Summary

Executive summary

There are now more than 150 million turn-by-turn navigation systems worldwide, including about 35 million factory installed and aftermarket in-dash navigation systems, over 90 million Personal Navigation Devices (PNDs) and an estimated 28 million navigation-enabled mobile handsets with GPS. Historically, Europe used to be the main market for PNDs, but North America has now almost caught up. Shipments grew to about 17.5 and 17 million units respectively in 2008 on these markets. In the rest of the world, shipments more than doubled year-on-year to 5.5 million units in 2008.

The PND as a device category is facing increased competition due to the adoption of handset-based navigation services and greater availability of in-dash navigation systems. Berg Insight forecasts that PND shipments in both Europe and North America will peak around 2011 at roughly 20 million units per annum in each market respectively and decline to about 16 million units in 2015. New markets in other parts of the world will partly compensate for the decline in Europe and North America. However, handset-based navigation services are likely to become especially competitive in markets where relatively few users can afford multiple devices. Worldwide shipments of PNDs are forecasted to peak at around 50 million devices annually in 2011–2012 and gradually decline to 43 million units in 2015.

Nevertheless, multiple navigation solutions and device types are likely to co-exist also in the future. PNDs and in-car navigation systems often provide a better user experience than many handset-based navigation services. Moreover, handset navigation services are also well suited as a complement to other solutions, especially for use outside the car. Pedestrian navigation features gradually being introduced include improved map data and multimodal navigation, which will enable users to plan routes taking into account all available modes of transportation, including trains, busses and trams.

PND vendors are increasingly focusing on new innovative online services. Connected PNDs that make use of wireless connectivity to access dynamic content can improve the value of navigation devices in everyday situations. Features such as local search, traffic flow information and speed camera locations can be useful in both familiar environments as well as on trips to new places. Major vendors such as TomTom, Garmin and NAVIGON have recently announced eight new PND models with integrated wireless connectivity. TomTom is today the leading vendor of connected PNDs and has even introduced connectivity in mid-end devices with prices starting as low as € 200 in some markets. The new offerings from vendors often comprise device and service bundles to maintain transparent pricing. New valuable services and features will also become more important going forward as a means to drive sales of replacement devices to the growing base of existing PND users. Berg Insight forecasts that as many as 88 percent of all PNDs shipped worldwide in 2015 will have cellular connectivity.

The initial tremendous success of the PND as a consumer product attracted numerous actors from multiple industries. There were more than 100 brands of PNDs in Europe and North America alone at the end of 2008. However, following the increased competition, many players have decided to exit the PND market. Meanwhile, MiTAC has instead expanded its market presence through the acquisitions of Navman and Magellan. The other major vendors Garmin and TomTom increasingly focus on related products and services, including in-dash navigation systems and handset navigation solutions. Going forward, the PND industry is likely to see further consolidation and additional exits as fewer vendors are able to maintain sufficient margins.