

Webinar: SUSTAINABLE CITIES & COMMUNITIES

Scaling IoT for resilience and growth





Index

- Applications - Innovation to Scale
- From trial to scale - Our experience
- Practical expertise in the deployment of IoT Solutions in cities
- Europe recovering from COVID19



Applications - Innovation to Scale

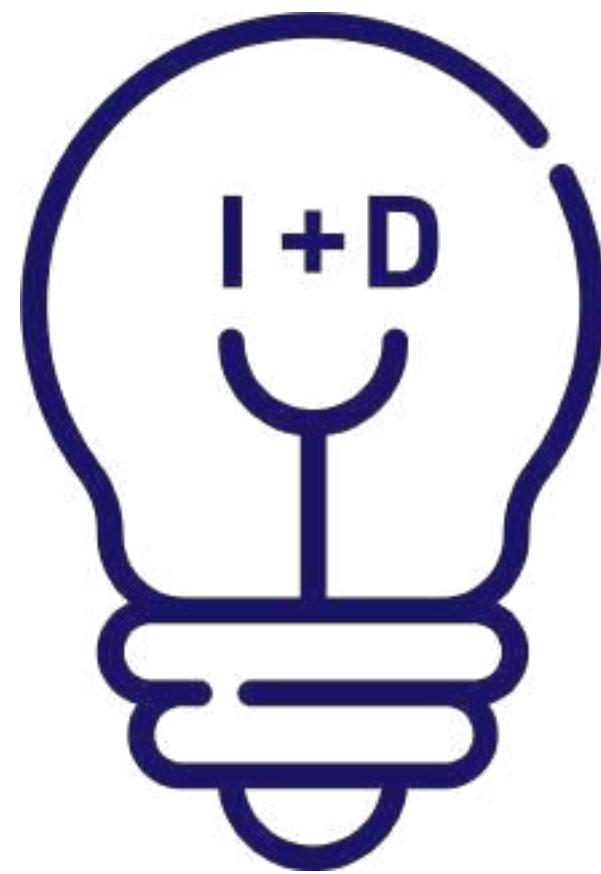


INTERNATIONAL PRESENCE



Innovation Foundations

Having completed more than 80 R&D projects, we are focused on tomorrow's challenges



Cloud

Scalability
Encryption
Clustering



Virtual World

Virtual Reality
Augmented Reality
5D visualization
Gamification



Energy Efficiency

Battery efficiency
Low Carbon Technologies



Big Data and Analytics

Efficient Database
Data extraction
Alarm Decision support



Machine Learning

Deep Reinforcement Learning
Prediction
Artificial Vision



Cyber-Physical Systems

Neural SoC
Advanced Communications
Distributed Decision Systems



Cybersecurity

Blockchain
E2E security
Data Science



Communications

LPWAN
5G
Wireless



Interoperability

Standards
Platforms

Wellness TechGroup meets client needs
with **tailored technological solutions**,
driving energy efficiency outcomes and
enabling **Smart City transformations**

Technology to face urbanization challenges

Wellness TechGroup Models: choose your Smart City road



Cybersecurity &
Privacy for Smart
Cities

The horizontal platform
centrally manages all
data across multiple city
services



Three main roads
for a Smart City
transformation:
Smart Spaces –
Use Cases

Devices and sensors are
deployed throughout the city
to collect data



Communications Network



Safe City
The city that reacts



Sustainable City
Sustainability and savings



Smart Destinations
Innovative Tourist Destinations



CCTV



Energy efficient
buildings



Microgrids



Asset tracking



PA system



Smart City
lighting



Smart waste
management

Device Layer



From trial to scale – Our experience



Going beyond the proof of concept

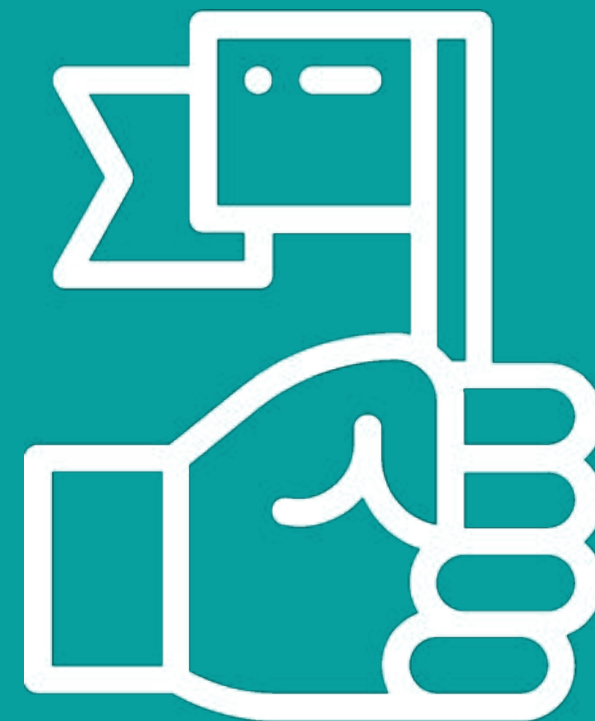
PHASE 1

R&D ideas



PHASE 2

City engagement



PHASE 3

Project ready to scale





Evidences – practical expertise in the deployment of IoT Solutions in cities



Case study: Seville's Waste Management Company

In 2015 Wellness TechGroup introduced the Quamtra Smart Waste Management solution to improve waste collection. The system uses Q sensors installed in containers to measure fill level as well as compile and analyze collected data in the Quamtra software platform.

8 LIPASAM

NO8DO
AYUNTAMIENTO
DE SEVILLA

Quamtra
SMART WASTE
MANAGEMENT





Virginia Pividal Garcia,
Managing Director,
LIPASAM

"Thanks to the application of this technology and the data provided by the sensors, our costs associated with collection have been reduced by 66%."







José Andrés Ferrete,
Head of street furniture,
LIPASAM

"With the information we received from the sensors and collection platform on glass containers' fill level, we were able to reduce the number of pick up rounds from 3 every 12 days, down to 1 every 7 days. This meant going from 100 rounds per year to 34, and optimized routes, going from 3 static routes to 1 dynamic one, 400 fewer hours a vehicle is on the street per year, which then means traffic improvement and reducing noise and odors caused by collection trucks."

Significant results:

From 3 Pre-defined routes to  1 Dynamic route

	SERVICE	STARTING POINT (100 SERVICES)	POST EWAS POINT (34 SERVICES)	SAVING
COST (€)	460	46.070	15.642	30.364
KM	107	10.700	3.638	7.062
LITERS	56	5.600	1.904	3.696

	STARTING POINT	POST EWAS POINT	REDUCTION
ROUTES	3 	1	66% 
SERVICES/ YEAR	100 	34	
HOURS/YEAR	700 	255	



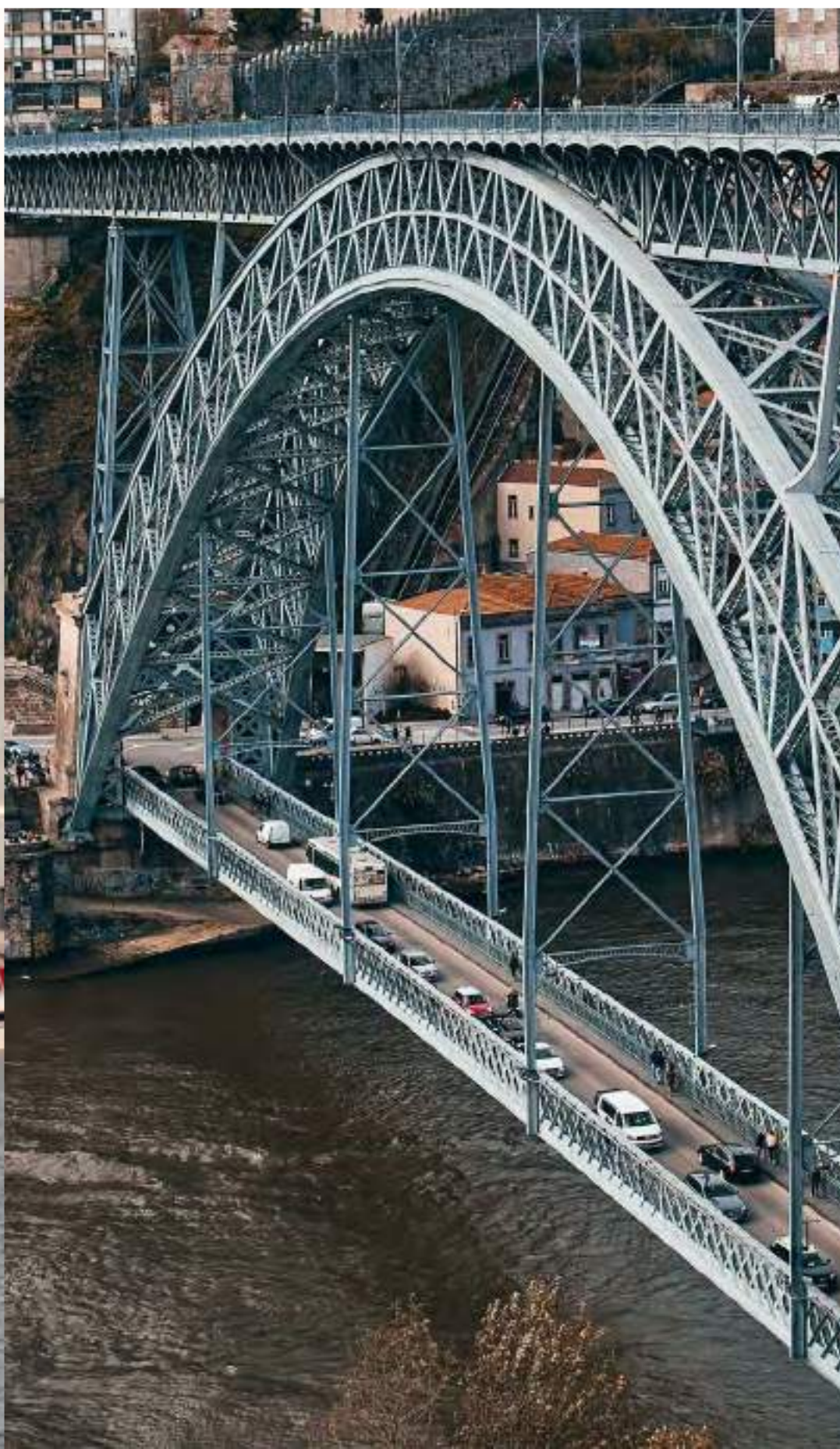
OVERFLOW DETECTION
& ALERT

Waste management: Scaled roll outs worldwide

Kalmar, Sweden



Porto, Portugal



Granada, Spain



Bogota, Colombia



Madrid, Spain





How Europe's cities are enabling the Covid 19 recovery



European Commission Covid19 Outbreak

750M€

Part of these funds are allocated to innovation projects in the H2020 framework

8 new calls to finance more projects in the next months

European Commission Funding & tender opportunities

Single Electronic Data Interchange Area (SEDIA)

English EN Register Login

SEARCH FUNDING & TENDERS HOW TO PARTICIPATE PROJECTS & RESULTS WORK AS AN EXPERT SUPPORT

COVID-19 outbreak: visit the [European Research Area \(ERA\) corona platform](#) for information on related funding opportunities

Latest news: Latest FAQs on Horizon 2020 calls and grants published on 10 May // Continuously updated info on extension of call deadlines

Funding & tender opportunities (the Single Electronic Data Interchange Area) is the entry point for participants and experts in funding programmes and tenders managed by the European Commission and other EU bodies.

Find calls for proposals

Search calls for proposals and tenders

EU Programmes

European Research Area (ERA) corona platform

Home H2020 call deadline updates Coronavirus-specific projects Other related projects National activities

Last update: 14/07/2020 - 11:59

COVID-19 outbreak: latest H2020 call deadline updates

Reacting to the COVID-19 crisis, **deadlines for some calls are extended** to give more time for applicants to prepare their proposals. This concerns the following calls:

Call ID:	Topic ID:	Deadline extended to:
H2020-INNOSUP-2018-2020 (stage 2)	INNOSUP-01-2018-2020	22 September 2020
H2020-JTHIMI2-2020-20-two-stage (stage 2)	IMI2-2020-20-01	
	IMI2-2020-20-02	
H2020-Epidemics-EICPrize-2020		

Home H2020 call deadline updates **Coronavirus-specific projects** Other related projects National activities

Funded projects under topic:
Advancing knowledge for the clinical and public health response to the 2019-nCoV epidemic (sc1-phe-coronavirus-2020)

Results 18 Download excel list

TITLE	ACRONYM	PROJECT ID	TYPE OF ACTION
Antibody therapy against coronavirus (COVID-19)	ATAC	101003650	
Combating 2019-nCoV: Advanced Nanobiosensing platforms for POC global diagnostics and surveillance	CoVWat	101003544	
COVID-19 Outbreak Response combining E-health, Serolomics, Modelling, Artificial Intelligence and Implementation Research	COPESMA	101003480	
Development and validation of rapid molecular diagnostic test for nCoV19	HG nCoV19 test	101003713	
Epidemic Intelligence to minimize 2019-nCoV's public health, economic and social impact in Europe	EpiPose	101003688	
EXaScale smArt Platform Against pathogEms for Corona Virus	EXSCALE4CoV	101003551	
Exploration of safety, tolerability and clinical efficacy of Solatide IMP in patients infected with the 2019 new coronavirus	Solatide	101003595	
FIGHTING-OFF CORONAVIRUS (SARS-CoV-2) WITH BROAD-SPECTRUM ANTIVIRALS: ESTABLISHING ANIMAL VIRAL CHALLENGE MODEL	Fight nCoV	101003555	
Health Emergency Response in Interconnected Systems	HERoS	101003506	
Monoclonal Antibodies against 2019-New Coronavirus	MANCO	101003651	



Alcoy will use intelligent solutions to fight Covid-19

The local government of the Spanish city mobilises its smart city projects against the new coronavirus

MAY 29, 2020 14:30

ASENIYA DIMITROVA



Smart solutions against coronavirus

Alcoy has started integrating smart city solutions as Covid-19 pandemic hit Spain. Their implementation the European Union's Feder funds, explains the aut the coronavirus pandemic, smart solutions have before.

Part of the Smart City Strategy of Alcoy is the insta network for improved municipal management. L strategy will allow them to obtain the necessary emergency caused by Covid-19.

The municipal government has acquired a con temperature control, capacity control, security, lic people and cyclists. This management system is cor city.

↑ Alcoy, Spain
Smart City Platform

Coronavirus: Drones patrol Spanish coast to make tourists keep their distance



Spaniards flocked to beaches such as Santa Maria del Mar in Cadiz as restrictions were eased
JUAN CARLOS TORO/GETTY IMAGES

↑ Cadiz, Spain
Drones



Praia da Luz, Portugal
Booking App for beaches

2. Beach full? Ask the app

Recent events in the UK and Spain, where police have intervened to reduce overcrowded beaches, demonstrate how desperate locked-down citizens coast. Some visitors said they had not realised how busy beaches would be arrived.

Portugal has devised a tech solution to the problem: an app that uses mobile information from beachfront businesses to measure how many people are warns would-be visitors that the beach is full before they set off.



ed out: people on the beach

CORONAVIRUS >

Thermal imaging and e-forms: How Spain will screen for Covid-19 when the travel ban is lifted

Experts warn about the difficulty of detecting the coronavirus when thousands of visitors start coming in by sea and air each day



Knokke-Heis, Belgium
Mobile tracking



Madrid, Spain
Thermal imaging

Belgium adopts mobile tracking to limit beach crowds

Clement Rossignol, Christian Levaux

2 MIN READ



People enjoy a hot summer day on a beach during the coronavirus disease (COVID-19) outbreak, in Knokke-Heist, Belgium, June 26, 2020. REUTERS/Clement Rossignol



Our Solution

Technology conceived to transform territories into smart and sustainable destinations that deliver an enhanced digital tourism experience

Sustainable Tourist Destinations



IoT & Big Data
Platform



Smart City
lighting



Microgrids



Smart waste
management



Energy
efficient
buildings



Smart parking



Environmental
monitoring



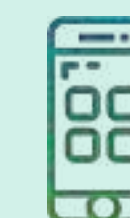
Streamlined customer
experience dashboard



Tourism Big
Data



People
counting



Tourist app



Social WiFi



Beacons



Smart Costa del Sol

First Smart Region in Spain

WTG technologically leads the project of a region in the south of Spain that united under common interests has started a digitalization path to gain in competitiveness and resilience.



15

Municipalities



13

Smart verticals

Outcomes:

01

Reduce safety risk on public touristic places

02

Restoring user & visitors trust in the region

03

Improvement of the tourist experience and the quality of life of the resident

04

Increase competitiveness of the territory

05

Greater efficiency in resources and public services management

06

Better data generation and processing for decision making



Spain

Seville

Calle Gregor J. Mendel,
Edificio da Vinci, 6, 1ª planta
41092 Isla de la Cartuja, Sevilla
Tel. +34 954 151 706
info@wellnesstg.com
www.wellnesstg.com

Málaga

Tel. +34 690 182 390
malaga@wellnesstg.com

Madrid

Tel. +34 678 778 168
madrid@wellnesstg.com

Australia

Adelaide

+61 457 156 025
australia@wellnesstg.com

United States

Orlando

+1 /435) 306-2687
usa@wellnesstg.com

Mexico

Mexico City

+52 (1) 453 08081
mexico@wellnesstg.com

Germany

Munich

+49 172 821 7233
deutschland@wtelecom.de

Sweden

Kalmar

+46 702 312 454
sweden@wellnesstg.com

Thank you!

Contact us

Enrique Villa Crespo_CTO
evilla@wellnesstg.com

Alejandra Ruiz de Viana_CMO
aruiz@wellnesstg.com

