

## **Harman International Automotive Division and Nokia Pave the Way for standardized Interface Between Smartphones & Car Infotainment**

*Mobile technology and services to be available via in-car systems*

**Karlsbad, 17<sup>th</sup> May 2010** – Harman, the global market leader in high-end Infotainment and Audio Systems, is working together with Nokia, the pioneer in mobile telecommunications and the world's leading maker of mobile devices, to develop technology which seamlessly integrates smartphones into in-vehicle infotainment systems.

In addition to providing the full range of smartphone features, services and applications through the high resolution screens and audio systems embedded in the car, the connection also supports information exchange between the smartphone and the car; and information retrieval through GPS functionality.

Hence, location based services could be enabled by combining GPS information from the smartphone or car with key vehicle data such as low oil or fuel warnings – in this case the nearest garage or service station would be sourced and displayed with the option to navigate directly there. Hotel or parking searches, for example, could be backed up with details of availability and pricing and, where appropriate, booked online or by telephone. In addition, ADAS\*-based safety features may also be supported, for example, to warn drivers to slow down for a sharp bend or to indicate when it is safe to overtake the vehicle in front.

*\*ADAS – Advanced Driver Assistance System*

“Beside our well equipped infotainment systems, standardized interface solutions between Smartphones & Car Infotainment will provide a rich set of additional applications and are particularly interesting for Entry- and Mid-Level Infotainment Systems to allow best connectivity via the head unit for attractive use of smartphone functionality in vehicle applications” stated Hans Roth, Director Global Business Development & Marketing, Harman Automotive Division.

“We are happy to be involved in creating an industry standard to connect smartphones to in-car systems. It is a totally logical step and we believe this standard will fuel the creation of innovative new services for drivers,” said Vesa Luiro, Director, Automotive, Nokia. “The infotainment system of a modern car is a natural extension for the capabilities of smartphones. Not only will it simplify the use of turn-by-turn voice guidance from Ovi Maps, but also provide a new and easy way of accessing other content on the smartphone, such as music and delivering automotive specific applications from the Ovi Store.”

The smartphone display is copied on the larger, infotainment system screen and commands can be given either by voice, touch or traditional in car controls to enable ease of use. For short journeys and convenience, wireless connection can be made by Bluetooth however for more stable, longer periods of use, the USB alternative will provide faster connection and refresh rates and preserve the smartphone battery.

## **About Harman**

HARMAN ([www.harman.com](http://www.harman.com)) designs, manufactures and markets a wide range of audio and infotainment solutions for the automotive, consumer and professional markets – supported by 15 leading brands including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon® and Mark Levinson®. The Company is admired by audiophiles across multiple generations and supports leading professional entertainers and the venues where they perform. More than 20 million automobiles on the road today are equipped with HARMAN audio and infotainment systems. HARMAN has a workforce of about 11,000 people across Americas, Europe and Asia, and reported sales of 3.2 billion for the last twelve months ended March 31, 2010. The Company's shares are traded on the New York Stock Exchange under the symbol NYSE: HAR.

## **About Nokia**

At Nokia, we are committed to connecting people. We combine advanced technology with personalized services that enable people to stay close to what matters to them. Every day, more than 1.2 billion people connect to one another with a Nokia device - from mobile phones to advanced smartphones and high-performance mobile computers. Today, Nokia is integrating its devices with innovative services through Ovi ([www.ovi.com](http://www.ovi.com)), including music, maps, apps, email and more. Nokia's NAVTEQ is a leader in comprehensive digital mapping and navigation services, while Nokia Siemens Networks provides equipment, services and solutions for communications networks globally.

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