PRESS RELEASE
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NX NextMotion receives road approval

- **Manufacturer and platform-independent drive-by-wire solution**
- **NX NextMotion meets strict requirements for road approval**
- **Comprehensive system integration and safety features**

Pfronstetten-Aichelau (Germany). Arnold NextG, an international technology company and leading advance developer in the future field of autonomous mobility, presents its pioneering NX NextMotion drive-by-wire technology, which is suitable for both series production and retrofitting. This manufacturer- and platform-independent solution sets new standards and is now approved for road traffic.

Drive-by-wire technologies play a decisive role in the mobility of the future. However, a technology like NX NextMotion has not existed until now. With its multi-redundant central control unit, Arnold NextG offers a unique, revolutionary plug-and-play solution that can be used in both existing and new vehicles across all sectors. The special feature: NX NextMotion has an interface for remote driving/teleoperation, remote control and autonomous driving. The associated applications enable a wide range of different uses in various mobility sectors.

NX NextMotion meets high standards for road approval

The pioneering NX NextMotion technology has now received road approval. This approval confirms that the very strict international safety standards, UN ECE R79 and UN ECE R13 (Economic Commission for Europe), for braking and steering systems are met and that safety and performance are guaranteed at all times. Background: UN ECE R79 generally defines the safety requirements for the steering system to ensure the structural integrity and reliability of the steering. The associated requirements have been supplemented in recent years in order to also meet drive-by-wire systems in the future. Among other things, UN ECE R13 defines the criteria for braking performance.

The system also meets the requirements for electromagnetic compatibility (EMC) in accordance with UN ECE R10, which describes how well an electronic device functions in its environment without causing or being affected by electromagnetic interference. In addition, the strict Volkswagen AG 81000 standard for electrical and electronic components in classification level 5 is also met. This means that the components must meet the highest quality and safety requirements.

Comprehensive system integration and safety features

With NX NextMotion, Arnold NextG enables such comprehensive system integration that the vehicle's primary and secondary functions can be intelligently controlled. This includes the control of essential systems such as steering and brakes (primary functions) as well as additional functions such as lights or indicators (secondary functions). Complete system monitoring ensures continuous diagnosis and monitoring of the current status of all systems in order to detect and rectify potential problems at an early stage.

Safety-related reactions, such as the emergency stop (e-stop) in the event of a timeout, guarantee that the vehicle comes to a safe standstill automatically, even in emergencies. The multiple redundancy in the system architecture ensures maximum availability through fail-safe and fail-operational mechanisms which, in the unlikely event of a fault, transfer the system to a safe state or ensure that the system remains functional. In other words, the multi-redundancy of the central control unit, developed and designed in accordance with the ISO 26262 (ASIL-D) and 61508 (SIL3) safety standards, ensures maximum availability and safety at all times.

Arnold NextG also pays the utmost attention to cyber security: NX NextMotion also complies with the international standard for cyber security in the automotive industry (ISO/SAE 21434). This ensures that vehicles are protected against cyber threats throughout their life cycle.

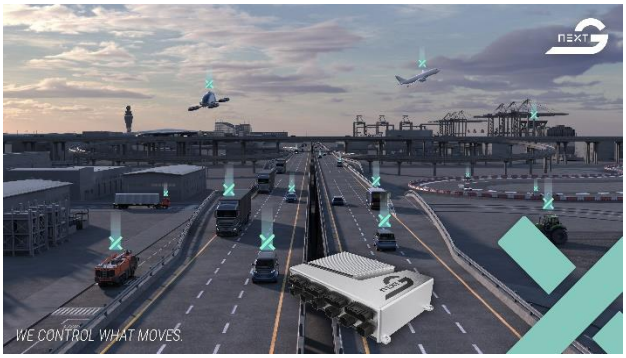
"Product liability is the biggest challenge in this context. This is a priority for us, as are safety and standards. As a young company, we are meeting the associated requirements with an international team of engineers and developers who already have 25 years of experience in this field," says Kevin Arnold, CEO of Arnold NextG GmbH.

The future starts now

Arnold NextG is setting new standards with its pioneering NX NextMotion technology, which will be available to the market from the fourth quarter of 2024. "NX NextMotion is not only a technological innovation, but also a milestone on the way to safer, more efficient, more sustainable and, of course, more accessible mobility," says Kevin Arnold.

Multi-redundant central control unit NX NextMotion

Source: Arnold NextG



NX NextMotion - manufacturer and platform-independent drive-by-wire solution

Source:: Arnold NextG

Kevin Arnold, CEO Arnold NextG

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About Arnold NextG GmbH

Arnold NextG realizes the safety-by-wire® technology of tomorrow: the globally unique and multi-redundant central control unit NX NextMotion, which enables vehicle-independent, fail-safe and individual implementation. As an independent advance developer, incubator and system supplier, Arnold NextG takes over the planning and implementation - from the vision to road approval. With the road approval of NX NextMotion, we are setting the global drive-by-wire standard. www.arnoldnextg.de