

High-precision GNSS Award for KU Leuven Ecochallenge Team



Septentrio recently awarded the KU Leuven Ecochallenge team – the winners of the Galileo Masters (Flanders Challenge) of the European Satellite Navigation Competition (ESNC) – a special prize of the AsteRx-m UAS receiver for their proposal to use high-precision, high-reliability Galileo receivers to modernise inland waterway transport by introducing autonomous technology for the vessels.

The judging panel were impressed with the proposal from the KU Leuven Ecochallenge team to use high-quality Galileo receivers to improve the safety and efficiency on autonomous and existing vessels (which can be retrofitted with the solution.) It was very ambitious and offers a pragmatic step towards rejuvenating inland waterways as a viable ecological alternative for freight transportation.

The AsteRx-m receiver board won by KU Leuven Eco-challenge team is a leading GNSS solution for applications in autonomous and unmanned vehicles, such as drones. The AsteRx-m UAS offers centimetre-level accuracy at only 700mW using L1/L2 GPS and GLONASS RTK.

Overall Winner

The KU Leuven team also participated in Ecorace Challenge organised by the Flemish Waterways Agency and was both the overall winner in the cargo category as well as being voted the most innovative vessel in 2016.

Jan van Hees, director of Business Development at Septentrio stated that exploiting inland waterways has been identified as a critical development for easing the pressure on road networks. High-precision high-reliability positioning technology using GNSS is an essential element of the development. He also judged that the KU Leuven team have demonstrated an innovative autonomous small vessel prototype already to move cargo safely and efficiently on the Flemish waterways and he is looking forward to continued collaboration as they further develop this technology for bigger ships.

Dr. Geert Waeyenbergh of KU Leuven who mentored the KU Leuven Ecochallenge team added that the team was very pleased with their performance winning the Septentrio Prize and the Ecorace Challenge together in the same year. He is convinced that the received AsteRx-m will further help research and development of better ships going into the future.