DES2023 will explore the cities of the future through aerotaxis or digital urban twins

The international summit, from 13 to 15 June, will analyse how disruptive technologies are transforming mobility and driving Smart cities

The CIO of Kyiv City Council will share the digital strategies they have implemented that anticipate risks and threats in the capital

Madrid, 5 May 2023. – The most futuristic mobility options are getting closer and closer. Spain is beginning its journey to position itself on the international map as a benchmark in innovation. There are several examples of this: the first experimental flights with aerotaxis, or the hyperloop prototype, an ultra-fast, sustainable and automated means of transport that connects passengers and cargo efficiently and without direct emissions, designed in Valencia. Likewise, the first buses powered by alternative energies such as hydrogen are already beginning to circulate on the streets of cities such as Madrid, Barcelona and Seville.

The seventh edition of DES – Digital Enterprise Show, Europe's largest event on digital transformation and exponential technologies, will delve into how digitalisation and alternative fuels are driving the new CASE mobility (connected, autonomous, social/shared and electric) as well as safe, while transforming cities and promoting smart management models. It will be held in Malaga from 13 to 15 June at the Smart Cities & Urban Mobility Forum. This forum will address, among other issues, the rise of intermodality in the transport of goods and passengers, incorporating technological solutions based on micro-mobility or last mile. It will also reveal how work is being done to deploy flying taxis that will improve urban and interurban connections.

Another recent innovation that is beginning to bear fruit in urban mobility is the use of alternative propulsion systems such as green hydrogen or electricity. In fact, the year 2035 is the deadline set by the European Union for the sale of cars with internal combustion engines. Well-known brands of buses and lorries have joined this regulation, which, by law, could continue to circulate until 2040.

In this context, the congress will bring together organisations that are stimulating the green transition, such as the Andalusian Hydrogen Cluster or the company Clantech, which will share how progress is being made in the application of clean sources in the transport sector. At the same time, the trend of car sharing will be studied, thanks to the platforms that promote it, and the progress of the autonomous vehicle with projects that are beginning to become effective.

Digital twins, keys to smart city management

Artificial Intelligence-based solutions are responding to the management of new models of sustainability or increasingly pedestrianised environments, while improving the management of traffic and people flows. The combination of AI with disruptive technologies such as digital twins is promoting the virtualisation of urban spaces to enable accurate decision-making, achieve energy savings, predict risks and, ultimately,
generate new, more comfortable and safer public spaces. Cities such as Herrenberg (Germany) have already embarked on creating their digital twin with the aim of boosting tourism and predicting the emotional response of visitors. Likewise, Madrid has recently announced the possibility of undertaking a digital twin to simulate the impact of construction works.

As an exponential technology, DES2023 will be addressing more than 16,000 professionals on the importance of having digital twins to boost Smart Cities. Lucia Alcibar-Arechuluaga, Head of Business Development at Inkolan, a company that provides data on municipal gas, water, electricity and telecommunications infrastructures and has helped to build virtual replicas of areas of Zaragoza and Bilbao, will discuss how the integration of these models achieves improvements in city planning.

Urban technology in warfare

The international forum will also focus on geopolitical current affairs. Thus, it will look at the digitalisation strategies that are being carried out in Kiev, because of the conflict that began in 2022, and which are saving lives. A delegation from the Ukrainian capital will discuss how technology helps to prevent threats within the city, attacks or potential disasters that may arise due to the poor state of equipment. Petro Olenych, Deputy Mayor for Digitalisation of Kyiv City Council; Victoria Itskovych, Deputy Director at the Department IT at Kyiv City Council; and Oleg Polovynko, CIO of Kyiv City Council, will present the city’s digital information plans for citizens in times of war.