

## On Dijon, smart metropolis

by Hélène Enginger / © 2019-06-16 23:37:21 / France / 7155 / FR



Year of commitment : 2019

**Digital services** : Applicative, Mobility, Comfort, Resilience, Safety

**Sustainable mobility** : Mobility services, Smart park

**Water cycle** : Prevention, Protection

**Circular economy and waste management** : Services & Organization



105 000 000 €

### Builder

Group Bouygues Energies and Services and Citelum with their partners Suez and Capgemini

### Manager / Dealer

DIJON METROPOLE

## GENERAL INFORMATION

### OnDijon: A new project of smart metropolis

Dijon Métropole invents the territory of the future with an unprecedented project in France of an intelligent metropolis that places the management of public space at the heart of new services for citizens and the modernization of public action.

This project, called OnDijon, relies on remote management, from a Connected Control Station (PPC), of all urban equipment (traffic lights, street lighting, video protection, etc.) of the 23 municipalities of the territory. .

Thanks to digital data from public facilities, the OnDijon Control Station facilitates and better coordinates service interventions.

OnDijon in a few figures:

- Contract of 105 million euros, including 53 million euros of investments financed by the public authorities: Dijon metropolis, the city of Dijon, the Burgundy region Franche-Comté and the European Regional Development Fund (ERDF)
- 34,000 luminous points renovated in 100% LED
- 113 crossroads and 180 bus-priority buses
- 205 geolocated vehicles and 130 equipped with radio
- 140 km of optical fiber deployed
- 180 buildings, including 13 renovated, operated safely and securely and connected to the PPC
- 65% energy savings at the end of the contract
- 26 sites of access points renewed
- 269 video surveillance cameras renewed

## Progress Status

Delivered

## Data Reliability

Self-declared

## Funding Type

Public

## Website Enterprise / Infrastructure

<https://www.metropole-dijon.fr/Les-grands-projets/Les-grandes-realisations/OnDijon-metropole-intelligente-et-connectee>

## Sustainable Development

### Attractiveness :

The OnDijon project is accompanied by a major renovation of the city's infrastructure in order to secure, sustain and connect them. All urban equipment is now remotely controllable from the Connected Control Station (PPC) and allows city departments to quickly coordinate interventions and effectively manage the daily and exceptional events of the city.

In addition, with digital data from public facilities, Dijon Métropole wants to increase its economic growth and thus take a leading position in terms of digital attractiveness among French regional capitals.

The openness of data stimulates territorial innovation and creativity in the service of the common good. Thanks to the OnDijon project, which will make it an intelligent territory, Dijon Métropole is becoming a model for urban Open Data and will develop and test services related to the new uses of the city.

The OnDijon project thus contributes to the economic dynamism of the territory by sharing access to data with the world of the digital economy.

With its project, Dijon Métropole is endowed with major assets to support companies already established or wishing to establish themselves on the territory.

OnDijon has already created 45 direct and permanent jobs and boosted the local economy by promoting the creation of new businesses and local jobs.

Dijon Métropole also relies on the actors of higher education and vocational training to prepare generations to meet the technological challenges of tomorrow. Building on the OnDijon project, a university chair unique in France dedicated to the "Smart City and governance of data" was created in March 2019 at the University of Burgundy.

The creation of this chair adds to the opening of a specialized training of computer and digital engineers from the Center for Industrial Advanced Studies (CESI) in September 2019 and the arrival of two new engineering schools in Dijon who will also reinforce training on smartcities projects between the start of 2019 and 2020

### Well Being :

The OnDijon project strengthens public action by initiating transversal collaborations between community services, which until then have been limited.

By bringing together all the command posts on the same space, Dijon Métropole is reorganizing its management model for a better articulation between the different teams. Today, agents solicited for interventions receive and share information in real time and coordinate to act effectively on the ground.

These smoother and more efficient collaborations reduce response times and citizens are the primary beneficiaries.

The city of Dijon is also deploying a reinforced videoprotection device as part of the optimized and connected management of the city and the management of its public spaces. 269 cameras will be renewed to meet the management and action needs of the actors of prevention, tranquility, security and justice as well as issues and concerns regarding tranquility and safety.

As in the public space, the security of citizens is also ensured inside public buildings. The fire and intrusion detection systems of the municipal library and the skating rink have been replaced and now make it possible to detect, very early on, a possible start of fire and to identify any abnormal or suspicious activity in the buildings. Thanks to these new systems, public buildings are better protected and more secure for citizens.

### Social Cohesion :

The extent of the territory in which the smart city project is deployed is unprecedented since the OnDijon project concerns all 23 municipalities of Dijon metropolis, and not just a district or a city.

It is also the first time that a project meets both the problems of road maintenance (bulky, road works, ...), efficiency of interventions on the public space (coordination of teams of different services and vehicles) and mobility.

In addition, citizens are at the heart of the project of connected management of the public space. They are both actors and beneficiaries. They are directly involved in the management of their city and encouraged to report any incident or malfunction via a new free citizen application or directly by phone as is currently the case.

Finally, thanks to a new display that combines icons and texts, users can read more easily information from the 25 electronic information newspapers of the city of Dijon.

#### Preservation / Environmental Improvement :

The OnDijon project pays particular attention to the control of energy resources, particularly through the renovation of public lighting.

The set of light points will be equipped with LED luminaires offering many advantages: the power reduced by two in many cases, no loss of lighting to the sky or in the private areas, a street-by-street adjustment of the intensity bright, a decrease in maintenance operations. Depending on the uses (shops, residential, outdoor boulevard, ...) and track attendance, the power of illumination is modulated during the night.

Presence sensors will also be installed in some neighborhoods where the streets will be lit to a minimum and where the light intensity will increase at the crossing of a pedestrian or a vehicle. Dijon metropolis will achieve 65% energy savings, which is considerable territory-wide.

In addition to energy savings, LED technology and its modularity is also an important factor in combating light pollution and preserving biodiversity. Indeed, the color temperature of the LED can adapt to less disturb the species and the reduction of power at night makes it possible to respect the nocturnal cycle of the surrounding fauna and flora.

In the city center, new retractable bollards will be added to existing, recently upgraded bollards to increase pedestrian zones.

Dijon Métropole also takes into account the everyday environment in which citizens live and has equipped the cleanliness vehicles with a guidance system to improve and optimize cleaning tours. With this system, vehicles are more efficient in the areas of intervention and the cleanliness of the public space is ensured.

#### Resilience :

Thanks to the connected cockpit, in the event of a serious event (flood, serious accident on the public road, public safety, ...), A crisis unit, based in the cockpit, can be activated to coordinate efficiently and real-time means and intervention teams. Digital technology makes it possible to facilitate the city's decision-making processes by providing relevant operational solutions, particularly in the event of a crisis.

A crisis room is now available and allows Dijon metropolis to have a modern and effective tool to deal with exceptional events.

The cockpit therefore allows the city to be more resilient in the face of exceptional events, particularly climatic events.

#### Responsible use of resources :

Through OnDijon, the metropolis facilitates access to digital data while keeping control at all times to guarantee residents the protection of their personal data. Dijon Métropole remains the sole and sole owner of the data produced or collected as part of the project. These allow the identification of mass uses but will not in any case to identify individual behaviors of citizens. No personal data can be sold. The storage and storage of personal data comply with the *European General Regulations for the Security of Personal Data* (GDPR), entered into force in May 2018, and follow the rules and best practices in the field, including the recommendations issued by the ANSSI , *the National Agency for the Security of Information Systems* , which is the reference organization in France.

The city of Dijon has joined the services of a Data Protection Officer of great competence, an expert speaker, chosen for his experience in the field and recognized among his peers.

Through this project, Dijon Métropole contributes to the emergence of a real local governance of data: the community facilitates access to data through open data while maintaining control.

## Testimony / Feedback

*Interview with François Rebsamen*

*Mayor of Dijon, President of Dijon Métropole, Former Minister*

#### **What is the origin of the project?**

*With the OnDijon project, we wanted to both modernize our administrations and improve services to citizens, especially those related to the public space, such as cleanliness, mobility, safety, public lighting ... Thanks to this unique project, we are building a modern and inclusive metropolis, serving its citizens.*

#### **What makes Dijon Métropole a smart territory?**

*The metropolis does not become "smart" by equipping itself with sensors. In this project, we have first and foremost wished to respond to the new needs and uses of citizens by making existing public services more efficient thanks to digital tools (real-time information, connected mobility, lighting adapted to visitors ...).*

#### **What are the expected benefits for the territory and the inhabitants?**

*The inhabitants are the first beneficiaries of this project thanks to more efficient and better coordinated public services. Beyond this, by facilitating access to digital data, this project offers a great opportunity to enhance the attractiveness and economic development of our territory.*

undefined

## Governance

DIJON METROPOLE

**Holder Type :** Regional Authority

Group Bouygues Energies and Services and Citelum with their partners Suez and Capgemini

**Builder Type :** Construction Industry

DIJON METROPOLE

Manager / Dealer Type : Public

Through this project, Dijon Métropole contributes to the emergence of a real local governance of data: the community facilitates access to data through open data while maintaining control. This governance of the data is translated by specific measures:

Data security is a permanent concern, integrated by design ("security by design"). Personal data are made anonymous and the meshes of geographical areas are wide enough to allow analysis of mass uses (not individual behavior). Data is not accessible directly but through APIs that filter and secure information

The provision in Open Data is always done on a copy, completely independent of the initial data. Security audits are conducted regularly under the authority of the Information Systems Security Officer (CISO) and the Data Protection Officer.

To implement the OnDijon project, Dijon Métropole relies on a consortium of companies composed of Bouygues Energies & Services (subsidiary of Bouygues Construction), agent of the consortium, and Citelum (subsidiary of the EDF group), associated with SUEZ and Capgemini. The group of companies is in charge of the realization and the management during 12 years of the connected cockpit, through a public contract of design, realization, exploitation and maintenance (CREM) of the cockpit.

#### Business Model :

Through this project, Dijon Métropole has developed an unprecedented business model in which a major territorial transformation project is financed by an innovative leverage effect of investments in current public services management of the public space and by the savings generated. by optimizing new urban amenities and services.

The savings generated by the project (energy savings, optimization of equipment and services, etc.) finance the creation of the new services of the smart metropolis and contribute to the development of the digital economy of Dijon metropolis. This model is therefore very easily transferable to other cities that would like to develop a smart city project. Dijon Métropole already has contacts with many communities interested in the new and reproducible model it has developed.

The total amount of the project is 105 million euros, including 53 million euros of investments financed by the public authorities: Dijon metropolis, the city of Dijon, the Burgundy region Franche-Comté and the European Regional Development Fund (ERDF).

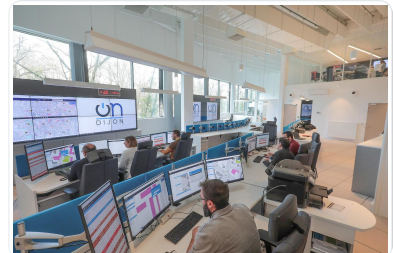
## Sustainable Solutions

The connected cockpit: heart of the OnDijon project

#### Description :

Arranged in a space of 1,200m<sup>2</sup>, the connected cockpit gathers 50 people and allows:

- to simplify and better coordinate the interventions and the maintenance work of the metropolitan services on the public space (bulky, roads, green spaces, cleanliness)
- remote control of urban equipment in the 23 municipalities of the metropolis (traffic lights, public lighting, videoprotection, road services ...)
- ensure the safety and security of the public space: crisis management (snow, flood, ...), security of public buildings (fire, intrusions, access control ...), videoprotection and interventions of the Municipal Police
- to organize the mobility of the inhabitants, by coordinating the modes of transport and the displacements on the territory
- manage the nearly 630 daily calls received to the telephone portal dedicated to residents' requests



The connected cockpit replaces the six command posts that previously coexisted (PC Security, PC Municipal Police, Urban Supervision Center, PC Circulation, Allo Mairie and PC Neige) and served, for the most part, only the city of Dijon.

- o Quality of life :
- o Mobility :
- o Smart city :
- o Proximity services
- o Security
- o Business development
- o Infrastructure
- o Digital services

<https://www.metropole-dijon.fr/Les-grands-projets/Les-grandes-realizations/OnDijon-metropole-intelligente-et-connectee>

Company (es) Website :



**Bouygues Energies et Services**  
0 -

Company (es) Website :



**Citelum**  
<https://twitter.com/Citelum>  
11-13 cours valmy 92100 Puteaux -  
<https://www.citelum.fr/>

Company (es) Website :



**SUEZ**

Tour CB21 - 16 place de l'Iris 92040 Paris La Défense -  
<https://www.suez.com/fr>

#### Description :

- o Quality of life :
- o Mobility :
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- o Security
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- o Infrastructure
- o Digital services

#### Photo credit

@Dijon metropolis / OnDijon

#### Contest

#### Building candidate in the category



Grand Prix Infrastructure Durable



Prix du public

