

PRESS RELEASE

In collaboration with the Regional Government of Andalusia and Málaga City Council and the participation of SEAT

THE MOST ADVANCED R&D LABORATORY IN SOUTHERN EUROPE FOR CONNECTED DRIVING, POWERED BY TELEFÓNICA AND DEKRA, OPENS ITS DOORS IN MÁLAGA AND NOW OFFERS A TESTING ENVIRONMENT

- The centre provides interested companies with a complete testing environment to validate devices, applications and services that support the development of connected driving with 5G solutions and V2X vehicle technologies.
- The laboratory offers an outdoor testing area of 51,000m² equipped with Spanish mobile phone frequencies and a shielded chamber, unique in Europe, with international frequencies.
- It is also available for start-ups through the Andalucía Open Future programme #RetoV2X.

Malaga, February 3, 2020 - DEKRA, a global expert in testing, inspection and certification, and Telefónica, together with the Regional Government of Andalusia and Málaga City Council, today unveiled the most advanced R&D laboratory in southern Europe for the development of connected driving in Málaga's Andalusia Technology Park, with all the infrastructure needed to test 5G solutions and V2X (*vehicle to everything*) technologies, which also includes the participation of SEAT.

The presentation was attended by Francisco de la Torre, Mayor of Málaga; Manuel Ortigosa Brun, Secretary General for Business, Innovation and Entrepreneurship of the Regional Government of Andalusia; María Jesús Almazor, CEO of Telefónica Spain; Fernando Hardasmal, Executive Vice President of the Product Testing Services Division, DEKRA SE; César de Marco, Head of Communication Technologies & EMC at SEAT and Miguel Arias, Global Director of Entrepreneurship at Telefónica.

The centre already provides a complete and solid testing environment to validate devices, applications and services that contribute to strengthening the development of connected driving with the aim of avoiding traffic accidents, improving the driving experience and contributing to environmental protection. In fact, according to the NHTSA(National Highway Traffic Safety Administration) V2X-connected technologies and car applications can prevent 600,000 traffic accidents per year.

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OUTDOOR AREA FOR NATIONAL FREQUENCIES

This R&D laboratory, a benchmark in Europe, offers a 51,000m² outdoor test area for Spanish frequencies where junctions, straight and curved streets, unpaved areas, beacons, roundabouts and tunnels have been installed, all of them fitted with sensors. The circuit is completed with real and simulated vehicles, as well as continuous monitoring. This is thus a testing environment for connected driving that replicates real traffic conditions and behaviours, with the security that comes from being a private test area.

Some of the business lines with the V2x technology to be carried out at this Centre will be connectivity and on-board services; advanced navigation and infrastructure; vehicle monitoring and maintenance; payment automation; safety and accident prevention and assisted driving and autonomous vehicles, among others.

The external area is currently open to component, device, infrastructure and vehicle manufacturers to further advance the development of connected driving in Europe. In fact, it has already been accessed by the participants of the first C-V2X PlugTest™ organised by ETSI, in collaboration with 5GAA, which attracted a total of 17 top-level C-V2X solution and device providers, and members of ETSI and 5GAA, who verified the interoperability between their devices and solutions. Observers from different organisations who were present witnessed more than 300 tests, based on a plan with more than 38 test scenarios, which yielded a 95% success rate.

During today's presentation, several use cases were shown in this outdoor area in which a real car detected the presence of virtually recreated vehicles on the road and sensorised obstacles that allow the car to "talk" to the infrastructure and the rest of the vehicles in order to anticipate risk situations and thus avoid accidents.

SHIELDED CHAMBER FOR INTERNATIONAL FREQUENCIES

The installations are completed with a shielded chamber, equipped in collaboration with Ericsson as a technology partner and unique in Europe, which allows other international frequencies to be tested. The equipment consists of two 5G antennas; servers; connectivity for on-board services; big data analysis; geolocation services; vehicle monitoring (management CPD) and infrastructure use optimisation software.

In addition, Telefónica, through the Andalucía Open Future #RetoV2X, an initiative of the Regional Government of Andalusia and Telefónica to accelerate technology-based start-ups, has selected five start-ups (Datlight SL; EV2XDigital Medical Services; Move Mode; eWatchTower and *Semáforo Conectado*) that will benefit from a 12-month acceleration programme through which they will have access to these facilities with the aim of strengthening the entrepreneurial ecosystem on V2X technology and the capacity of the Andalusian technology industry.

During today's presentation, the start-ups 'Digital Medical Services' and '*Semáforo Conectado*' (connected traffic light) showed the tests of their developments that they will be conducting on the circuit, consisting of a connected ambulance that offers the possibility of carrying out patient

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emergency triage inside the vehicle on the way to the hospital, minimising reaction times and optimising emergency care, and a traffic light that interacts with cars and pedestrians.

This centre currently has 15 employees with an initial investment of more than 5 million euros.

STATEMENTS BY SPOKESPERSONS

Maria Jesus Almazor, CEO of Telefónica Spain: "At Telefónica we are committed to the mobility of the future, connected mobility and the next step, autonomous mobility. To make this a reality, we must overcome a series of challenges, including connectivity, so that all the players in this ecosystem opt for mobile access and C-V2X (Cellular vehicle-to-anything) technology as the language of communication. This Centre, the only one of its kind in Europe, is a key element in advancing this path of standard connectivity to make the connected car a reality."

Andrés Moreno, General Manager of Dekra Spain: "This R&D Lab is a source of great pride for DEKRA as we are international pioneers in the field of Connected Driving tests and trials and our goal is to take DEKRA to international leadership in these technologies, given DEKRA's important links with the automotive sector and connectivity technologies, especially in Malaga. C-V2X and 5G technologies are going to be uniquely important in the coming years and are going to facilitate a major transformation of the sector and of the business models around it. For us, it is a priority to be part of that transformation that is a key element of the global digitalisation processes we are witnessing. The cooperation with Telefónica is proving to be second to none and is undoubtedly essential; we also hope to strengthen it in other vertical markets, while communication and coordinated support from the Regional Government of Andalusia, Malaga City Council and PTA are extremely necessary as we are covering such novel technologies".

César de Marco, Head of communication technologies & EMC at SEAT: "This type of lab with 5G solutions and V2x technology allows SEAT to continue exploring new solutions for connected cars that facilitate a safer and more comfortable driving experience. The new V2X technologies allow the car to connect with its environment and thus anticipate situations of risk in real time, turning the car into a kind of "sixth sense" for the driver. In short, it is one step away from the completely cooperative and autonomous car".