

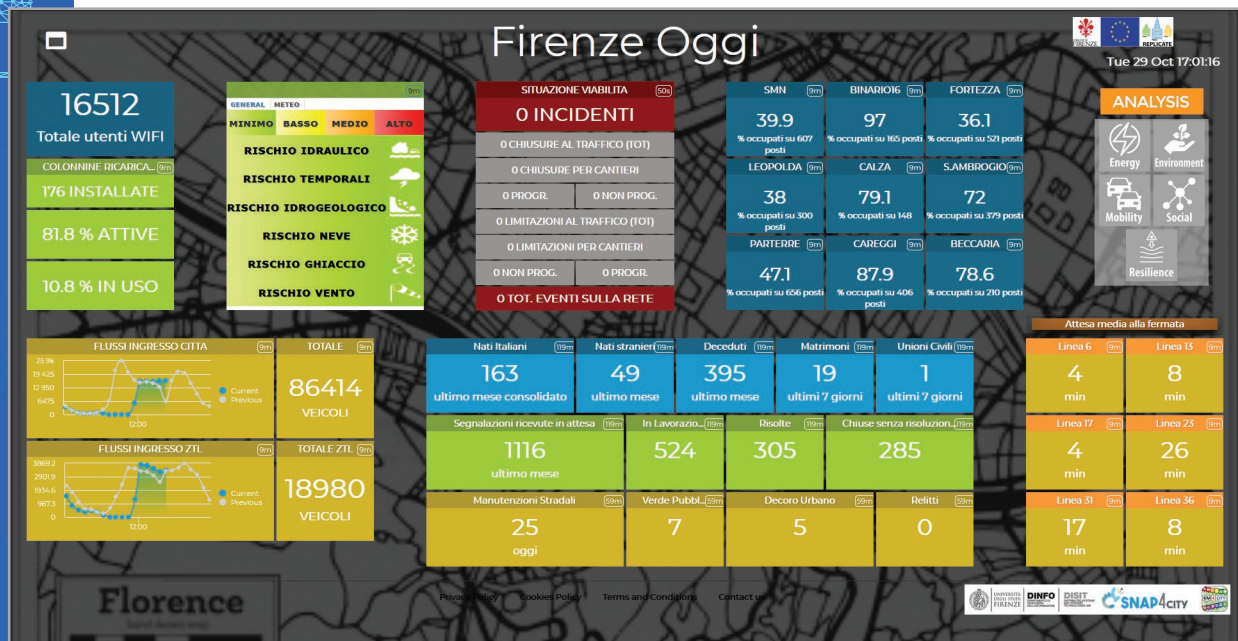


Firenze Smart City Control Room

The City Officials need to get an overview of the city in glance on the basis of relevant aspects to make corresponding decisions if needed. DISIT Lab, in the context of REPLICATE project of the European Commission has set up a Smart City Control Room by collecting a relevant amount of data and performing the data analytics to provide a set of Dashboards for the control room. The whole set of Dashboards start from a main panel that is H24/7 accessible for the city major, where each tile/widget is autonomously updated and interactive to bring the user to a set of more detailed views on data and maps.

Control
Room
Dashboards

A set of
connected
views and
tools



The observed views on the Control Room Dashboards are related to:

- Mobility and Transport: public and private transportation
- Key performance indicators of several gov services
- Civil protection alerts and conditions
- Major parking status and their predictions
- Major Public transportation mean delay at the bus stops
- Energy and consumption aspects for: e-Vehicle recharge, meters, ..
- Environmental aspects: pollution, pollination, waste, irrigator, ..
- Social aspects: social media, tags, citations, people flow, ..
- Resilience of the city: civil protection, hospital first aid, evacuation paths, ..
- Analysis to perform a deep view into the city status from traffic to pollution up to the What-IF analysis.

Predictions
and Anomaly
Detections



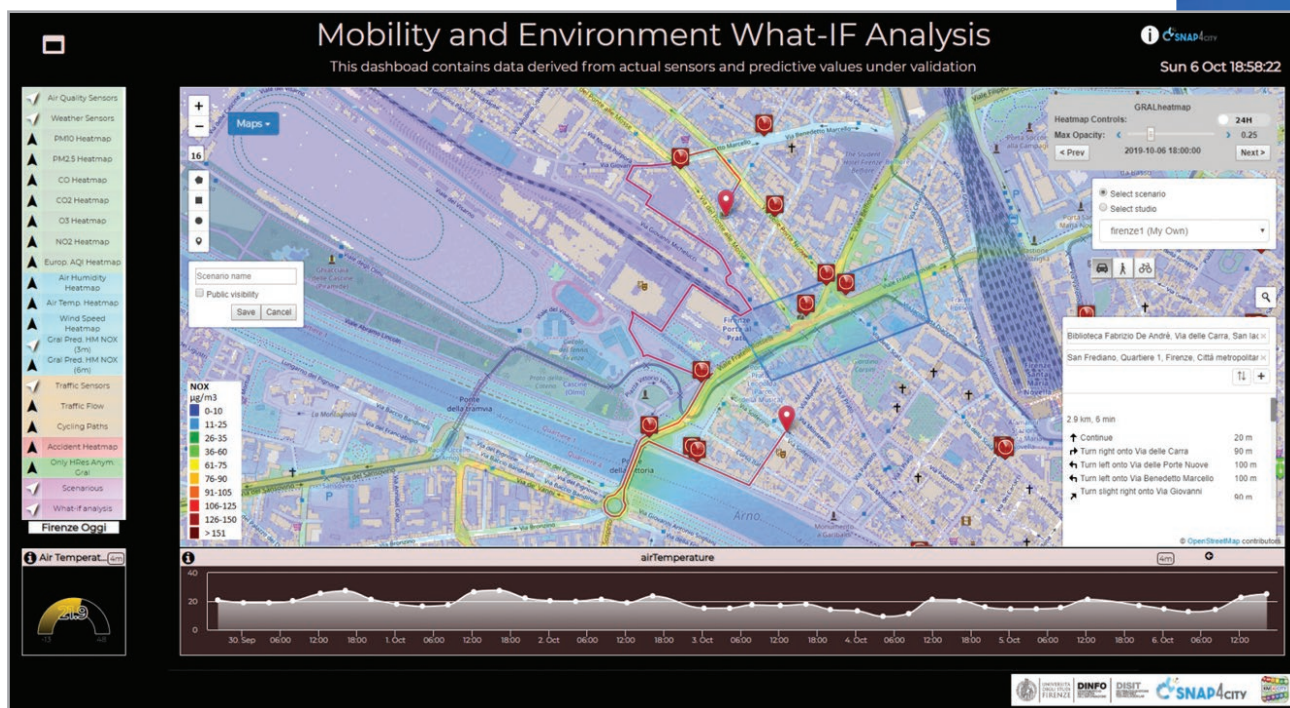
<https://www.snap4city.org/dashboardSmartCity/view/index.php?iddashboard=MTE3MA==>

Most of the SCCR Dashboards for Firenze are private and not accessible to general public since they contain sensitive data. Others are public, for example that providing parking predictions with high precision, over the 97%, computed by using machine learning. This information of smart parking is also provided via Mobile App Km4City and permits at to users to avoid critical situations informing them in advance when the parking is not presenting free slots. In the set of Dashboards and tools, the data collected are related to point of interest, traffic flow, smart benches, irrigators, KPI on energy, KPI on administrative aspects, environmental sensor, weather sensors, public transportation plans data via GTFS and delays at the bus stops, parking status, triage status, social media trends on twitter, civil protection, Wi-Fi status, events of traffic from police department, etc.

The Florence municipality, with REPLICATE project of EC, started initially by exploiting Km4City (<https://www.km4city.org>) for data aggregation. Then the production of dashboards has strongly improved the solution. Recently, Florence passed to Snap4City more powerful platform which has integrated the former solution. Snap4City provides a range of solutions and a secure environment for Smart City Control Room. Relevant aspects are also related to the Data Analytic and Analysis Tool by which the City Operators can perform What-If analysis dynamic routing on the basis of eventual unexpected events and taking into account: city context, pollution, traffic flow, cycling paths, etc.

Operator Dashboards

Data Analytics What-If Analysis



<https://www.snap4city.org/dashboardSmartCity/view/index.php?iddashboard=MjE5MA==>

The above Dashboard exploits data analytics as: parking prediction, public transportation delay analysis, traffic flow reconstruction, prediction of environmental data.

The above features can be tested mobile Apps on Google Play or Apple Store, and on Dashboards accessible from <https://www.snap4city.org> in the public set. On the dashboards, you can navigate on several predictions, in past and future and you can see the 24H animation of the next and past days.

Extended version accessible from: <https://www.snap4city.org/531>

Contact: <https://www.snap4city.org>

Partners: Comune di Firenze, Città Metropolitana di Firenze