

News Release

September 7, 2015

**Basic agreement to discuss with HERE
on the utilization of advanced maps,
in support of automated driving and advanced driving support**

Pioneer announced today that it has begun exploratory discussions with HERE (Head Office: Germany, Berlin; President: Sean Fernback) regarding collaboration on utilization of advanced automated driving maps. The agreement is based on potential scope for cooperation with mapping for advanced automatic driving, made possible by 3D-LiDAR, the high-performance, compact, low-cost driving space sensor currently being developed by Pioneer.

The aim of the agreement is to discuss the utilization of advanced maps ahead of the coming era of automated driving, harnessing HERE's expertise in map development and utilization, and Pioneer's 3D-LiDAR driving space sensor, announced on September 1, 2015.

[Key details of discussion]

Cooperation on the utilization of advanced maps

- HERE to provide maps for automated driving and advanced driving support
- Pioneer to provide 3D-LiDAR driving space sensor, currently under development

Timings and other such details will be determined in consultation between the two companies at a later date.

[Pioneer's approach to automated driving and advanced driving support]

Pioneer promotes the development of its high-performance, compact, low-cost 3D-LiDAR system for in-car applications by drawing on its optical disc technologies built up over many years. In addition, with our car-navigation technologies, the *Smart Loop* proprietary network system using probe data we launched in 2006 and the map creation and update expertise of Increment P, our map creation subsidiary, we aim to develop and propose efficient creation and operation systems ("data ecosystem") which update and disseminate advanced map data using the surrounding environment information automatically collected from private passenger vehicles.

[About HERE]

HERE, a Nokia company, is a leader in navigation, mapping and location experiences. We build high-definition (HD) maps and combine them with cloud technology to enable rich, real-time location experiences in a broad range of connected devices - from smartphones and tablets to wearables and vehicles. To learn more about today's announcement, visit the <http://360.here.com>.