

## Smart city sensors

Kifissia is mainly a residential city and a green suburb, the existing green areas is a great advantage of the city that need to be preserved. Every year the city consume a large amount of energy and water for unnecessary watering, and sometimes even harmful for the plants.

An important initiative towards our vision of a smart city is the implementation of a smart sensors system.

### The project consists of 2 phases of implementation:

**Phase A:** sensors for air quality measurements, local meteorological and weather aspects and a pilot system for fire prevention. This phase is already concluded. Three sensors are installed in municipal buildings covering the three municipal areas of Kifissia measuring air quality (CO, SO<sub>2</sub>, O<sub>3</sub>, NO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>) and weather aspects (temperature, pressure, wind, rainfall, humidity). While a pilot for fire prevention is installed within the forestal area of Fasideri.

**Phase B:** Sensors for efficient irrigation management of two green areas of the city Kefalari park and Mavromihali. The sensors will monitor soil humidity, weather conditions, detect leak of irrigation water supply system, optimising irrigation to be more efficient. This system will help reduce energy and water consumption as well as CO<sub>2</sub> emissions. This phase is under development.

All sensors can be monitored from an online platform providing real time data. Network & cloud architecture is identical for all applications, facilitating all users. An alert system to pre-defined users will generate corrective actions.

Key partners involved: SPARCS local team, technical department, procurement office, financial department, department of greenery, ES systems, local group of forest firefighters.

## Replication

Incorporate new technologies and innovations, upgrade the information systems and citizen experience across the municipality will have a significant positive impact.

The vision is that this monitoring system will work as a pilot, being the first step of a complete city monitoring system with smart features enabling urban management, energy efficiency and improved quality of life of the citizens.

Towards this goal Kifissia is setting up a central smart city room within a municipal building in Ekali.

The installed platform is based on open source software able to expand as well as to receive more applications regarding possible future projects like smart parking system, municipal fleet management, traffic control and street lighting. Efficient management of city features will reduce energy consumption and the CO<sub>2</sub> emissions and enhance sustainability.

### Status Quo of the city

Collection of all relative information and strategic documents. Meeting with key departments and offices of the Municipality gathering essential information about installed systems, projects to be developed, needs and barriers.

2019



Ελάτε να σχεδιάσουμε την πόλη μας!  
Τρίτη 27/10/2020 | 17:00 - 18:00 | Διαδικτυακά  
Με την ευκαιρία του Ευρωπαϊκού προγράμματος SPARCS

2020



### Participatory actions

The city invited the citizens to a virtual open discussion about the vision of the city in order to understand better their views and needs. Local schools were involved also by asking elementary students to draw their vision of the city, followed by city vision two days' workshop with key stakeholders such as citizens, experts, city officials, local organisations, local business, etc. The result of this participatory process was to determine the six strategic areas of intervention and the future vision of the city.

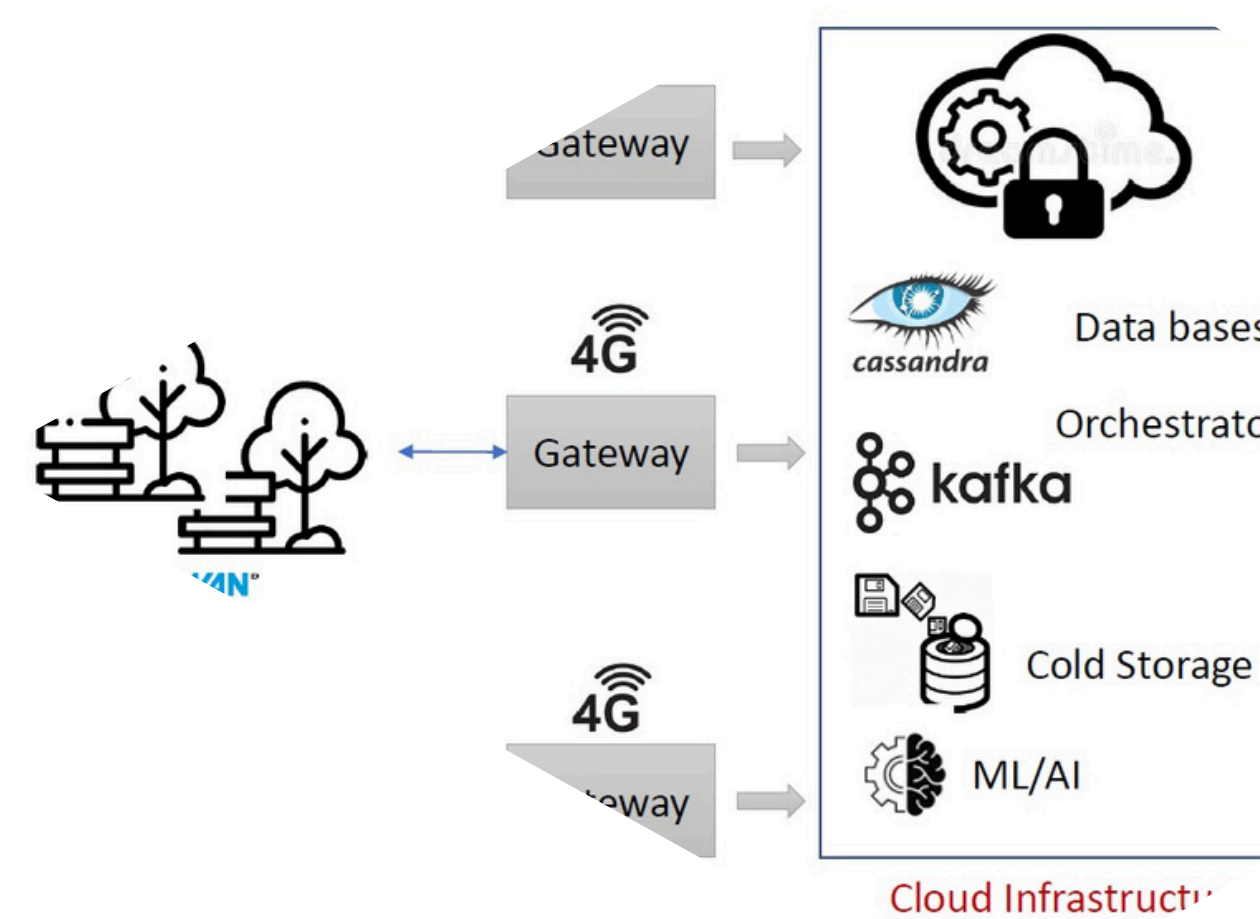
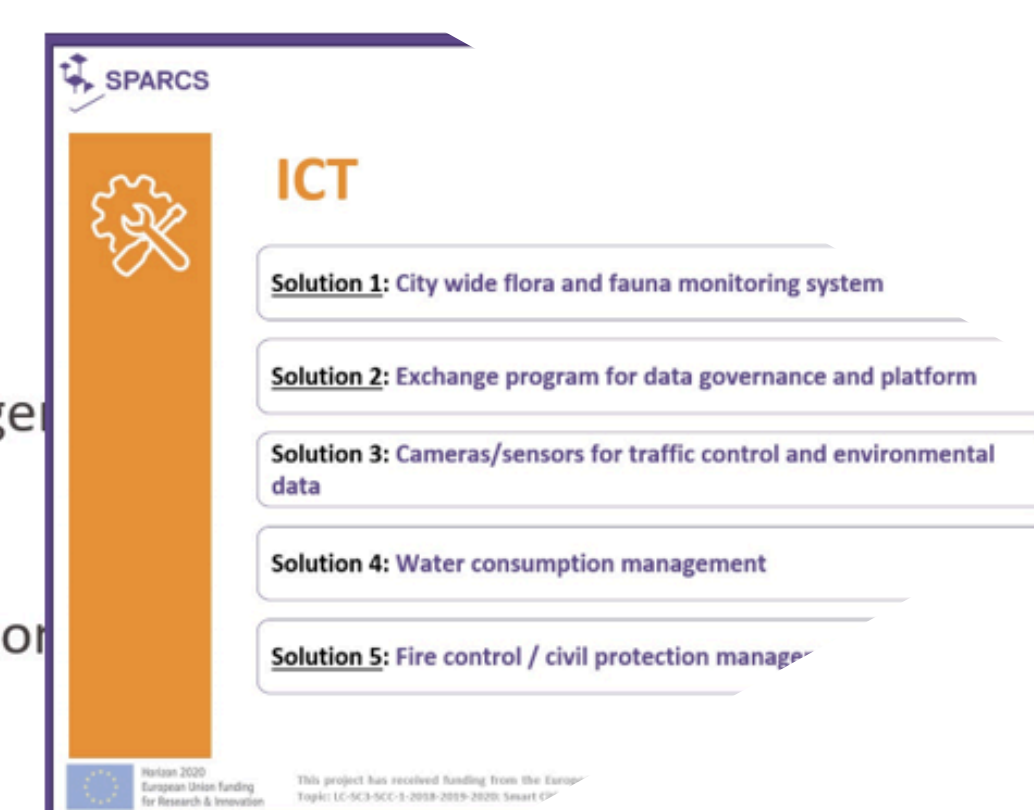
### Actions targeting sustainability

The six strategic areas defined were analyzed and discussed during interviews with key stakeholders, the virtual on site assessment, innovation workshop and meetings between departments of the Municipality.

A total of 29 project ideas were developed.

2021

- Governance
- Mobility
- Citizen engagement
- Energy
- ICT
- Circular economy



2022

### Market research & procurement

The final projects selected for implementation were decided by city administration with the consultation of local SPARCS team. The decision for the types and the installation area of the sensors were made after analyzing the needs, the budget available and reviewing offers and technical requirements.

### Implementation

Phase A: sensors for air quality measurements, local meteorological and weather aspects and a pilot system for fire prevention is concluded. Information and data are viewed in real time. Training sessions for users of the platform were held on line.

2023

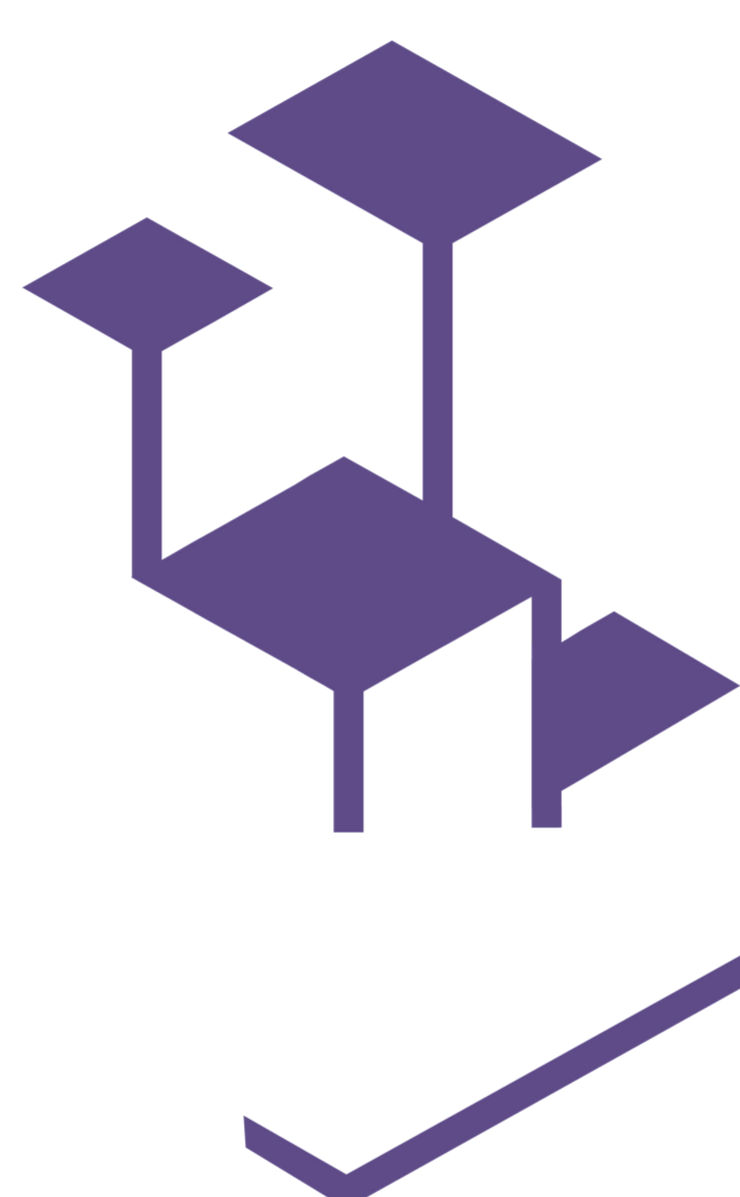


2024

### Future plans

Phase B: sensors for efficient irrigation management of two green areas of the city Kefalari park and Mavromihali. Set up central control room in a municipal building.

Collaboration with IT office, civil protection, department of greenery and technical department.



### Contact



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