for the efficient execution of the Roma 5G project. INWIT thus confirms its commitment to supporting the transformation of the Capital into an increasingly connected and intelligent smart city thanks to shared digital infrastructures." — **Diego Galli**, General Manager of INWIT.

INDOOR TOO: ROME'S METROS RUN ON 5G

Thanks to the multi-operator indoor **DAS (Distributed Antenna System) infrastructure,** 4G and 5G connectivity is now enabled in **Rome's metro stations and tunnels.**

Starting in **October 2025,** all Line A stations will be 5G-enabled. And this is just the beginning.

By June 2026:

- **75 stations** covered (Lines A, B, B1, C)
- **3.000+ antennas**
- **1.170 remote units**
- **250 km of optical fiber**

Coordinating everything is the new **Piazza Vittorio Radio Equipment Room**, among the largest and most advanced in Europe.

METRO A, B, B1, C COVERAGE

ROMA

75	STATIONS
61	KM OF LINES
1	DATA CENTER/BTS HOTEL
>250	KM OF NEW FIBER
470	REMOTE UNITS 5G
700	REMOTE UNITS 4G
>3000	MINI-ANTENNAS

Data relating to stations existing as of January 31, 2025.

THE FULL POTENTIAL OF 5G IN A “DAS”

DAS is a network of indoor mini-antennas, connected via fiber optics to a central unit that carries the 4G/5G signal over very long distances.

The result?

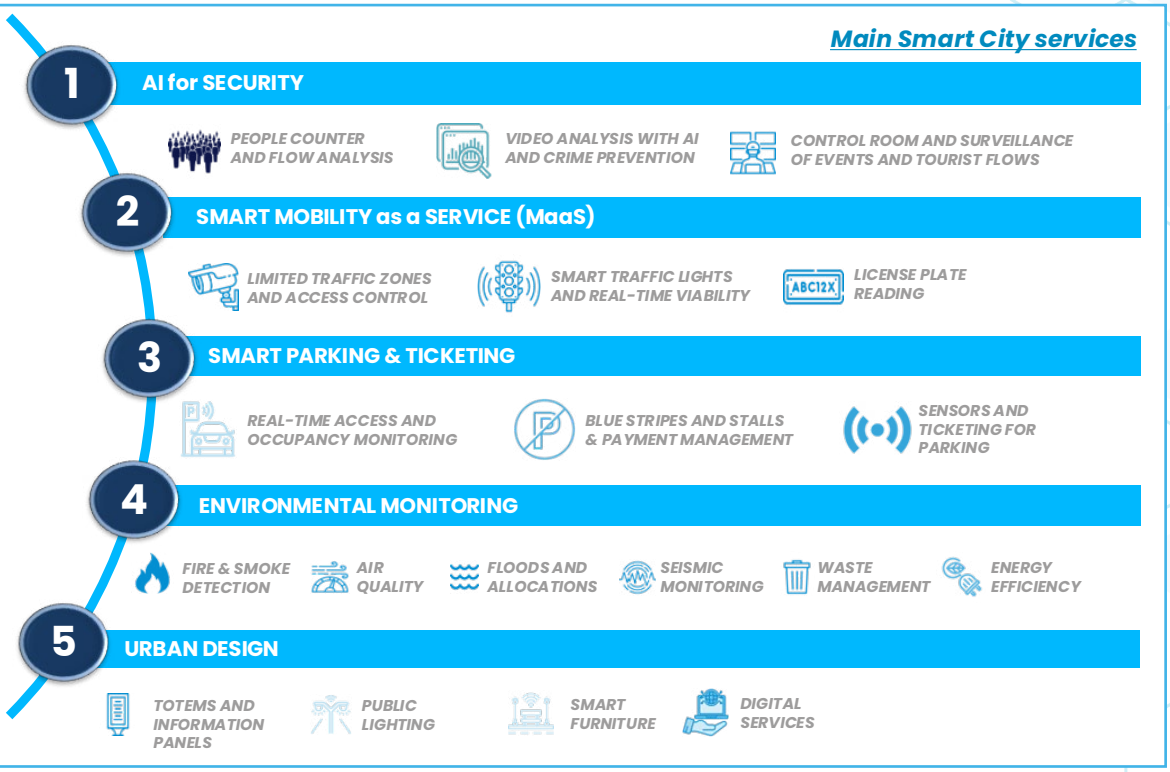
- **High performance**
- **High cybersecurity standards**
- **Seamless experience** between outdoor and indoor connectivity, ideal for complex environments like stations and public spaces.

SMART APPLICATIONS, REAL IMPACT

The new infrastructure currently being built in the capital is enabling ultra-fast connectivity, video surveillance, and environmental monitoring. This is a decisive step toward offering real-time digital services to citizens and public administration.

Among the main applications:

- **Intelligent traffic:** for predictive traffic models.
- **Urban security:** continuous monitoring and rapid response in sensitive areas.
- **Smart waste collection:** thanks to the IoT, targeted interventions and lower CO2 emissions.
- **Smart grids and adaptive lighting:** efficient management of public lighting.
- **Smart operations centers:** new digital hubs for law enforcement agencies.



A STRATEGIC INVESTMENT

Economic Growth, Employment, Attractiveness

Roma 5G is not just about fast connection: it is a **driver of economic growth, innovation, and digital inclusion.** By **2030**, the introduction of 5G digital infrastructures is estimated that, will have a **$1.3 trillion** impact on **global GDP**[4]. The **5G adoption rate in Europe** will rise to **80% by 2030**, resulting in a continental economic expansion of **€164 billion**[5].

Three phenomena related to the introduction of 5G digital infrastructures.

🌐 **Multiplier Effect:** faster, more efficient, and higher-performing urban services.
🚦 **Smart City Applications:** smart mobility, security, energy, connected healthcare, and waste management.
🤝 **Technological Synergies:** 5G powers IoT, AI, cloud, and robotics, increasing economic returns[6].

[4] Kennet Mark, How 5G Expansion Fuels U.S. Economic Growth: ROI & Coverage Impact, March 26, 2025
[5] Gsma Mobile Economy Europe 2025 Report. Full version of the report here.
[6] Unindustria Luiss Business School Study, Roma 5G: fast, secure, clean, 14.02.2020

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