



## SHARED INTELLIGENCE SOLUTIONS FOR THE ENVIRONNEMENT

*Environmental impacts management  
Worksite news for local residents*





## DISTURBANCES CAUSED BY CONSTRUCTION OR INDUSTRIAL OPERATIONS : A SOURCE OF STRESS, ENVIRONMENTAL, POLITICAL AND FINANCIAL RISK

### FOR RESIDENTS

Feeling helpless, coping with worsening living conditions.

### FOR CONTRACTING AUTHORITIES

Answering complaints, managing discontent and difficulties in ensuring a good quality of life for inhabitants.

### FOR COMPANIES

Financial risk if specific waivers to construction timetables are cancelled, lack of efficiency onsite, impact on company image.

# OUR MISSION

Com'in develops digital solutions for **environmental impacts management and neighbours information** that contribute to a better living together.

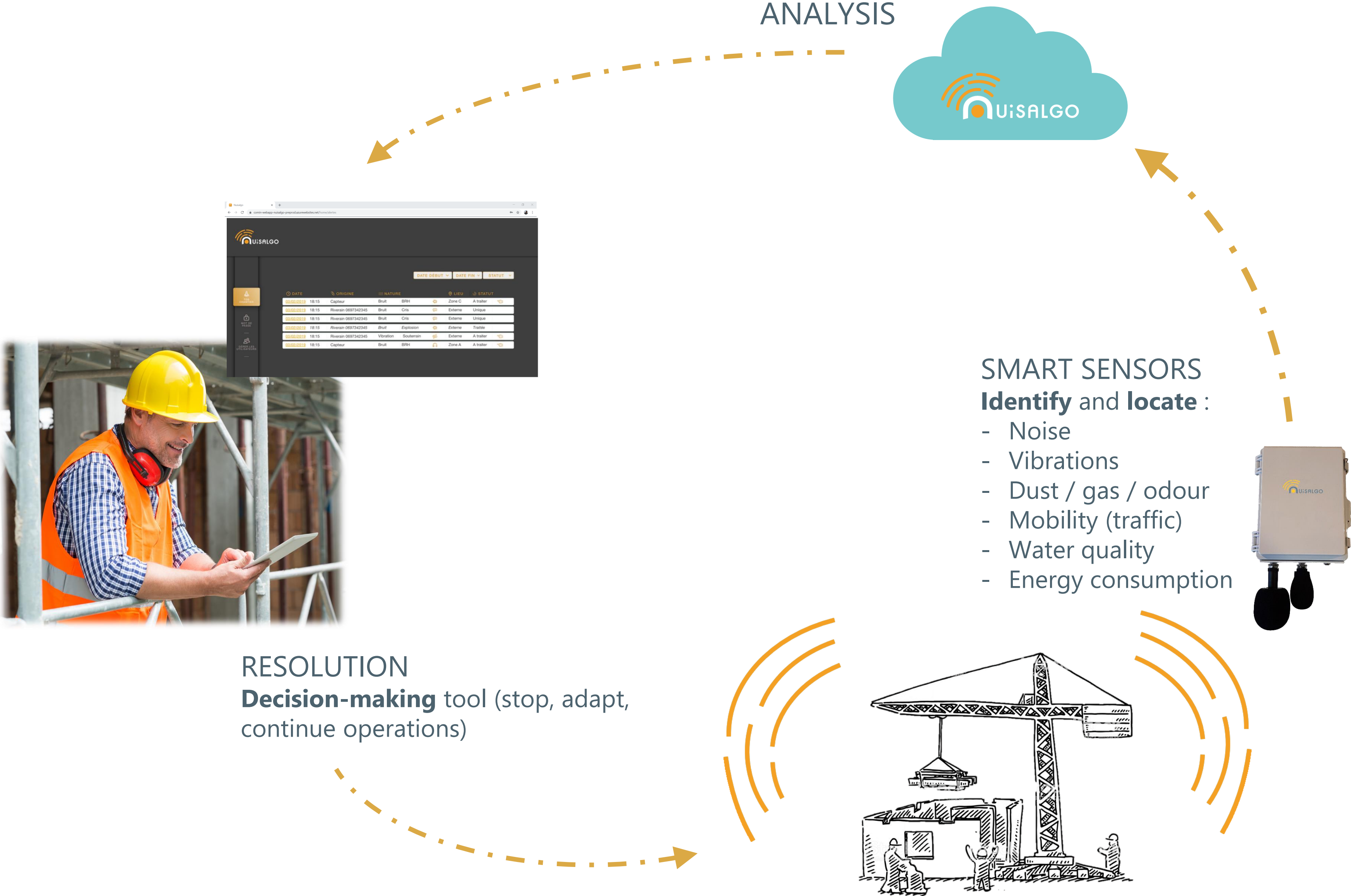
To ensure both **successful construction projects** and **neighbours' acceptability**, we provide you with tools based on objective listening and information.

We redesigned traditional **nuisances monitoring solutions** to make it a real decision support tool → environmental impacts generated by construction sites are better managed, relationship with the community is improved, companies' margins and timing are respected.





# MONITORING OF ENVIRONMENTAL IMPACTS





# SMART SENSORS



## We install Smart Sensors at key points of the worksites:

- In order to monitor noise, vibrations, air quality, water quality, energy consumption and nuisances such as mud on the ground or traffic congestion.
- In order to identify 🏗️ and precisely locate 📍 disturbances thanks to our AI-based algorithms.
- In order to provide you with a unique environmental impact management solution and ensure a better quality of life for local residents.





# NOTIFICATIONS

UISALGO

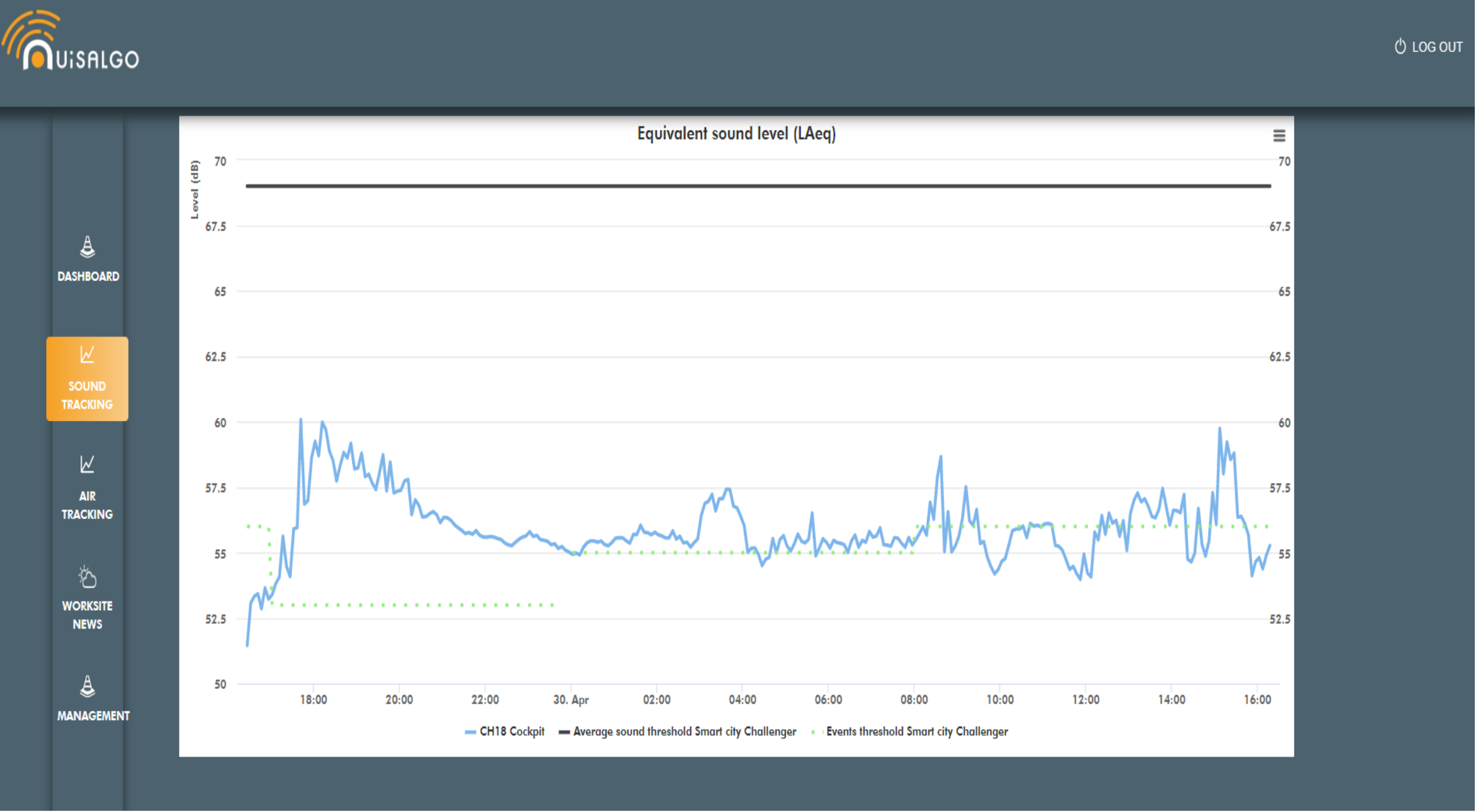
LOG OUT

Download report


START DATE29/04/2020END DATESTATUSPendingReset

DATE	ORIGINE	NATURE	LOCATION	STATUS
30/04/2020 3:54 PM	Gas sensor	Gas	Smell	Pending
30/04/2020 3:45 PM	Sensor	Noise	Engine	Pending
30/04/2020 3:33 PM	Sensor	Noise	Motorbike / scooter	Pending
30/04/2020 3:26 PM	Sensor	Noise	Motorbike / scooter	Pending
30/04/2020 3:20 PM	Sensor	Noise	Motorbike / scooter	Pending
30/04/2020 3:19 PM	Sensor	Noise	Percussion drill	Pending
30/04/2020 3:19 PM	Gas sensor	Gas	Sulfur dioxide	Pending
30/04/2020 3:14 PM	Gas sensor	Gas	Sulfur dioxide	Pending
30/04/2020 3:09 PM	Gas sensor	Gas	Sulfur dioxide	Pending
30/04/2020 3:08 PM	Sensor	Noise	Engine	Pending
30/04/2020 3:04 PM	Gas sensor	Gas	Sulfur dioxide	Pending
30/04/2020 2:59 PM	Gas sensor	Gas	Sulfur dioxide	Pending

NuisAlgo platform for environmental impacts management and real time reporting.

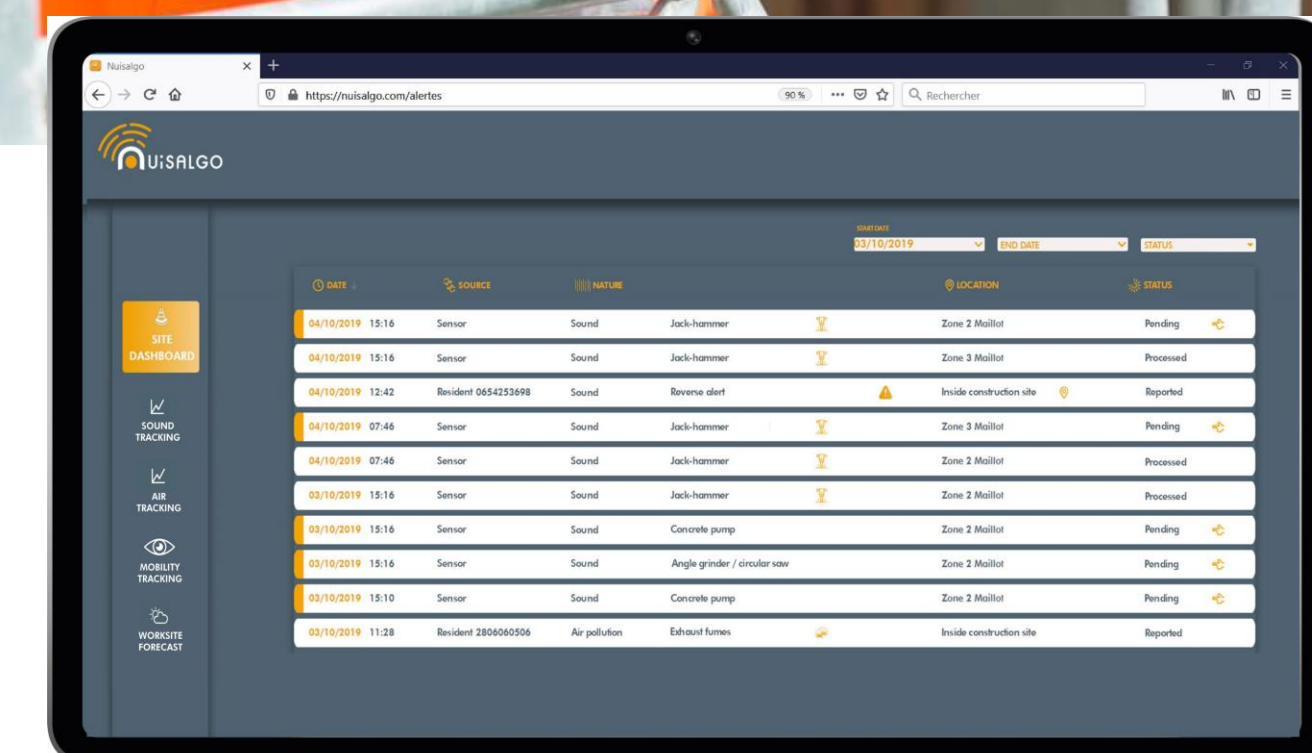
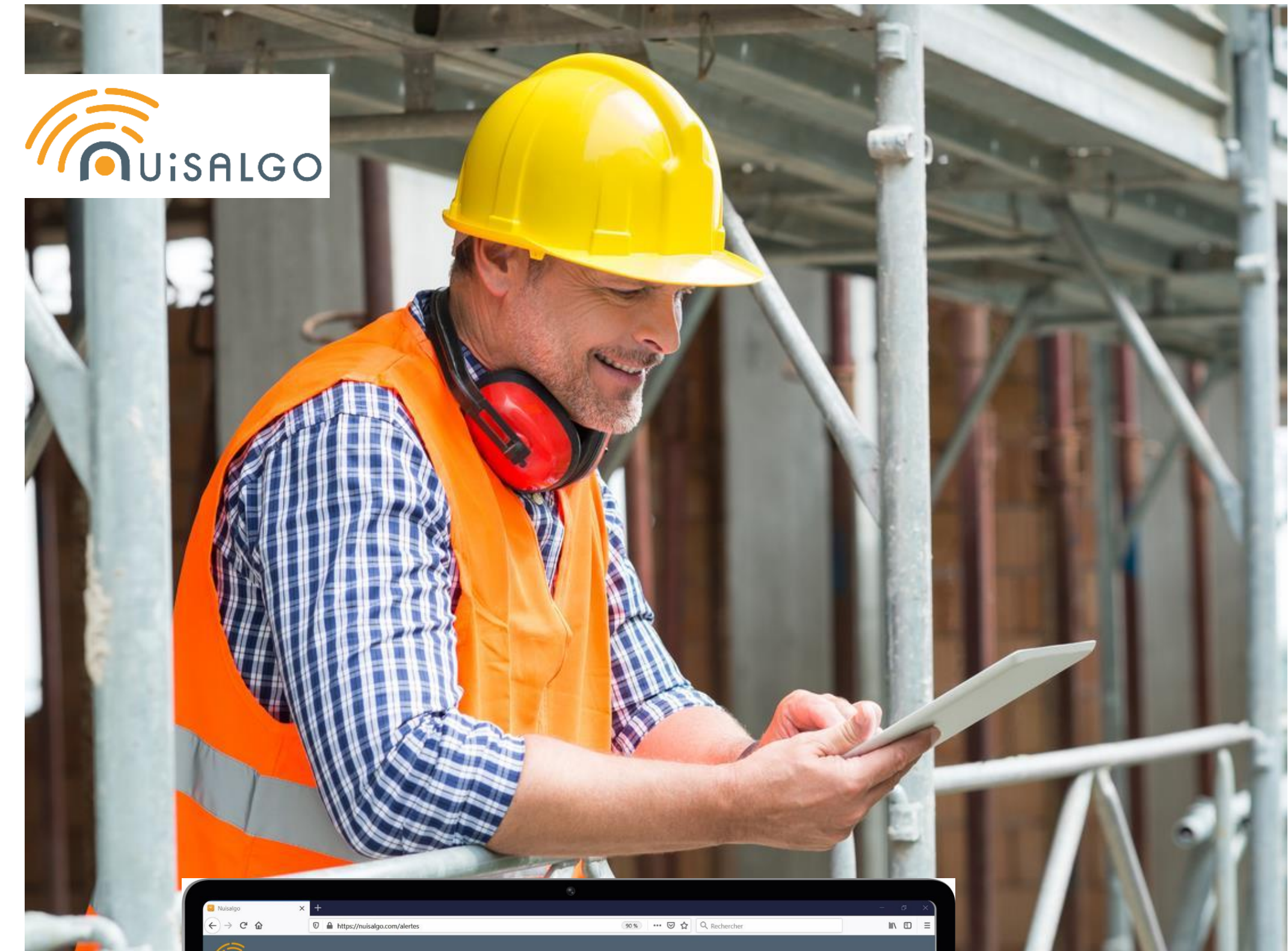


# DECISION TOOL

The platform uses its algorithms to **send real-time alerts**  when :

- The sensors report measurements which are **exceeding** the pre-determined thresholds

➔ An expert tool for **decision support** (choice to stop, modify or continue the work) which allows to answer and inform on the action taken with all the members on the Com'in platform



DATE	SOURCE	NATURE	LOCATION	STATUS
04/10/2019 15:16	Sensor	Sound	Jack-hammer	Pending
04/10/2019 15:16	Sensor	Sound	Jack-hammer	Processed
04/10/2019 12:42	Resident 0654252698	Sound	Reverberant noise	Reported
04/10/2019 07:46	Sensor	Sound	Jack-hammer	Pending
04/10/2019 07:46	Sensor	Sound	Jack-hammer	Processed
03/10/2019 15:16	Sensor	Sound	Jack-hammer	Processed
03/10/2019 15:16	Sensor	Sound	Concrete pump	Pending
03/10/2019 15:16	Sensor	Sound	Angle grinder / circular saw	Pending
03/10/2019 15:10	Sensor	Sound	Concrete pump	Pending
03/10/2019 11:28	Resident 0806000566	Air pollution	Exhaust fumes	Reported



# COMPLETE SOLUTION

## NOTIFICATIONS

**Exceeding** authorised thresholds  
**Neighbour reports**  
**Preventative smart alerts**

## ANALYSIS



DATE	ZONE	NATURE	LEU	STATUT
18/10/2018	18:15	Captur	Bruit	Zone C
18/10/2018	18:15	Révision 0897342345	Bruit	Cris
18/10/2018	18:15	Révision 0897342345	Bruit	Cris
18/10/2018	18:15	Révision 0897342345	Bruit	Extrem
18/10/2018	18:15	Révision 0897342345	Bruit	Extrem
18/10/2018	18:15	Révision 0897342345	Vibration	Souderman
18/10/2018	18:15	Révision 0897342345	Vibration	Extrem
18/10/2018	18:15	Captur	Bruit	Zone A

## SMART SENSORS

**Identify and locate :**

- Noise
- Vibrations
- Dust / gas / odour
- Mobility (traffic)
- Water quality
- Energy consumption



## FEEDBACK

**Reports**



## NEIGHBOURS



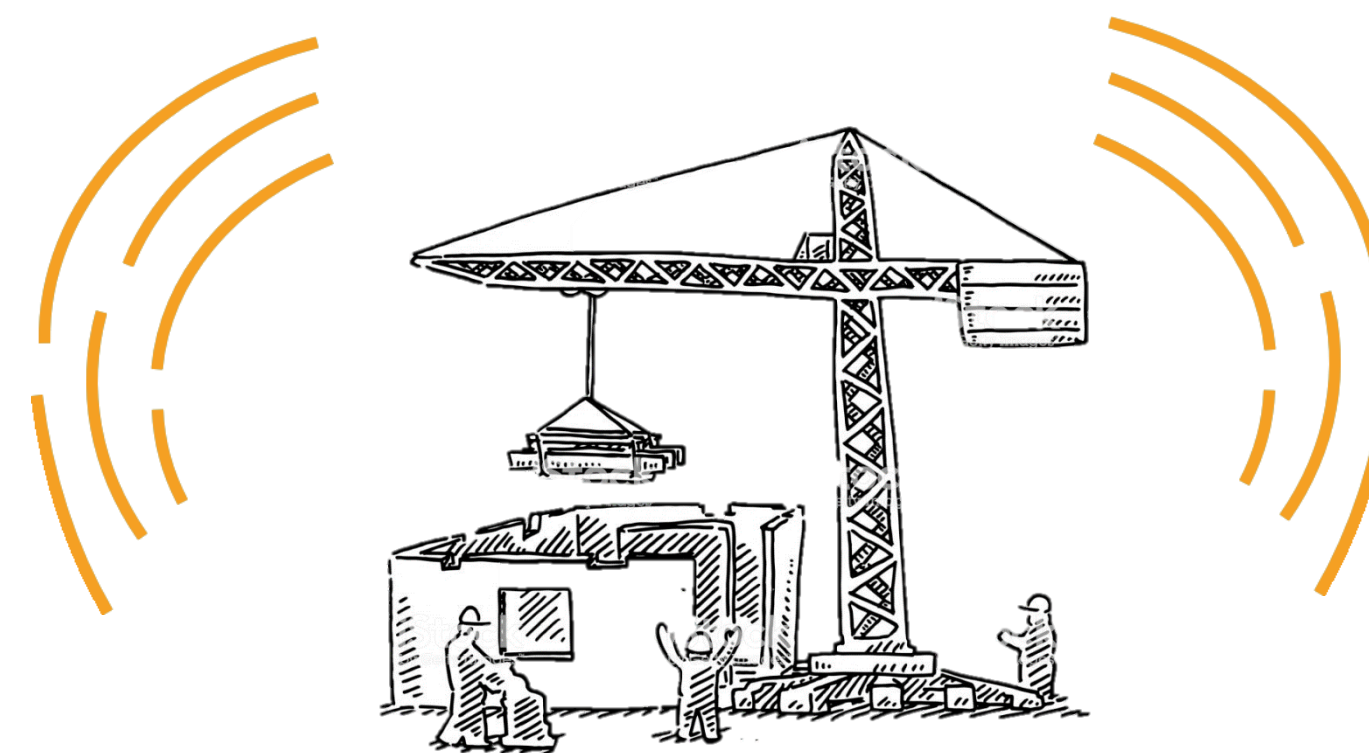
## INFORMATION

**Worksite**  
**News**

**Answering** neighbours

## RESOLUTION

**Decision-making** tool (stop, adapt, continue operations)





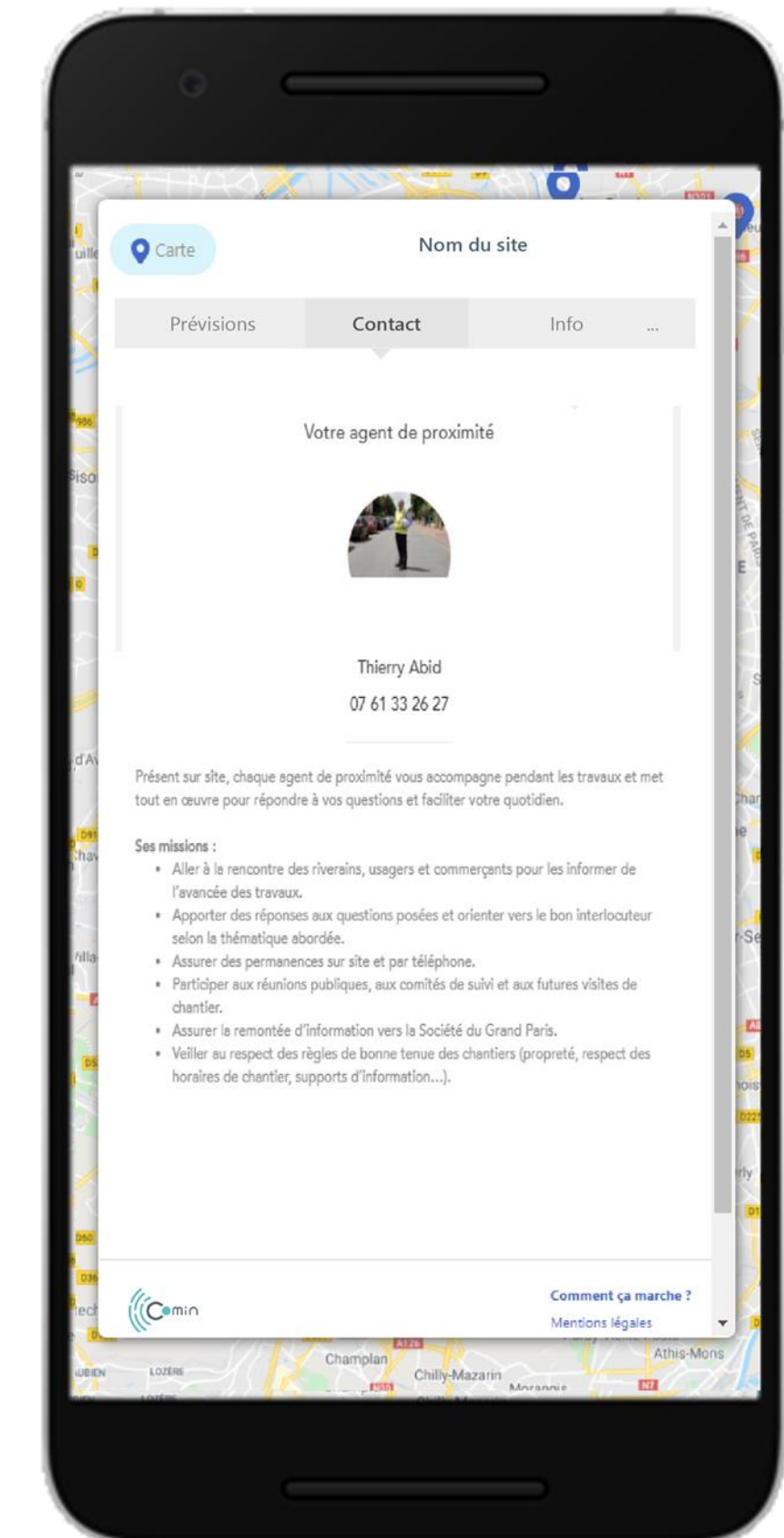
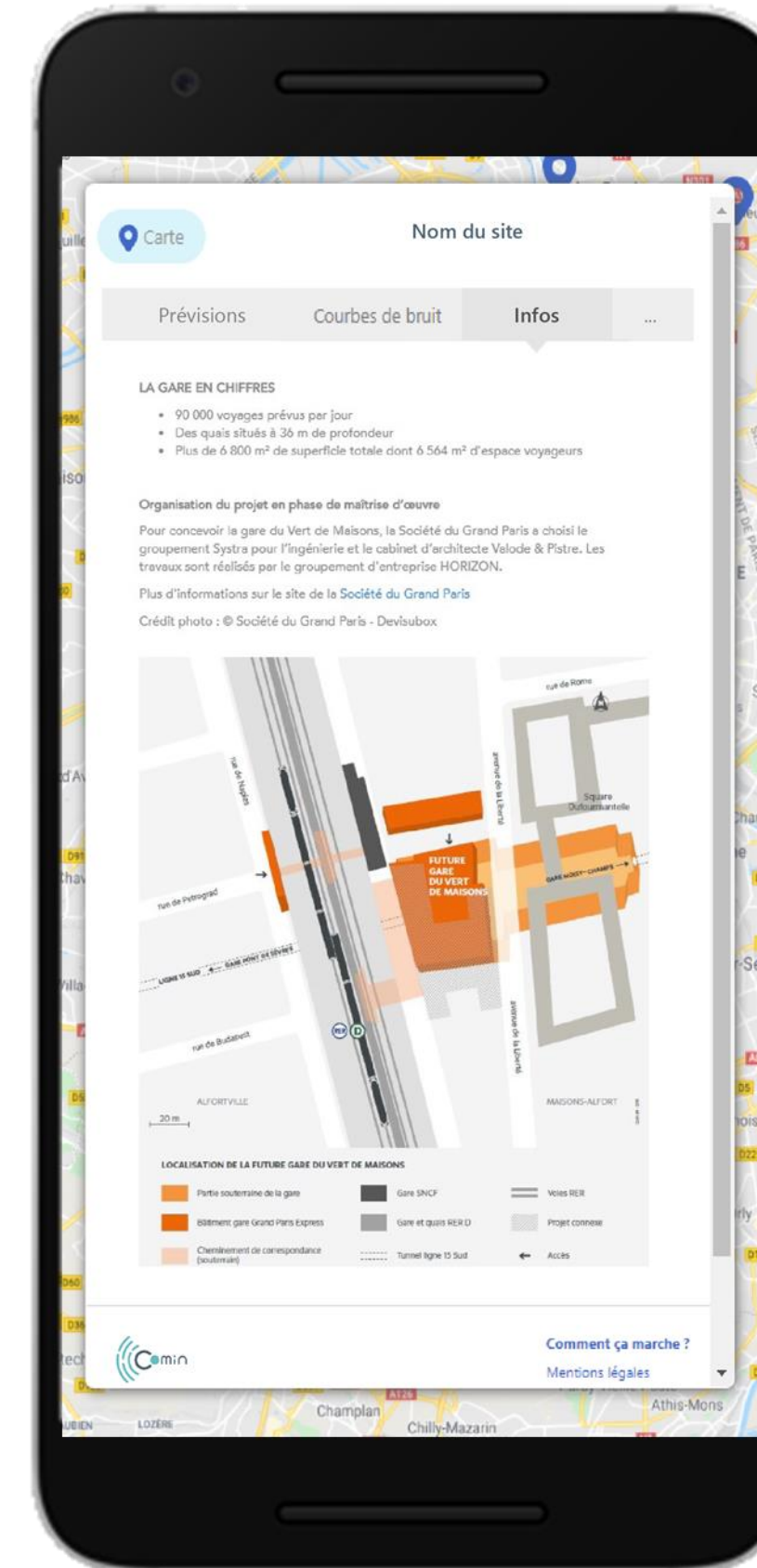
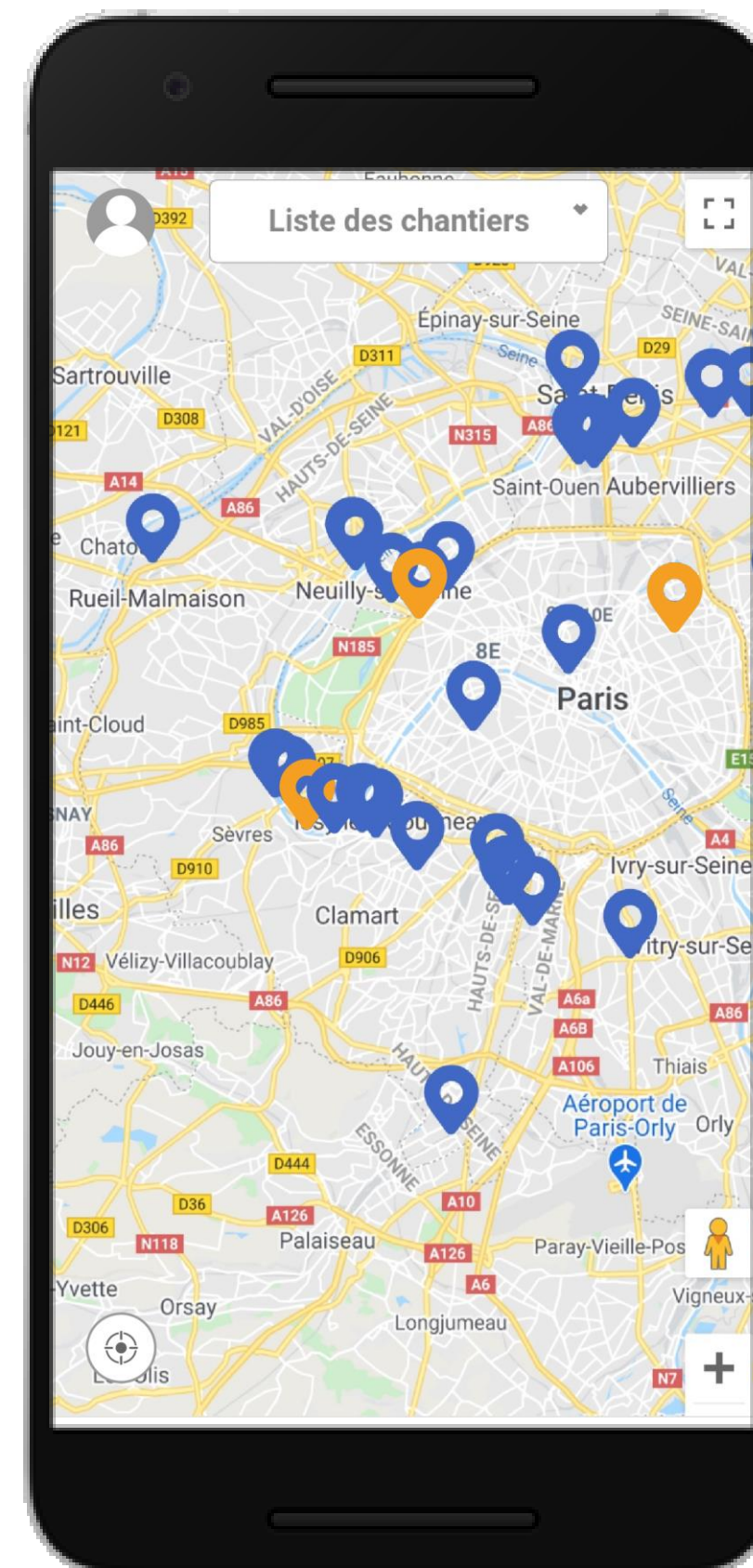
# RESIDENTS WIDGET



The web and mobile application Com'in for residents promotes the acceptability of construction sites.

In its basic version, it allows you to locate and present your worksites but also to indicate the contact point of each worksite.

The Com'in application can be integrated to your institutional website and/or downloaded by the concerned residents.





# RESIDENTS WIDGET

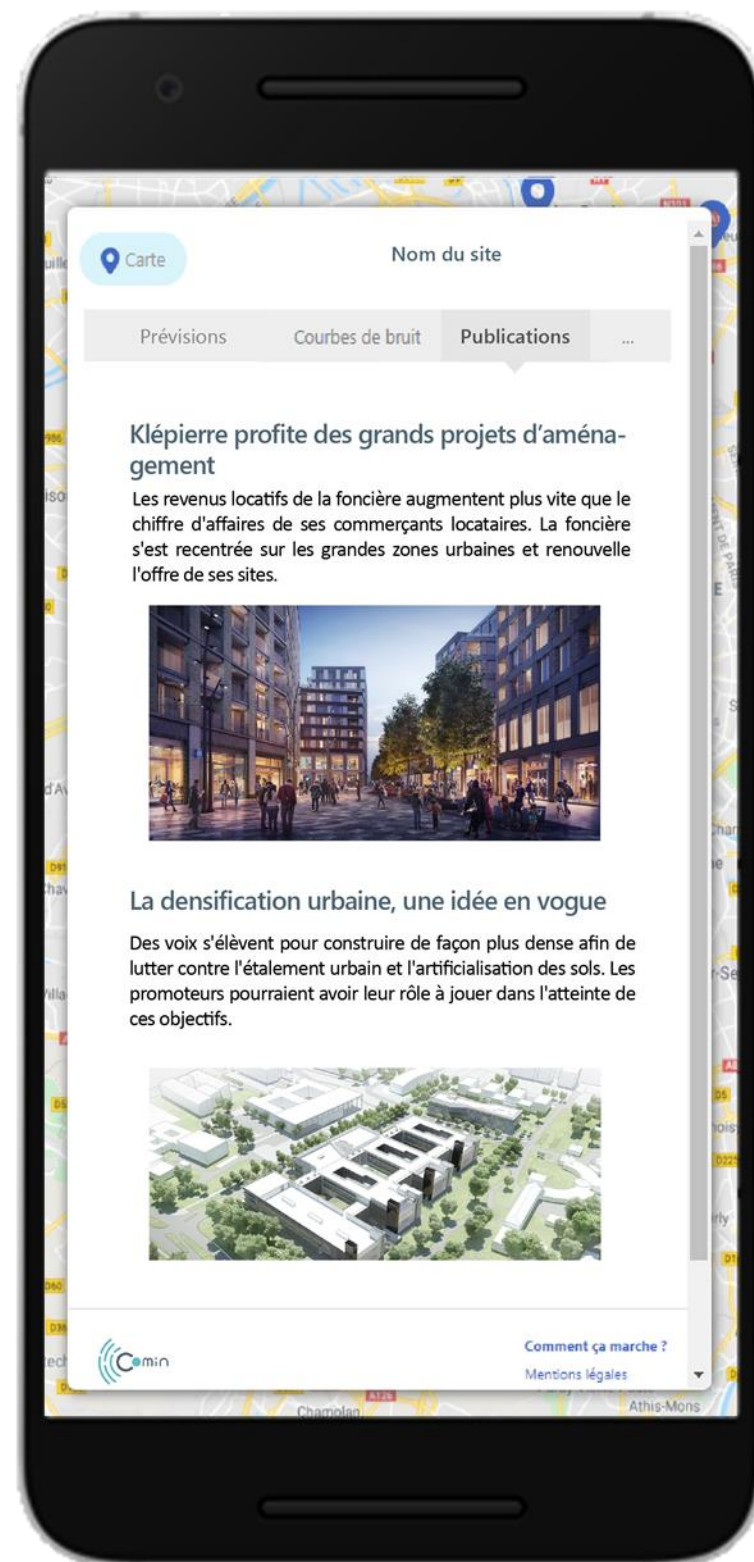


The residents widget also allows, depending on your choices, to:

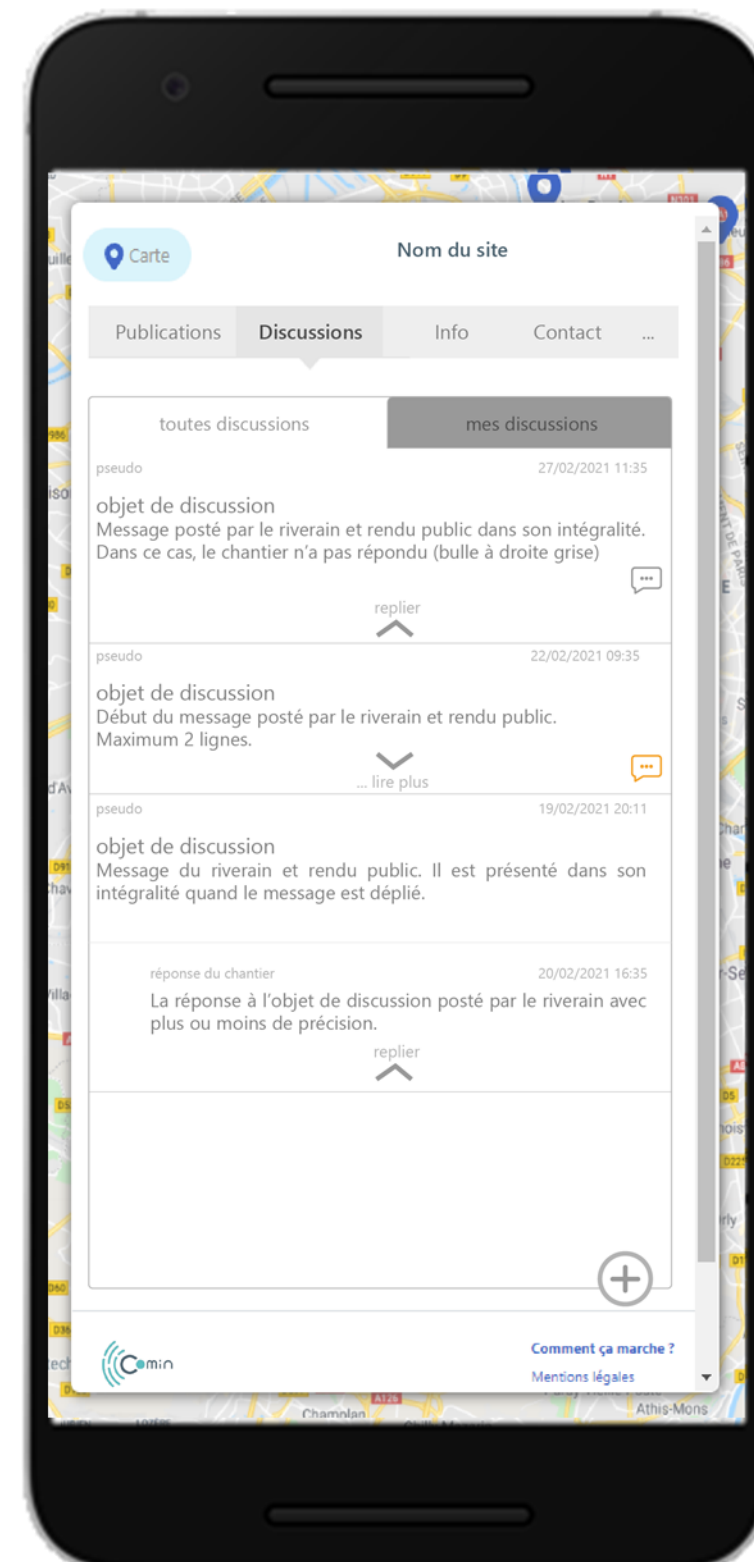
## Communicate & Interact

## Inform about disturbances

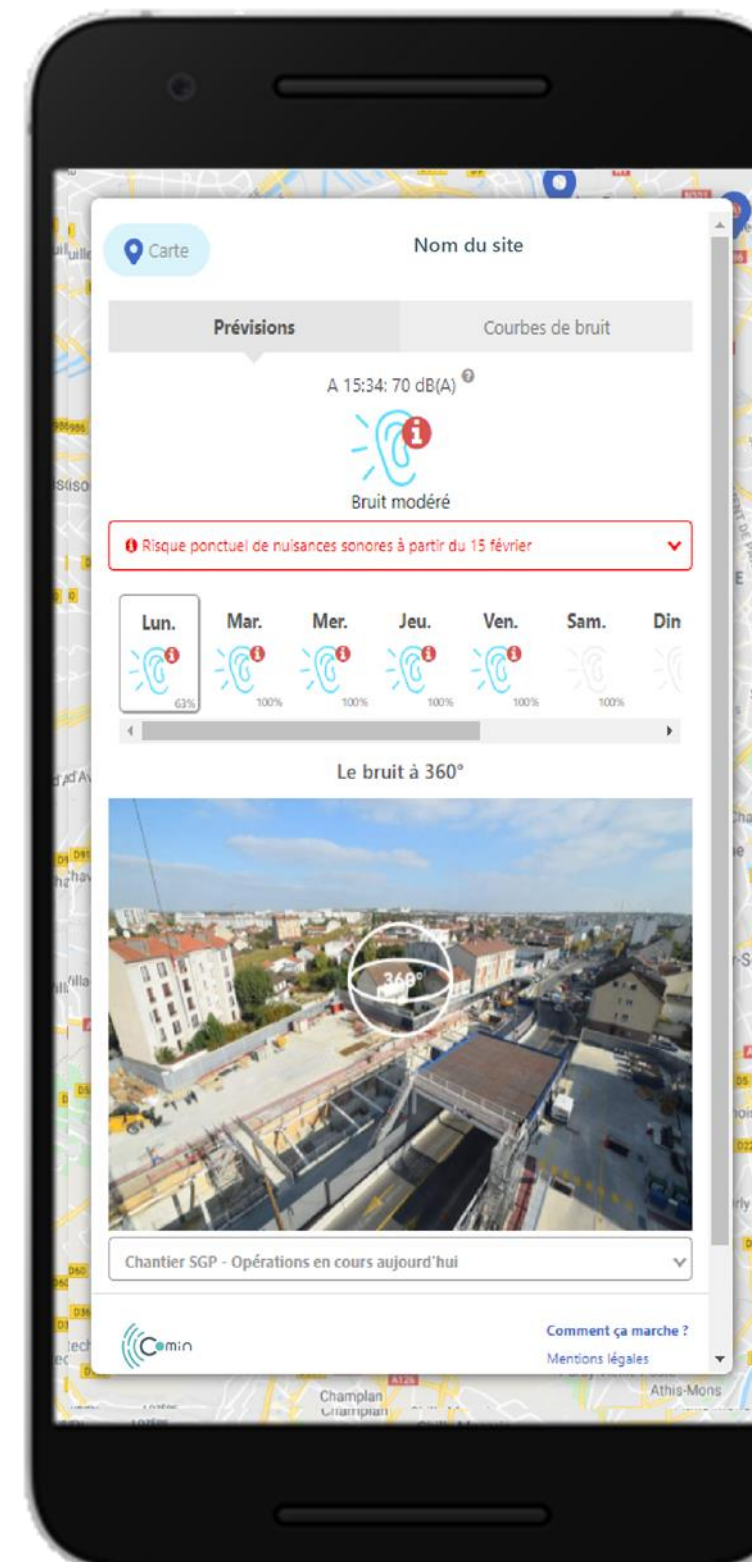
## Manage declarations



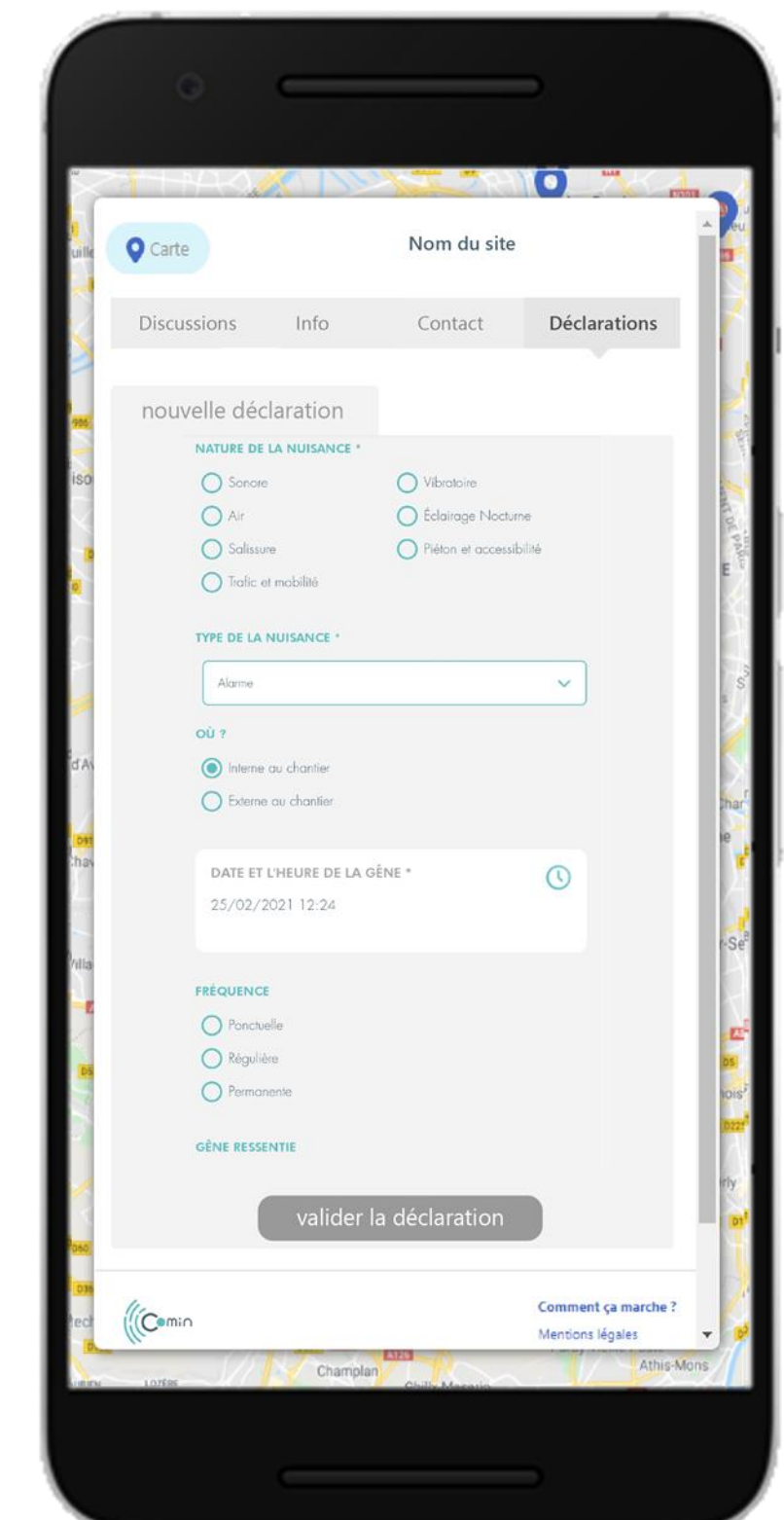
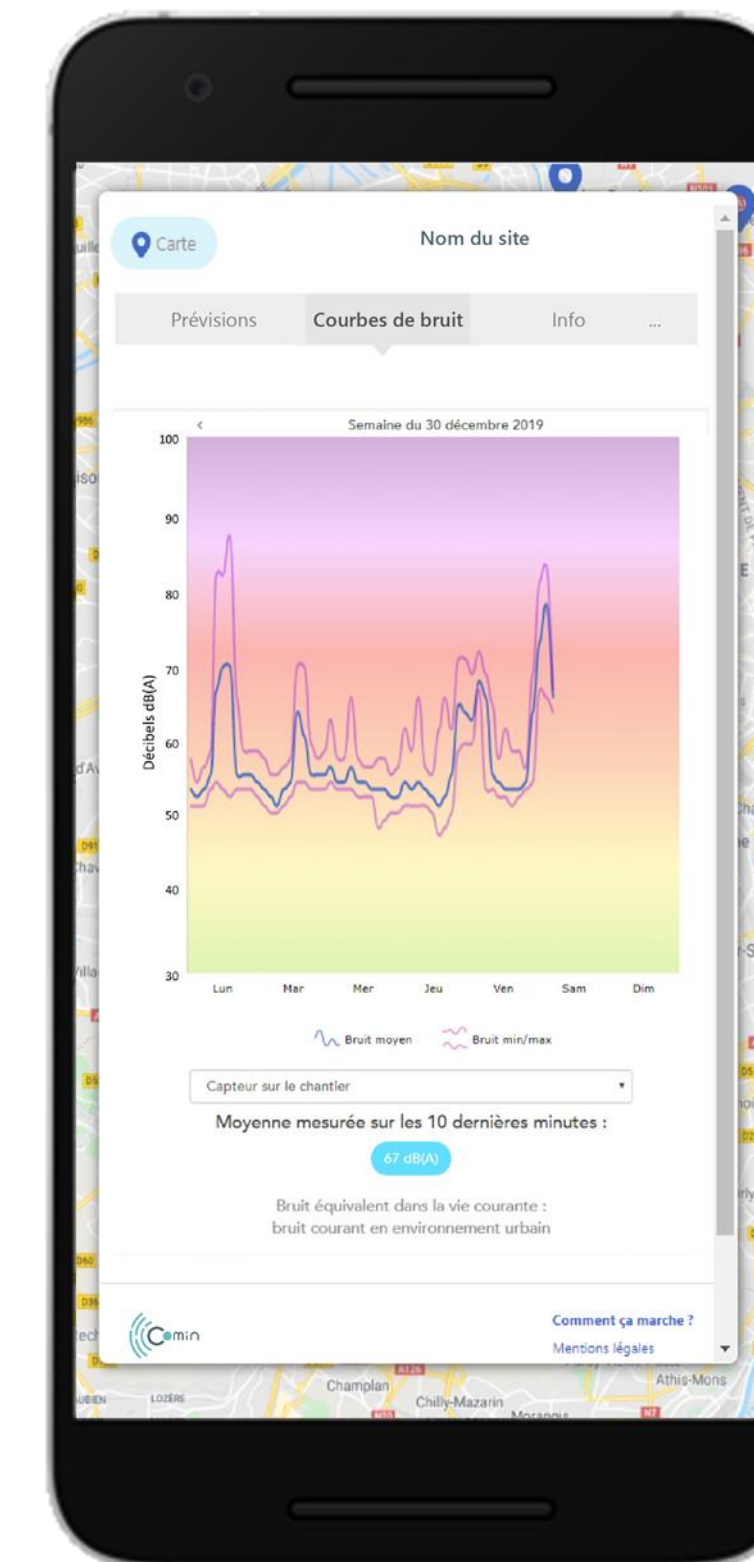
Publications on the life of the project



Answers to questions and comments from local residents



Prediction of future disturbances (and in real time if sensors are already deployed)

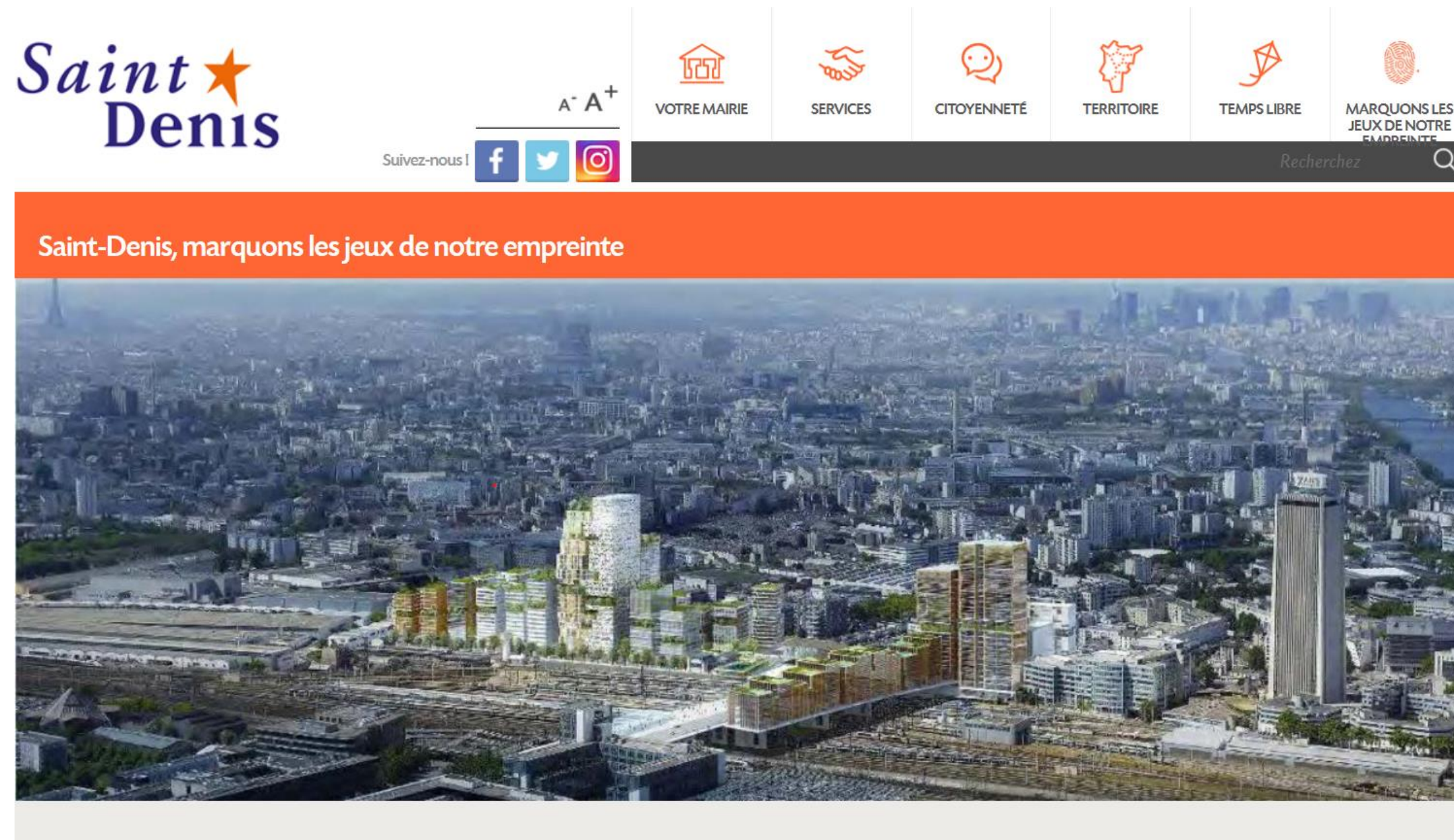


Management of declarations (in case of already deployed sensors)

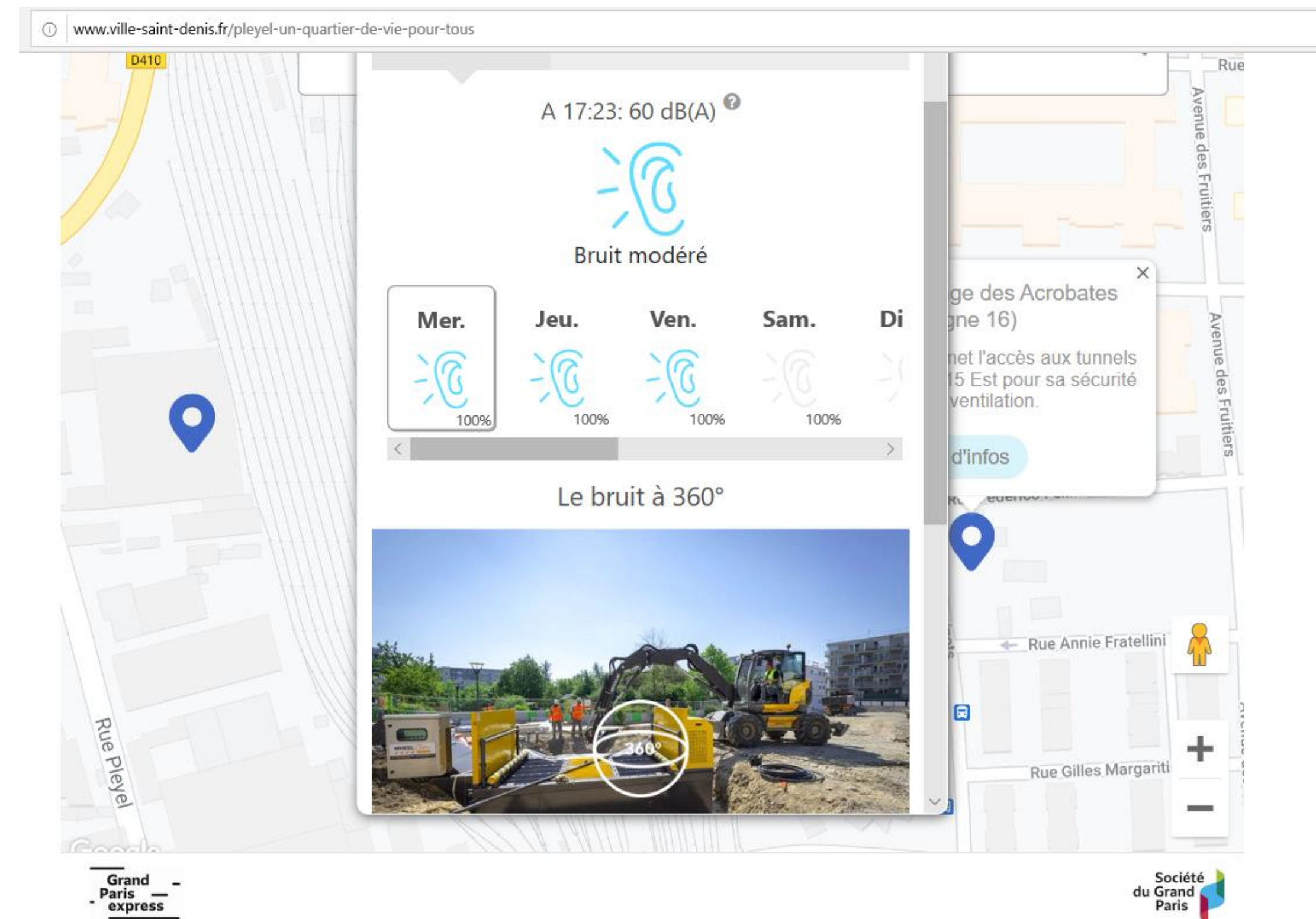


# EXAMPLES OF CUSTOMER INTEGRATION

The Com'in application can be easily integrated into **your institutional sites, applications and social networks, or those of your project owner.**

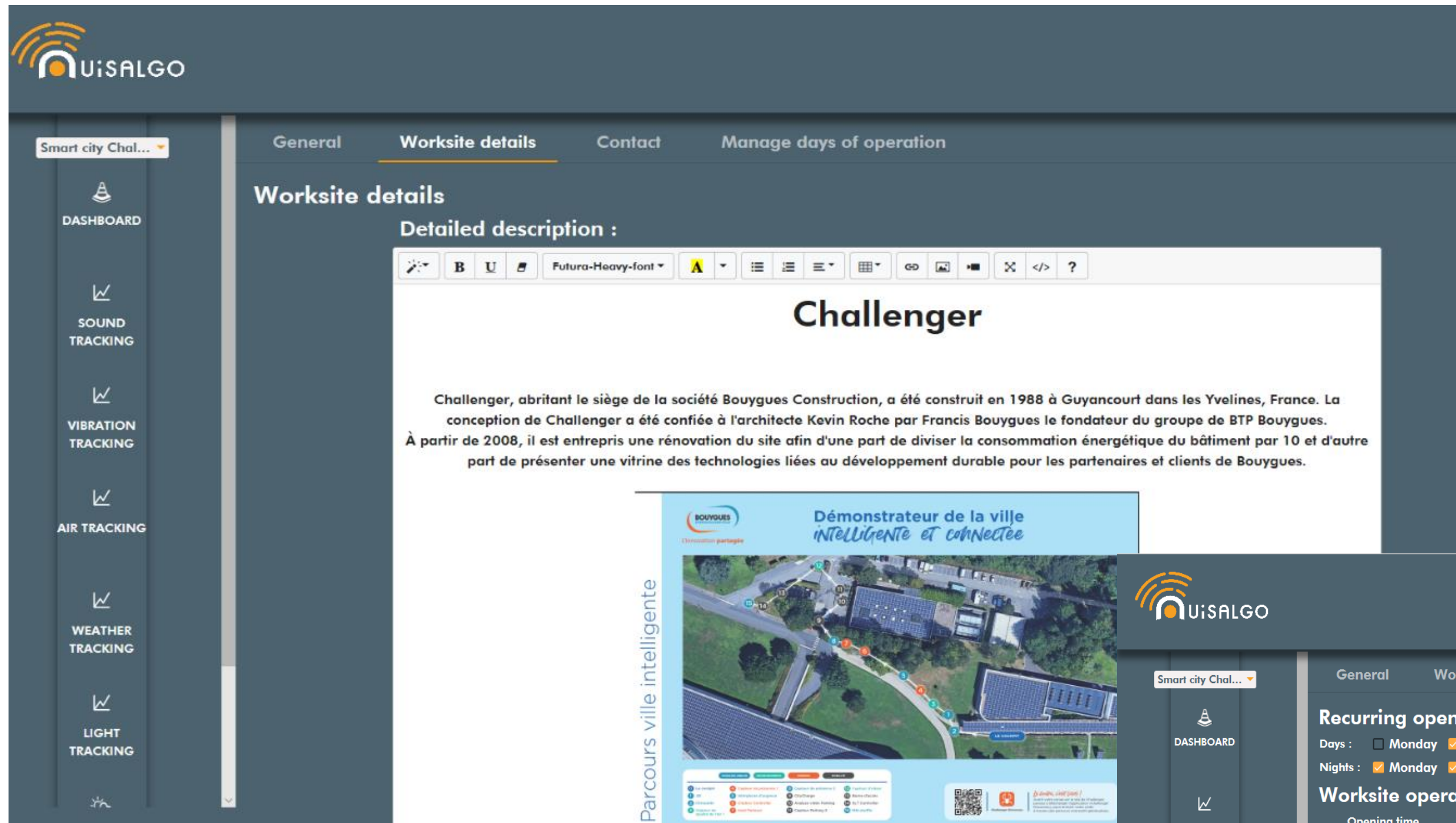


Integration on the website of the city of Saint-Denis

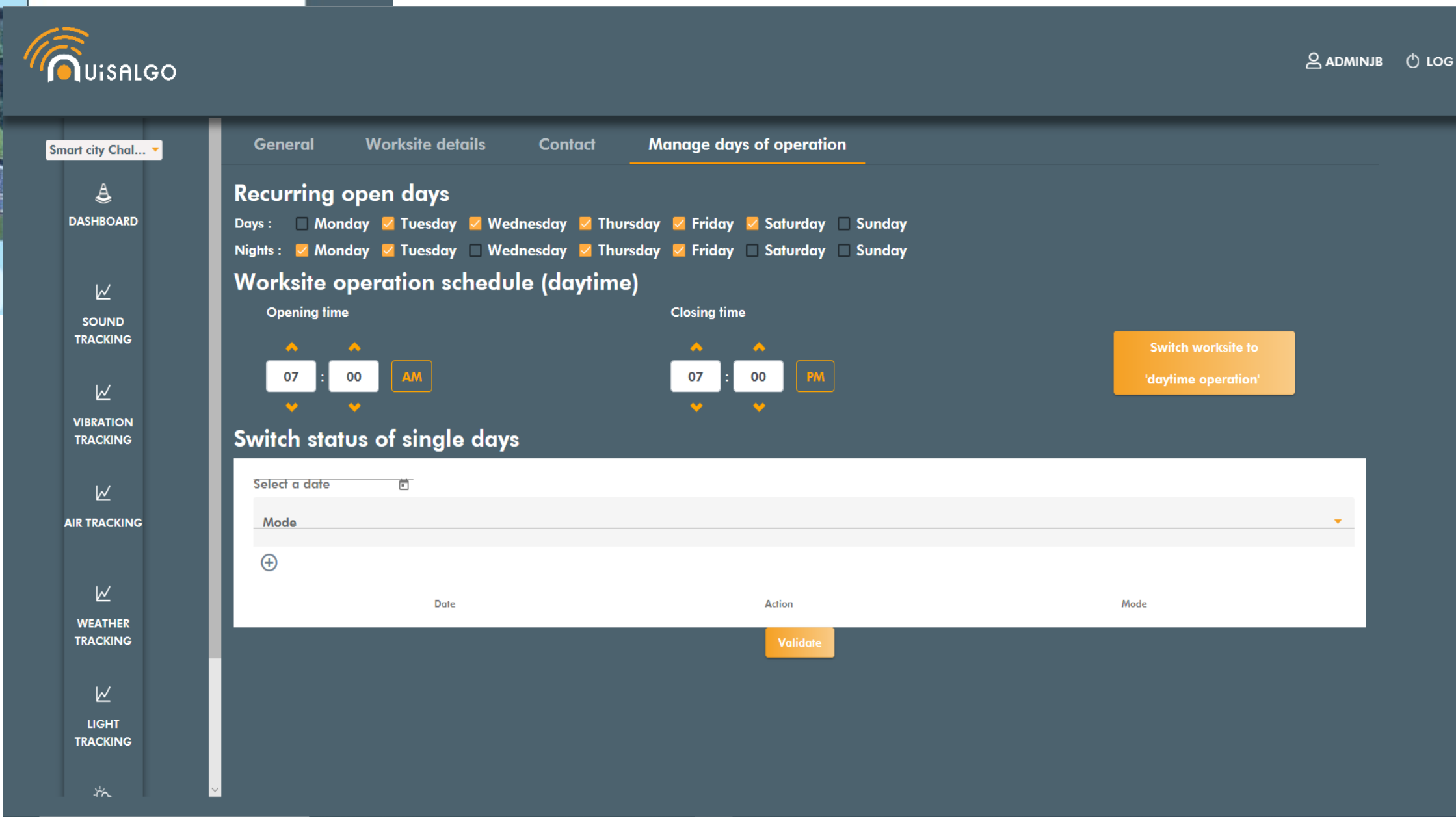




# BACK OFFICE FOR NEIGHBOURS INFORMATION



The same **NuisAlgo platform** allows to update the information aimed at local residents.





# KEY ADDED VALUE OF OUR SOLUTION

## Field expertise

- ➔ +20 years experience as Operation Managers for large-scale construction projects
- ➔ Knowledge on the specificities of each sites
- ➔ Environmental and technical consultancy

## Accuracy

- ➔ 10 days forecast on the upcoming disturbances
- ➔ Smart sensors precisely identify and locate the disturbances



## Simplicity

- ➔ A single back office to manage both neighbours information and monitor environmental impacts
- ➔ A user-friendly platform designed for operation and communication managers
- ➔ Widget can be integrated into corporate websites, application and social media easily.
- ➔ Objective reply to neighbours is sent from the platform

## Automation

- ➔ Real time alerting
- ➔ Customized and automatic report generation via the platform



# AN OFFER ADAPTED TO ANY WORKSITE'S SPECIFICITIES



Example of Com'in applications	Environmental impact monitoring – sensors:							Neighbours information	
	Acoustic	Vibratory	Optical	Air quality	Water quality	Energy consumption	Meduse 360°	Information widget	Neighbours feedback
Neighbours' information widget deployed on <b>Grand Paris Express' sensitive worksites</b> .								✓	
Information widget and <b>neighbours' feedback fuctionality</b> deployed on <b>Charles de Gaulles Express' sensitive operations</b> .								✓	✓
Monitoring of the acoustic nuisances in compliance with <b>NF ISO CEI 61 672-1 norms</b> during the rehabilitation works of the European Space Agency's French office.	✓	✓							
Monitoring of the acoustic nuisances, vibrations, air and water quality, <b>mud on the ground, energy consumption and traffic at the worksite's exit</b> in an area of intense activity in Geneva.	✓	✓	✓	✓	✓	✓			
Monitoring of acoustic nuisances <b>and air pollution, especially with benzene</b> during the metro line L17's construction works (Paris area).	✓			✓					
<b>Visualization of the zones emitting critical noise and display of noise curves</b> thanks to the installation of Meduse 360° sensors in a Monaco worksite.							✓	✓	
Monitoring of the <b>water quality (PH, turbidity)</b> during the rehabilitation works of a sluice.					✓				
Monitoring and management of the nuisances generated <b>by the day to day operation of a soil treatment and recycling center</b> .	✓	✓	✓	✓					



**Tell us your use case!** We adapt our solutions to any worksite's specificities.

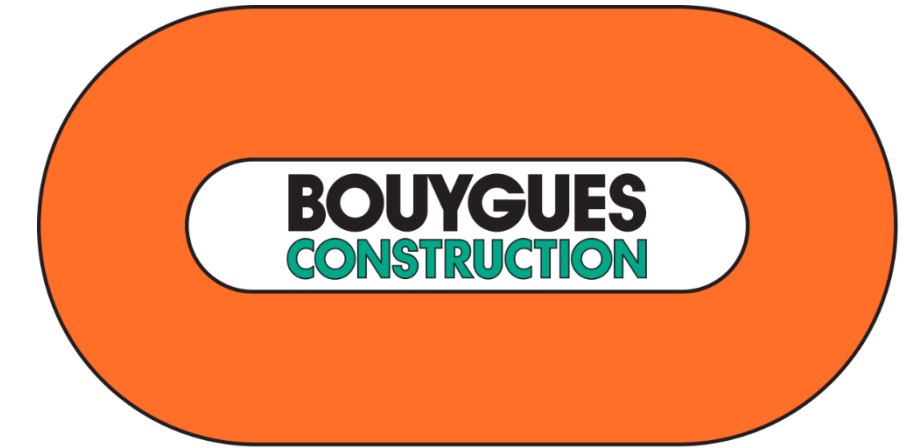
Shared Serenity.



# AN OFFER ADAPTED TO A LARGE VARIETY OF CLIENTS



Principauté de Monaco





# A CUSTOMIZED OFFER

## BETTER CONTROL OF OPERATIONS

**NuisAlgo smart sensors** installed on site for identifying and localising sources of disturbances. Monitor sound, vibration, air/dust/water, energy consumption or mobility disturbances:

- Monitor disturbance indicators (Origin, Nature, Location) via the NuisAlgo line-of-business platform
- Warning when the set thresholds are exceeded
- Automatic reporting
- Sensor installation assistance

## INFORM NEIGHBOURS

**Worksite news widget** to inform local residents:

- Provide information to residents about the worksite and upcoming works
- Send notifications in case of unexpected event
- Local agent's contact line

## COLLECT NEIGHBOURS' FEEDBACK

In addition to the control of operation, **collect neighbours' feedback**

- Com'in consumer-facing smartphone application:
- Notifications sent through the NuisAlgo platform in case of neighbour complaint. Complaint answering interface and templates
- Preventative smart alerts : identifying an event which has already caused neighbour complaints
- Option: Manage answers to neighbour's complaints





[www.comin-city.com](http://www.comin-city.com)

