

## MAGNA ENHANCES ADAS CAPABILITIES BY JOINING 5G INNOVATION PROGRAM

- NorthStar partnership with Telia and Ericsson to help support Magna's V2V and V2X developments
- Private 5G network testing environment established at Magna's test track in Sweden
- Magna to have access to 5G mmWave technology, enabling low latency gigabit speeds

AURORA, Ontario, December 4, 2023 – Magna, a leading global mobility technology company, is enhancing its automated driving capabilities by joining NorthStar – Telia Sweden and Ericsson's 5G innovation program for industrial enterprises. As part of the agreement, Telia and Ericsson have built a dedicated, private 5G network at Magna's test track located in Vårgårda, Sweden, where new cutting-edge Advanced Driver Assistance System (ADAS) solutions in vehicle-to-vehicle (V2V) and vehicle-to-everything (V2X) connectivity are being trialed.

As part of NorthStar, Magna will have access to 5G millimeter wave (mmWave) technology, enabling low latency gigabit speeds and seamless connectivity for new ADAS trials. Additionally, the use of mmWave technology enables ongoing research into joint sensing and communication systems.

"By utilizing the latest advancements in mobile networks, we are able to accelerate the automotive domain by offering sensor enhancements and as a result offer more capable and competitive ADAS products," said Bill Snider, President of Electronics.



*Magna joins NorthStar program to test V2V and V2X connectivity on their test track in Vårgårda, Sweden*

“Our focus is not only on meeting challenging technical requirements, but also on developing products that can help anticipate critical situations to prevent accidents, ultimately making the roads safer for all.”

Magna’s test track will feature the 5G network, delivering gigabits data speeds and ultra-low latency. Leveraging the 26GHz frequency band and 400MHz bandwidth, this network is crucial for Magna’s driving automation and driver support systems, which rely on real-time data from vehicle sensors. Fast network speeds and quick response times are essential for timely alerts to drivers, preventing accidents, and minimizing their impact.

NorthStar’s 5G network is powered by Ericsson dual-mode 5G Core, which connects to Telia’s existing public 5G network. This interconnectivity will enable Magna to benefit from high-speed connectivity across large geographical areas.

“As an industry leader in ADAS technologies, Magna is exactly the kind of company we envisioned joining us when we started the NorthStar program,” said Magnus Leonhardt, Head of innovation and strategy at Telia Sweden’s enterprise business unit. “The solutions they develop are based on the premise that vehicles and road users can share data in near real-time. To achieve that requires ultra-fast and reliable connectivity that you can trust, and that is precisely what 5G has been developed for. This is a great opportunity to really push the boundaries of 5G and the millimeter wave technology.”

Magna’s ADAS technology supports driver safety by effectively reducing the risk of serious accidents or preventing them altogether by controlling steering, brakes, and acceleration. By integrating the driver’s needs and environment, Magna creates an exceptional driving experience. These advanced technologies pave the way for future autonomous driving and new mobility solutions.

“We are thrilled to have Magna joining NorthStar and to continue to put the power of 5G in the hands of global leaders within the automotive industry. Ericsson’s 5G mmWave technology enables a broad set of use cases with its low latency and very high speeds that will be key for new time-sensitive safety applications.”, said Nora Wahby, Head of Northern and Central Europe, at Ericsson.

## TAGS

5G Network, ADAS, V2V, V2X, JCAS

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## ABOUT MAGNA

Magna is more than one of the world's largest suppliers in the automotive space. We are a mobility technology company built to innovate, with a global, entrepreneurial-minded team of over 181,000 employees across 344 manufacturing operations and 104 product development, engineering and sales centres spanning 29 countries. With 65+ years of expertise, our ecosystem of interconnected products combined with our complete vehicle expertise uniquely positions us to advance mobility in an expanded transportation landscape.

For further information about Magna (NYSE:MGA; TSX:MG), please visit [www.magna.com](http://www.magna.com) or follow us on social.

## ABOUT NORTHSTAR

NorthStar is a 5G innovation program run by Telia and Ericsson that focuses on helping industrial companies reinvent better connected business by accelerating the adoption of 5G, a standard developed specifically for demanding applications such as vehicles, machinery or critical infrastructure that require robust and secure mobile connectivity. The program, launched in February, targets customer innovation and R&D units in selected industries, initially focusing on the automotive industry and the development of smart and sustainable transport solutions. At the center of the program is a new purpose-built 5G innovation network. The network connects a new 5G core, the brains of a mobile network, to Telia's existing public 5G network, which is currently being rolled out across Sweden.

Partners can also build dedicated network infrastructure – for example at test sites and R&D facilities, like Magna's test track in Vårgårda, and connect it to the innovation network. The ability to leverage both the public network and dedicated networks allows customers to access the innovation hub regardless of where they are located.

One area the program will explore, with funding from the EU, is the development of 5G transport corridors along key routes in Sweden, ensuring that vehicles such as autonomous trucks benefit

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from secure connectivity when switching between private and public 5G networks as they travel along highways, cross borders, and enter or exit confined areas.

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