



## STÉPHANE PÉAN

DIGITAL CITIES ACTION LINE LEADER

# DIGITAL CITIES

In 2017, the Digital Cities Action Line successfully steered a diversified portfolio involving 11 Innovation Activities along with three scaleups in the EIT Digital Accelerator. As a result, 29 products and services were delivered and one startup established.

The Smart Safety in Smart Cities activity, which contributes to the field of resilient cities, is a good example of business impact. Thirty Italian cities have already adopted their Alert System, a solution that identifies and qualifies a risk and alerts security forces and citizens.

Likewise, BeCamGreen, which provides an Intelligent Transportation System (ITS) solution that accurately identifies occupants in vehicles, succeeded in globalising its business by selling a prototype in North America.

In the area of civic engagement, the Piazza Innovation Activity set up a debate on the future of self-driving vehicles in France, involving around 500 people in five French cities, with the support of a robust civic platform.

The activity City Enabler for Digital Urban Services (CEDUS), which provides a FIWARE-based open-platform software to boost digital cities services, has started commercialisation in the Italian market. It also succeeded in entering the second phase of a pre-commercial procurement (PCP) led by three major European cities.

Regarding promotional activities, the Digital Cities Action Line participated in the Smart City Expo World Congress, the leading event in the field. Innovation activities and supported scaleups had the opportunity to showcase their results and achieve exposure on key social networks during this three-day international event.

The Digital Cities Action Line also fostered thought leadership with a particular focus on connected vehicles. The analysis suggests that this market will be stimulated by fifth generation mobile networks (5G), a key enabler. EIT Digital presented this thinking on the main stage in front of 500 people at the New Mobility World conference in Frankfurt.

Regarding education, the two Summer Schools – held in Nice and Berlin – successfully attracted 100 new talents from a variety of nationalities.

## DIGITAL CITIES

# INNOVATION ACTIVITY



For EIT Digital and its partners, one key pillar of a resilient city should always be citizens' safety. We have recently witnessed the deadly impact of earthquakes in Italy, floods in the UK, massive fires in Portugal, terrorist attacks in France, and other incidents from a long list of tragic events that remain in our hearts and minds.

In 2017, we supported the Smart Safety in Smart Cities Innovation Activity, which aims to implement the Alert System solution.

In crisis situations, such as natural disasters or even terrorist attacks, civil security agencies and local authorities need to quickly inform affected citizens. Event data confirms that it takes an average of 72 minutes to alert 100,000 people. With Alert System, it takes only 11 minutes.

In technical terms, it is a digital solution based on a platform that integrates sensors, open data and algorithms, in order to identify and qualify a risk and, if necessary, alert security forces as well as citizens via all communication channels (voice, text, mail, social media). The system can also manage feedback and requests for help, thanks to integration with BT Cloud Contact.

In 2017, the project initially targeted Italy and completed the technological development before launching the service to around 30 cities. Florence, Milan and Parma are among those already working with Alert System. In 2018, the objective is to industrialise the platform and its processes, culminating in a European launch in 16 countries, including Belgium, France, Germany, the Netherlands, Switzerland and the United Kingdom. Alert System is already expanding beyond Europe to other global markets with the support of Comunica Italia.





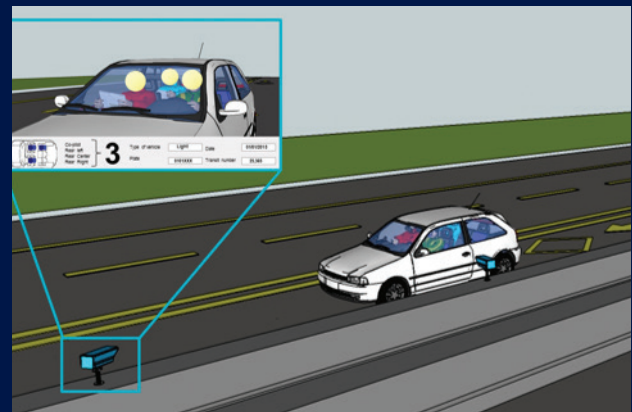
## DIGITAL CITIES

# INNOVATION ACTIVITY

Among the major problems facing European cities today is urban road transport. It contributes to increasing rates of accidents, air pollution, traffic congestion and noise, which has a negative impact on citizens' health, lifestyle and wellbeing as well as our cities' economies.

BeCamGreen is an innovation activity aimed at developing an Intelligent Transportation System (ITS) solution based on computer vision (image processing) and big data (sensors, social media and open data), which contributes to traffic reduction, especially among single-occupant vehicles, and boosting new policies on sustainable mobility.

It is an automated system that precisely identifies the number of occupants in a vehicle's front and back seats in real time thanks to state-of-the-art algorithms for human and facial detection.



Marketable, this unique solution is designed for transportation authorities, as well as road/parking operators, willing to implement new strategies to reduce traffic congestion by prioritising and promoting high-occupancy vehicles, but also low-emission vehicles and public transportation. The result is improved air quality, noise and traffic levels.

The objective is not to penalise single-occupancy car drivers, but to reward those that make more sustainable transport choices, for example by applying reduced toll fares or by providing priority lanes to high-occupancy vehicles. The aim is to foster a change in mindset among citizens, encouraging them to think twice before taking their cars and choosing the travel option that benefits both the citizen and the whole city.

BeCamGreen pilot testing was completed in 2017 on a high occupancy lane in Madrid and a prototype will be running on an express lane in the US in 2018.



## DIGITAL CITIES

# SCALEUP

## CASE STUDY

### Nordic Automation Systems (NAS)

Founded in 2014, Estonian-Norwegian scaleup Nordic Automation Systems (NAS) makes sensor technologies, data analyses and monitoring systems for smart gas, water and heat metering as well as smart city street lighting solutions. The technology is based on wireless long-range and low power wide area network (LoRaWAN) and enables NAS to provide full vertical end-to-end applications at low cost.

The company is already present in more than 25 countries with customers such as Diehl Metering, Levira and Seas-Nve. It has a partnership with Semtech and is one of the few companies licensed to build LoRaWAN gateways.

NAS joined the EIT Digital Accelerator in November 2017 and is aiming to grow its sales pipeline in 2018 with help from Accelerator's business network.

The goal this year is to use EIT Digital Accelerator's access-to-market support to close a double-digit number of major customers, and/or partners, with business operations that will secure a recurring revenue for a minimum of three to five years.



*"Industry analysts expect high growth in our target segment and industries. The EIT Digital Accelerator with its strong network of business experts all over Europe will allow us to grow far above our organic growth potential."*

ARNE KAASIK

PARTNER & COMMERCIAL DIRECTOR  
NAS





## DIGITAL CITIES

# SCALEUP

## CASE STUDY

### IsCleanAir

IsCleanAir has developed modular filterless technologies to effectively abate a wide range of air pollutants. Its systems are cost-effective to run and are easy to install and maintain while guaranteeing the highest level of environmental protection in both industrial and urban areas.

The Italian company, founded in 2015, created a patented technology named APA (Air Pollution Abatement), a device that works at surface level to abate most pollutants present or released in manufacturing, commercial or urban environments. Up to 99.7 per cent of indoor and 90 per cent of outdoor toxins can be treated with the technology.

IsCleanAir has signed an agreement with the TIM/Olivetti Group to promote and distribute APAs on the markets, mainly to cities and manufacturing plants.

Certified by the European Commission for proven excellence within the Horizon 2020 programme, IsCleanAir holds 12 patents for its highly innovative technology and has been awarded numerous national and international innovation awards, grants and peer recognitions.

The company joined the EIT Digital Accelerator in April 2017 to grow both national and international markets. Since then, IsCleanAir has participated in several international events facilitated by EIT Digital and been introduced to key business partners and clients such as Catania airport in Italy, which has shown much interest in the APA technology. A live demo is available to visitors at the co-location centre in Trento, Italy.



*"Entering EIT Digital's Accelerator programme represents an extraordinary growth opportunity for us in both the national and international markets."*

**GIUSEPPE SPANTO**  
CEO, IsCleanAir

