“We have great timing”: Thoughts from Terranet’s CTO after the ADAS & Autonomous Vehicle Expo

Last week, Terranet’s CTO Nihat Küçük visited the ADAS & Autonomous Vehicle Expo in Stuttgart to take the pulse of the ADAS market and explore the latest in automotive tech. Here are his main takeaways from the conference.

More focus on testing, simulation, and data collection as ADAS matures

“We’re seeing now how ADAS is maturing: cutting-edge technology that was invented 5 years ago is gradually but surely entering the series automotive production, creating a need for OEMs to have strong partners for technology integration, testing, and simulation.

Testing and high-speed in-vehicle data recording is a necessity for the further development of autonomous vehicles. To make ADAS systems better, vast amounts of raw data need to be captured, packaged, synchronized, and stored both in-vehicle as well as in the cloud. Manufacturers are asking for more computing power and ready-to-use testing and simulation environments to verify the design and implementation of sensor systems and connected components.

For the Self-Driving layers three and above (as defined by SAE’s standards) you need to simulate what happens if one (or more) sensors fail in certain traffic situations, how your fallback or backup strategy works, and how you can avoid severe accidents while still having full control of the movement of the vehicle. This focus on testing, simulation and data is largely driven by ADAS regulations, such as ISO 26262. We can expect more safety regulations and standards around ADAS technology and autonomous driving as adoption of the technologies continues.”

Lidar is becoming mainstream – and Terranet benefits from it

“The well-known Lidar manufacturers had their established place at the conference, and it’s clear that Lidar has truly arrived as a technology that the automotive industry has embraced. This is good news for Terranet – just like Lidar, our BlincVision system is also a laser-based scanning technology, but with higher 4D accuracy and providing an order of magnitude faster detection and classification response time. This reconfirms our position that BlincVision is a lifesaving complement to Lidar in urban traffic situations

I didn’t see many software suppliers focusing on the actual object perception stack that is required on top of the raw vision data layer that Lidar sensors generate. In other words, I didn’t see exhibitors offering off-the-shelf solutions for object detection, classification, or movement. These are all crucial software components to save more lives in complex traffic situations, and Terranet is developing them as part of its BlincVision product. This is another example showing the great opportunity down the road for combining Lidar and BlincVision.”

Great timing for BlincVision

“I haven’t seen any vision based ADAS road safety technology that is even close to what we are doing with BlincVision. That reinforces my belief that Terranet is on the right path, and that we are at the forefront. Moreover, I think we have good timing. Of course, we need to be humble about the fact that technology adoption and integration generally takes time in the automotive industry.
But given the rapid rise of systems for testing and integration, I believe OEMs, Tier-1’s, automotive suppliers and technology partners will be ready to integrate our technology into their vehicle platforms in a standardized process by the time we have completed the BlincVision prototype.

BlincVision will not have additional or higher integration, testing, or simulation requirements than today's sensor technologies, including lidar."