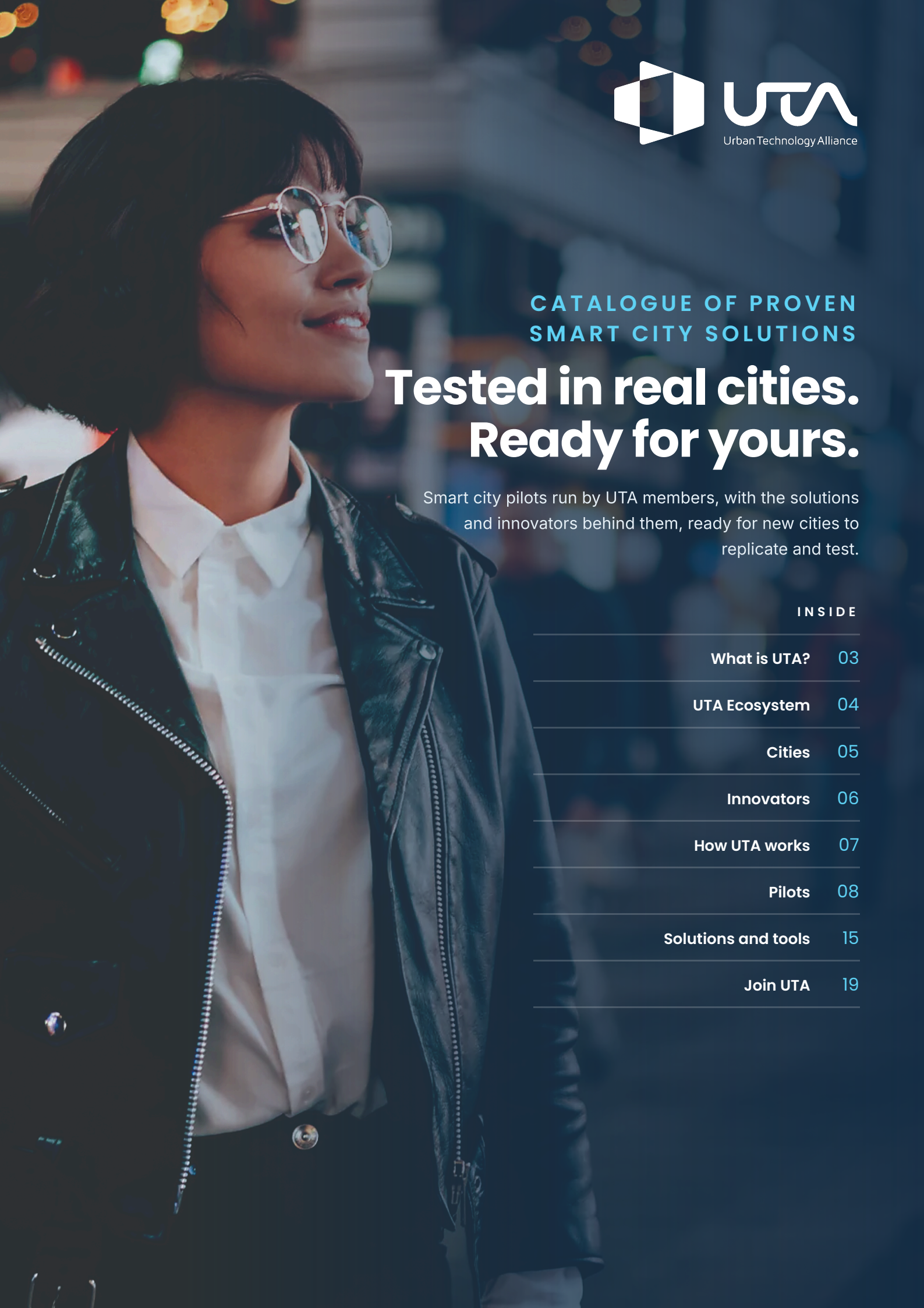


Urban Technology Alliance

CATALOGUE OF PROVEN SMART CITY SOLUTIONS

Tested in real cities. Ready for yours.

Smart city pilots run by UTA members, with the solutions and innovators behind them, ready for new cities to replicate and test.

INSIDE

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What is UTA?

The Urban Technology Alliance (UTA) is an international non-profit association based in Geneva. It acts as a neutral, trusted intermediary between cities and solution partners. UTA structures real urban challenges, matches them with the right innovators and facilitates pilots, so that cities can test, validate and refine smart city solutions in real-life conditions before large-scale deployment.



Dr Levent Gürgen
President, Urban Technology Alliance

Welcome

Cities do not need more promises about technology. They need evidence. UTA gives cities a neutral place to test smart city solutions in real streets, parks, homes and neighbourhoods before they commit to large-scale deployment. This catalogue brings together pilots run by our members across Europe, Japan and the United States, the solutions they tested and the organisations behind them. Some are recent; others laid the foundations years ago. All of them carry lessons other cities can reuse. If your city has a challenge it wants to solve, we would like to hear about it.

A neutral and trusted framework

Technology-independent
No preferred vendors or locked ecosystems. We choose solutions for performance, impact and each city's needs.

Non-profit and neutral
UTA acts as a neutral third party serving the public interest.

Scalable
We design pilots so other cities, contexts and regions can replicate them.

Balanced
Cities, industry, academia and partners have an equal voice.

Science-based
Academic partners validate KPIs, methods and results.

Open learnings
We share results, KPIs and lessons with the whole ecosystem.

Who UTA is for

Cities
- Validate solutions before scaling
- Reduce risk and uncertainty
- Share learnings with peer cities

Industry and startups
- Test solutions in real conditions
- Prove impact and performance
- Improve products with city feedback

Academia and non-profits
- Apply research to real urban needs
- Contribute to evidence-based pilots
- Access real-world data and insights

UTA Ecosystem

30
Member Organisations

26
Member and Partner Cities

50+
Partners

3
Continents

20
Countries

10+
Solution Domains Demonstrated

18+ UTA members in EU project consortia

~24M€ Portfolio value active Horizon Europe projects



Member cities

Bibai, Japan · **Bucheon,** South Korea · **Busan,** South Korea · **Cauayan,** Philippines · **Fujisawa,** Japan · **Grenoble Alpes Métropole,** France · **Saitama,** Japan · **Santander,** Spain · **Sejong,** South Korea · **Siheung,** South Korea · **Taipei,** Taiwan · **Tsukuba,** Japan

Partner cities

Área Metropolitana de Barcelona, Spain · **Athens,** Greece · **Bristol,** United Kingdom · **Chamrousse,** France · **Chișinău,** Moldova · **Dublin (Fingal),** Ireland · **Florence,** Italy · **Genova,** Italy · **GZM Metropolis,** Poland · **Helsinki,** Finland · **Istanbul,** Türkiye · **Jena,** Germany · **Milan,** Italy · **New York City,** United States · **Paris,** France · **Tampere,** Finland · **Tirana,** Albania · **Trento,** Italy · **Valencia,** Spain

Cities

UTA MEMBERS

Member cities

Member cities provide real-world testbeds for smart city experimentation and help shape UTA's work.

Bibai, Japan

Bucheon, South Korea

Busan, South Korea

Cauayan, Philippines

Fujisawa, Japan

Grenoble Alpes Métropole, France

Saitama, Japan

Santander, Spain

Sejong, South Korea

Siheung, South Korea

Taipei, Taiwan

Tsukuba, Japan

PARTNERS

Partner cities

Partner cities support pilot activities and share local insights with the network.

Área Metropolitana de Barcelona, Spain

Athens, Greece

Bristol, United Kingdom

Chamrousse, France

Chișinău, Moldova

Dublin (Fingal), Ireland

Florence, Italy

Genova, Italy

GZM Metropolis, Poland

Helsinki, Finland

Istanbul, Türkiye

Jena, Germany

Milan, Italy

New York City, United States

Paris, France

Tampere, Finland

Tirana, Albania

Trento, Italy

Valencia, Spain

Innovators

UTA members include companies, universities and non-profit organisations. They contribute solutions and expertise, run pilots with partner cities and share what they learn with the network. Partner organisations take part in pilots and projects with UTA.

UTA MEMBERS

Companies, universities and non-profits

Kentyou,
Data · France

Data in Motion,
Data · Germany

Jriss,
Systems · Japan

Latitudo 40,
Data · Italy

NTT East,
Digital · Japan

RealSim,
Modelling · Ireland

Caspera Lab,
Digital · France

CrowdScan,
Connectivity · Belgium

WeMB,
Energy · South Korea

KAIST,
AI · South Korea

Keio University,
Digital · Japan

Nagoya University,
Mobility · Japan

University of Cantabria,
Digital · Spain

Czech Smart City Cluster,
Governance · Czechia

Feuga,
Data · Spain

IoT Lab,
Digital · Switzerland

Knowledge Capital,
Mobility · Japan

Urban Opus,
Data · Canada

PARTNERS

Partner organisations

Universidade da Coruña

Lancaster University

University of Tsukuba

ICCS, NTUA

Smart City Consortium (SCC)

Inovallée

EIP-SCC

EIT Digital Cities

Eclipse Foundation

Global City Teams Challenge

Industry IoT Consortium

IoT Acceleration Consortium

OSGi Alliance

Open Agile Smart Cities

Bristol is Open

Worldline

How UTA works

From city need to proven solution

Cities
Identify real urban needs and priorities.

Challenges
Turn each need into a concrete problem to solve.

Pilots
Test the solution in real-life conditions.

Solutions
Provide a practical answer that can scale.

Innovators
Companies, universities and non-profits build and deliver the solution.

From challenge to pilot

1

Matchmaking
Cities publish open challenges. UTA matches them with relevant solution providers and partners.

2

Ongoing pilot
Solutions run in real urban environments, with continuous coordination and reporting.

3

Finalised pilot
UTA evaluates, documents and shares the results to support replication and scaling.

What UTA delivers

Concrete outputs to support decision-making, replication and scaling.

Pilots and testbeds
Real-world pilots that run in operational urban environments.

Guidelines and KPIs
Indicators and methodologies to measure impact and performance.

Reference architectures
Reusable technical and functional frameworks that pilots have validated.

Lessons and best practices
Lessons and recommendations drawn from real deployments.

Marketplace and showcase
A curated space where you can explore validated solutions and pilots.



Pilots

Real-world pilots run by UTA cities and innovators in mobility, climate, infrastructure and buildings. Scan a code for the full pilot.





BUILDING

3D and VR planning consultation

Fingal, County Dublin, Ireland · Finalised · April 2020 to September 2026

THE CHALLENGE

Fingal is consulting residents on large public realm schemes that will reshape its town centres. Technical drawings and one-off public meetings leave many people unable to picture the changes.

WHAT WAS TESTED

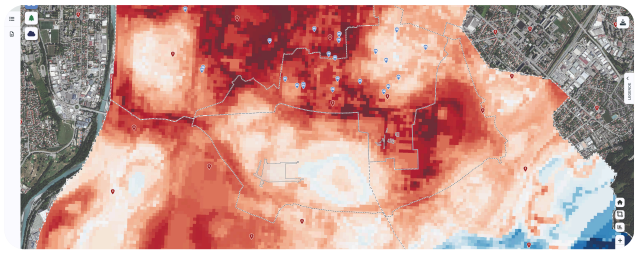
The Council's Digital Services Department commissioned RealSim to build town-scale digital twins of Balbriggan and Swords. Residents explore proposals at street level, online from any device or on VR headsets in local libraries.

RESULTS

Fingal became the first local authority in Ireland to publish an interactive 3D digital twin online. Two rounds of public consultation shaped the Balbriggan Quay Street and Harbour scheme. Construction runs until September 2026.

Innovators **RealSim**

EnviroSim Web Lite, VR Planning Consultation



CLIMATE

Urban heat islands

Grenoble-Alpes Métropole, France · Finalised · March 2024 to March 2026

THE CHALLENGE

Grenoble-Alpes Métropole needed a scientifically robust tool that its teams could actually use to understand, anticipate and reduce urban overheating, and to judge the impact of regeneration projects.

WHAT WAS TESTED

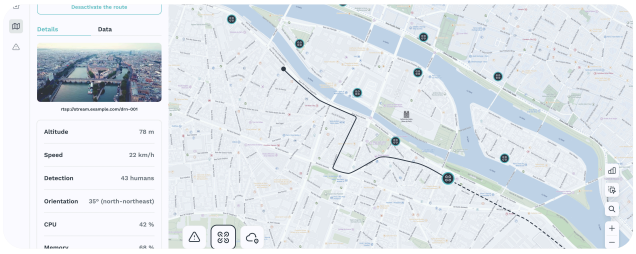
Within the Climaborough initiative, UTA members Kentyou, Latitudo 40 and RealSim combined satellite Earth observation, AI analytics and a 3D digital twin in one platform. It serves planners and decision-makers, and helps explain choices to citizens.

RESULTS

A consolidated inventory of environmental indicators for the GrandAlpe territory. Side-by-side comparison of urban projects on heat, thermal comfort, vegetation and carbon storage. Scenario simulations to support climate-resilient planning decisions.

Innovators **Kentyou, Latitudo 40, RealSim**

Kentyou Eye, Geospatial Urban Analytics, RealSim City



INFRASTRUCTURE

Flood detection and rescue coordination

Paris, France · Finalised · June 2024 to December 2025

THE CHALLENGE

Emergency infrastructure across a city is scattered and runs on mixed hardware. In a major Seine flood, rescue teams need fast, reliable data.

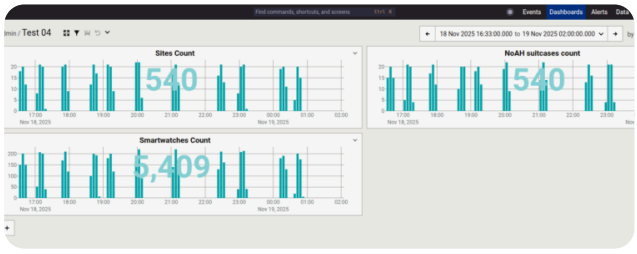
WHAT WAS TESTED

A distributed edge-to-cloud platform combined real-time environmental sensors with on-site edge processing, for a Seine flood scenario in Paris-Saclay. Edge sites coordinate themselves and scale with little manual work.

RESULTS

The system detected rising water levels faster and kept emergency teams coordinated across the city.

Solution **Self-coordinating edge-to-cloud network**



INFRASTRUCTURE

Telemedicine for remote workers

Athens, Greece · Finalised · June 2024 to December 2025

THE CHALLENGE

Hundreds of wind-turbine technicians work on rural and remote sites with poor connectivity, which makes health and safety monitoring difficult.

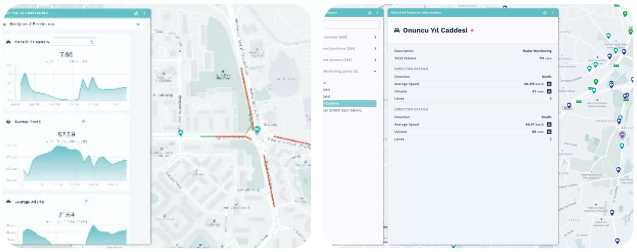
WHAT WAS TESTED

Portable telemedicine units, wearable devices and edge processing delivered secure, real-time patient monitoring without a constant link to a central system.

RESULTS

Emulation with simulated devices showed that the approach can scale to hundreds of sites across Europe.

Solution **Edge–cloud telemedicine platform**



MOBILITY

AI-based smart traffic management

Istanbul, Türkiye and Helsinki, Finland · Finalised · January 2024 to June 2025

THE CHALLENGE

Intersections are bottlenecks for traffic and hotspots for accidents: in Europe, half of urban road deaths happen at them. Istanbul's operators monitored abnormal traffic by hand, across several separate tools.

WHAT WAS TESTED

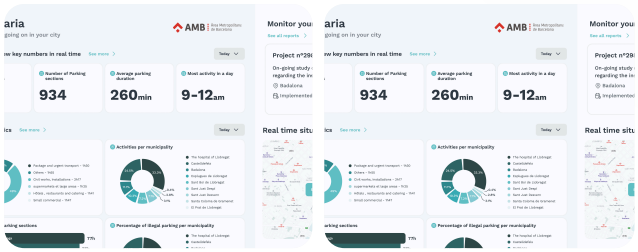
In the EIT Urban Mobility AI4LIFE project, Kentyou, the City of Istanbul and its municipal company ISBAK integrated ISBAK's IoT and adaptive signal infrastructure with Kentyou's AI data platform, adding automatic detection of abnormal traffic and decision-support tools.

RESULTS

Operators receive automatic alerts instead of watching cameras or waiting for citizen calls, so they detect problems and intervene faster. A commercialisation plan prepares roll-out in Europe and beyond.

Innovators **Kentyou, Data in Motion**

Kentyou Eye, AI-Driven Urban Data Analytics Platform



MOBILITY

Smart parking management

Barcelona Metropolitan Area (AMB), Spain · Finalised · June to December 2023

THE CHALLENGE

AMB collected large volumes of data on loading and unloading zones through its logistics app, but could not turn that data into policy or day-to-day decisions.

WHAT WAS TESTED

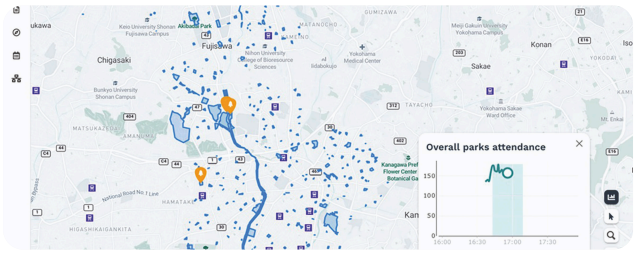
Through the EIT Urban Mobility RAPTOR programme, Kentyou deployed Kentyou Eye, an AI platform with dashboards, forecasting and decision support covering nine municipalities.

RESULTS

Clear visibility of how drivers use loading zones, detection of illegal parking and forecasts of parking availability. In five months, the pilot laid a foundation that other metropolitan areas can replicate.

Innovators **Kentyou, Data in Motion**

Kentyou Eye, AI-Driven Urban Data Analytics Platform



INFRASTRUCTURE

Smart parks monitoring and incident management

Fujisawa, Japan · Finalised · January 2022 to June 2023

THE CHALLENGE

A growing volume of park reports from staff and citizens became hard to track and prioritise.

WHAT WAS TESTED

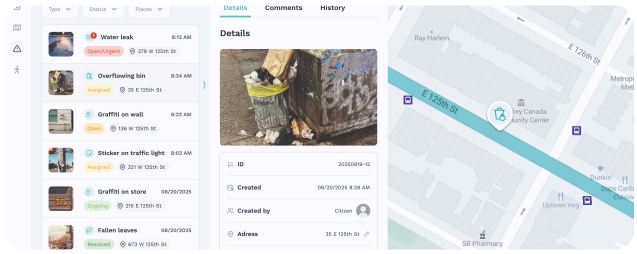
Fujisawa issued the Fujisawa Parks Challenge, and UTA matched the city with Kentyou. Incident reports from a mobile app feed a smart city platform with analytics and dashboards.

RESULTS

Faster response, automatic detection of duplicate and clustered reports, and better planning of repairs and grass cutting. Since March 2022, residents can also report park problems through the city's official LINE account.

Innovators **Kentyou**

Kentyou Eye



MOBILITY

Smart intersection monitoring

Manhattan, New York City, USA · Finalised · January to December 2022

THE CHALLENGE

Cars, pedestrians, cyclists and e-scooters share the same intersections. Spotting danger in real time needs very low latency, and sending raw video to the cloud raises privacy concerns.

WHAT WAS TESTED

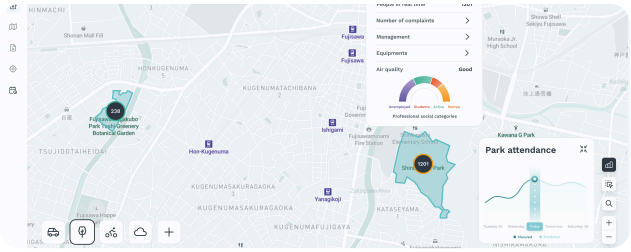
Cameras, sensors and machine learning analyse traffic interactions at the roadside. Edge computing processes the video locally and shares only anonymised data with the city's mobility platform.

RESULTS

Real-time monitoring of risky interactions, lower latency, privacy by design, and a history of traffic behaviour to guide long-term infrastructure planning.

Innovators **Kentyou**

Kentyou Eye, Eclipse sensiNact



INFRASTRUCTURE

Securing urban sensing and citizen reporting

Fujisawa, Japan · Finalised · July 2018 to September 2021

THE CHALLENGE

Fujisawa runs an open sensing platform and invites residents to report on city life by photograph. Both are valuable because they are open, and both expose information that needs protecting.

WHAT WAS TESTED

In the EU-Japan M-Sec project, Keio University and NTT East secured the existing sensing fleet end to end and launched SmileCityReport, a photo-reporting app with on-device anonymisation and group-only sharing. Participants traded data through a blockchain marketplace shared with Santander.

RESULTS

250 active users created 1,340 posts. Forty participants in Fujisawa and Santander exchanged 46 posts across the two cities. The team extended sensing to ventilation in restaurants, buses and classrooms.

Innovators **Keio University, NTT East, ICCS (NTUA)**

Keio Secure Mobile Sensing Platform, SmileCityReport, GANonymizer, SOXFire, M-Sec Data Marketplace, Urban Environmental Sensing Fleet Extension

INFRASTRUCTURE

Secured IoT sensing in a city park

Santander, Spain · Finalised · July 2018 to September 2021

THE CHALLENGE

Santander wanted environmental and visitor data from Parque de las Llamas without putting privacy or data integrity at risk.

WHAT WAS TESTED

Five sensors measured temperature, humidity, CO_2, volatile organic compounds and noise, and a people counter estimated visitors. The system encrypted the data, recorded its hash on a blockchain and offered it on the M-Sec marketplace.

RESULTS

Nine QR codes let visitors view live readings and rate the park. Eclipse sensiNact handled visualisation and analysis.

Innovators **University of Cantabria, Kentyou, ICCS**

Eclipse sensiNact, M-Sec Blockchain Middleware, M-Sec Data Marketplace



MOBILITY

Pedestrian crossing safety

Trento, Italy · Finalised · July 2018 to June 2021

THE CHALLENGE

Pedestrian crossings are among the most dangerous points in a city, and distracted pedestrians make them riskier. Trento wanted real-time risk detection without sending video of citizens to the cloud.

WHAT WAS TESTED

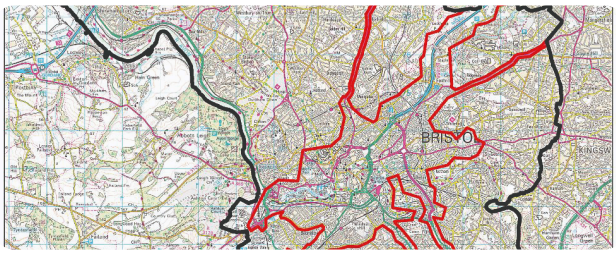
In the Horizon 2020 DECENTER project, Kentyou, Fondazione Bruno Kessler, CEA and the Municipality of Trento installed edge-AI cameras at two intersections, built on Eclipse sensiNact, with automatic model updates and a live digital twin of each crossing.

RESULTS

A working prototype on real streets. No raw video leaves the roadside, alerts arrive faster and the approach became the basis for FedIntersect, which extends it to Santander and New York.

Innovators **Kentyou**

Eclipse sensiNact



MOBILITY

Pollution-aware walking routes

Bristol, United Kingdom · Finalised · July 2016 to June 2019

THE CHALLENGE

Nitrogen dioxide in central Bristol regularly exceeded legal limits, and a Clean Air Zone was years away. Pedestrians had no way to see which streets were cleaner.

WHAT WAS TESTED

In the EU-Japan BigClouT project, Bristol City Council, Bristol is Open and Lancaster University built a routing service that combines pedestrian movement and air-quality data.

RESULTS

Air quality became a routing factor, just as congestion is in mapping apps. Residents and visitors could cut their own exposure straight away, and the same platform served pilots in Grenoble, Fujisawa and Tsukuba.

Innovators **Bristol is Open, Lancaster University, University of Tsukuba**

Pollution-Aware Walking Route Service, BigClouT Distributed City Data Platform



MOBILITY

MyIno App for a technology park

Inovallée, Grenoble, France · Finalised · July 2016 to June 2019

THE CHALLENGE

More than 11,000 people at over 350 companies share buses, canteens and events, but the information sat with separate organisations.

WHAT WAS TESTED

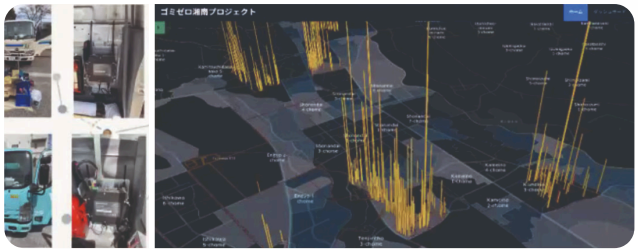
Inovallée led the pilot with Grenoble-Alpes Métropole and CEA-Leti. Kentyou's Eclipse sensiNact aggregates live transport, canteen menus, news, events, a company directory and a map in one app.

RESULTS

The park launched the app on 14 March 2019. Workers downloaded it more than 1,000 times, about one in eleven. The park still runs and develops it.

Innovators **Inovallée, Kentyou**

MyIno App, Eclipse sensiNact, BigClouT Distributed City Data Platform



CLIMATE

Garbage-truck air-quality sensing

Fujisawa, Japan · Finalised · April 2013 to June 2016

THE CHALLENGE

Collection routes followed tradition, with no record of actual paths, distances or times. Air quality came from a few fixed stations.

WHAT WAS TESTED

Fujisawa City and the ClouT group fitted refuse trucks with a custom sensor board: per-second GPS and 13 types of air sensor, sending data every 30 seconds to a remote server.

RESULTS

The city's first record of real routes, distances and times, plus street-level data on pollen, particulates and traffic gases, shared with residents. The approach continued in the BigClouT project.

Innovators **NTT R&D**

Sensorised Waste Collection Vehicles, ClouT Platform



MOBILITY

Multimodal route recommendation

Santander, Spain · Finalised · April 2013 to June 2016

THE CHALLENGE

Transport and environmental data sat in separate systems, so travellers could not easily compare options for a trip.

WHAT WAS TESTED

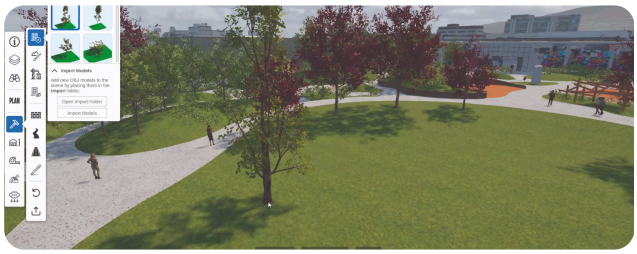
The University of Cantabria and Santander City Council built a map app that combines bus, bike, taxi, train, parking, traffic and air-quality data into one route recommendation.

RESULTS

For each trip, travellers get five options (bike, walking, car, taxi and bus), each with distance, journey time and environmental readings.

Innovators **University of Cantabria**

SmartSantander, ClouT Platform



CLIMATE

Climate resilience in a business district

Sandyford, County Dublin, Ireland · Ongoing · since March 2023

THE CHALLENGE

Sandyford is an ageing business park with little tree cover. Dún Laoghaire–Rathdown County Council needed evidence on where heat builds up and which green measures would cool the district.

WHAT IS BEING TESTED

Latitudo 40 mapped heat and tree cover from satellite data and simulated the cooling effect of nature-based solutions. RealSim built a district-scale 3D digital twin.

PROGRESS

The analysis shaped the design of the new Sandyford Civic Park. The digital twin shows businesses and the public what a greener, cooler district will look like.

Innovators **Latitudo 40, RealSim**

Geospatial urban analytics, RealSim City

BUILDING

Secure home monitoring for older residents

Santander, Spain · Finalised · July 2018 to September 2021

THE CHALLENGE

More older people live alone, and tele-assistance is moving from alarm buttons to always-on home sensors. Those sensors record daily routines, which are highly sensitive if they leak.

WHAT WAS TESTED

In the EU-Japan M-Sec project, Worldline built the Senior Care platform, tele-assistance provider Atenzia ran it and Santander City Council supported deployment. A security stack added access control, tamper-evident storage and anonymised data exchange.

RESULTS

Real users tested the system in their own homes. Staff trusted the alerts and found the system easy to install and use. All participants with sensors said they felt safer, and none felt the system invaded their privacy.

Innovators **Worldline, Kentyou, ICCS (NTUA)**

Senior Care, Eclipse sensiNact, M-Sec Blockchain Middleware, M-Sec Data Marketplace

INFRASTRUCTURE

Tourism and visitor information

Tsukuba, Japan · Finalised · July 2016 to June 2019

THE CHALLENGE

International visitors lacked real-time information in English and had no simple way to report problems they met during their stay.

WHAT WAS TESTED

The University of Tsukuba and NTT East built HukuRepo, an app with live tourism, traffic and environmental information, plus a reporting channel answered by local volunteers. Digital signage at the Tsukuba Centre transport hub extended the service.

RESULTS

A month-long public trial in November 2017 at Tsukuba Station and Mount Tsukuba proved a participatory model for short-term visitors. Tsukuba became a Super City National Strategic Special Zone in 2022.

Innovators **University of Tsukuba, NTT East**

HukuRepo, Foreign-Visitor Problem Reporting, Visitor Information Sensing and Signage, BigClouT Distributed City Data Platform

BUILDING

Smarter household energy

Bristol, United Kingdom · Finalised · July 2016 to June 2019

THE CHALLENGE

Standby load, heating empty homes and peak-time use waste money that many Bristol households cannot afford. Meter readings arrive after the fact and only show totals.

WHAT WAS TESTED

In the EU-Japan BigClouT project, Bristol City Council, Bristol is Open and Lancaster University built a tool that forecasts household energy use and reveals hidden waste.

RESULTS

Forecasting replaced backward-looking reports, so residents can act before they use the energy. The pilot put energy poverty at the centre of a smart city project, not on the side.

Innovators **Lancaster University, Bristol is Open, University of Tsukuba**

Predictive Home Energy-Management Tool, BigClouT Distributed City Data Platform, Bristol is Open City Testbed

INFRASTRUCTURE

Road condition monitoring from refuse trucks

Fujisawa, Japan · Finalised · July 2016 to June 2019

THE CHALLENGE

Surveying every street for faded markings, surface damage and dented guardrails is slow and costly.

WHAT WAS TESTED

Keio University and Fujisawa City fitted about 100 refuse trucks with underbody cameras, GPS, accelerometers and environmental sensors. Neural networks trained on drivers' own footage detect road damage and debris.

RESULTS

Refuse collection covers every street on a regular cycle, so the fleet gives a repeatable road survey at almost no extra operating cost.

Innovators **Keio University**

BigClouT Distributed City Data Platform

CLIMATE

Participatory sensing and air-quality monitoring

Fujisawa, Japan · Finalised · July 2016 to June 2019

THE CHALLENGE

The city learnt about illegal dumping, missed collections or damaged facilities only when someone reported them. Air-quality data came from a few fixed stations.

WHAT WAS TESTED

In the EU–Japan BigClouT project, Keio University and NTT East combined three moving data sources: officers' geolocated photo reports through MinaRepo, refuse trucks measuring air quality street by street, and festival-goers sharing live crowd updates.

RESULTS

Moving sources became a city-wide data network. One programme served both city operations and residents.

Innovators **Keio University, NTT East**

MinaRepo, Sensor-Equipped Refuse Collection Vehicles, Rokemon

INFRASTRUCTURE

Digital park and public realm maintenance

Fujisawa, Japan · Finalised · July 2016 to June 2019

THE CHALLENGE

Officers recorded park defects on paper. Staff transcribed reports by hand, often duplicating or losing them.

WHAT WAS TESTED

In the EU–Japan BigClouT project, Keio University and NTT East replaced paper with MinaRepo. City officers file geolocated photo reports, which the system routes to the right department and tracks digitally.

RESULTS

Reports come from trained officers, so the data arrives pre-validated and moves through a digital workflow instead of paper.

Innovators **Keio University, NTT East**

MinaRepo

MOBILITY

Skier flow monitoring

Chamrousse, France · Finalised · June 2016 to May 2018

THE CHALLENGE

Resort operators had no live view of where visitors gathered or how they moved between lifts and pistes.

WHAT WAS TESTED

In the Wise-IoT project, an app monitored skier flow and location across the resort. It ran on a semantic layer shared by six testbeds in Europe and South Korea.

RESULTS

Operators gained a real-time view of visitor movement. The pilot showed that IoT services built for one platform can run on another without rewriting.

Partners **CEA, University of Cantabria, KAIST, Sejong, FHNW**

INFRASTRUCTURE

Federated IoT experimentation testbed

Santander, Spain · Finalised · October 2014 to September 2017

THE CHALLENGE

Researchers and companies needed to test IoT services in a real city, not only in the lab.

WHAT WAS TESTED

In the FESTIVAL project, the University of Cantabria and Santander City Council federated the SmartSantander testbed with other European and Japanese testbeds.

RESULTS

Experimenters gained common access to city-scale IoT deployments, open data and living labs under an experimentation-as-a-service model.

Innovators **University of Cantabria**
SmartSantander

CLIMATE

Civil protection information

Genova, Italy · Finalised · April 2013 to June 2016

THE CHALLENGE

Citizens need to understand local environmental risks and know how to act in an emergency.

WHAT WAS TESTED

Genova and its Civil Protection Office built a mobile service on the national "I Don't Risk" campaign. It combines rules of conduct with live weather, hydrological and sensor data.

RESULTS

The service ran as a field trial on the EU–Japan ClouT platform.

City **City of Genova, Civil Protection Office**
ClouT Platform

BUILDING

Smile-based coupons

Santander, Spain · Finalised · April 2013 to June 2016

THE CHALLENGE

The ClouT project wanted to know whether a citizen service built in Japan could work in a European city.

WHAT WAS TESTED

Santander replicated Smiley Coupon, first trialled in Fujisawa. The app gives citizens and visitors personalised coupons based on how much they smile.

RESULTS

The clearest example of Japan-to-Europe transfer in the ClouT project.

Cities **Santander, Fujisawa**
ClouT Platform

MOBILITY

Public space for sustainable mobility

Florence, Italy · Ongoing · since January 2026

THE CHALLENGE

Traffic, public transport and visitors compete for limited space in Florence's historic centre, and the city must also adapt that space to a hotter climate.

WHAT IS BEING TESTED

Florence is reallocating public space to sustainable mobility, public transport and climate adaptation. Sensors and digital monitoring regulate access and check compliance.

PROGRESS

Florence is one of three demonstrator cities in the EU URBAN-FLOW project, with Valencia and Tampere.

Project **URBAN-FLOW**

MOBILITY

Automated transport and smart energy

Tampere, Finland · Ongoing · since January 2026

THE CHALLENGE

Tampere is growing fast and needs transport and energy systems that keep that growth sustainable and work for older residents too.

WHAT IS BEING TESTED

Tampere is testing automated public transport with flexible first- and last-mile connections, mobility services for older residents and bi-directional vehicle charging.

PROGRESS

Tampere is one of three demonstrator cities in the EU URBAN-FLOW project, with Valencia and Florence.

Project **URBAN-FLOW**

CLIMATE

Climate-resilient reconstruction

Valencia, Spain · Ongoing · since January 2026

THE CHALLENGE

Floods damaged public spaces in Valencia's southern districts of La Torre, Horno de Alcedo and Castellar-Oliveral.

WHAT IS BEING TESTED

The city is rebuilding these public spaces as climate-resilient, climate-adapted environments.

EXPECTED OUTCOME

A model for sustainable urban reconstruction that other European cities can replicate. Valencia is one of three URBAN-FLOW demonstrator cities.

Project **URBAN-FLOW**

CLIMATE

Closed-loop kitchen bio-waste

GZM Metropolitan Area, Poland · Ongoing · January 2025 to December 2027

THE CHALLENGE

Kitchen waste from flats is often mixed with other waste, which makes the organic stream hard to collect and reuse.

WHAT IS BEING TESTED

The Górnośląsko-Zagłębiowska Metropolia is testing a closed-loop system: resident engagement, separate household collection, collection validation, transport conditions and analysis of the organic waste stream.

SCOPE

About 4,000 households in multi-family buildings in Chorzów take part.

City **Górnośląsko-Zagłębiowska Metropolia (GZM)**

INFRASTRUCTURE

Smart City Urban Data Platform Jena

Jena, Thuringia, Germany · Ongoing · since December 2020, in production since 2021

THE CHALLENGE

City data sat in incompatible systems. Jena needed one GDPR-compliant data space under its own control, free of new vendor dependencies.

WHAT WAS TESTED

Data in Motion built and operates a standards-based urban data platform on city-owned infrastructure, with the City of Jena as data steward.

RESULTS

One API across city IoT sensors, live bus and tram telemetry and traffic signal data, with a GDPR compliance layer, an automated audit trail and automatic open data publication.

Innovators **Data in Motion, Kentyou**

AI-Driven Urban Data Analytics Platform, Eclipse sensiNact

PROPOSE A PILOT OR JOIN A CONSORTIUM

Have a challenge to test, or a solution to prove?

Cities can propose a challenge and host a pilot. Innovators and research partners can join a UTA-led consortium for EU and international funding calls. UTA matches partners, structures the pilot and supports the application.

contact@urbantechnologyalliance.org
urbantechnologyalliance.org/contact

ALL PILOTS ONLINE

Full pilot reports, contacts and new pilots as they launch.

urbantechnologyalliance.org/pilots

Solutions and tools

UTA innovators offer these platforms and tools to member cities. Cities have already tested each one, and UTA can help you test it in yours. Scan a code to open the solution's website.

1. **Find a match**
   Pick a solution that fits a challenge your city faces.
2. **Scan the code**
   Open the solution's website to see how it works and where cities use it.
3. **Contact UTA**
   Email contact@urbantechnologyalliance.org and we connect you with the innovator to plan a pilot.

Kentyou Eye

Kentyou, France

Smart city monitoring and decision-support platform. Combines real-time, historical and geospatial data in one view, with custom KPIs, predictive analytics and impact simulation.

WEBSITE
kentyou.com/kentyou-eye

Eclipse sensiNact

Kentyou, France

Open-source, edge-to-cloud IoT data platform. Collects data from devices of different makes through one common layer, with access control over raw data.

WEBSITE
eclipse.dev/sensinact

AI-Driven Urban Data Analytics Platform

Data in Motion, Germany

Open-source, model-driven platform that connects IoT sensors, traffic signals and city data. Includes a Model Privacy Analyzer for GDPR reporting.

WEBSITE
datainmotion.com

Crowd Monitoring Platform

CrowdScan, Belgium

Real-time crowd monitoring for public spaces and events. Shows crowd density, flows and risks to support safety, event management and planning.

WEBSITE
crowdscan.be

Geospatial urban analytics

Latitudo 40, Italy

AI and satellite imagery, with no physical sensors. Maps heat islands, land cover and vegetation, ranks priority areas and simulates planning scenarios.

WEBSITE
latitudo40.com

Digital Twin

WeMB, South Korea

Digital platform for energy management in buildings and districts. Combines IoT data, monitoring and analytics to cut consumption and improve operations.

WEBSITE
wemb.co.kr/en/digital-twin

Digital Maturity Assessment Tool

Caspera Lab, France

CSP Journey in a Box: workshops, maturity assessment, co-design and AI-supported monitoring that take organisations from strategy to implementation.

WEBSITE
caspera-lab.com

SmartSantander

University of Cantabria, Spain

City-scale IoT testbed with more than 12,000 sensors for parking, air quality, noise and transport. Open APIs and links to other international testbeds.

WEBSITE
smartsantander.eu

Transdisciplinary Mobility Innovation (TMI)

Nagoya University, Japan

Combines AI, digital twins and social science to predict mobility flows and test how new transport fits into people's daily lives.

WEBSITE
tmi.nagoya-u.ac.jp

Urban innovation platform

Knowledge Capital, Japan

Open innovation ecosystem in Osaka. Shared labs, offices and exhibition spaces where companies, universities, startups and citizens test and demonstrate technology.

WEBSITE
kc-i.jp

Solutions and tools

AI-Driven Urban Data Analytics

Universidade da Coruña, Spain

AI framework that takes in and analyses large urban datasets. Machine learning gives city managers predictive insight on mobility, resource use and environmental health.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/ai-driven-urban-data-analytics

BigClouT Distributed City Data Platform

University of Tsukuba, Japan

Distributed city data platform that combines open data, sensor feeds, web sources and citizen reports, using edge and fog computing with big data analytics.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/bigclout-distributed-city-data-platform

Bristol is Open City Testbed

Bristol is Open, United Kingdom

City-scale experimental network in central Bristol, set up by the city council and the University of Bristol, with networking, IoT and analytics for real-world research.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/bristol-is-open-city-testbed

ClouT Platform

NTT R&D, Japan

EU–Japan Cloud of Things platform with infrastructure, platform and software layers for data collection, storage and services in city field trials.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/clout-platform

EnviroSim Web Lite Public 3D Viewer

RealSim, Ireland

Browser viewer that lets anyone explore town-scale 3D digital twins of proposed developments on any device, with nothing to install.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/envirosim-web-lite-public-3d-viewer

Foreign-Visitor Problem Reporting and Volunteer Response

NTT East, Japan

Visitors report problems with a photo and short note. Local volunteers respond, and the city gets a geolocated record of where visitor services fail.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/foreign-visitor-problem-reporting

GANonymizer

Keio University, Japan

Deep learning on the phone finds and removes sensitive content from photos before users share them, so the original image never leaves the device.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/ganonymizer

HukuRepo

University of Tsukuba, Japan

Android app that gives international visitors real-time tourism, traffic and environmental information, backed by digital signage at the main transport hub.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/hukurepo

Keio Secure Mobile Sensing Platform

Keio University, Japan

Urban mobile sensing platform secured end to end: device hardening, intrusion detection, encrypted device-to-cloud traffic and authenticated cloud access.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/keio-secure-mobile-sensing-platform

M-Sec Blockchain Middleware

ICCS, National Technical University of Athens, Greece

Makes stored monitoring data tamper-evident by anchoring record hashes on a blockchain, so any later change is detectable and audits are fast.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/m-sec-blockchain-middleware

M-Sec Data Marketplace

ICCS, National Technical University of Athens, Greece

Blockchain marketplace where data owners sell anonymised IoT data for tokens. A smart contract completes each purchase with no intermediary.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/m-sec-data-marketplace

MinaRepo

Keio University, Japan

City field officers report maintenance problems with a photo and GPS location. The system categorises each report, routes it to the right department and tracks it.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/minarepo

Solutions and tools

MyIno App

Inovallée, France

Web and mobile app for people working in a technology park: real-time transport, restaurant menus, news, events, a company directory and a map.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/myino

Pollution-Aware Walking Route Service

Lancaster University, United Kingdom

Combines pedestrian movement and air-quality data to suggest walking routes that avoid the most congested and polluted streets.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/pollution-aware-walking-route-service

Predictive Home Energy-Management Tool

Lancaster University, United Kingdom

Forecasts household energy use and highlights avoidable consumption, such as standby load and peak-time demand, so residents can act early.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/predictive-home-energy-management-tool

RealSim City

RealSim, Ireland

Simulation and scenario modelling that lets cities test the long-term impact of policy, infrastructure and environmental decisions before they make them.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/realsim-city

Rokemon

Keio University, Japan

Festival app in which visitors share live, anonymous updates on events and crowding. Venue signage uses the updates to spread crowds between event areas.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/rokemon

Senior Care

Worldline, Spain

IoT platform for tele-assistance providers. Home sensors feed a rules engine that raises emergency and unusual-behaviour alerts for operators.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/senior-care

Sensor-Equipped Refuse Collection Vehicles

NTT East, Japan

Refuse trucks with 13 types of atmospheric sensor turn collection rounds into a mobile, street-level air-quality network at low cost.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/sensor-equipped-refuse-collection-vehicles

Sensorised Waste Collection Vehicles

NTT R&D, Japan

Garbage trucks with a custom sensor board, per-second GPS and environmental sensors, producing route data and street-level air-quality readings.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/sensorised-waste-collection-vehicles

Shonan Future Verse

Keio University, Japan

High-precision digital twin that syncs real-time city data with simulations, so planners and citizens can rehearse policies and disaster response.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/shonan-future-verse

Smart city collaborative platform

Czech Smart City Cluster, Czechia

Network that connects municipalities, companies and research institutions, with project support and knowledge sharing across smart city sectors.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/smart-city-data-platform

Smart Infrastructure Monitoring

NTT East, Japan

Fibre broadband, communications and ICT services that give cities and regions the connectivity behind digital public services.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/smart-infrastructure-monitoring

SmileCityReport

Keio University, Japan

Residents report on city events by photo and share only within defined groups. Contributors can offer photos for sale on the M-Sec marketplace.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/smilecityreport

Solutions and tools

SOXFire Secure Data Distribution Framework

Keio University, Japan

Encrypted data sharing for designated user groups, so only members of the intended group can read citizen reports.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/soxfire-secure-data-distribution-framework

Super City Data Federation Platform (S-DAP)

University of Tsukuba, Japan

Urban data platform that joins transport, health and administrative data for the Tsukuba Super City, using decentralised identifiers to protect privacy.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/super-city-data-federation-platform-s-dap

Urban Environmental Sensing Fleet Extension

Keio University, Japan

Extends a secured mobile sensing platform from refuse trucks to restaurant, bus and university classroom ventilation monitoring.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/urban-environmental-sensing-fleet-extension

Urban Innovation Service

Smart City Consortium (SCC)

Collaborative platform that links industry, academia and public bodies through networking, research and international cooperation.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/urban-innovation-service

Visitor Information Sensing and Signage Extension

NTT East, Japan

Adds sensor-based weather and congestion data to visitor information and shows it on digital signage at a city transport hub.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/visitor-information-sensing-signage-extension

VR Planning Consultation in Public Libraries

RealSim, Ireland

VR headsets in public libraries, supported by trained staff, let residents walk through planning proposals at full scale.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/vr-planning-consultation-in-public-libraries

Wi-Fi Pocket Sensor Mobility Analysis System

JRISS, Japan

Risk and resilience assessment for infrastructure and urban systems, combining modelling, scenario analysis and decision support.

MORE ON THE UTA WEBSITE

urbantechnologyalliance.org/solution/wi-fi-pocket-sensor-mobility-analysis-system

Join UTA

Bring your challenge. Test your solution. Shape the future of cities.

City

Open a challenge and test solutions before you scale them.

Innovator

Test and validate your solution in real city environments and prove its impact.

Partner

Contribute expertise, funding or coordination to support pilots.

Membership levels

Associate

Explore, contribute, gain visibility

- Use UTA member logo and materials
- Join Working Groups
- Access platform and communications
- Contribute to draft reports
- Logo featured on UTA website
- Visibility and recognition
- Attend member meetings
- Promotion of news and press releases

Principal

Participate, vote, partner

All Associate privileges, plus:

- Deploy solutions in UTA testbeds
- Propose new testbeds and use cases
- Vote in Working Groups
- Use UTA-approved testbed mark
- Listing on UTA marketplace
- Exhibit at UTA trade shows
- Access business matchmaking
- Discounts on member meetings

Strategic

Influence, approve, govern

All Principal privileges, plus:

- Seat on UTA Board
- Define and drive strategic roadmap
- Approve deliverables and testbeds
- Chair Working Groups
- Set sustainability benchmarks
- Approve annual budget and plan
- Official spokesperson role
- Eligible for officer position

ANNUAL FEES	ASSOCIATE	PRINCIPAL	STRATEGIC
Large technology organisations	Free*	€5,000	€25,000
Cities and non-profits	Free*	Free**	€15,000
SMEs	Free*	€3,000	€15,000
Startups and micro-enterprises	Free*	€1,000	€5,000

* Free for the first year. Associate members then upgrade to Principal or Strategic, or may continue as Associate at the UTA Board's discretion, based on equivalent technical contributions. ** Free for cities bringing an approved UTA testbed; €3,000 otherwise. SMEs and micro-enterprises follow the European Commission definition.

Notes

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Urban Technology Alliance

Helping to shape the cities of tomorrow

CONTACT

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