

EUROFILE NEWS

Spanish highway improvement

Spain is planning to improve the V-30 highway route in the city of Valencia. The highway runs from the port in the south west of the city and links with the industrial zone located to the north east of the city. The route also provides an important connection to the city's airport, which is located in between the A-3 and V30 highways. The work has an estimated cost of €145 million and is intended to increase capacity, with the plans being drawn up by the Ministry of Development.

Munich Autobahn widening

Preparation work is starting on a widening project for the A99 Autobahn, which runs around the city of Munich in the southern German state of Bavaria. The project will see the A99 being widened from its current six lanes to eight lanes on the north side of the city, between the junctions with the A9 and A92 Autobahn routes. This stretch of the A99 is close to the Allianz Arena as well as the city's international airport and frequently suffers heavy congestion at peak periods of the day as well as from tourist traffic and during sports events. Construction activity will commence in the second quarter of 2017 and is expected to be completed by 2019. Widening this section of the A99 is expected to cost in the order of €153 million, which is higher than originally estimated due to the need to upgrade or rebuild a number of bridge crossings. Plans have been drawn up for widening the entire A99 as congestion can cause delays all along the route, particularly in summer months when there is heavy north and southbound tourist traffic passing around Munich. Widening the entire 53.5km length of the A99 is expected to cost in the region of €400 million to carry out. Much of the A99 was built in the 1970s with further sections in the north and west opening in 2009. However the ring remains incomplete as the final section in the south of Munich has been the topic of much debate.

Italian market for road machinery jumps

Italy has seen growth in the market for road construction machines in 2015. According to data from the SaMoTer-Prometeia Outlook analysts, the country's exports of road construction machines grew 27.5% while its imports of equipment for the market jumped 30.8%.

This emerges from data analysed by SaMoTer Outlook, the construction equipment outlook set up by Veronafiere in collaboration with Prometeia and the

information input of Unace.

This resurgence in demand for equipment comes at an opportune time for the organisers of the upcoming event for the bitumen sector, Asphaltica, which will highlight road paving technologies and solutions, safety and road infrastructure. This show is scheduled to run alongside the 30th edition of SaMoTer, the triennial event in Italy for earth moving, site and building machinery.

Airware acquires Redbird

Airware, a commercial drone solutions provider, has acquired Redbird, a France-based pioneer in drone data analytics that has been working closely with Caterpillar.

Redbird focuses on the mining, quarrying, and construction industries through sophisticated geospatial analytics which will be integrated into the Airware Aerial Information Platform. This will give customers the combined power of Redbird's industry-specific analytics and Airware's enterprise-focused workflow, compliance, and security features, according to a joint statement.

"Commercial drone technology brings these operations into the digital world while offering faster, cheaper and higher-quality data and analytics," said Jonathan Downey, founder and chief executive of Airware.

Customers can plan drone flights, capture high-quality aerial data, analyse it and create detailed, survey-grade mining and construction site maps of more than 400 hectares a day, per drone, for immediate and exact production tracking and site safety assessment.

"Building materials companies and contractors are no longer



experimenting with drones, but are looking to put drones to work for their businesses," said Emmanuel de Maistre, co-founder and chief executive of Redbird.

Redbird was founded in 2013 and Airware was established in 2011. Redbird's Paris office will become Airware's European headquarters.

In May, Caterpillar and Redbird expanded the geographic scope of their collaboration. Redbird's data analysis and reporting tools are now offered to Caterpillar customers worldwide instead of only in Europe, Africa and the Middle East, said George Taylor, vice president for digital at Caterpillar.

Last March, de Maistre told World Highways how it was working with Caterpillar to

help the machine manufacturer move towards more so-called project site overview. The Holy Grail is to integrate machine equipment information with 3D site information. De Maistre calls it "Google Map for quarries or construction sites".

In 2014, Redbird partnered with Bergerat Monnoyeur, Caterpillar's exclusive dealer in France and several other countries, including Belgium and Poland. The objective was to develop specific data analytics for Bergerat's customers. But Redbird is not a drone maker, nor usually a drone operator. It provides a service only through its advanced cloud platform called Cardinal, named after a common small North American bird. No specific software is required, only internet access and a login.

Norway's long tunnel

Norway looks set to retain its position as a leader in tunnelling with the project moving forward to build a new link connecting the city of Stavanger with Bokn.

This 27km road tunnel is being designed to carry four lanes of traffic, which would make it the world's longest underwater road tunnel. It will also be the world's longest four lane tunnel as well as the world's deepest road tunnel, dropping around 385-390m below sea level. The Rogaland Fixed Link will form part of the E39 route, connecting Kristiansand, Stavanger, Haugesund and Bergen in the south of Norway.

Also known as the Rogfast, the tunnel runs from

Harestad in Randaberg to Arsvågen in Bokn. In addition to the main tunnel there will be an additional 4km link to the island of Kvitsøy. Once the tunnel is open, it will shorten the journey time between Stavanger and Norway's second city, Bergen.

The project forms part of a plan by the Norwegian Government to improve road links in the country and to construct bridges and tunnels so that drivers no longer have to use ferries or take long detours. The project is being planned by Norconsult and the tunnel is expected to cost in the region of €1.5-€1.6 billion to build, with tolls paying back a chunk of the construction costs. The link is expected to open to traffic in 2025 or 2026.